DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop: S2-25-26
Baltimore, Maryland 21244-1850

State Demonstrations Group

June 25, 2025

Janet Mann
Deputy Secretary and Medicaid Director
Arkansas Department of Human Services
P.O. Box 1437
Slot S201
Little Rock, Arkansas 72203-1437

Dear Director Mann:

The Centers for Medicare & Medicaid Services (CMS) is updating the section 1115 demonstration monitoring approach to reduce state burden, promote effective and efficient information sharing, and enhance CMS's oversight of program integrity by reducing variation in information reported to CMS.

Federal section 1115 demonstration monitoring and evaluation requirements are set forth in section 1115(d)(2)(D)-(E) of the Social Security Act (the Act), in CMS regulations in 42 CFR 431.428 and 431.420, and in individual demonstration special terms and conditions (STCs). Monitoring provides insight into progress with initial and ongoing demonstration implementation and performance, which can detect risks and vulnerabilities to inform possible course corrections and identify best practices. Monitoring is a complementary effort to evaluation. Evaluation activities assess the demonstration's success in achieving its stated goals and objectives.

Key changes of this monitoring redesign initiative include introducing a structured template for monitoring reporting, updating the frequency and timing of submission of monitoring reports, and standardizing the cadence and content of the demonstration monitoring calls.

Updates to Demonstration Monitoring

Below are the updated aspects of demonstration monitoring for the Arkansas Health and Opportunity for Me (ARHOME) (Project Number 11-W-00379/6) demonstration.

Reporting Cadence and Due Date

CMS determined that, when combined with monitoring calls, an annual monitoring reporting cadence will generally be sufficient to monitor potential risks and vulnerabilities in demonstration implementation, performance, and progress toward stipulated goals. Thus, pursuant to CMS's authority under 42 CFR 431.420(b)(1) and 42 CFR 431.428, CMS is updating the cadence for this demonstration to annual monitoring reporting (see also section

1115(d)(2)(D)-(E) of the Act). This transition to annual monitoring reporting is expected to alleviate administrative burden for both the state and CMS. In addition, CMS is extending the due date of the annual monitoring report from 90 days to 180 days after the end of each demonstration year to balance Medicaid claims completeness with the state's work to draft, review, and submit the report timely.

CMS might increase the frequency of monitoring reporting if CMS determines that doing so would be appropriate. The standard for determining the frequency of monitoring reporting will ultimately be included in each demonstration's STCs. CMS expects that this standard will permit CMS to make on-going determinations about reporting frequency under each demonstration by assessing the risk that the state might materially fail to comply with the terms of the approved demonstration during its implementation and/or the risk that the state might implement the demonstration in a manner unlikely to achieve the statutory purposes of Medicaid. *See* 42 CFR 431.420(d)(1)-(2).

The ARHOME demonstration will transition to annual monitoring reporting effective June 25, 2025. The next annual monitoring report will be due on June 29, 2026, which reflects the first business day following180 calendar days after the end of the current demonstration year. The demonstration STCs will be updated in the next demonstration amendment or extension approval to reflect the new reporting cadence and due date.

Structured Monitoring Report Template

As noted in STC 66, "Monitoring Reports," monitoring reports "must follow the framework to be provided by CMS, which is subject to change as monitoring systems are developed / evolve and be provided in a structured manner that supports federal tracking and analysis." Pursuant to that STC, CMS is introducing a structured monitoring report template to minimize variation in content of reports across states, which will facilitate drawing conclusions over time and across demonstrations with broadly similar section 1115 waivers or expenditure authorities. The structured reporting framework will also provide CMS and the state opportunities for more comprehensive and instructive engagement on the report's content to identify potential risks and vulnerabilities and associated mitigation efforts as well as best practices, thus strengthening the overall integrity of demonstration monitoring.

This structured template will include a set of base metrics for all demonstrations. For demonstrations with certain waiver and expenditure authorities, there are additional policy-specific metrics that will be collected through the structured reporting template.

The base and policy-specific metrics include applicable established measures of quality of care and correlated outcomes, which will be standardized across all similar demonstrations. The state may continue reporting additional quality measures to address state goals and priorities. CMS will no longer expect the state to report metrics that include elements from the draft CMS disparities-sensitive measure set, referenced in the demonstration STCs.

CMS is also removing the requirement for a Monitoring Protocol deliverable, which has been required under certain types of section 1115 demonstration, including but not limited to the

Substance Use Disorder (SUD), Serious Mental Illness (SMI)/Serious Emotional Disturbance (SED), Health-Related Social Needs (HRSN), and reentry demonstrations. Removal of the Monitoring Protocol requirement simplifies and streamlines demonstration monitoring activities for states and CMS.

Demonstration Monitoring Calls

As STC 69 "Monitoring Calls" describes, CMS may "convene periodic conference calls with the state," and the calls are intended "to discuss ongoing demonstration operation, including (but not limited to) any significant actual or anticipated developments affecting the demonstration." Going forward, CMS envisions implementing a structured format for monitoring calls to provide consistency in content and frequency of demonstration monitoring calls across demonstrations. CMS also envisions convening quarterly monitoring calls with the state and will follow the structure and topics in the monitoring report template. We anticipate that standardizing the expectations for and content of the calls will result in more meaningful discussion and timely assessment of demonstration risks, vulnerabilities, and opportunities for intervention. The demonstration STCs will be updated in the next demonstration amendment or extension approval to reflect that monitoring calls will be held no less frequently than quarterly.

CMS will continue to be available for additional calls as necessary to provide technical assistance or to discuss demonstration applications, pending actions, or requests for changes to demonstrations. CMS recognizes that frequent and regular calls are appropriate for certain demonstrations and at specific points in a demonstration's lifecycle.

In the coming weeks, CMS will reach out to schedule a transition meeting to review templates and timelines outlined above. As noted above, the pertinent ARHOME section 1115 demonstration STCs will be updated in the next demonstration amendment or extension approval to reflect these updates.

If you have any questions regarding these updates, please contact Danielle Daly, Director of the Division of Demonstration Monitoring and Evaluation, at Danielle.Daly@cms.hhs.gov.

Sincerely,

Karen LLanos
Acting Director

Enclosure
cc: Lee Herko, State Monitoring Lead, Medicaid and CHIP Operations Group

CENTERS FOR MEDICARE AND MEDICAID SERVICES
EXPENDITURE AUTHORITY

NUMBER: **11-W-00379/6**

TITLE: **Arkansas Health and Opportunity for Me Section 1115 Demonstration**

AWARDEE: **Arkansas Department of Human Services**

Under the authority of section 1115(a)(2) of the Social Security Act (the Act), expenditures made by the state for the items identified below, which are not otherwise included as expenditures under section 1903 shall, for the period of this demonstration from January 1, 2022 through December 31, 2026, unless otherwise stated, be regarded as expenditures under the state's Title XIX plan, but are further limited by the special terms and conditions (STCs) for the Arkansas Health and Opportunity for Me (ARHOME) section 1115 demonstration.

As discussed in the Centers for Medicare & Medicaid Services' (CMS) amendment approval letter, the Secretary of Health and Human Services has determined that the ARHOME section 1115 demonstration, including the granting of the waiver and expenditure authorities described below, is likely to assist in promoting the objectives of title XIX of the Social Security Act.

1. **Premium Assistance and Cost Sharing Reduction Payments.** Expenditures for part or all of the cost of private insurance premiums in the individual market, and for payments to reduce cost sharing under such coverage for certain beneficiaries as described in these STCs.

2. **Life360 HOMEs and Health-Related Social Needs (HRSN) Services.** Effective November 1, 2022, expenditures for approved evidence-based health-related social needs services not otherwise eligible for Medicaid payment furnished to individuals who meet the qualifying criteria as described in STC 44.

3. **Expenditures for Life360 HOME Services Infrastructure**. Effective November 1, 2022, expenditures for allowable administrative costs and infrastructure not otherwise eligible for Medicaid payment, to the extent such activities are authorized as part of the approved Infrastructure activities in STC 42.

4. **Maternal Life360 HOME Services.** Expenditures for Maternal Life360 HOME services for up to 2 years postpartum for individuals with high risk pregnancies, as defined by their physician, who become ineligible for Medicaid coverage during their enrollment in a Maternal Life360 HOME.

Requirements Not Applicable to Expenditure Authorities:

1. **Cost Effectiveness** **Section 1902(a)(4) and 42 CFR 435.2025(a)(4)**

To the extent necessary to permit the state to offer, with respect to beneficiaries through

qualified health plans, premium assistance and cost sharing reduction payments that are determined to be cost effective using state developed tests of cost effectiveness that differ from otherwise permissible tests for cost effectiveness as described in these STCs.

2. Amount, Duration, and Scope of Services and Comparability **Section 1902(a)(10)(B) and 1902(a)(17)**

To the extent necessary to allow the state to offer Life360 HOME services as described in STC 40.

To the extent necessary to enable the state to provide Life360 HOME services based on systems of service that are not otherwise available to all beneficiaries in the same eligibility group.

3. Statewideness **Section1902(a)(1)**

To the extent necessary to enable the State to provide Life360 HOME services on a less than statewide basis.

4. Freedom of Choice **Section 1902(a)(23)(A)**

To the extent necessary to enable Arkansas to limit beneficiaries' freedom of choice with respect to Life360 HOME Services to providers participating in a Life360 HOME.

CENTERS FOR MEDICARE & MEDICAID SERVICES
WAIVER LIST

NUMBER: **11-W-00379/6**

TITLE: **Arkansas Health and Opportunity for Me Section 1115 Demonstration**

AWARDEE: **Arkansas Department of Human Services**

All requirements of the Medicaid program expressed in law, regulation, and policy statement, not expressly waived or identified as not applicable in accompanying expenditure authorities, shall apply to the demonstration project effective January 1, 2022 through December 31, 2026. In addition, these waivers may only be implemented consistent with the approved Special Terms and Conditions (STCs).

Under the authority of section 1115(a)(1) of the Social Security Act (the Act), the following waivers of state plan requirements contained in section 1902 of the Act are granted for the ARHOME Section 1115 demonstration, subject to the STCs.

1. Freedom of Choice **Section 1902(a)(23)(A)**

To the extent necessary to enable Arkansas to limit beneficiaries' freedom of choice among providers to the providers participating in the network of the beneficiary's Qualified Health Plan. No waiver of freedom of choice is authorized for family planning providers.

2. Payment to Providers **Section 1902(a)(13) and Section 1902(a)(30)**

To the extent necessary to permit Arkansas to provide for payment to providers equal to the market-based rates determined by the Qualified Health Plan.

3. Prior Authorization **Section 1902(a)(54) insofar as it incorporates Section 1927(d)(5)**

To permit Arkansas to require that requests for prior authorization for drugs be addressed within 72 hours, and for expedited review in exigent circumstances within 24 hours, rather than 24 hours for all circumstances as is currently required in their state policy. A 72- hour supply of the requested medication will be provided in the event of an emergency.

4. Premiums **Section 1902(a)(14) insofar as it incorporates Sections 1916 and 1916A**

To the extent necessary to enable Arkansas to collect monthly premium payments, for beneficiaries with incomes above 100 up to and including 133 percent of the federal poverty

level (FPL) as described in these STCs. This waiver authority will sunset on December 31, 2022.

5. Comparability **Section 1902(a)(10)(B)**

To the extent necessary to enable the state to impose targeted cost sharing on beneficiaries as described in these STCs.

6. Retroactive Eligibility **Section 1902(a)(34)**

To enable the state to not provide beneficiaries in table 1 retroactive eligibility but for 30 days prior to the date of the application for coverage under the demonstration.

CENTERS FOR MEDICARE AND MEDICAID SERVICES
SPECIAL TERMS AND CONDITIONS

NUMBER: **11-W-00379/6**

TITLE: **Arkansas Health and Opportunity for Me**

AWARDEE: **Arkansas Department of Human Services**

I. PREFACE

The following are the Special Terms and Conditions (STCs) for the Arkansas Health and Opportunity for Me (ARHOME) section 1115(a) Medicaid demonstration (hereinafter demonstration) to enable the Arkansas Department of Human Services (state) to operate this demonstration. The Centers for Medicare & Medicaid Services (CMS) has granted waivers of requirements under section 1902(a) of the Social Security Act (Act), and expenditure authorities authorizing federal matching of demonstration costs that are not otherwise matchable, and which are separately enumerated. These STCs set forth in detail the nature, character, and extent of federal involvement in the demonstration and the state's obligations to CMS during the life of the demonstration.

These STCs are effective January 1, 2022 through December 31, 2026, unless otherwise stated.

The STCs have been arranged into the following subject areas:

Attachment E: Monitoring Protocol (reserved)
Attachment F: Life360 HOME Evaluation Design
Attachment G: Life360 HOME Definitions and Eligibility
Attachment H: Life360 HOME Services Details (reserved)
Attachment I: Protocol for Assessment of Beneficiary Eligibility and Needs, Infrastructure Planning, and Provider Qualifications
Attachment J: Amendments to Expenditure Authorities and Special Terms and Conditions Effective December 20, 2024
Attachment K: Evaluation Design

II. PROGRAM DESCRIPTION AND OBJECTIVES

Under the prior section 1115 demonstration, Arkansas Works, the state provided premium assistance to support the purchase by beneficiaries eligible under the adult group under the state plan of coverage from qualified health plans (QHPs) offered in the individual market through the Marketplace. Enrollment activities for the adult population began on October 1, 2013, for QHPs with eligibility effective January 1, 2014. Beginning in 2014, individuals eligible for coverage under the adult group are described at Section 1902(a)(10)(A)(i)(VIII) of the Social Security Act and were further specified in the state plan. The Arkansas Works demonstration terminated on December 31, 2021.

Effective January 1, 2022, the ARHOME demonstration began providing the premium assistance for the adult group.

As of November 1, 2022, the ARHOME demonstration will also provide additional supportive services to targeted populations through Life360 HOMEs, as specified in these STCs. Life360 HOMEs will provide participants with intensive care coordination to connect them to needed health services and community supports, address health-related social needs (HRSN), and actively engage them in promoting their own health. Beneficiary participation in a Life360 HOME will be voluntary and services available under a Life360 HOME will be supplemental to any medical services already covered by the beneficiary's QHP or Medicaid fee for service (FFS). ARHOME will create three types of Life360 HOMEs:

1. Maternal Life360 HOMEs will support individuals with high-risk pregnancies, as identified by their physician, and up to two years post-partum, even if the individual is no longer eligible for Medicaid under any other category, either through Maternal Life360 HOME's provision of evidence-based home visitation or through contracts with evidence-based home visitation programs; [1]
2. Rural Life360 HOMEs will support individuals with a serious mental illness (SMI) or substance use disorder (SUD) diagnosis who live in rural areas of the state through intensive care coordination provided directly or through contracts with organizations to provide care coordination; and

[1] The Maternal Life360 HOME will include leveraging the state home visiting program infrastructure that is being implemented in counties statewide and administered by the Arkansas Department of Health with Maternal, Infant and Early Childhood Home Visiting (MIECHV) program to expand current access and capacity for evidence-based home visiting for high-risk pregnant individuals. Funding authorized under this demonstration will expand access to this home visiting program and current funding

levels for MIECHV will not be reduced.

3. Success Life360 HOMEs will support young adults (ages 19-27) at high-risk for long-term poverty due to prior incarceration, involvement with the foster care system, or young adults (ages 19-24) with involvement with the juvenile justice system and veterans ages 19-30 who are at high risk of homelessness. Success Life360s will provide intensive care coordination directly or contract with organizations to provide care coordination.

Throughout the demonstration period, the state will work towards achieving several demonstration goals. These goals will inform the state's Evaluation Design hypotheses, subject to CMS approval, as described in these STCs. The demonstration's goals include, and are not limited to, the following:

- Providing continuity of coverage for individuals,
- Improving access to providers,
- Improving continuity of care across the continuum of coverage, and
- Furthering quality improvement and delivery system reform initiatives that are successful across population groups.
- Improving the health outcomes among Arkansans especially in maternal and infant health, rural health, behavioral health, and those with chronic diseases
- Providing supports to assist individuals, especially young adults in target populations, to move out of poverty; and
- Slowing the rate of growth in federal and state spending on the program so the demonstration will be financially sustainable.

Arkansas proposes that the demonstration will provide integrated coverage for low-income Arkansans, leveraging the efficiencies and experience of the private market to improve continuity, access, and quality of care for ARHOME beneficiaries that should ultimately result in lowering the rate of growth in premiums across population groups. The state proposes that the demonstration will also drive structural health care system reform and more competitive premium pricing for all individuals purchasing coverage through the Marketplace by at least doubling the size of the population enrolling in QHPs offered through the Marketplace.
The state proposes to demonstrate the following key features:

Continuity of coverage and care - The demonstration will allow qualifying households to stay enrolled in the same plan regardless of whether their coverage is subsidized through Medicaid, or Advanced Premium Tax Credits (APTC).

Support equalization of provider reimbursement and improve provider access - The demonstration will support equalization of provider reimbursement across payers, toward the end of expanding provider access and eliminating the need for providers to cross-subsidize. Arkansas Medicaid provides rates of reimbursement lower than Medicare or commercial payers, causing some providers to forego participation in the program and others to "cross subsidize" their Medicaid patients by charging more to private insurers.

Integration, efficiency, quality improvement and delivery system reform - Arkansas is proposing taking an integrated and market-based approach to covering uninsured Arkansans. It is anticipated that QHPs will bring the experience of successful private sector models that can

improve access to high quality services and lead delivery system reform.

III. GENERAL PROGRAM REQUIREMENTS

1. Compliance with Federal Non-Discrimination Statutes. The state must comply with all applicable federal statutes relating to non-discrimination. These include, but are not limited to, the Americans with Disabilities Act of 1990 (ADA), Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973 (Section 504), the Age Discrimination Act of 1975, and Section 1557 of the Affordable Care Act (Section 1557).

2. Compliance with Medicaid and Children's Health Insurance Program (CHIP) Law, Regulation, and Policy. All requirements of the Medicaid program and CHIP programs, expressed in federal law, regulation, and policy statement, that are not expressly waived or identified as not applicable in the waiver and expenditure authority documents (of which these terms and conditions are part), apply to the demonstration.

3. Changes in Medicaid and CHIP Law, Regulation, and Policy. The state must, within the timeframes specified in federal law, regulation, or policy statement, come into compliance with changes in law, regulation, or written policy affecting the Medicaid or CHIP programs that occur during this demonstration approval period, unless the provision being changed is expressly waived or identified as not applicable. In addition, CMS reserves the right to amend the STCs to reflect such changes and/or changes of as needed without requiring the state to submit an amendment to the demonstration under STC 7. CMS will notify the state 30 calendar days in advance of the expected approval date of the amended STCs to allow the state to provide comment. Changes will be considered in force upon issuance of the approval letter by CMS. The state must accept the changes in writing.

4. Impact on Demonstration of Changes in Federal Law, Regulation, and Policy.

a. To the extent that a change in federal law, regulation, or written policy requires either a reduction or an increase in federal financial participation (FFP) for expenditures made under this demonstration, the state must adopt, subject to CMS approval, a modified budget neutrality agreement and/or a modified allotment neutrality worksheet for the demonstration as necessary to comply with such change. The modified budget neutrality and/or modified allotment neutrality agreement will be effective upon the implementation of the change. The trend rates for the budget neutrality agreement are not subject to change under this subparagraph. Further, the state may seek an amendment to the demonstration (as per STC 7 of this section) as a result of the change in FFP.

b. If mandated changes in the federal law, regulation, or policy require state legislation, unless otherwise prescribed by the terms of the federal law, the changes must take effect on the earlier day such state legislation becomes effective, or on the last day such legislation was required to be in effect under the law, whichever is sooner.

5. **State Plan Amendments.** The state will not be required to submit title XIX or title XXI state plan amendments (SPAs) for changes affecting any populations made eligible solely through the demonstration. If a population eligible through the Medicaid or CHIP state plan is affected by a change to the demonstration, a conforming amendment to the appropriate state plan is required, except as otherwise noted in these STCs. In all such instances the Medicaid and CHIP state plan governs.

6. **Changes Subject to the Amendment Process.** Changes related to eligibility, enrollment, benefits, beneficiary rights, delivery systems, cost sharing, evaluation design, sources of non-federal share of funding, budget neutrality, and other comparable program elements must be submitted to CMS as amendments to the demonstration. All amendment requests are subject to approval at the discretion of the Secretary in accordance with section 1115 of the Act. The state must not implement or begin operational changes to these demonstration elements without prior approval. Amendments to the demonstration are not retroactive and no FFP of any kind, including for administrative or medical assistance expenditures, will be available for amendments to the demonstration that have not been approved through the amendment process set forth in STC 7 below, except as provided in STC 3 or as otherwise specified in the STCs.

7. **Amendment Process.** Requests to amend the demonstration must be submitted to CMS for approval no later than 120 calendar days prior to the planned date of implementation of the change and may not be implemented until approved. CMS reserves the right to deny or delay approval of a demonstration amendment based on non-compliance with these STCs, including but not limited to failure by the state to submit required elements of a complete amendment request as described in this STC, and failure by the state to submit required reports and other deliverables according to the deadlines specified herein. Amendment requests must include, but are not limited to, the following:
   a. An explanation of the public notice process used by the state, consistent with the requirements of STC 13. Such explanation must include a summary of any public feedback received and identification of how this feedback was addressed by the state in the final amendment request submitted to CMS;
   b. A detailed description of the amendment including impact on beneficiaries, with sufficient supporting documentation;
   c. A data analysis worksheet which identifies the specific "with waiver" impact of the proposed amendment on the current budget neutrality agreement. Such analysis must include current total computable "with waiver" and "without waiver" status on both a summary and detailed level through the current approval period using the most recent actual expenditures, as well as summary and detailed projections of the change in the "with waiver" expenditure total as a result of the proposed amendment, which isolates (by Eligibility Group) the impact of the amendment;
   d. An up-to-date CHIP allotment neutrality worksheet, if necessary; and
   e. The state must provide updates to existing demonstration reporting and quality and evaluation plans. This includes a description of how the evaluation design and annual progress reports will be modified to incorporate the amendment

provisions, as well as the oversight, monitoring and measurement of the provisions.

8. Extension of the Demonstration. States that intend to request an extension of the demonstration must submit an application to CMS from the Governor of the state in accordance with the requirements of 42 CFR § 431.412(c). States that do not intend to request an extension of the demonstration beyond the period authorized in these STCs must submit a phase-out plan consistent with the requirements of STC 9.

9. Demonstration Phase Out. The state may only suspend or terminate this demonstration in whole, or in part, consistent with the following requirements.

a. **Notification of Suspension or Termination.** The state must promptly notify CMS in writing of the reason(s) for the suspension or termination, together with the effective date and a draft transition and phase-out plan. The state must submit a notification letter and a draft plan to CMS no less than 6 months before the effective date of the demonstration's suspension or termination. Prior to submitting the draft plan to CMS, the state must publish on its website the draft transition and phase-out plan for a 30-day public comment period. In addition, the state must conduct tribal consultation in accordance with STC 13, if applicable. Once the 30-day public comment period has ended, the state must provide a summary of the issues raised by the public during the comment period and how the state considered the comments received when developing the revised transition and phase-out plan.

b. **Transition and Phase-out Plan Requirements**. The state must include, at a minimum, in its phase-out plan the process by which it will notify affected beneficiaries, the content of said notices (including information on the beneficiary's appeal rights), the process by which the state will conduct redeterminations of Medicaid or CHIP eligibility prior to the demonstration for the affected beneficiaries, and ensure ongoing coverage for eligible beneficiaries, as well as any community outreach activities the state will take to notify affected beneficiaries, including community resources that are available.

c. **Transition and Phase-out Plan Approval.** The state must obtain CMS approval of the transition and phase-out plan prior to the implementation of transition and phase-out activities. Implementation of transition and phase-out activities must begin no sooner than 14 calendar days after CMS approval of the transition and phase-out plan.

d. **Transition and Phase-out Procedures.** The state must redetermine eligibility for all affected beneficiaries in order to determine if they qualify for Medicaid eligibility under a different eligibility category prior to making a determination of ineligibility as required under 42 CFR 435.916(f)(1) or for children in CHIP consider eligibility for other insurance affordability programs under 42 CFR 457.350. For individuals determined ineligible for Medicaid and CHIP, the Commonwealth must determine potential eligibility for other insurance affordability programs and comply with the procedures set forth in 42 CFR 435.1200(e). The state must comply with all applicable notice requirements for Medicaid found in 42 CFR, part 431 subpart E, including sections 431.206

through 431.214 or for CHIP found at 42 CFR 457.340(e), including information about a right to a review consistent with 42 CFR 457.1180. In addition, the state must assure all applicable Medicaid appeal and hearing rights are afforded to Medicaid beneficiaries in the demonstration as outlined in 42 CFR, part 431 subpart E, including sections 431.220 and 431.221. If a beneficiary in the demonstration requests a hearing before the date of action, the state must maintain Medicaid benefits as required in 42 CFR §431.230.

e. **Exemption from Public Notice Procedures 42 CFR Section 431.416(g).** CMS may expedite the federal and state public notice requirements under circumstances described in 42 CFR 431.416(g).

f. **Enrollment Limitation during Demonstration Phase-Out.** If the state elects to suspend, terminate, or not extend this demonstration, during the last six months of the demonstration, enrollment of new individuals into the demonstration must be suspended. The limitation of enrollment into the demonstration does not impact the state's obligation to determine Medicaid eligibility in accordance with the approved Medicaid state plan.

g. **Federal Financial Participation (FFP).** If the project is terminated or any relevant waivers are suspended by the state, FFP must be limited to normal closeout costs associated with the termination or expiration of the demonstration including services, continued benefits as a result of beneficiaries' appeals, and administrative costs of disenrolling beneficiaries.

10. CMS Right to Terminate or Suspend. CMS may suspend or terminate the demonstration, in whole or in part, at any time before the date of expiration, whenever it determines following a hearing that the state has materially failed to comply with the terms of the project. CMS must promptly notify the state in writing of the determination and the reasons for the suspension or termination, together with the effective date.

11. Withdrawal of Waiver or Expenditure Authority. CMS reserves the right to withdraw waivers and/or expenditure authorities at any time it determines that continuing the waiver or expenditure authorities would no longer be in the public interest or promote the objectives of title XIX or title XXI. CMS will promptly notify the state in writing of the determination and the reasons for the withdrawal, together with the effective date, and afford the state an opportunity to request a hearing to challenge CMS's determination prior to the effective date. If a waiver or expenditure authority is withdrawn, FFP is limited to normal closeout costs associated with terminating the waiver or expenditure authority, including services, continued benefits as a result of beneficiary appeals, and administrative costs of disenrolling beneficiaries.

12. Adequacy of Infrastructure. The state must ensure the availability of adequate resources for implementation and monitoring of the demonstration, including education, outreach, and enrollment; maintaining eligibility systems; compliance with cost sharing requirements; and reporting on financial and other demonstration components.

13. Public Notice, Tribal Consultation, and Consultation with Interested Parties. The state must comply with the state notice procedures as required in 42 CFR 431.408 prior to

submitting an application to extend the demonstration. For applications to amend the demonstration, the state must comply with the state notice procedures set forth in 59 Fed. Reg. 49249 (September 27, 1994) prior to submitting such request. The state must also comply with the public notice procedures set forth in 42 CFR 447.205 for changes in statewide methods and standards for setting payment rates.

In states with federally recognized Indian tribes, consultation must be conducted in accordance with the consultation process outlined in the July 17, 2001, letter or the consultation process in the state's approved Medicaid state plan if that process is specifically applicable to consulting with tribal governments on waivers (42 CFR Section 431.408(b)(2)).

14. Federal Financial Participation (FFP). No federal matching for expenditures under this demonstration, including for administrative and medical assistance expenditures, will be available until the effective date identified in the demonstration approval letter, or if later, as expressly stated within these STCs.

15. Administrative Authority. When there are multiple entities involved in the administration of the demonstration, the Single State Medicaid Agency must maintain authority, accountability, and oversight of the program. The State Medicaid Agency must exercise oversight of all delegated functions to operating agencies, managed care plans, and any other contracted entities. The Single State Medicaid Agency is responsible for the content and oversight of the quality strategies for the demonstration.

16. Common Rule Exemption. The state shall ensure that the only involvement of human subjects in research activities that may be authorized and/or required by this demonstration is for projects which are conducted by or subject to the approval of CMS, and that are designed to study, evaluate, or otherwise examine the Medicaid or CHIP program – including public benefit or service programs; procedures for obtaining Medicaid or CHIP benefits or services; possible changes in or alternatives to Medicaid or CHIP programs and procedures; or possible changes in methods or levels of payment for Medicaid and CHIP benefits or services under those programs. CMS has determined that this demonstration as represented in these approved STCs meets the requirements for exemption from the human subject research provisions of the Common Rule set forth in 45 CFR 46.104(b)(5).

IV. ARKANSAS HEALTH AND OPPORTUNITY FOR ME (ARHOME) PROGRAM POPULATIONS AFFECTED

The state will use this demonstration to ensure coverage for ARHOME eligible beneficiaries provided primarily through QHPs offered in the individual market instead of the FFS delivery system that serves the traditional Medicaid population. The state will provide premium assistance to aid ARHOME beneficiaries in enrolling in coverage through QHPs in the Marketplace.

17. **Populations Affected by the ARHOME Demonstration.** Except as described in STCs 18 and 19, the ARHOME demonstration affects adults aged 19 through 64 eligible under the state plan under section 1902(a)(10)(A)(i)(VIII) of the Act and 42 CFR Section 435.119 (the adult group). Eligibility and coverage for ARHOME beneficiaries are subject to all applicable Medicaid laws and regulations in accordance with the Medicaid state plan, except as expressly waived in this demonstration and as described in these STCs. Any Medicaid state plan amendments that apply to the adult group will apply to this demonstration.

Table 1. Eligibility Groups

Eligibility Group	Federal Poverty Level	Services	Funding Stream
Adult Group	Adults up to and including 133 percent of the FPL who meet the other criteria specified in Section 1902(a)(10)(A)(i)(VIII) of the Social Security Act	All services authorized through the demonstration	Title XIX
Maternal Life360 HOME non-Medicaid Eligible Individuals	Individuals enrolled in a Maternal Life360 HOME who become ineligible for Medicaid coverage for up to two years, consistent with expenditure authority 4.	Maternal Life360 Services only	1115 demonstration

18. **Medically Frail Individuals.** Arkansas has instituted a process to determine whether a beneficiary is medically frail. The process is described in the Alternative Benefit state plan. Beneficiaries excluded from enrolling in QHPs through the ARHOME as a result of a determination of medical frailty as defined in the Alternative Benefit Plan (ABP) state plan amendment (SPA) will have the option of receiving direct coverage through the state of either the same ABP offered to the beneficiaries or an ABP that includes all benefits otherwise available under the approved Medicaid state plan (the standard Medicaid benefit package). Direct coverage will be provided through a FFS system or the PASSE program.

19. **American Indian/Alaska Native Individuals.** Beneficiaries identified as American Indian or Alaskan Native (AI/AN) will not be required to enroll in QHPs in this demonstration, but can choose to opt into a QHP. New applicants will be subject to provisions of STC 17 and coverage will begin 30 days prior to the date an application is submitted for coverage. Beneficiaries who are AI/AN and who have not opted into a QHP will receive the ABP through a FFS system. An AI/AN beneficiary will be able to access covered benefits through Indian Health Service (IHS), Tribal or Urban Indian Organization (collectively, I/T/U) facilities funded through the IHS. Under the Indian Health Care Improvement Act (IHCIA), I/T/U facilities are entitled to payment notwithstanding network restrictions.

20. **Retroactive Eligibility.** The state will only provide coverage effective 30 days prior to the date a beneficiary submits an application. All other regulations governing retroactive

eligibility are otherwise consistent with the requirements of 42 CFR 435.915, for coverage for beneficiaries in table 1.

V. ARKANSAS HEALTH AND OPPORTUNITY FOR ME (ARHOME) PREMIUM ASSISTANCE ENROLLMENT

21. ARHOME. For ARHOME beneficiaries, except as noted in STCs 18 and 19, enrollment in a QHP is a condition of receiving benefits.

22. QHP Selection. The QHPs in which ARHOME beneficiaries enroll are certified through the Arkansas Insurance Department's QHP certification process. The QHPs available for selection by the beneficiary are determined by the Medicaid agency.

23. Auto-assignment. In the event that a beneficiary is determined eligible for coverage through the ARHOME QHP premium assistance program, but does not select a plan, the state will auto-assign the beneficiary to one of the available QHPs in the beneficiary's rating area. Beneficiaries who are auto-assigned will be notified of their assignment, and the effective date of QHP enrollment, and will be given a thirty-day period from the date of enrollment to request enrollment in another plan.

24. Distribution of Members Auto-assigned. ARHOME QHP auto-assignments will be distributed among QHP issuers in good standing with the Arkansas Insurance Department offering certified silver-level QHPs certified by the Arkansas Insurance Department.

25. Changes to Auto-assignment Methodology. The state will advise CMS prior to implementing a change to the auto-assignment methodology.

26. Disenrollment. Beneficiaries may be disenrolled from the demonstration if they are determined to be medically frail after they were previously determined eligible.

VI. PREMIUM ASSISTANCE DELIVERY SYSTEM

27. Memorandum of Understanding for QHP Premium Assistance. The Arkansas Department of Human Services and the Arkansas Insurance Department have entered into a memorandum of understanding (MOU) with each QHP that enrolls beneficiaries. Areas to be addressed in the MOU include, but are not limited to:

a. Enrollment of beneficiaries in populations covered by the demonstration;
b. Payment of premiums and cost sharing reductions, including the process for collecting and tracking beneficiary premiums and cost sharing, and ceasing premium collections;
c. Reporting and data requirements necessary to monitor and evaluate the ARHOME demonstration including those referenced in STCs 65 and 66, ensuring beneficiary access to Early and Periodic Screening, Treatment and Diagnosis (EPSDT) and other covered benefits through the QHP;
d. Requirement for QHPs to provide, consistent with federal and state laws, claims and other data as requested to support state and federal evaluations, including any

corresponding state arrangements needed to disclose and share data, as required by 42 CFR 431.420(f)(2), to CMS or CMS's evaluation contractors.

e. Noticing requirements; and

f. Audit rights.

28. Qualified Health Plans. The state will use premium assistance to support the purchase of coverage for ARHOME beneficiaries through Marketplace QHPs.

29. Choice of QHPs. Each ARHOME beneficiary required to enroll in a QHP will have the option to choose between at least two silver plans covering only Essential Health Benefits (EHBs) that are offered in the individual market through the Marketplace. The state will pay the full cost of QHP premiums, less the cost of the premium paid by the beneficiary in accordance with these STCs.

a. ARHOME beneficiaries will be able to choose from at least two silver plans covering only EHBs that are in each rating area of the State.

b. ARHOME beneficiaries will be permitted to choose among all silver plans covering only EHBs that are offered in their geographic area and that meet the purchasing guidelines established by the State in that year, and thus all ARHOME beneficiaries will have a choice of at least two QHPs.

c. The state will comply with Essential Community Provider network requirements, as part of the QHP certification process.

d. ARHOME beneficiaries will have access to the same networks as other beneficiaries enrolling in QHPs through the individual Marketplace.

30. Coverage Prior to Enrollment in a QHP. The state will provide coverage through FFS Medicaid from the date a beneficiary is determined eligible until the beneficiary's enrollment in the QHP becomes effective.

a. For beneficiaries who enroll in a QHP (whether by selecting the QHP or through auto-assignment) between the first and fifteenth day of a month, QHP coverage will become effective as of the first day of the month following QHP enrollment.

b. For beneficiaries who enroll in a QHP (whether by selecting the QHP or through auto-assignment) between the sixteenth and last day of a month, QHP coverage will become effective as of the first day of the second month following QHP selection (or auto-assignment).

31. Family Planning. If family planning services are accessed at a facility that the QHP considers to be an out-of-network provider, the state's FFS Medicaid program will cover those services.

32. Non-Emergency Medical Transportation (NEMT). Non-emergency medical transport services will be provided through the state's FFS Medicaid program. See STC 39 for further discussion of non-emergency medical transport services.

33. Access to Federally Qualified Health Centers (FQHC) and Rural Health Centers (RHC). ARHOME beneficiaries will have access to at least one QHP in each service area that contracts with at least one FQHC and RHC.

VII. BENEFITS

34. ARHOME Benefits. Beneficiaries affected by this demonstration will receive benefits as set forth in section 1905(y)(2)(B) of the Act and codified at 42 CFR Section 433.204(a)(2). These benefits are described in the Medicaid state plan.

35. Alternative Benefit Plan. The benefits provided under an alternative benefit plan for the adult group are reflected in the State ABP state plan.

36. Medicaid Wrap Benefits. The state will provide through its FFS system wrap-around benefits that are required for the ABP but not covered by QHPs. These benefits include NEMT and EPSDT services for beneficiaries participating in the demonstration who are under age 21.

37. Access to Wrap Around Benefits. In addition to receiving an insurance card from the applicable QHP issuer, ARHOME beneficiaries will have a Medicaid Client Identification Number (CIN) through which providers may bill Medicaid for wrap-around benefits. The notice containing the CIN will include information about which services ARHOME beneficiaries may receive through FFS Medicaid and how to access those services. This information is also posted on Arkansas Department of Human Services' Medicaid website and will be provided through information at the Department of Human Service's call centers and through QHP issuers.

38. Early and Periodic Screening, Diagnosis, and Treatment. The State must fulfill its responsibilities for coverage, outreach, and assistance with respect to EPSDT services that are described in the requirements of sections 1905(a)(4)(b) (services), 1902(a)(43) (administrative requirements), and 1905(r) (definitions).

39. Access to Non-Emergency Medical Transportation. The state will establish prior authorization for NEMT in the ABP. Beneficiaries served by IHS or Tribal facilities and medically frail beneficiaries will be exempt from such requirements.

VIII. IMPROVING HEALTH OUTCOMES THROUGH INTENSIVE CARE COORDINATION FOR POPULATIONS MOST AT RISK OF POOR HEALTH (Life360 HOMEs)

40. Life360 HOME Services. The state may claim FFP for the evidence-based Life360 HOME services identified in STC 41, subject to the restrictions described below and in STC 43. There are three types of Life360 HOMEs: Maternal, Success and Rural. Expenditures for some Life360 HOME services are limited to costs not otherwise covered under Title XIX, but consistent with Medicaid demonstration objectives that enable the state to continue to improve health outcomes and increase the efficiency and quality of care. To receive Life360 HOME services, individuals in the targeted populations must have a documented need for the services. Life360 HOME services must be medically appropriate for the beneficiary and based on medical appropriateness using

clinical and other health-related social needs criteria. The state is required to align clinical and social risk criteria across services with other non-Medicaid support agencies, to the extent possible. The Life360 HOME services may not supplant any other available funding sources such as housing or nutrition supports available to beneficiaries through local, state or federal programs. The Life360 HOME services will be the choice of the beneficiary; beneficiaries can opt out of Life360 HOME services at any time; and Life360 HOME services do not absolve the state of their responsibility to provide required coverage for other medically necessary services. Under no circumstances will the state be permitted to condition Medicaid coverage, or coverage of any benefit or service, on receipt of Life360 HOME services. The state must submit additional details on covered Life360 HOME services to CMS as outlined in STC 41 and Attachment H.

41. Allowable HRSN Services. The state may cover the following Life360 HOME services in all three Life360 HOME types:

a. Housing Supports, including:
   i. Pre-tenancy and tenancy sustaining services, including tenant rights education and eviction prevention
   ii. Housing transition navigation services
   iii. One-time transition and moving costs (e.g., security deposits, first-month's rent, utilities activation fees, movers, and pest eradication)
   iv. Housing deposits to secure housing, including application and inspection fees and fess to secure needed identification

b. Nutrition Supports
   i. Nutrition counseling and education, including healthy meal preparation

c. Case management, outreach, and education including linkages to other state and federal benefit program application assistance, and benefit program application fees, as described in attachment G.

42. Life360 HOME Infrastructure.

a. The state may claim FFP in infrastructure investments in order to support the development and implementation of Life360 HOME services, subject to STC 40. This FFP will be available for the following activities:
   i. Technology- e.g., electronic referral systems, shared data platforms, EHR modifications or integrations, screening tool and/or case management systems, databases/data warehouses, data analytics and reporting, data protections and privacy, accounting and billing systems
   ii. Development of business or operational practices – e.g., procurement and planning, developing policies and workflows for referral management, privacy, quality improvement, trauma-informed practices, evaluation, member navigation
   iii. Workforce development – e.g., cultural competency training, trauma-informed training, community health worker certification, training staff on new policies and procedures
   iv. Outreach, education, and stakeholder convening – e.g., design and production of outreach and education materials, translation, obtaining community input, investments in stakeholder convening

v. Costs consistent with the above categories necessary for the development of crisis stabilization capacity in rural hospitals to support Rural Life360 HOMEs

b. The state may claim FFP in Life360 HOME infrastructure expenditures for no more than the annual amounts outlined in Table 2. In the event that the state does not claim the full amount of FFP for a given demonstration year, the unspent amounts will roll over to one or more demonstration years not to exceed this demonstration period and the state may claim the remaining amount in a subsequent demonstration year.

Table 2. Annual Limits in Total Computable LIFE360 HOME Infrastructure

	DY 1 (2022)	DY 2 (2023)	DY 3 (2024)	DY 4 (2025)	DY 5 (2026)
Total Computable Expenditures	$0	$2.7M	$1.97M	$3.0M	$2.8M

c. HRSN infrastructure funding must be claimed at the applicable administrative match rate, and approved HRSN Infrastructure funding will be matched at the applicable administrative match for the expenditure.

d. This HRSN infrastructure funding is separate and distinct from the payment for delivery of Life360 HOME services. The state must ensure that Life360 HOME infrastructure expenditures are not factored into qualified health plan capitation payments, and that there is no duplication of funds.

e. The state may not claim any FFP in Life360 HOME infrastructure expenditures until the Protocol for Assessment of Beneficiary Eligibility and Needs, Infrastructure Planning, and Provider Qualifications for Life 360 HOME Services is approved, as described in STC 48. Once approved, the state can claim FFP in Life360 HOME infrastructure expenditures retrospectively to the beginning of the demonstration approval date.

f. To the extent the state requests any additional infrastructure funding, or changes to its scope as described within this STC, it must submit an amendment to the demonstration for CMS's consideration.

43. Excluded Life360 HOME Services. Excluded items, services and activities that are not covered as Life360 HOME services include, but are not limited to:

a. Construction costs (bricks and mortar);

b. Capital investments other than those as allowable as HRSN infrastructure as described in STC 42;

c. Room and board, except as described in STC 41;

d. Research grants and expenditures not related to monitoring and evaluation;

e. Costs for services in prisons, correctional facilities or services for people who are civilly committed and unable to leave an institutional setting;

f. Services provided to individuals who are not lawfully present in the United States or are undocumented;

g. Expenditures that supplant services and activities funded by other state and federal governmental entities;

h. School-based programs for children that supplant Medicaid state plan programs, or that are funded under the Department of Education and/or state or the local education agency;
i. General workforce activities, not specifically linked to Medicaid or Medicaid beneficiaries; and
j. Any other projects or activities not specifically approved by CMS as qualifying for demonstration coverage as Life360 HOME services.

44. Life360 HOMEs Covered Populations. Expenditures for Life360 services may be made for the targeted populations specified below. To receive Life360 HOME services, individuals in the targeted populations must have a documented need for the services and the services must be determined medically appropriate consistent with STC 40. Medical appropriateness must be based on clinical and social risk factors. This determination must be documented in the beneficiary's care plan or medical record. A beneficiary may only participate in one Life360 HOME at a time but may participate in more than one Life360 HOME throughout the demonstration approval period, if eligible. The allowable targeted populations for each of the Life360 HOME types are:

a. Maternal Life360 HOMEs will support individuals with high-risk pregnancies, as diagnosed by their physician, and up to two years post-partum, even if the individual is no longer eligible for Medicaid under any other category,[2] either through the Maternal Life360 HOME's provision of intensive care coordination and evidence-based home visitation or through contracts with evidence-based home visitation programs;[3]
b. Rural Life360 HOMEs will support individuals with a serious mental illness (SMI) or substance use disorder (SUD) diagnosis who live in rural areas of the state through provision of intensive care coordination provided directly or through contracts with organizations to provide care coordination; and,
c. Success Life360 HOMEs will support young adults (ages 19-27) most at risk of long-term poverty due to prior incarceration, involvement with the foster care system, or young adults (ages 19-24) with involvement with the juvenile justice system and veterans ages 19-30 who are at high risk of homelessness. Success Life360 HOMEs will provide intensive care coordination directly or contract with organizations to provide care coordination.

45. Definition of Intensive Care Coordination for Life360 HOMEs. The key function of each Life360 HOME is to provide intensive care coordination to identify HRSN and engage with the beneficiary to ensure successful connection to medical services and nonmedical supports in the community to meet the beneficiary's HRSN consistent with

[2] If the individual would become no longer eligible for Medicaid under any eligibility category, they would still be able to receive the benefits under the Maternal Life360 HOME,(e.g., intensive care coordination, visiting home nursing and health related social needs assessments) based on continued need. The match for services to people who are no longer eligible for the adult group would be at regular FMAP.

[3] The Maternal Life360 HOME will include leveraging the state home visiting program infrastructure that is being implemented in counties statewide and administered by the Arkansas Department of Health with Maternal, Infant and Early Childhood Home Visiting (MIECHV) program to expand current access and capacity for evidence-based home visiting for high-risk pregnant individuals. Funding authorized under this demonstration will expand access to this home visiting program and current funding levels for MIECHV will not be reduced.

these STCs. Intensive Care Coordination means: a collaborative process in which a care coordinator meets regularly virtually or in person with the beneficiary and assesses, plans, implements, coordinates, monitors and evaluates the options, services and supports necessary to meet the beneficiary's health and health-related social needs. It includes advocacy on behalf of participants in health care settings, communication, and resource management and promotes quality interventions and outcomes. In addition to accessing medical services, it includes ensuring that beneficiaries attain and maintain their HRSN service goals identified in their Person-Centered Action Plan (PCAP). The Life360 will develop an individualized PCAP for each beneficiary to address their HRSN. Each beneficiary will have a care coordinator that will directly connect the beneficiary with services and supports needed to meet the goals identified in the PCAP, which should include activities beyond providing a referral. By interacting in person on a regular basis with their beneficiaries, the care coordinator will help beneficiaries develop and strengthen life skills. Maternal Life360 will provide the intensive care coordination within an evidence-based home visiting model during pregnancy and up to 2 years following childbirth.

The use of medical care typically depends on the individual's own initiative to seek care. Care coordinators will go out into the community to meet people where they live. Qualifications of care coordinators will vary depending upon the type of Life360.

46. Life360 HOMEs Applicant Selection Process. The following hospitals enrolled as a provider with the Arkansas Medicaid program and as defined as eligible in Arkansas state statute,[4] can apply to implement a Life360 HOME:

a. Maternal Life360 HOME – the hospital must be a birthing facility
b. Rural Life360 HOME – the hospital must be a rural hospital with 50 or fewer beds
c. Success Life360 HOME – the hospital must be an acute care facility

There is no limit to the number of HOME types a hospital may establish, consistent with these STCs and subject to state review and approval.

The state must require that Life360 HOME applicants identify the target population(s) to be served (Maternal, Rural, and/or Success), service area and partners as applicable, and complete an analysis of the service area population demographics and a community resource inventory to determine the referral network/gaps and to implement data collection and sharing processes. The state must also require applicants to demonstrate they can provide, or establish contracts to provide, the required supports or model for the target population and will also need to set an annual budget and specifications for IT systems as part of their application.

47. Life360 HOME Program Integrity. The state will ensure that all Life360 payments are made consistent with these STCs. Program integrity activities for Life360 HOMEs will include at a minimum:

[4] A.C.A. § 23-61-1010 and A.C.A. § 23-61-1003

a. **Completing progress reporting on Life360-funded activities.** All Selected Applicants will be expected to submit progress reports that document Life360 HOME-funded activities. The state will require hospitals that apply to operate a Life360 HOME and are selected by the state to do so (Selected Applicants) attest to non-duplication of funding with other federal, state, and local funds. The state must monitor for funding irregularities and potential duplication across all Life360 HOMEs.

b. **Participating in audit processes.** The state must conduct audits in accordance with all required policies for Medicaid funding to ensure that Life360 HOME funds are being spent on permissible uses and are being reported appropriately. The state must include results from these audits in its Annual Monitoring Reports, which are described in STC 66.

c. **Ensuring action is taken to address noncompliance.** The state will ensure that action is taken to address any identified non-compliance with Life360 HOME funding parameters. If the state determines that a Selected Applicant has failed to demonstrate appropriate performance, including enrolling an insufficient number of beneficiaries, the state may impose corrective actions that may include caps on funding, recoupment of funds, or discontinuation of Life360 HOME funding. The state may also impose corrective actions for a Selected Applicant if it determines the Life360 HOME is out of compliance with requirements set forth in the STCs and attachments, the agreement between the Selected Applicant and the state, and/or policy letters or guidance set forth by the state. Prior to initiating any corrective action on a Selected Applicant, the state shall provide the Selected Applicant notice and an opportunity to comment regarding the identified area of non-compliance. CMS reserves the right to require the state to return FFP associated with recoupment of funding for Selected Applicant due to noncompliance.

48. Protocol for Assessment of Beneficiary Eligibility and Needs, Infrastructure Planning, and Provider Qualifications for Life360 HOMEs. Within 180 days of approval the state must complete and submit to CMS for review and approval a Protocol for Assessment of Beneficiary Eligibility and Needs, Infrastructure Planning, and Provider Qualifications (Protocol) for conducting the assessment of beneficiary eligibility and needs, Life360 HOME infrastructure, and provider qualifications for Life360 HOME services. This Protocol must include a list of the Life360 HOME services and service descriptions, outlining the name and description of each proposed service, the criteria for defining when each service is medically appropriate, the process by which that criteria will be applied including care plan requirements or other documented processes, proposed uses of Life360 HOME infrastructure, and provider qualification criteria for each service. The state must resubmit an updated protocol if CMS provides feedback on the initial submission. The Protocol may be updated as details are changed or added. The state may not claim FFP for Life360 HOME service or Life360 HOME infrastructure expenditures until CMS approves the protocol. Once approved, the state can claim FFP for Life360 HOME services and Life360 HOME infrastructure expenditures retrospectively to the beginning of the amendment approval date. The approved protocol will be attached to the STCs as Attachment I.

Specifically, the Protocol must include the following information:

a. Proposed uses of HRSN infrastructure expenditures, including the type of entities to receive funding, the intended purpose of the funding, the projected expenditure amounts, and an implementation timeline
b. A list of the covered HRSN services (not to exceed those allowed under STC 41), with associated service descriptions and service-specific provider qualification requirements
c. A description of the process for identifying beneficiaries with health-related social needs, including outlining beneficiary eligibility, implementation settings, screening tool selection, and rescreening approach and frequency, as applicable
d. A description of the process by which clinical criteria will be applied, including a description of the documented process wherein a provider, using their professional judgment, may deem the service to be medically appropriate
    i. Plan to identify medical appropriateness based on clinical and social risk factors
    ii. Plan to publicly maintain these clinical/social risk criteria to ensure transparency for beneficiaries and stakeholders
e. A description of the process for developing care plans based on assessment of need
    i. Plan to initiate care plans and closed-loop referrals to social services and community providers based on the outcomes of screening
    ii. Description of how the state will ensure that HRSN screening and service delivery are provided to beneficiaries in ways that are culturally responsive and/or trauma-informed

49. Sources of Non-federal Share of Funding for Life360 Expenditures. The state shall provide permissible sources for the non-federal share of all Life360 HOME expenditures derived from state funds that do not utilize impermissible provider taxes or intergovernmental transfers (IGTs) as the source of revenue.

50. Compliance with Federal Requirements. The state shall ensure Life360 HOME services are delivered in accordance with all applicable federal statute, regulation or guidance.

51. Person-Centered Action Plan. The state shall ensure that there is a person-centered action plan for each individual determined to be eligible for HRSN services through Life360 HOMEs. The person-centered action plan must be person-centered, identify the individual's needs and individualized strategies and interventions for meeting those needs, and be developed in consultation with the individual and the individual's chosen support network as appropriate. The person-centered action plan will be reviewed and revised upon reassessment of need at least every 12 months, when the individual's circumstances or needs change significantly, or at the request of the individual.

52. Conflict of Interest. The state shall ensure appropriate protections against conflicts of interest in the service planning and delivery of HRSN services though Life360 HOMEs.

The state agrees that appropriate separation of assessment, service planning and service provision functions are incorporated into state and other applicable vendors' conflict of interest policies. In situations where the entity responsible for assessments is also the entity responsible for service planning, the state will ensure the individual responsible for the development of the person-centered action plan will not also be a direct service provider.

53. Rate Methodologies. All rate and/or payment methodologies for authorized Life360 HOME services outlined in these STCs must be submitted to CMS for review and approval at least 60 days prior to implementation. These methodologies, including but not limited to fee-for-service payment as well as non-risk payments and capitation rates in managed care delivery systems, must be included in the New Initiatives Implementation Plan. States must submit all documentation requested by CMS, including but not limited to the payment rate methodology as well as other documentation and supporting information (e.g., state responses to Medicaid non-federal share financing questions). The state must also comply with the Public Notice Procedures set forth in 42 CFR 447.205 for changes in statewide methods and standards for setting fee-for-service payment rates.

54. Maintenance of Effort (MOE). The state must maintain the level of state funding for social service programs related to housing transitions supports and nutrition supports for the duration of the demonstration. Within 90 days of approval of the Life360 amendment, the state must submit a plan to CMS as part of the New Initiatives Implementation Plan (see STC 64) that outlines how it will assess the current availability of these services throughout the state. The annual MOE will be reported and monitored as part of the Annual Monitoring Reports described in STC 66, including any justifications necessary to describe the findings.

55. Partnerships with State and Local Entities. The state must have in place partnerships with other state and local entities (e.g., HUD Continuum of Care Program, local housing authority, SNAP state agency, etc.) to assist beneficiaries in obtaining non-Medicaid funded housing and nutrition supports, if available, upon the conclusion of temporary Medicaid payment for such supports, in alignment with beneficiary needs identified in the person-centered plans as appropriate. The state must submit a plan to CMS as part of the New Initiatives Implementation Plan (see STC 64) that outlines how it will put into place the necessary arrangements with other state and local entities and also work with those entities to beneficiaries in obtaining available non-Medicaid funded housing and nutrition supports upon conclusion of temporary Medicaid payment as stated above. The plan must provide a timeline for the activities outlined. As part of the Quarterly Monitoring Reports described in STC 66, the state will provide the status of the state's fulfillment of its plan and progress relative to timeline, and whether and to what extent the non-Medicaid funding supports are being accessed by beneficiaries as planned. Once the state's plan is fully implemented, the state may conclude its status updates in the Quarterly Monitoring Reports.

IX. PREMIUMS & COST SHARING

56. **Premiums & Cost Sharing.** Cost sharing for ARHOME beneficiaries must be in compliance with federal requirements that are set forth in statute, regulation and policies, including requirements and limitations from cost sharing set forth in 42 CFR Section 447.50-57. Waiver authority for premiums will sunset on December 31, 2022.

57. **Premiums & Cost Sharing Parameters for the ARHOME Program.** With the approval of this demonstration:

a. Beneficiaries up to and including 20 percent of the FPL will have no cost sharing.
b. Beneficiaries above 20 percent of the FPL will have cost sharing consistent with Medicaid requirements beginning January 1, 2023.
c. Beneficiaries above 100 percent of the FPL will be required to pay monthly premiums of up to 2 percent of household income until the authority sunsets on December 31, 2022.
d. Premiums and cost sharing will be subject to an aggregate cap of no more than 5 percent of family quarterly income.
e. Cost sharing requirements and/or limitations described in 42 CFR 447.50-57 will be applied to all program beneficiaries.
f. Copayment and coinsurance amounts will be consistent with federal requirements regarding Medicaid cost sharing and with the state's approved state plan; copayment and coinsurance amounts are listed in Attachment A.
g. Medically frail individuals and American Indian/Alaska Native individuals, and individuals ages 19 and 20, will be exempt from cost sharing.

58. **Payment Process for Payment of Cost Sharing Reduction to QHPs.** Agreements with QHP issuers may provide for advance monthly cost-sharing reduction (CSR) payments to cover the costs associated with the reduced cost sharing for ARHOME beneficiaries. Such payments will be subject to reconciliation at the conclusion of the benefit year based on actual expenditures by the QHP for cost sharing reduction. If a QHP issuer's actuary determines during the benefit year that the estimated advance CSR payments are significantly different than the CSR payments the QHP issuer will be entitled to during reconciliation, the QHP issuer may ask Arkansas' Department of Human Services to adjust the advance payments. Arkansas' reconciliation process will follow 45 CFR Section 156.430 to the extent applicable.

59. **Grace Period/Debt Collection.** The grace period/debt collection process will be consistent with federal requirements regarding Medicaid cost sharing, including requirements at 42 CFR 447.55(b). ARHOME beneficiaries will have two months from the date of the payment invoice to make the required monthly premium contribution. Arkansas and/or its vendor may attempt to collect unpaid premiums and the related debt from beneficiaries, but may not report the debt to credit reporting agencies, place a lien on an individual's home, refer the case to debt collectors, file a lawsuit, or seek a court order to seize a portion of the individual's earnings for beneficiaries at any income level. The state and/or its vendor may not "sell" the debt for collection by a third party. The waiver authorizing this policy will sunset on December 31, 2022.

X. FAIR HEARINGS

60. The state will afford beneficiaries in the demonstration fair hearing rights in accordance with 42 CFR part 431 subpart E. No waiver will be granted related to fair hearings. The state must ensure compliance with all federal and state requirements related to beneficiary fair hearing rights, including compliance with the approved state plan.

XI. MONITORING AND REPORTING REQUIREMENTS

61. Deferral for Failure to Submit Timely Demonstration Deliverables. CMS may issue deferrals in accordance with 42 CFR part 430 subpart C, in the amount of $5,000,000 per deliverable (federal share) when items required by these STCs (e.g., required data elements, analyses, reports, design documents, presentations, and other items specified in these STCs) (hereafter singly or collectively referred to as "deliverable(s)") are not submitted timely to CMS or found to not be consistent with the requirements approved by CMS. A deferral shall not exceed the value of the federal amount for the demonstration period. The state does not relinquish its rights provided under 42 CFR part 430 subpart C to challenge any CMS finding that the state materially failed to comply with the terms of this agreement.

The following process will be used: 1) 30 calendar days after the deliverable was due, if the state has not submitted a written request to CMS for approval of an extension as described in subsection (b) below; or 2) 30 calendar days after CMS has notified the state in writing that the deliverable was not accepted due to being inconsistent with the requirements of this agreement and the information needed to bring the deliverable into alignment with CMS requirements:

a. CMS will issue a written notification to the state providing advance notification of a pending deferral for late or non-compliant submissions of required deliverables.
b. For each deliverable, the state may submit to CMS a written request for an extension to submit the required deliverable. The extension request must explain the reason why the required deliverable was not submitted, the steps that the state has taken to address such issue, and state's anticipated date of submission. Should CMS agree to the state's request, a corresponding extension of the deferral process described below can be provided. CMS may agree to a corrective action as an interim step before applying the deferral, if corrective action is proposed in the state's written extension request.
c. If CMS agrees to an interim corrective process in accordance with subsection (b), and the state fails to comply with the corrective action plan or, despite the corrective action plan, still fails to submit the overdue deliverable(s) that meets the terms of this agreement, CMS may proceed with the issuance of a deferral against the next Quarterly Statement of Expenditures reported in Medicaid Budget and Expenditure System/State Children's Health Insurance Program Budget and Expenditure System (MBES/CBES) following a written deferral notification to the state.
d. If the CMS deferral process has been initiated for state non-compliance with the terms of this agreement for submitting deliverable(s), and the state submits the

overdue deliverable(s), and such deliverable(s) are accepted by CMS as meeting the standards outlined in these STCs, the deferral(s) will be released.

As the purpose of a section 1115 demonstration is to test new methods of operation or service delivery, a state's failure to submit all required reports, evaluations and other deliverables will be considered by CMS in reviewing any application for an extension, amendment, or for a new demonstration.

62. Submission of Post-Approval Deliverables. The state must submit all deliverables as stipulated by CMS and within the timeframes outlined in these STCs.

63. Compliance with Federal Systems Innovation. As federal systems continue to evolve and incorporate additional section 1115 demonstration reporting and analytics functions, the state will work with CMS to:

a. Revise the reporting templates and submission processes to accommodate timely compliance with the requirements of the new systems;
b. Ensure all section 1115, T-MSIS, and other data elements that have been agreed to for reporting and analytics are provided by the state; and
c. Submit deliverables to the appropriate system as directed by CMS.

64. New Initiatives Implementation Plan. The state is required to submit a New Initiatives Implementation Plan to cover certain key policies being tested under this demonstration, including those approved through any amendments. The Implementation Plan will contain applicable information for the following expenditure authorities: Life360 HOME HRSN Services, Life360 HOME HRSN Infrastructure. The New Initiatives Implementation Plan, at a minimum, must provide a description of the state's strategic approach to implementing the key demonstration policies, including timelines for meeting critical implementation stages or milestones, as applicable, to support successful implementation.

The state must submit the Maintenance of Effort information required by STC 54 for CMS approval no later than 90 calendar days after approval of the Life360 HOMEs amendment. All other Implementation Plan requirements outlined in this STC must be submitted for CMS approval no later than 9 months after the approval of the demonstration amendment. The state must submit any required clarifications or revisions to their Implementation Plan submission within 60 calendar days after receipt of CMS feedback. Once approved, the finalized Implementation Plan will be incorporated into the STCs as Attachment D and may be further altered only with CMS approval.

In the Implementation Plan, the state is expected only to provide additional details regarding the implementation of the demonstration policies that are not already captured in the STCs or available elsewhere publicly. Furthermore, for the state's HRSN-related authorities, the Implementation Plan does not need to repeat any information submitted to CMS in the Protocol for Assessment of Beneficiary Eligibility and Needs, Infrastructure Planning, and Provider Qualifications for Life360 HOME Services (see STC 48);

however, as applicable, the information provided in the two deliverables must be aligned and consistent with one another.

The Implementation Plan can be updated as necessary to align with state operations. CMS may provide the state with a template to support the state in developing and obtaining approval of the Implementation Plan.

The New Initiatives Implementation Plan must include information on, but not limited to, the following:

a. A plan for establishing and/or improving data sharing and partnerships with an array of health system and social services stakeholders to the extent those entities are vital to provide needed administrative and HRSN-related data on screenings, referrals, and provision of services, which are critical for understanding program implementation and conducting demonstration monitoring and evaluation
b. Information about key partnerships related to HRSN service delivery, including plans for capacity building for community partners and for soliciting and incorporating input from impacted groups (e.g., community partners, health care delivery system partners, and beneficiaries)
c. Plans for changes to information technology (IT) infrastructure that will support HRSN-related data exchange, including development and implementation of data systems necessary to support program implementation, monitoring, and evaluation. These existing or new data systems should, at a minimum, collect data on beneficiary characteristics, eligibility and consent, screening, referrals, and service provision.
d. A plan for tracking and improving the share of Medicaid beneficiaries who are eligible and enrolled in the Supplemental Nutrition Assistance Program (SNAP), the Special Supplemental Nutrition Program for Women, Infants and Children (WIC), and federal and state housing assistance programs, relative to the number of total eligible beneficiaries, including establishing a timeline for reporting.
e. An implementation timeline and evaluation considerations impacted by the timeline, such as staged rollout that can facilitate robust evaluation designs if these implementation strategies are culturally appropriate
f. Information as required per STC 54 (MOE)
g. Information as required per STC 55 (Partnerships with State and Local Entities)

Failure to submit a New Initiatives Implementation Plan will be considered a material failure to comply with the terms of the demonstration project as described in 42 CFR 431.420(d) and, as such, would be grounds for termination or suspension of the Life360 HOMEs programs under this demonstration.

65. Monitoring Protocol. The state must submit to CMS a Monitoring Protocol no later than 150 calendar days after approval of the demonstration. The state must submit a revised Monitoring Protocol within 60 days after receipt of CMS's comments. Once approved, the Monitoring Protocol will be incorporated into the STCs as Attachment E. In addition, the state must submit an updated or a separate Monitoring Protocol for any amendments to the demonstration, such as the Life 360 HOMEs, no later than 150 calendar days after

the approval of the amendment. Such amendment Monitoring Protocols are subject to same requirement of revisions and CMS approval, as described above.

At a minimum, the Monitoring Protocol must affirm the state's commitment to conduct Quarterly and Annual Monitoring Reports in accordance with CMS's guidance and technical assistance and using CMS-provided reporting templates, if applicable. Any proposed deviations from CMS's guidance must be documented in the Monitoring Protocol. The Monitoring Protocol must describe the quantitative and qualitative elements on which the state will report through Quarterly and Annual Monitoring Reports. For the overall demonstration and specific policies where CMS provides states with a suite of quantitative monitoring metrics (e.g., performance metrics described in STC 66b below), the state is required to calculate and report such metrics leveraging the technical specifications provided by CMS. CMS will provide the state with a set of required metrics, and technical specifications for data collection and metrics calculations covering reporting topics, including but not limited to, enrollment, access to care, quality of care and health outcomes, enrollment by premium payment status, and unpaid medical bills at application. The Monitoring Protocol must specify the methods of data collection and timeframes for reporting on the demonstration's progress as part of the Quarterly and Annual Monitoring Reports. In alignment with CMS guidance, the Monitoring Protocol must additionally specify the state's plans and timeline on reporting metrics data stratified by key demographic subpopulations of interest (e.g., by sex, age, race/ethnicity, English language proficiency, primary language, disability status, and geography) and demonstration component.

For the Life360 HOMEs amendment, the state can update its existing Monitoring Protocol or submit a new Monitoring Protocol within 150 days of the amendment approval. Metrics related to the Life360 HOMEs must include a selection of quality of care and health outcomes metrics and population stratifications based on CMS's upcoming guidance on the Health Equity Measure Slate, and must outline the corresponding data sources and reporting timelines. This slate of measures represents a critical set of equity-focused metrics known to be important for closing key equity gaps in Medicaid/CHIP (e.g. the National Quality Forum (NQF) "disparities-sensitive" measures) and prioritizes key outcome measures and their clinical and non-clinical (i.e. social) drivers. The Monitoring Protocol must also outline the state's planned approaches and parameters to track performance relative to the goals and milestones, as provided in the implementation plan, for the HRSN infrastructure investments.

In addition, the state must describe in the Monitoring Protocol methods to collect and analyze non-Medicaid administrative data to help calculate applicable monitoring metrics. These sources may include, but are not limited to: (1) community resource referral platforms, (2) records of social services receipt from other agencies (such as SNAP or TANF benefits, or housing assistance), (3) other data from social services organizations linked to beneficiaries (e.g., services rendered, resolution of identified need, as applicable), (4) social needs screening results from electronic health records, health plans, or other partner agencies. Across data sources, the state must make efforts and consult with relevant non-Medicaid social service agencies to collect data in ways that support

analyses of data on beneficiary subgroups. The Monitoring Protocol must also outline the state's planned approaches and parameters to track performance relative to the goals and milestones, as provided in the implementation plan, for the HRSN infrastructure investments.

For the qualitative elements (e.g., operational updates as described in STC 66a below), CMS will provide the state with guidance on narrative and descriptive information which will supplement the quantitative metrics on key aspects of the demonstration policies. The quantitative and qualitative elements will comprise the state's Quarterly and Annual Monitoring Reports.

66. Monitoring Reports. The state must submit three Quarterly Monitoring Reports and one Annual Monitoring Report each DY. The fourth-quarter information that would ordinarily be provided in a separate report should be reported as distinct information within the Annual Monitoring Report. The Quarterly Monitoring Reports are due no later than 60 calendar days following the end of each demonstration quarter. The Annual Monitoring Report (including the fourth-quarter information) is due no later than 90 calendar days following the end of the DY. The state must submit a revised Monitoring Report within 60 calendar days after receipt of CMS's comments, if any. The reports will include all required elements as per 42 CFR 431.428, and should not direct readers to links outside the report. Additional links not referenced in the document may be listed in a Reference/Bibliography section. The Quarterly and Annual Monitoring Reports must follow the framework to be provided by CMS, which is subject to change as monitoring systems are developed/evolve, and will be provided in a structured manner that supports federal tracking and analysis.

a. Operational Updates. Per 42 CFR 431.428, the Monitoring Reports must document any policy or administrative difficulties in operating the demonstration. The reports must provide sufficient information to document key operational and other challenges, underlying causes of challenges, and how challenges are being addressed. The discussion should also include any issues or complaints identified by beneficiaries; lawsuits or legal actions; unusual or unanticipated trends; legislative updates; and descriptions of any public forums held. In addition, Monitoring Reports should describe key achievements, as well as the conditions and efforts to which these successes can be attributed. Monitoring Reports should also include a summary of all public comments received through post-award public forums regarding the progress of the demonstration.

b. Performance Metrics. The performance metrics will provide data to demonstrate how the state is progressing toward meeting the demonstration's goals – including relative to their projected timelines – of the demonstration's program and policy implementation and infrastructure investments, and must cover all key policies under this demonstration. Additionally, per 42 CFR 431.428, the Monitoring Reports must document the impact of the demonstration in providing insurance coverage to beneficiaries and the uninsured population, as well as outcomes of care, quality and cost of care, and access to care. This may also include the results of beneficiary satisfaction or experience of care surveys, if conducted, as well as grievances and appeals.

The demonstration's metrics reporting must cover categories including, but not limited to: enrollment and renewal, including enrollment duration, access to providers, utilization of services, enrollment by premium payment status, unpaid medical bills at application and those who experienced a gap in coverage, and quality of care and health outcomes. The state must undertake robust reporting of quality of care and health outcomes metrics aligned with the demonstration's policies and objectives, to be reported for all demonstration populations. Such reporting must also be stratified by key demographic subpopulations of interest (e.g., by sex, age, race/ethnicity, English language proficiency, primary language, disability status, and geography) and by demonstration component, to the extent feasible. Subpopulation reporting will support identifying any existing shortcomings or disparities in quality of care and health outcomes, and help track whether the demonstration's initiatives help improve outcomes for the state's Medicaid population, including the narrowing of any identified disparities. To that end, CMS underscores the importance of the state's reporting of quality of care and health outcomes metrics known to be important for closing key equity gaps in Medicaid/CHIP (e.g. the National Quality Forum (NQF) "disparities-sensitive" measures) and prioritizing key outcome measures and their clinical and non-clinical (i.e. social) drivers of health. In coordination with CMS, the state is expected to select such measures for reporting in alignment with a critical set of equity-focused measures CMS is finalizing as part of its upcoming guidance on the Health Equity Measure Slate.

For the Life360 HOMEs amendment, in addition to reporting on the metrics described above, the state must track beneficiary participation, screening, receipt of referrals and social services over time, as well as narratively report on the adoption of information technology infrastructure to support data sharing between the state or partner entities assisting in the administration of the demonstration and social services organizations. Furthermore, the state's enrollment and renewal metrics must capture baseline data and track progress via Monitoring Reports for the percent of Medicaid renewals completed ex-party (administratively), as well as the percentage of Medicaid beneficiaries enrolled in other public benefit programs (such as, Supplemental Nutrition Assistance Program (SNAP) and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)) for which they are eligible. The Monitoring Reports must also provide status updates in accordance with the Monitoring Protocol on the implementation of infrastructure investments tied to HRSN initiatives. In addition, if the state, health plans, or health care providers will contract or partner with organizations to implement Life360 HOMEs, the state must use monitoring metrics that track the number and characteristics of contracted or participating organizations in specific demonstration programs and corresponding payment-related metrics.

c. Budget Neutrality and Financial Reporting Requirements. Per 42 CFR 431.428, the Monitoring Reports must document the financial performance of the demonstration. The state must provide an updated budget neutrality workbook with every Monitoring Report that meets all the reporting requirements for monitoring budget neutrality set forth in the General Financial Requirements section of these STCs, including the submission of corrected budget neutrality data upon request. In addition, the state must report quarterly and annual

expenditures associated with the populations affected by this demonstration on the Form CMS-64. Administrative costs for this demonstration should be reported separately on the CMS-64.

d. Evaluation Activities and Interim Findings. Per 42 CFR 431.428, the Monitoring Reports must document any results of the demonstration to date per the evaluation hypotheses. Additionally, the state shall include a summary of the progress of evaluation activities, including key milestones accomplished, as well as challenges encountered and how they were addressed.

67. Corrective Action Plan Related to Monitoring. If monitoring indicates that demonstration features are not likely to assist in promoting the objectives of Medicaid, CMS reserves the right to require the state to submit a corrective action plan to CMS for approval. A state corrective action plan could include a temporary suspension of implementation of demonstration programs in circumstances where monitoring data indicate substantial and sustained directional change inconsistent with demonstration goals, such as substantial and sustained trends indicating increased difficulty accessing services. A corrective action plan may be an interim step to withdrawing waivers or expenditure authorities, as outlined in STC 11. CMS will withdraw an authority, as described in STC 11, when metrics indicate substantial and sustained directional change inconsistent with the state's demonstration goals, and the state has not implemented corrective action. CMS further has the ability to suspend implementation of the demonstration should corrective actions not effectively resolve these concerns in a timely manner.

68. Close-Out Report. Within 120 calendar days after the expiration of the demonstration, the state must submit a draft Close-Out Report to CMS for comments.

a. The Close-Out Report must comply with the most current guidance from CMS.

b. In consultation with CMS, and per guidance from CMS, the state will include an evaluation of the demonstration (or demonstration components) that are to phase out or expire without extension along with the Close-Out Report. Depending on the timeline of the phase-out during the demonstration approval period, in agreement with CMS, the evaluation requirement may be satisfied through the Interim and/or Summative Evaluation Reports stipulated in STCs 104 and 105, respectively.

c. The state will present to and participate in a discussion with CMS on the Close-Out report.

d. The state must take into consideration CMS's comments for incorporation into the final Close-Out report.

e. A revised Close-Out report is due to CMS no later than thirty (30) calendar days after receipt of CMS's comments.

f. A delay in submitting the draft or final version of the Close-Out report may subject the state to penalties described in STC 61.

69. Monitoring Calls. CMS will convene periodic conference calls with the state.

a. The purpose of these calls is to discuss ongoing demonstration operation, to include (but not limited to), any significant actual or anticipated developments

affecting the demonstration. Examples include implementation activities, trends in reported data on metrics and associated mid-course adjustments, enrollment and access, budget neutrality, and progress on evaluation activities.

b. CMS will provide updates on any pending actions, as well as federal policies and issues that may affect any aspect of the demonstration.

c. The state and CMS will jointly develop the agenda for the calls.

70. Post Award Forum. Pursuant to 42 CFR 431.420(c), within 6 months of the demonstration's implementation, and annually thereafter, the state must afford the public with an opportunity to provide meaningful comment on the progress of the demonstration. At least thirty (30) calendar days prior to the date of the planned public forum, the state must publish the date, time and location of the forum in a prominent location on its website. The state must also post the most recent Annual Monitoring Report on its website with the public forum announcement. Pursuant to 42 CFR 431.420(c), the state must include a summary of the public comments in the Annual Monitoring Report associated with the year in which the forum was held.

XII. GENERAL FINANCIAL REQUIREMENTS

71. Allowable Expenditures. This demonstration project is approved for authorized demonstration expenditures applicable to services rendered and for costs incurred during the demonstration approval period designated by CMS. CMS will provide FFP for allowable demonstration expenditures only so long as they do not exceed the pre-defined limits as specified in these STCs.

72. Standard Medicaid Funding Process. The standard Medicaid funding process will be used for this demonstration. The state will provide quarterly expenditure reports through the Medicaid and CHIP Budget and Expenditure System (MBES/CBES) to report total expenditures under this Medicaid section 1115 demonstration following routine CMS-37 and CMS-64 reporting instructions as outlined in section 2500 of the State Medicaid Manual. The state will estimate matchable demonstration expenditures (total computable and federal share) subject to the budget neutrality expenditure limit and separately report these expenditures by quarter for each federal fiscal year on the form CMS-37 for both the medical assistance payments (MAP) and state and local administration costs (ADM). CMS shall make federal funds available based upon the state's estimate, as approved by CMS. Within 30 days after the end of each quarter, the state shall submit form CMS-64 Quarterly Medicaid Expenditure Report, showing Medicaid expenditures made in the quarter just ended. If applicable, subject to the payment deferral process, CMS shall reconcile expenditures reported on form CMS-64 with federal funding previously made available to the state, and include the reconciling adjustment in the finalization of the grant award to the state.

73. Sources of Non-Federal Share. As a condition of demonstration approval, the state certifies that its funds that make up the non-federal share are obtained from permissible state and/or local funds that, unless permitted by law, are not other federal funds. The state further certifies that federal funds provided under this section 1115 demonstration

must not be used as the non-federal share required under any other federal grant or contract, except as permitted by law. CMS approval of this demonstration does not constitute direct or indirect approval of any underlying source of non-federal share or associated funding mechanisms and all sources of non-federal funding must be compliant with section 1903(w) of the Act and applicable implementing regulations. CMS reserves the right to deny FFP in expenditures for which it determines that the sources of non-federal share are impermissible.

a. If requested, the state must submit for CMS review and approval documentation of any sources of non-federal share that would be used to support payments under the demonstration.
b. If CMS determines that any funding sources are not consistent with applicable federal statutes or regulations, the state must address CMS's concerns within the time frames allotted by CMS.
c. Without limitation, CMS may request information about the non-federal share sources for any amendments that CMS determines may financially impact the demonstration.

74. State Certification of Funding Conditions. As a condition of demonstration approval, the state certifies that the following conditions for non-federal share financing of demonstration expenditures have been met:

a. If units of state or local government, including health care providers that are units of state or local government, supply any funds used as non-federal share for expenditures under the demonstration, the state must certify that state or local monies have been expended as the non-federal share of funds under the demonstration in accordance with section 1903(w) of the Act and applicable implementing regulations.
b. To the extent the state utilizes certified public expenditures (CPE) as the funding mechanism for the non-federal share of expenditures under the demonstration, the state must obtain CMS approval for a cost reimbursement methodology. This methodology must include a detailed explanation of the process, including any necessary cost reporting protocols, by which the state identifies those costs eligible for purposes of certifying public expenditures. The certifying unit of government that incurs costs authorized under the demonstration must certify to the state the amount of public funds allowable under 42 CFR 433.51 it has expended. The federal financial participation paid to match CPEs may not be used as the non-federal share to obtain additional federal funds, except as authorized by federal law, consistent with 42 CFR 433.51(c).
c. The state may use intergovernmental transfers (IGT) to the extent that the transferred funds are public funds within the meaning of 42 CFR 433.51 and are transferred by units of government within the state. Any transfers from units of government to support the non-federal share of expenditures under the demonstration must be made in an amount not to exceed the non-federal share of the expenditures under the demonstration.
d. Under all circumstances, health care providers must retain 100 percent of their payments for or in connection with furnishing covered services to beneficiaries. Moreover, no pre-arranged agreements (contractual, voluntary, or otherwise) may exist between health care providers and state and/or local governments, or third parties to return and/or redirect to the state any portion of the Medicaid payments in a

manner inconsistent with the requirements in section 1903(w) of the Act and its implementing regulations. This confirmation of Medicaid payment retention is made with the understanding that payments that are the normal operating expenses of conducting business, such as payments related to taxes, including health care provider-related taxes, fees, business relationships with governments that are unrelated to Medicaid and in which there is no connection to Medicaid payments, are not considered returning and/or redirecting a Medicaid payment.

e. The State Medicaid Director or his/her designee certifies that all state and/or local funds used as the state's share of the allowable expenditures reported on the CMS-64 for this demonstration were in accordance with all applicable federal requirements and did not lead to the duplication of any other federal funds.

75. Financial Integrity for Managed Care Delivery Systems. As a condition of demonstration approval, the state attests to the following, as applicable:

a. All risk-based managed care organization, prepaid inpatient health plan (PIHP), and prepaid ambulatory health plan (PAHP) payments, comply with the requirements on payments in 42 CFR 438.6(b)(2), 438.6(c), 438.6(d), 438.60, and 438.74.

76. Requirements for Health Care-Related Taxes and Provider Donations. As a condition of demonstration approval, the state attests to the following, as applicable:

a. Except as provided in paragraph (c) of this STC, all health care-related taxes as defined by section 1903(w)(3)(A) of the Act and 42 CFR 433.55 are broad-based as defined by section 1903(w)(3)(B) of the Act and 42 CFR 433.68(c).

b. Except as provided in paragraph (c) of this STC, all health care-related taxes are uniform as defined by section 1903(w)(3)(C) of the Act and 42 CFR 433.68(d).

c. If the health care-related tax is either not broad-based or not uniform, the state has applied for and received a waiver of the broad-based and/or uniformity requirements as specified by 1903(w)(3)(E)(i) of the Act and 42 CFR 433.72.

d. The tax does not contain a hold harmless arrangement as described by section 1903(w)(4) of the Act and 42 CFR 433.68(f).

e. All provider-related donations as defined by 42 CFR 433.52 are bona fide as defined by section 1903(w)(2)(B) of the Act, 42 CFR 433.66, and 42 CFR 433.54.

77. State Monitoring of Non-Federal Share. If any payments under the demonstration are funded in whole or in part by a locality tax, then the state must provide a report to CMS regarding payments under the demonstration no later than 60 days after demonstration approval. This deliverable is subject to the deferral as described in STC 61. This report must include:

a. A detailed description of and a copy of (as applicable) any agreement, written or otherwise agreed upon, regarding any arrangement among the providers including those with counties, the state or other entities relating to each locality tax or payments received that are funded by the locality tax;

b. Number of providers in each locality of the taxing entities for each locality tax;

c. Whether or not all providers in the locality will be paying the assessment for each locality tax;

d. The assessment rate that the providers will be paying for each locality tax;

e. Whether any providers that pay the assessment will not be receiving payments funded by the assessment;
f. Number of providers that receive at least the total assessment back in the form of Medicaid payments for each locality tax;
g. The monitoring plan for the taxing arrangement to ensure that the tax complies with section 1903(w)(4) of the Act and 42 CFR 433.68(f); and
h. Information on whether the state will be reporting the assessment on the CMS form 64.11A as required under section 1903(w) of the Act.

78. Extent of Federal Financial Participation for the Demonstration. Subject to CMS approval of the source(s) of the non-federal share of funding, CMS will provide FFP at the applicable federal matching rate for the following demonstration expenditures, subject to the budget neutrality expenditure limits described in STC 87:

a. Administrative costs, including those associated with the administration of the demonstration;
b. Net expenditures and prior period adjustments of the Medicaid program that are paid in accordance with the approved Medicaid state plan; and
c. Medical assistance expenditures and prior period adjustments made under section 1115 demonstration authority with dates of service during the demonstration extension period; including those made in conjunction with the demonstration, net of enrollment fees, cost sharing, pharmacy rebates, and all other types of third-party liability.

79. Program Integrity. The state must have processes in place to ensure there is no duplication of federal funding for any aspect of the demonstration. The state must also ensure that the state and any of its contractors follow standard program integrity principles and practices including retention of data. All data, financial reporting, and sources of non-federal share are subject to audit.

80. Medicaid Expenditure Groups: Medicaid Expenditure Groups (MEG) are defined for the purpose of identifying categories of Medicaid or demonstration expenditures subject to budget neutrality, components of budget neutrality expenditure limit calculations, and other purposes related to monitoring and tracking expenditures under the demonstration. The Master MEG Chart Table 3 provides a master list of MEGs defined for this demonstration

Table 3: Master MEG Chart

MEG	Which BN Test Does Applies?	WOW Per Capita	WOW Aggregate	WW	Brief Description
Adult Group	Hypo 1	X		X	Adult Group
HRSN Services	Capped Hypo		X	X	All expenditures for Life360 HOME HRSN services

Table 3: Master MEG Chart					
MEG	**Which BN Test Does Applies?**	**WOW Per Capita**	**WOW Aggregate**	**WW**	**Brief Description**
HRSN Infrastructure	Capped Hypo		X	X	All infrastructure expenditures related to the provision of Life360 HOME HRSN services
ADM	N/A				All additional administrative costs that are directly attributable to the demonstration and are not described elsewhere and are not subject to budget neutrality

BN – budget neutrality; MEG – Medicaid expenditure group; WOW – without waiver; WW – with waiver

81. Reporting Expenditures and Member Months. The state must report all demonstration expenditures claimed under the authority of title XIX of the Act and subject to budget neutrality each quarter on separate forms CMS-64.9 WAIVER and/or 64.9P WAIVER, identified by the demonstration project number assigned by CMS (11-W-00365/4). Separate reports must be submitted by MEG (identified by Waiver Name) and Demonstration Year (identified by the two-digit project number extension). Unless specified otherwise, expenditures must be reported by DY according to the dates of service associated with the expenditure. All MEGs identified in the Master MEG Chart as WW must be reported for expenditures, as further detailed in the MEG Detail for Expenditure and Member Month Reporting table below. To enable calculation of the budget neutrality expenditure limits, the state also must report member months of eligibility for specified MEGs.

a. **Cost Settlements.** The state will report any cost settlements attributable to the demonstration on the appropriate prior period adjustment schedules (forms CMS-64.9P Waiver) for the summary sheet line 10b (in lieu of lines 9 or 10c, or line 7. For any cost settlement not attributable to this demonstration, the adjustments should be reported as otherwise instructed in the State Medicaid Manual. Cost settlements must be reported by DY consistent with how the original expenditures were reported.

b. **Premiums and Cost Sharing Collected by the State.** The state will report any premium contributions collected by the state from demonstration enrollees quarterly on the form CMS-64 Summary Sheet line 9.D, columns A and B. In order to assure that these collections are properly credited to the demonstration, quarterly premium collections (both total computable and federal share) should also be reported separately by demonstration year on the form CMS-64 Narrative, and on the Total Adjustments tab in the Budget Neutrality Monitoring Tool. In the annual calculation of expenditures subject to the budget neutrality expenditure

limit, premiums collected in the demonstration year will be offset against expenditures incurred in the demonstration year for determination of the state's compliance with the budget neutrality limits.

c. **Pharmacy Rebates.** Because pharmacy rebates are not included in the base expenditures used to determine the budget neutrality expenditure limit, pharmacy rebates are not included for calculating net expenditures subject to budget neutrality. The state will report pharmacy rebates on form CMS-64.9 BASE, and not allocate them to any form 64.9 or 64.9P WAIVER.

d. **Administrative Costs.** The state will separately track and report additional administrative costs that are directly attributable to the demonstration. All administrative costs must be identified on the forms CMS-64.10 WAIVER and/or 64.10P WAIVER. Unless indicated otherwise on the MEG Charts and in the STCs in section XII, administrative costs are not counted in the budget neutrality tests; however, these costs are subject to monitoring by CMS.

e. **Member Months.** As part of the Quarterly and Annual Monitoring Reports described in section IX, the state must report the actual number of "eligible member months" for all demonstration enrollees for all MEGs identified as WOW Per Capita in the Master MEG Chart table above, and as also indicated in the MEG Detail for Expenditure and Member Month Reporting table below. The term "eligible member months" refers to the number of months in which persons enrolled in the demonstration are eligible to receive services. For example, a person who is eligible for three months contributes three eligible member months to the total. Two individuals who are eligible for two months, each contribute two eligible member months per person, for a total of four eligible member months. The state must submit a statement accompanying the annual report certifying the accuracy of this information.

f. **Budget Neutrality Specifications Manual.** The state will create and maintain a Budget Neutrality Specifications Manual that describes in detail how the state will compile data on actual expenditures related to budget neutrality, including methods used to extract and compile data from the state's Medicaid Management Information System, eligibility system, and accounting systems for reporting on the CMS-64, consistent with the terms of the demonstration. The Budget Neutrality Specifications Manual will also describe how the state compiles counts of Medicaid member months. The Budget Neutrality Specifications Manual must be made available to CMS on request.

Table 4. MEG Detail for Expenditure and Member Month Reporting								
MEG (Waiver Name)	**Detailed Description**	**Exclusions**	**CMS-64.9 or 64.10 Line(s) To Use**	**How Expend. Are Assigned to DY**	**MAP or ADM**	**Report Member Months (Y/N)**	**MEG Start Date**	**MEG End Date**
Adult Group	Report all medical assistance expenditures for eligible adult group individuals enrolled in ARHOME		Follow standard CMS 64.9 Category of Service Definition	Date of service	MAP	Y	1/1/2022	12/31/2026
HRSN Services	Report all expenditures for approved HRSN initiatives, excluding infrastructure	See STC# 41	Follow standard CMS 64.9 or CMS 64.10 Category of Service Definitions	Date of service/Date of payment	MAP/ADM	N	11/1/22	12/31/26
HRSN Infrastructure	Report all infrastructure expenditures for approved HRSN initiatives	See STC# 42	Follow standard CMS 64.10 Category of Service Definitions	Date of payment	ADM	N	11/1/22	12/31/26
ADM	Report all additional administrative costs that are directly attributable to the demonstration and are not described elsewhere and are not subject to budget neutrality		Follow standard CMS 64.10 Category of Service Definitions	Date of Payment	ADM	N	1/1/22	12/31/26

ADM – administration; DY – demonstration year; MAP – medical assistance payments; MEG – Medicaid expenditure group;

82. Demonstration Years. The Demonstration Years (DY) for this demonstration are defined in Table 5.

Table 5. Demonstration Populations

Demonstration Year 1 (DY1)	January 1, 2022	12 months
Demonstration Year 2 (DY2)	January 1, 2023	12 months
Demonstration Year 3 (DY3)	January 1, 2024	12 months
Demonstration Year 4 (DY4)	January 1, 2025	12 months
Demonstration Year 5 (DY5)	January 1, 2026	12 months

83. Budget Neutrality Monitoring Tool. The state must provide CMS with quarterly budget neutrality status updates, including established baseline and member months data, using the Budget Neutrality Monitoring Tool provided through the performance metrics database and analytics (PMDA) system. The tool incorporates the "Schedule C Report" for comparing the demonstration's actual expenditures to the budget neutrality expenditure limits described in section XII. CMS will provide technical assistance, upon request.[5]

84. Claiming Period. The state will report all claims for expenditures subject to the budget neutrality agreement (including any cost settlements) within two years after the calendar quarter in which the state made the expenditures. All claims for services during the demonstration period (including any cost settlements) must be made within two years after the conclusion or termination of the demonstration. During the latter two-year period, the state will continue to identify separately net expenditures related to dates of service during the operation of the demonstration on the CMS-64 waiver forms in order to properly account for these expenditures in determining budget neutrality.

85. Future Adjustments to Budget Neutrality. CMS reserves the right to adjust the budget neutrality expenditure limit:

a. To be consistent with enforcement of laws and policy statements, including regulations and guidance, regarding impermissible provider payments, health care related taxes, or other payments. CMS reserves the right to make adjustments to the budget neutrality limit if any health care related tax that was in effect during the base year, or provider-related donation that occurred during the base year, is determined by CMS to be in

[5] Per 42 CFR 431.420(a)(2), that states must comply with the terms and conditions of the agreement between the Secretary (or designee) and the state to implement a demonstration project, and 431.420(b)(1) states that the terms and conditions will provide that the state will perform periodic reviews of the implementation of the demonstration. CMS's current approach is to include language in STCs requiring, as a condition of demonstration approval, that states provide, as part of their periodic reviews, regular reports of the actual costs which are subject to the budget neutrality limit. CMS has obtained Office of Management and Budget (OMB) approval of the monitoring tool under the Paperwork Reduction Act (OMB Control No. 0938 – 1148) and states agree to use the tool as a condition of demonstration approval.

violation of the provider donation and health care related tax provisions of section 1903(w) of the Act. Adjustments to annual budget targets will reflect the phase out of impermissible provider payments by law or regulation, where applicable.

b. To the extent that a change in federal law, regulation, or policy requires either a reduction or an increase in FFP for expenditures made under this demonstration. In this circumstance, the state must adopt, subject to CMS approval, a modified budget neutrality agreement as necessary to comply with such change. The modified agreement will be effective upon the implementation of the change. The trend rates for the budget neutrality agreement are not subject to change under this STC. The state agrees that if mandated changes in the federal law require state legislation, the changes shall take effect on the day such state legislation becomes effective, or on the last day such legislation was required to be in effect under the federal law.

The state certifies that the data it provided to establish the budget neutrality expenditure limit are accurate based on the state's accounting of recorded historical expenditures or the next best available data, that the data are allowable in accordance with applicable federal, state, and local statutes, regulations, and policies, and that the data are correct to the best of the state's knowledge and belief. The data supplied by the state to set the budget neutrality expenditure limit are subject to review and audit, and if found to be inaccurate, will result in a modified budget neutrality expenditure limit.

86. Budget Neutrality Mid-Course Correction Adjustment Request. No more than once per demonstration year, the state may request that CMS make an adjustment to its budget neutrality agreement based on changes to the state's Medicaid expenditures that are unrelated to the demonstration and/or outside the state's control, and/or that result from a new expenditure that is not a new demonstration-covered service or population and that is likely to further strengthen access to care.

a. **Contents of Request and Process.** In its request, the state must provide a description of the expenditure changes that led to the request, together with applicable expenditure data demonstrating that due to these expenditures, the state's actual costs have exceeded the budget neutrality cost limits established at demonstration approval. The state must also submit the budget neutrality update described in STC 86.c. If approved, an adjustment could be applied retrospectively to when the state began incurring the relevant expenditures, if appropriate. Within 120 days of acknowledging receipt of the request, CMS will determine whether the state needs to submit an amendment pursuant to STC 6. CMS will evaluate each request based on its merit and will approve requests when the state establishes that an adjustment to its budget neutrality agreement is necessary due to changes to the state's Medicaid expenditures that are unrelated to the demonstration, are outside of the state's control, and/or that result from a new expenditure that is not a new demonstration-covered service or population and that is likely to further strengthen access to care.

b. **Types of Allowable Changes.** Adjustments will be made only for actual costs as reported in expenditure data. CMS will not approve mid-demonstration adjustments for anticipated factors not yet reflected in such expenditure data.

Examples of the types of mid-course adjustments CMS may consider allowable include the following:

i. Provider rate increases that are anticipated to further strengthen access to care;
ii. CMS or State technical errors in the original budget neutrality formulation applied retrospectively, including, but not limited to the following: mathematical errors (such as not aging data correctly) or unintended omission of certain applicable costs of services for individual MEGs;
iii. Changes in federal statute or regulations, not directly associated with Medicaid, that impact expenditures;
iv. State legislated or regulatory change to Medicaid that significantly affects the costs of medical assistance;
v. When not already accounted for under Emergency Medicaid 1115 demonstrations, cost impacts from public health emergencies;
vi. High cost innovative medical treatments that states are required to cover; or,
vii. Corrections to coverage/service estimates where there is no prior state experience (e.g., SUD) or small populations where expenditures may vary widely.

c. **Budget Neutrality Update.** The state must submit an updated budget neutrality analysis with its adjustment request, which includes the following elements:

i. Projected without waiver and with waiver expenditures, estimated member months, and annual limits for each DY through the end of the approval period; and,
ii. Description of the rationale for the mid-course correction, including an explanation of why the request is based on changes to the state's Medicaid expenditures that are unrelated to the demonstration and/or outside of the state's control, and/or is due to a new expenditure that is not a new demonstration-covered service or population and that is likely to further strengthen access to care.

XIII. MONITORING BUDGET NEUTRALITY

87. Limit on Title XIX Funding. The state will be subject to limits on the amount of federal Medicaid funding the state may receive over the course of the demonstration approval. The budget neutrality expenditure limits are based on projections of the amount of FFP that the state would likely have received in the absence of the demonstration. The limit consists of a Hypothetical Budget Neutrality Test and a Capped Hypothetical Budget Neutrality Test, as described below. CMS's assessment of the state's compliance with these tests will be based on the Schedule C CMS-64 Waiver Expenditure Report, which summarizes the expenditures reported by the state on the CMS-64 that pertain to the demonstration.

88. Risk. The budget neutrality expenditure limits are determined on either a per capita or aggregate basis as described in Table 3. Master MEG Chart, and Table 4, MEG Detail for Expenditure and Member Month Reporting. If a per capita method is used, the state is at

risk for the per capita cost of state plan and hypothetical populations, but not for the number of participants in the demonstration population By providing FFP without regard to enrollment in the demonstration for all demonstration populations, CMS will not place the state at risk for changing economic conditions, however, by placing the state at risk for the per capita costs of the demonstration populations, CMS assures that the demonstration expenditures do not exceed the levels that would have been realized had there been no demonstration. If an aggregate method is used, the state accepts risk for both enrollment and per capita costs.

89. Calculation of the Budget Neutrality Limits and How They Are Applied. To calculate the budget neutrality limits for the demonstration, separate annual budget limits are determined for each DY on a total computable basis. Each annual budget limit is the sum of one or more components: per capita components, which are calculated as a projected without-waiver PMPM cost times the corresponding actual number of member months, and aggregate components, which project fixed total computable dollar expenditure amounts. The annual limits for all DYs are then added together to obtain a budget neutrality limit for the entire demonstration period. The federal share of this limit will represent the maximum amount of FFP that the state may receive during the demonstration period for the types of demonstration expenditures described below. The federal share will be calculated by multiplying the total computable budget neutrality expenditure limit by the appropriate Composite Federal Share.

90. Main Budget Neutrality Test. This demonstration does not include a Main Budget Neutrality Test. Budget neutrality will consist entirely of Hypothetical and Capped Hypothetical Budget Neutrality Tests. If the state exceeds the budget neutrality limits under the Hypothetical or Capped Hypothetical Budget Neutrality Tests it must return the excess FFP to CMS.

91. Hypothetical Budget Neutrality. When expenditure authority is provided for coverage of populations or services that the state could have otherwise provided through its Medicaid state plan or other title XIX authority (such as a waiver under section 1915 of the Act), or when a WOW spending baseline for certain WW expenditures is difficult to estimate due to variable and volatile cost data resulting in anomalous trend rates, CMS considers these expenditures to be "hypothetical," such that the expenditures are treated as if the state could have received FFP for them absent the demonstration. For these hypothetical expenditures, CMS makes adjustments to the budget neutrality test which effectively treats these expenditures as if they were for approved Medicaid state plan services. Hypothetical expenditures, therefore, do not necessitate savings to offset the expenditures on those services. When evaluating budget neutrality, CMS does not offset non-hypothetical expenditures with projected or accrued savings from hypothetical expenditures; that is, savings are not generated from a hypothetical population or service. To allow for hypothetical expenditures, while preventing them from resulting in savings, CMS currently applies separate, independent Hypothetical Budget Neutrality Tests, which subject hypothetical expenditures to pre-determined limits to which the state and CMS agree, and that CMS approves, as a part of this demonstration approval. If the state's WW hypothetical spending exceeds the Hypothetical Budget Neutrality Test's

expenditure limit, the state agrees (as a condition of CMS approval) to offset that excess spending through savings elsewhere in the demonstration (if available) or to refund the FFP to CMS.

92. Hypothetical Budget Neutrality Test 1: The table below identifies the MEGs that are used for Hypothetical Budget Neutrality Test 1. MEGs that are designated "WOW Only" or "Both" are the components used to calculate the budget neutrality expenditure limit. The Composite Federal Share for the Hypothetical Budget Neutrality Test is calculated based on all MEGs indicated as "WW Only" or "Both." MEGs that are indicated as "WW Only" or "Both" are counted as expenditures against this budget neutrality expenditure limit.

Table 6. Hypothetical Budget Neutrality Test 1

MEG	PC or Agg	WOW Only, WW Only, or Both	Base Year	Trend Rate	DY 01	DY 02	DY 03	DY 04	DY 05
Adult Group	PC	Both	2019	5.8%	$717.25	$758.85	$802.86	$849.43	$898.69

93. Capped Hypothetical Budget Neutrality for Evidence-Based HRSN Initiatives. When expenditure authority is provided for specified HRSN initiatives in the demonstration (in this approval, as specified in STC 41), CMS considers these expenditures to be "capped hypothetical" expenditures; that is, the expenditures are eligible to receive FFP up to a specific aggregate spending cap per demonstration year, based on the state's expected expenditures. States can also receive FFP for capacity-building, infrastructure, and operational costs for the HRSN initiatives (per STC 42); this FFP is limited by a sub-cap of the aggregate spending cap and is determined by CMS based on the amount the state expects to spend. Like all hypothetical expenditures, capped hypothetical expenditures do not need to be offset by savings, and cannot produce savings; however, unspent expenditure authority allocated for HRSN infrastructure in a given demonstration year can be applied to HRSN services in the same demonstration year. Any unspent HRSN services expenditure authority may not be used to fund HRSN infrastructure. To allow for capped hypothetical expenditures and to prevent them from resulting in savings that would apply to the rest of the demonstration, CMS currently applies a separate, independent Capped Hypothetical Budget Neutrality Test, which subjects capped hypothetical expenditures to pre-determined aggregate limits to which the state and CMS agree, and that CMS approves, as a part of this demonstration approval. If actual HRSN initiative spending is less than the Capped Hypothetical Budget Neutrality Test's expenditure limit for a given demonstration year, the difference is not considered demonstration savings. Unspent HRSN expenditure authority under the cap for each demonstration year can be carried, shifted, or transferred across future

demonstration years. However, unspent HRSN expenditure authority cannot roll over to the next demonstration approval period. If the state's capped hypothetical spending exceeds the Capped Hypothetical Budget Neutrality Test's expenditure limit, the state agrees (as a condition of CMS approval) to refund any FFP in excess of the cap to CMS.

94. Capped Hypothetical Budget Neutrality Test: HRSN. Table 7 identifies the MEGs that are used for the Capped Hypothetical Budget Neutrality Test. MEGs that are designated "WOW Only" or "Both" are the components used to calculate the budget neutrality expenditure limit. The Composite Federal Share for the Capped Hypothetical Budget Neutrality Test is calculated based on all MEGs indicated as "WW Only" or "Both." MEGs that are indicated as "WW Only" or "Both" are counted as expenditures against this budget neutrality expenditure limit. Any expenditures in excess of the limit from the Capped Hypothetical Budget Neutrality Test cannot be offset by savings under the Hypothetical Budget Neutrality Test.

Table 7. Capped Hypothetical Budget Neutrality Test

MEG	PC or Agg	WOW Only, WW Only, or Both	DY01	DY02	DY03	DY04	DY05
HRSN services	Agg	Both	$0	$8.4M	$19.5M	$25.8M	$31.1M
HRSN Infrastructure	Agg	Both	$0	$2.7M	$1.97M	$3.0M	$2.8M

95. Composite Federal Share. The Composite Federal Share is the ratio that will be used to convert the total computable budget neutrality limit to federal share. The Composite Federal Share is the ratio calculated by dividing the sum total of FFP received by the state on actual demonstration expenditures during the approval period by total computable demonstration expenditures for the same period, as reported through the MBES/CBES and summarized on Schedule C. Since the actual final Composite Federal Share will not be known until the end of the demonstration's approval period, for the purpose of interim monitoring of budget neutrality, a reasonable estimate of Composite Federal Share may be developed and used through the same process or through an alternative mutually agreed to method. Each Budget Neutrality Test has its own Composite Federal Share, as defined in the paragraph pertaining to each particular test.

96. Exceeding Budget Neutrality. CMS will enforce the budget neutrality agreement over the demonstration period, which extends from January 1, 2022 to December 31, 2026. If

at the end of the demonstration approval period a Hypothetical or Capped Hypothetical Budget Neutrality Test has been exceeded, the excess federal funds will be returned to CMS. If the demonstration is terminated prior to the end of the budget neutrality agreement, the budget neutrality test shall be based on the time elapsed through the termination date.

97. Corrective Action Plan. If at any time during the demonstration approval period CMS determines that the demonstration is on course to exceed its budget neutrality expenditure limit, CMS will require the state to submit a corrective action plan for CMS review and approval. CMS will use the threshold levels in the tables below as a guide for determining when corrective action is required.

Table 8. Budget Neutrality Test Corrective Action Plan Calculation

Demonstration Year	Cumulative Target Definition	Percentage
DY 1	Cumulative budget neutrality limit plus:	2.0 percent
DY 1 through DY 2	Cumulative budget neutrality limit plus:	1.5 percent
DY 1 through DY 3	Cumulative budget neutrality limit plus:	1.0 percent
DY 1 through DY 4	Cumulative budget neutrality limit plus:	0.5 percent
DY 1 through DY 5	Cumulative budget neutrality limit plus:	0.0 percent

XIV. EVALUATION OF THE DEMONSTRATION

98. Cooperation with Federal Evaluators and Learning Collaborative. As required under 42 CFR 431.420(f), the state must cooperate fully and timely with CMS and its contractors in any federal evaluation of the demonstration or any component of the demonstration. This includes, but is not limited to, commenting on design and other federal evaluation documents and providing data and analytic files to CMS, including entering into a data use agreement that explains how the data and data files will be exchanged, and providing a technical point of contact to support specification of the data and files to be disclosed, as well as relevant data dictionaries and record layouts. The state must include in its contracts with entities that collect, produce or maintain data and files for the demonstration, that they make data available for the federal evaluation as is required under 42 CFR 431.420(f) to support federal evaluation. This may also include the state's participation – including representation from the state's contractors, independent evaluators, and organizations associated with the demonstration operations,

as applicable – in a federal learning collaborative aimed at cross-state technical assistance, and identification of lessons learned and best practices for demonstration measurement, data development, implementation, monitoring and evaluation. The state may claim administrative match for these activities. Failure to comply with this STC may result in a deferral being issued as outlined in STC 61.

99. Independent Evaluator. The state must use an independent party to conduct an evaluation of the demonstration to ensure that the necessary data is collected at the level of detail needed to research the approved hypotheses. The independent party must sign an agreement to conduct the demonstration evaluation in an independent manner in accordance with the CMS-approved Evaluation Design. When conducting analyses and developing the evaluation reports, every effort should be made to follow the approved methodology. However, the state may request, and CMS may agree to, changes in the methodology in appropriate circumstances.

100. Draft Evaluation Design. The state must submit, for CMS comment and approval, a draft Evaluation Design no later than 180 days after the approval of the demonstration. The Evaluation Design must be drafted in accordance with Attachment A (Developing the Evaluation Design) of these STCs, and any applicable CMS evaluation guidance and technical assistance for the demonstration's policy components. The Evaluation Design must also be developed in alignment with CMS guidance on applying robust evaluation approaches, such as quasi-experimental methods like difference-in-differences and interrupted time series, as well as establishing valid comparison groups and assuring causal inferences in demonstration evaluations. In addition to these requirements, if determined culturally appropriate for the communities impacted by the demonstration, the state is encouraged to consider implementation approaches involving randomized control trials and staged rollout (for example, across geographic areas, by service setting, or by beneficiary characteristic)—as these implementation strategies help create strong comparison groups and facilitate robust evaluation.

The state is strongly encouraged to use the expertise of the independent party in the development of the draft Evaluation Design. The draft Evaluation Design also must include a timeline for key evaluation activities, including the deliverables outlined in STCs 104 and 104.

For any amendment to the demonstration, the state will be required to update the approved Evaluation Design or submit a new Evaluation Design to accommodate the amendment component. The amended Evaluation Design must be submitted to CMS for review no later than 180 calendar days after CMS's approval of the demonstration amendment. Depending on the scope and timing of the amendment, in consultation with CMS, the state may provide the details on necessary modifications to the approved Evaluation Design via the monitoring reports. The amendment Evaluation Design must also be reflected in the state's Interim and Summative Evaluation Reports, described below.

101. Evaluation Design Approval and Updates. The state must submit a revised draft Evaluation Design within 60 calendar days after receipt of CMS's comments, if any.

Upon CMS approval of the Evaluation Design, the document will be included as an attachment to these STCs. Per 42 CFR 431.424(c), the state will publish to its website the approved Evaluation Design within 30 days of CMS approval. The state must implement the Evaluation Design and submit a description of its evaluation progress in each of the Quarterly and Annual Monitoring Reports. Once CMS approves the Evaluation Design, if the state wishes to make changes, the state must submit a revised Evaluation Design to CMS for approval if the changes are substantial in scope; otherwise, in consultation with CMS, the state may include updates to the Evaluation Design in Monitoring Reports.

102. Evaluation Questions and Hypotheses. Consistent with Attachments B and C (Developing the Evaluation Design and Preparing the Interim and Summative Evaluation Reports) of these STCs, the evaluation deliverables must include a discussion of the evaluation questions and hypotheses that the state intends to test. In alignment with applicable CMS evaluation guidance and technical assistance, the evaluation must outline and address well-crafted hypotheses and research questions for all key demonstration policy components that support understanding the demonstration's impact and its effectiveness in achieving the goals.

The hypothesis testing should include, where possible, assessment of both process and outcome measures. The evaluation must study outcomes, such as likelihood of enrollment and enrollment continuity, and various measures of access, utilization, and health outcomes, as appropriate and in alignment with applicable CMS evaluation guidance and technical assistance, for the demonstration policy components. Proposed measures should be selected from nationally-recognized sources and national measures sets, where possible. Measures sets could include CMS's Core Set of Health Care Quality Measures for Children in Medicaid and CHIP, Consumer Assessment of Health Care Providers and Systems (CAHPS), the Core Set of Health Care Quality Measures for Medicaid-Eligible Adults, the Behavioral Risk Factor Surveillance System (BRFSS) survey, and/or measures endorsed by National Quality Forum (NQF).

CMS underscores the importance of the state undertaking a well-designed beneficiary survey and/or interviews to assess, for instance, beneficiary understanding of and experience with the various demonstration policy components, including the Life360 components, and waiver of retroactive eligibility, beneficiary experiences with access to and quality of care, as well as changes in incidence of beneficiary medical debt. In addition, the state is strongly encouraged to evaluate the implementation of the demonstration programs in order to better understand whether implementation of certain key demonstration policies happened as envisioned during the demonstration design process and whether specific factors acted as facilitators of—or barriers to—successful implementation. Implementation research questions can also focus on beneficiary and provider experience with the demonstration. The implementation evaluation can inform the state's crafting and selection of testable hypotheses and research questions for the demonstration's outcome and impact evaluations and provide context for interpreting the findings.

Specifically, hypotheses for the demonstration's program component authorizing premium assistance and cost-sharing reduction payments for beneficiaries in QHPs must focus on outcomes such as beneficiary enrollment, take-up rates, access and health outcomes, and unmet need for care. Hypotheses for the waiver of retroactive eligibility must relate to (but are not limited to) the following outcomes: likelihood of enrollment and enrollment continuity, enrollment when people are healthy, health status, and financial status. The state must also include descriptive research questions and hypotheses related to trends in enrollment, disenrollment, and reenrollment, beneficiary outreach, and challenges encountered during the premium policy phase out process.

With respect to the Life360 HOMEs amendment, evaluation hypotheses must focus on areas such as assessing the effectiveness of the HRSN services in mitigating identified needs of beneficiaries. Such assessment is expected to use applicable demonstration monitoring and other data on the prevalence and severity of beneficiaries' HRSNs and the provision of and beneficiary utilization of HRSN services. Furthermore, the HRSN evaluation must include an analysis of how the initiatives affect utilization of preventive and routine care, utilization of and costs associated with potentially avoidable, high-acuity health care, and beneficiary physical and mental health outcomes. More specifically, the evaluation must analyze—among other outcomes—maternal and infant health outcomes for participants in the Maternal Life360 HOMEs; utilization of behavioral health and substance use disorder treatments for individuals with relevant diagnoses in Rural Life360 HOMEs; and the impact of incentives and supports to assist individuals in Success Life360 HOMES. Given the populations of focus and the program designs of the Life360 HOMEs, the state must also outline goals on how the demonstration may reduce inequities in health care access, quality of care, or health outcomes at the individual and/or community level, and include corresponding research questions and hypotheses focused on understanding the impact of the demonstration on health quality, including through the reduction of health disparities. For example, by assessing the effects of the initiatives in reducing disparities in health care access, quality of care, or health outcomes at the individual, population, and/or community level.

The evaluation must also assess the effectiveness of the infrastructure investments authorized through the demonstration to support the development and implementation of the HRSN initiatives. The state must also examine whether and how state and local investments in housing, nutrition and any other type of allowable HRSN services change over time in concert with new Medicaid funding toward those services. In addition, in light of how demonstration HRSN expenditures are being treated for purposes of budget neutrality, the evaluation of the HRSN initiative must include a cost analysis to support developing comprehensive and accurate cost estimates of providing such services. It also is required to include a robust assessment of potential improvements in the quality and effectiveness of downstream services that can be provided under the state plan authority, and associated cost implications.

Additionally, as part of its evaluation efforts, the state must also conduct a demonstration cost assessment to include, but not be limited to: administrative costs of demonstration implementation and operation, Medicaid health service expenditures, and provider

uncompensated care costs. The state must analyze the budgetary effects of the HRSN services, and the overall Medicaid health medical assistance service expenditures. In addition, the state must use findings from hypothesis tests aligned with other demonstration goals and cost analyses together to assess the demonstration's effects on the fiscal sustainability of the state's Medicaid program.

The state must collect data to support analyses stratified by key subpopulations of interest (e.g., by sex, age, race/ethnicity, English language proficiency, primary language, disability status, and geography). Such stratified data analyses will provide a fuller understanding of existing disparities in access to and quality of care and health outcomes, and help inform how the demonstration's various policies might support reducing such disparities.

103. Evaluation Budget. A budget for the evaluation must be provided with the draft Evaluation Design. It will include the total estimated cost, as well as a breakdown of estimated staff, administrative and other costs for all aspects of the evaluation such as any survey and measurement development, quantitative and qualitative data collection and cleaning, analyses, and report generation. A justification of the costs may be required by CMS if the estimates provided do not appear to sufficiently cover the costs of the design or if CMS finds that the design is not sufficiently developed, or if the estimates appear to be excessive.

104. Interim Evaluation Report. The state must submit an Interim Evaluation Report for the completed years of the demonstration, and for each subsequent extension of the demonstration, as outlined in 42 CFR 431.412(c)(2)(vi). When submitting an application for extension, the Interim Evaluation Report should be posted to the state's website with the application for public comment.

a. The Interim Evaluation Report will discuss evaluation progress and present findings to date as per the approved Evaluation Design. In this report, the state must also describe its findings related to unwinding the state's premium policies, and any potential lessons thereof.
b. For demonstration authority or any components within the demonstration that expire prior to the overall demonstration's expiration date, and depending on the timeline of expiration/phase-out, the Interim Evaluation Report may include an evaluation of the authority, to be collaboratively determined by CMS and the state.
c. If the state is seeking to extend the demonstration, the draft Interim Evaluation Report is due when the application for extension is submitted, or one year prior to the end of the demonstration, whichever is sooner. If the state is not requesting an extension for the demonstration, an Interim Evaluation Report is due one year prior to the end of the demonstration.
d. The state must submit a revised Interim Evaluation Report within 60 days of receiving CMS's comments on the draft Interim Evaluation Report, if any. Once approved by CMS, the state must post the final Interim Evaluation Report to the state's Medicaid website within 30 calendar days.

e. The Interim Evaluation Report must comply with Attachment C (Preparing the Interim and Summative Evaluation Reports) of these STCs.

105. Summative Evaluation Report. The state must submit a draft Summative Evaluation Report for the demonstration's current approval period within 18 months of the end of the approval period represented by these STCs. The draft Summative Evaluation Report must be developed in accordance with Attachment C (Preparing the Interim and Summative Evaluation Reports) of these STCs, and in alignment with the approved Evaluation Design.

a. The state must submit a revised Summative Evaluation Report within 60 calendar days of receiving comments from CMS on the draft.
b. Once approved by CMS, the state must post the final Summative Evaluation Report to the state's Medicaid website within 30 calendar days.

106. Corrective Action Plan Related to Evaluation. If evaluation findings indicate that demonstration features are not likely to assist in promoting the objectives of Medicaid, CMS reserves the right to require the state to submit a corrective action plan to CMS for approval. These discussions may also occur as part of an extension process when associated with the state's Interim Evaluation Report, or as part of the review of the Summative Evaluation Report. A corrective action plan could include a temporary suspension of implementation of demonstration programs, in circumstances where evaluation findings indicate substantial and sustained directional change inconsistent with demonstration goals, such as substantial and sustained trends indicating increased difficulty accessing services. A corrective action plan may be an interim step to withdrawing waivers or expenditure authorities, as outlined in STC 11. CMS further has the ability to suspend implementation of the demonstration should corrective actions not effectively resolve these concerns in a timely manner.

107. State Presentations for CMS. CMS reserves the right to request that the state present and participate in a discussion with CMS on the Evaluation Design, the Interim Evaluation Report, and/or the Summative Evaluation Report.

108. Public Access. The state shall post the final documents (e.g., Implementation Plans, Monitoring Protocol, Monitoring Reports, Close-Out Report, approved Evaluation Design, Interim Evaluation Report, and Summative Evaluation Report) on the state's Medicaid website within 30 calendar days of approval by CMS.

109. Additional Publications and Presentations. For a period of 12 months following CMS's approval of deliverables, CMS will be notified prior to presentation of these reports or their findings, including in related publications (e.g., journal articles), by the state, contractor or any other third party directly connected to the demonstration over which the state has control. Prior to release of these reports, articles and other documents, CMS will be provided a copy including any associated press materials. CMS will be given 10 business days to review and comment on publications before they are released. CMS may choose to decline to comment or review some or all of these

notifications and reviews. This requirement does not apply to the release or presentation of these materials to state or local government officials.

XV. SCHEDULE OF DELIVERABLES

The state is held to all reporting requirements as outlined in the STCs; this schedule of deliverables should serve only as a tool for informational purposes only.

Date – Specific	Deliverable	Section Reference
Within 9 months of Life360 HOME amendment approval; Maintenance of Effort component is required within 90 days of Life360 HOME amendment approval	New Initiatives Implementation Plan	STC 64
Within 60 days of receiving CMS comments	Revised New Initiatives Implementation Plan	STC 64
Within 150 days of approval date	Monitoring Protocol	STC 65
Within 60 days of receiving CMS comments	Revised Monitoring Protocol	STC 65
Within 180 calendar days from approval date	Draft Evaluation Design	STC 100
Within 180 calendar days from approval date	Amended Evaluation Design	STC 100
Within 60 days of receiving CMS comments	Revised Evaluation Design	STC 101
One year prior to demonstration expiration or with extension application	Draft Interim Evaluation Report	STC 104
Within 60 days of receiving CMS comments	Revised Interim Evaluation Report	STC 104
Within 18 months after the expiration of this demonstration period	Draft Summative Evaluation Report	STC 105
Within 60 days of receiving CMS comments	Revised Summative Evaluation Report	STC 105
Within 120 days after the end of the demonstration	Draft Close-Out Report	STC 68
Within 30 days after receiving CMS comments	Revised Close-Out Report	STC 68
Within 180 days of Life360 HOME amendment approval	Protocol for Assessment of Beneficiary Eligibility and Needs, Infrastructure Planning, and Provider Qualifications for Life360 HOMEs	STC 50
Annually		

Date – Specific	Deliverable	Section Reference
90 days after the end of each DY	Annual Monitoring Report (including Q4 monitoring information and budget neutrality)	STC 66, 81
Within 60 days of receiving CMS comments	Revised Annual Monitoring Report	STC 66
Quarterly		
60 days following the end of the quarter	Quarterly Monitoring Reports	STC 64
30 days following the end of the quarter	Quarterly Expenditure Reports	STC 72
60 days following the end of the quarter, except for Q4 which is submitted with Annual Report	Quarterly Budget Neutrality Report	STC 66, 81, 83, 84

Attachment A
Copayment Amounts

General Service Description	Cost Sharing for Beneficiaries with Incomes >20% FPL
Behavioral Health - Inpatient	$0
Behavioral Health - Outpatient	$4.70
Behavioral Health - Professional	$4.70
Durable Medical Equipment	$4.70
Emergency Room Services	$0
FQHC	$4.70
Inpatient	$0
Lab and Radiology	$4.70
Skilled Nursing Facility	$0
Other	$4.70
Other Medical Professionals	$4.70
Outpatient Facility	$4.70
Primary Care Physician	$4.70
Specialty Physician	$4.70
Pharmacy - Generics	$4.70
Pharmacy - Preferred Brand Drugs	$4.70
Pharmacy - Non-Preferred Brand Drugs, including specialty drugs	$9.40

No copayments for individuals at or below 20% FPL.

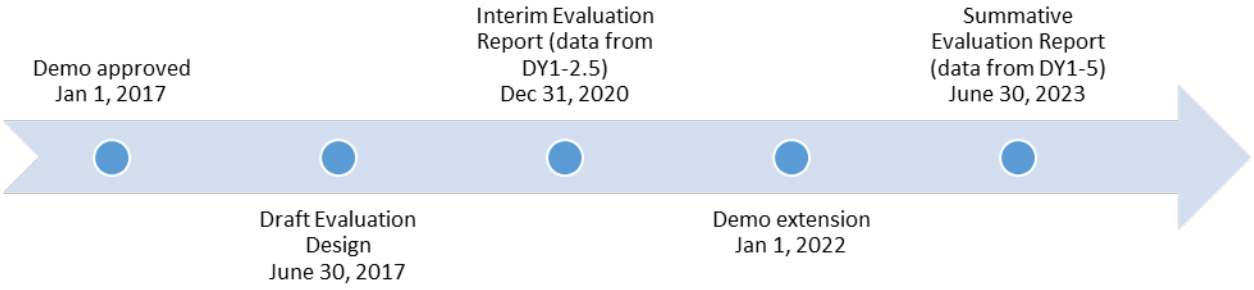
Attachment B
Developing the Evaluation Design

Introduction

Both state and federal governments need rigorous quantitative and qualitative evidence to inform policy decisions. To that end, for states that are testing new approaches and flexibilities in their Medicaid programs through section 1115 demonstrations, evaluations are crucial to understand and disseminate information about these policies. The evaluations of new initiatives seek to produce new knowledge and direction for programs and inform Medicaid policy for the future. While a narrative about what happened during a demonstration provides important information, the principal focus of the evaluation of a section 1115 demonstration should be obtaining and analyzing data. Evaluations should include findings about the process (e.g., whether the demonstration is being implemented as intended), outcomes (e.g., whether the demonstration is having the intended effects on the population of focus), and impacts of the demonstration (e.g., whether the outcomes observed in the population of focus differ from outcomes in similar populations not affected by the demonstration).

Submission Timelines

There is a specified timeline for the state's submission of its draft Evaluation Design and subsequent evaluation reports. The graphic below depicts an example of this timeline for a 5-year demonstration. In addition, the state should be aware that section 1115 evaluation documents are public records. The state is required to publish the Evaluation Design to the state's website within 30 calendar days of CMS approval, as per 42 CFR 431.424(e). CMS will also publish a copy to the Medicaid.gov website.



Expectations for Evaluation Designs

CMS expects Evaluation Designs to be rigorous, incorporate baseline and comparison group assessments, as well as statistical significance testing. Technical assistance resources for constructing comparison groups and identifying causal inferences are available on Medicaid.gov: https://www.medicaid.gov/medicaid/section-1115-demonstrations/1115-demonstration-monitoring-evaluation/1115-demonstration-state-monitoring-evaluation-resources/index.html. If the state needs technical assistance using this outline or developing the Evaluation Design, the state should contact its demonstration team.

All states with section 1115 demonstrations are required to conduct Interim and Summative Evaluation Reports, and the Evaluation Design is the roadmap for conducting these evaluations.

The roadmap begins with the stated goals for the demonstration, followed by the measurable evaluation questions and quantifiable hypotheses, all to support a determination of the extent to which the demonstration has achieved its goals. When conducting analyses and developing the evaluation reports, every effort should be made to follow the approved methodology. However, the state may request, and CMS may agree to, changes in the methodology in appropriate circumstances.

The format for the Evaluation Design is as follows:

- **A.** General Background Information;
- **B.** Evaluation Questions and Hypotheses;
- **C.** Methodology;
- **D.** Methodological Limitations;
- **E.** Attachments.

A. General Background Information – In this section, the state should include basic information about the demonstration, such as:

1. The issue/s that the state is trying to address with its section 1115 demonstration and/or expenditure authorities, the potential magnitude of the issue/s, and why the state selected this course of action to address the issue/s (e.g., a narrative on why the state submitted an 1115 demonstration proposal).

2. The name of the demonstration, approval date of the demonstration, and period of time covered by the evaluation.

3. A description of the population groups impacted by the demonstration.

4. A brief description of the demonstration and history of its implementation, and whether the draft Evaluation Design applies to an amendment, extension, or expansion of, the demonstration.

5. For extensions, amendments, and major operational changes: a description of any changes to the demonstration during the approval period; the primary reason or reasons for the change; and how the Evaluation Design was altered or augmented to address these changes.

B. Evaluation Questions and Hypotheses – In this section, the state should:

1. Identify the state's hypotheses about the outcomes of the demonstration, and discuss how the evaluation questions align with the hypotheses and the goals of the demonstration.

2. Address how the hypotheses and research questions promote the objectives of Titles XIX and/or XXI.

3. Describe how the state's demonstration goals are translated into quantifiable targets for improvement, so that the performance of the demonstration in achieving these targets can be measured.
4. Include a Logic Model or Driver Diagram to visually aid readers in understanding the rationale behind the cause and effect of the variants behind the demonstration features and intended outcomes. A driver diagram, which includes information about the goals and features of the demonstration, is a particularly effective modeling tool when working to improve health and health care through specific interventions. A driver diagram depicts the relationship between the goal, the primary drivers that contribute directly to achieving the goal, and the secondary drivers that are necessary to achieve the primary drivers for the demonstration. For an example and more information on driver diagrams: https://innovation.cms.gov/files/x/hciatwoaimsdrvrs.pdf.

5. Include implementation evaluation questions to inform the state's crafting and selection of testable hypotheses and research questions for the demonstration's outcome and impact evaluations and provide context for interpreting the findings. Implementation evaluation research questions can focus on barriers, facilitators, beneficiary and provider experience with the demonstration, the extent to which demonstration components were implemented as planned, and the extent to which implementation of demonstration components varied by setting.

C. Methodology – In this section, the state is to describe in detail the proposed research methodology. The focus is on showing that the evaluation meets the prevailing standards of scientific and academic rigor, that the results are statistically valid and reliable, and that it builds upon other published research, using references where appropriate. The evaluation approach should also consider principles of equitable evaluation, and involve partners such as community groups, beneficiaries, health plans, health care providers, social service agencies and providers, and others impacted by the demonstration who understand the cultural context in developing an evaluation approach. The state's Request for Proposal for an independent evaluator, for example, could encourage research teams to partner with impacted groups.

This section also provides evidence that the demonstration evaluation will use the best available data. The state should report on, control for, and make appropriate adjustments for the limitations of the data and their effects on results, and discuss the generalizability of results. This section should provide enough transparency to explain what will be measured and how, in sufficient detail so that another party could replicate the results. Table A below is an example of how the state might want to articulate the analytic methods for each research question and measure.

Specifically, this section establishes:

1. *Methodological Design* – Provide information on how the evaluation will be designed. For example, whether the evaluation will utilize pre/post data comparisons, pre-test or post-test only assessments. If qualitative analysis methods will be used, they must be described in detail.

2. *Focus and Comparison Populations* – Describe the characteristics of the focus and comparison populations, incorporating the inclusion and exclusion criteria. Include information about the level of analysis (beneficiary, provider, or program level), and if populations will be stratified into subgroups. Additionally, discuss the sampling methodology for the populations, as well as support that a statistically reliable sample size is available.

3. *Evaluation Period* – Describe the time periods for which data will be included.

4. *Evaluation Measures* – List all measures that will be calculated to evaluate the demonstration. The state also should include information about how it will define the numerators and denominators. Furthermore, the state should ensure the measures contain assessments of both process and outcomes to evaluate the effects of the demonstration during the period of approval. When selecting metrics, the state shall identify opportunities for improving quality of care and health outcomes, and controlling cost of care. The state also should incorporate benchmarking and comparisons to national and state standards, where appropriate.

   Include the measure stewards (i.e., the organization(s) responsible for the evaluation data elements/sets by "owning", defining, validating, securing, and submitting for endorsement, etc.) Proposed health measures could include CMS's Core Set of Health Care Quality Measures for Children in Medicaid and CHIP, Consumer Assessment of Health Care Providers and Systems (CAHPS), the Core Set of Health Care Quality Measures for Medicaid-Eligible Adults, metrics drawn from the Behavioral Risk Factor Surveillance System (BRFSS) survey, and/or measures endorsed by National Quality Forum. Proposed performance metrics can be selected from nationally recognized metrics, for example from sets developed by the Center for Medicare and Medicaid Innovation or for meaningful use under Health Information Technology.

5. *Data Sources* – Explain from where the data will be obtained, describe any efforts to validate and clean the data, and discuss the quality and limitations of the data sources. If the state plans to collect primary data (i.e., data collected specifically for the evaluation), include the methods by which the data will be collected, the source of the proposed questions and responses, and the frequency and timing of data collection. Additionally, copies of any proposed surveys must be provided to CMS for approval before implementation.

6. *Analytic Methods* – This section includes the details of the selected quantitative and/or qualitative analysis measures that will adequately assess the effectiveness of the demonstration. This section should:

   a. Identify the specific statistical testing which will be undertaken for each measure (e.g., t-tests, chi-square, odds ratio, ANOVA, regression).

b. Explain how the state will isolate the effects of the demonstration from other initiatives occurring in the state at the same time (e.g., through the use of comparison groups).
c. Include a discussion of how propensity score matching and difference-in-differences designs may be used to adjust for differences in comparison populations over time, if applicable.
d. Consider the application of sensitivity analyses, as appropriate.

7. *Other Additions* – The state may provide any other information pertinent to the Evaluation Design for the demonstration.

Table A. Example Design Table for the Evaluation of the Demonstration

Research Question	Outcome measures used to address the research question	Sample or population subgroups to be compared	Data Sources	Analytic Methods
Hypothesis 1				
Research question 1a	-Measure 1 -Measure 2 -Measure 3	-Sample e.g. All attributed Medicaid beneficiaries -Beneficiaries with diabetes diagnosis	-Medicaid fee-for-service and encounter claims records	-Interrupted time series
Research question 1b	-Measure 1 -Measure 2 -Measure 3 -Measure 4	-Sample, e.g., PPS patients who meet survey selection requirements (used services within the last 6 months)	-Patient survey	Descriptive statistics
Hypothesis 2				
Research question 2a	-Measure 1 -Measure 2	-Sample, e.g., PPS administrators	-Key informants	Qualitative analysis of interview material

D. Methodological Limitations – This section provides more detailed information about the limitations of the evaluation. This could include limitations about the design, the data sources or collection process, or analytic methods. The state should also identify any efforts to minimize these limitations. Additionally, this section should include any information about features of the demonstration that effectively present methodological constraints that the state would like CMS to take into consideration in its review.

CMS also recognizes that there may be certain instances where a state cannot meet the rigor of an evaluation as expected by CMS. In these instances, the state should document for CMS why it is not able to incorporate key components of a rigorous evaluation, including comparison groups and baseline data analyses. For example, if a demonstration is long-standing, it may be difficult for the state to include baseline data because any pre-test data points may not be relevant or comparable. Other examples of considerations include:

1. When the demonstration is:
    a. Non-complex, unchanged, or has previously been rigorously evaluated and found to be successful; or
    b. Could now be considered standard Medicaid policy (CMS published regulations or guidance).

2. When the demonstration is also considered successful without issues or concerns that would require more regular reporting, such as:

a. Operating smoothly without administrative changes;
b. No or minimal appeals and grievances;
c. No state issues with CMS-64 reporting or budget neutrality; and
d. No Corrective Action Plans for the demonstration.

E. Attachments

1. **Independent Evaluator.** This includes a discussion of the state's process for obtaining an independent entity to conduct the evaluation, including a description of the qualifications that the selected entity must possess, and how the state will assure no conflict of interest. Explain how the state will assure that the Independent Evaluator will conduct a fair and impartial evaluation and prepare objective Evaluation Reports. The Evaluation Design should include a "No Conflict of Interest" statement signed by the independent evaluator.

2. **Evaluation Budget.** A budget for implementing the evaluation shall be provided with the draft Evaluation Design. It will include the total estimated costs, as well as a breakdown of estimated staff, administrative, and other costs for all aspects of the evaluation. Examples include, but are not limited to: the development of all survey and measurement instruments; quantitative and qualitative data collection; data cleaning and analyses; and reports generation. A justification of the costs may be required by CMS if the estimates provided do not appear to sufficiently cover the costs of the draft Evaluation Design, if CMS finds that the draft Evaluation Design is not sufficiently developed, or if the estimates appear to be excessive.

3. **Timeline and Major Milestones.** Describe the timeline for conducting the various evaluation activities, including dates for evaluation-related milestones, including those related to procurement of an outside contractor, if applicable, and deliverables. The final Evaluation Design shall incorporate milestones for the development and submission of the Interim and Summative Evaluation Reports. Pursuant to 42 CFR 431.424(c)(v), this timeline should also include the date by which the Final Summative Evaluation Report is due.

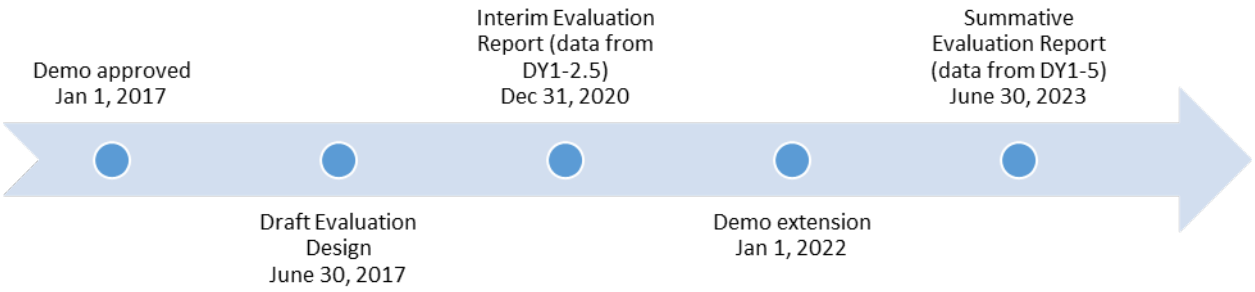
Attachment C
Preparing the Interim and Summative Evaluation Reports

Introduction

Both state and federal governments need rigorous quantitative and qualitative evidence to inform policy decisions. To that end, for states that are testing new approaches and flexibilities in their Medicaid programs through section 1115 demonstrations, evaluations are crucial to understand and disseminate information about these policies. The evaluations of new initiatives seek to produce new knowledge and direction for programs and inform Medicaid policy for the future. While a narrative about what happened during a demonstration provides important information, the principal focus of the evaluation of a section 1115 demonstration should be obtaining and analyzing data. Evaluations should include findings about the process (e.g., whether the demonstration is being implemented as intended), outcomes (e.g., whether the demonstration is having the intended effects on the population of focus), and impacts of the demonstration (e.g., whether the outcomes observed in the population of focus differ from outcomes in similar populations not affected by the demonstration).

Submission Timelines

There is a specified timeline for the state's submission of Evaluation Designs and Evaluation Reports. These dates are specified in the demonstration Special Terms and Conditions (STCs). The graphic below depicts an example of a deliverables timeline for a 5-year demonstration. In addition, the state should be aware that section 1115 evaluation documents are public records. In order to assure the dissemination of the evaluation findings, lessons learned, and recommendations, the state is required to publish the Interim and Summative Evaluation Reports to the state's website within 30 calendar days of CMS approval, as per 42 CFR 431.424(d). CMS will also publish a copy to the Medicaid.gov website.



Expectations for Evaluation Reports

All states with Medicaid section 1115 demonstrations are required to conduct evaluations that are valid (the extent to which the evaluation measures what it is intended to measure), and reliable (the extent to which the evaluation could produce the same results when used repeatedly). The already-approved Evaluation Design is a map that begins with the demonstration goals, then transitions to the evaluation questions, and to the specific hypotheses, which will be used to investigate whether the demonstration has achieved its goals. When conducting analyses and developing the evaluation reports, every effort should be made to follow

the methodology outlined in the approved Evaluation Design. However, the state may request, and CMS may agree to, changes in the methodology in appropriate circumstances.

When submitting an application for renewal, the Interim Evaluation Report should be posted on the state's website with the application for public comment. Additionally, the Interim Evaluation Report must be included in its entirety with the application submitted to CMS.

CMS expects Interim and Summative Evaluation Reports to be rigorous, incorporate baseline and comparison group assessments, as well as statistical significance testing. Technical assistance resources for constructing comparison groups and identifying causal inferences are available on Medicaid.gov: https://www.medicaid.gov/medicaid/section-1115-demonstrations/1115-demonstration-monitoring-evaluation/1115-demonstration-state-monitoring-evaluation-resources/index.html. If the state needs technical assistance using this outline or developing the evaluation reports, the state should contact its demonstration team.

Intent of this Attachment
Title XIX of the Social Security Act (the Act) requires an evaluation of every section 1115 demonstration. In order to fulfill this requirement, the state's evaluation report submissions must provide comprehensive written presentations of all key components of the demonstration, and include all required elements specified in the approved Evaluation Design. This Attachment is intended to assist states with organizing the required information in a standardized format and understanding the criteria that CMS will use in reviewing the submitted Interim and Summative Evaluation Reports.

Required Core Components of Interim and Summative Evaluation Reports
The Interim and Summative Evaluation Reports present research and findings about the section 1115 demonstration. It is important that the reports incorporate a discussion about the structure of the Evaluation Design to explain the goals and objectives of the demonstration, the hypotheses related to the demonstration, and the methodology for the evaluation. The evaluation reports should present the relevant data and an interpretation of the findings; assess the outcomes (what worked and what did not work); explain the limitations of the design, data, and analyses; offer recommendations regarding what (in hindsight) the state would further advance, or do differently, and why; and discuss the implications on future Medicaid policy.

The format for the Interim and Summative Evaluation reports is as follows:

A. Executive Summary;
B. General Background Information;
C. Evaluation Questions and Hypotheses;
D. Methodology;
E. Methodological Limitations;
F. Results;
G. Conclusions;
H. Interpretations, and Policy Implications and Interactions with Other State Initiatives;
I. Lessons Learned and Recommendations; and,
J. Attachment(s).

A. Executive Summary – A summary of the demonstration, the principal results, interpretations, and recommendations of the evaluation.

B. General Background Information about the Demonstration – In this section, the state should include basic information about the demonstration, such as:

1. The issue/s that the state is trying to address with its section 1115 demonstration and/or expenditure authorities, how the state became aware of the issue, the potential magnitude of the issue, and why the state selected this course of action to address the issues.
2. The name of the demonstration, approval date of the demonstration, and period of time covered by the evaluation.
3. A description of the population groups impacted by the demonstration.
4. A brief description of the demonstration and history of the implementation, and if the evaluation is for an amendment, extension, or expansion of, the demonstration.
5. For extensions, amendments, and major operational changes: A description of any changes to the demonstration during the approval period; whether the motivation for change was due to political, economic, and fiscal factors at the state and/or federal level; whether the programmatic changes were implemented to improve beneficiary health, provider/health plan performance, or administrative efficiency; and how the Evaluation Design was altered or augmented to address these changes. Additionally, the state should explain how this Evaluation Report builds upon and expands earlier demonstration evaluation findings (if applicable).

C. Evaluation Questions and Hypotheses – In this section, the state should:

1. Identify the state's hypotheses about the outcomes of the demonstration, and discuss how the goals of the demonstration align with the evaluation questions and hypotheses.
2. Address how the research questions / hypotheses of this demonstration promote the objectives of Titles XIX and XXI.
3. Describe how the state's demonstration goals were translated into quantifiable targets for improvement, so that the performance of the demonstration in achieving these targets could be measured.
4. The inclusion of a Logic Model or Driver Diagram in the Evaluation Report is highly encouraged, as the visual can aid readers in understanding the rationale behind the demonstration features and intended outcomes.

D. Methodology – In this section, the state is to provide an overview of the research that was conducted to evaluate the section 1115 demonstration, consistent with the approved Evaluation Design. The Evaluation Design should also be included as an attachment to the report. The focus is on showing that the evaluation builds upon other published research, (using references), meets the prevailing standards of scientific and academic rigor, and the results are statistically valid and reliable.

An Interim Evaluation Report should provide any available data to date, including both quantitative and qualitative assessments. The Evaluation Design should assure there is

appropriate data development and collection in a timely manner to support developing an Interim Evaluation Report.

This section provides the evidence that the demonstration evaluation used the best available data and describes why potential alternative data sources were not used. The state also should report on, control for, and make appropriate adjustments for the limitations of the data and their effects on results, and discusses the generalizability of results. This section should provide enough transparency to explain what was measured and how, in sufficient detail so that another party could replicate the results. Specifically, this section establishes that the approved Evaluation Design was followed by describing:

1. *Methodological Design* – Whether the evaluation included an assessment of pre/post or post-only data, with or without comparison groups, etc.

2. *Focus and Comparison Populations* – Describe the focus and comparison populations, describing inclusion and exclusion criteria.

3. *Evaluation Period* – Describe the time periods for which data will be collected.

4. *Evaluation Measures* – List the measures used to evaluate the demonstration and their respective measure stewards.

5. *Data Sources* – Explain from where the data were obtained, and efforts to validate and clean the data.

6. *Analytic Methods* – Identify specific statistical testing which was undertaken for each measure (t-tests, chi-square, odds ratio, ANOVA, regression, etc.).

7. *Other Additions* – The state may provide any other information pertinent to the evaluation of the demonstration.

E. Methodological Limitations – This section provides sufficient information for discerning the strengths and weaknesses of the study design, data sources/collection, and analyses.

F. Results – In this section, the state presents and uses the quantitative and qualitative data to demonstrate whether and to what degree the evaluation questions and hypotheses of the demonstration were addressed. The findings should visually depict the demonstration results, using tables, charts, and graphs, where appropriate. This section should include findings from the statistical tests conducted.

G. Conclusions – In this section, the state will present the conclusions about the evaluation results. Based on the findings, discuss the outcomes and impacts of the demonstration and identify the opportunities for improvements. Specifically, the state should answer the following questions:

1. In general, did the results show that the demonstration was/was not effective in achieving the goals and objectives established at the beginning of the demonstration?

a. If the state did not fully achieve its intended goals, why not?

b. What could be done in the future that would better enable such an effort to more fully achieve those purposes, aims, objectives, and goals?

H. Interpretations, Policy Implications and Interactions with Other State Initiatives – In this section, the state will discuss the section 1115 demonstration within an overall Medicaid context and long-range planning. This should include interrelations of the demonstration with other aspects of the state's Medicaid program, interactions with other Medicaid demonstrations, and other federal awards affecting service delivery, health outcomes and the cost of care under Medicaid. This section provides the state with an opportunity to provide interpretations of the data using evaluative reasoning to make judgments about the demonstration. This section should also include a discussion of the implications of the findings at both the state and national levels. Interpreting the implications of evaluation findings should include involving partners, such as community groups, beneficiaries, health plans, health care providers, social service agencies and providers, and others impacted by the demonstration who understand the cultural context in which the demonstration was implemented.

I. Lessons Learned and Recommendations – This section of the evaluation report involves the transfer of knowledge. Specifically, it should include potential "opportunities" for future or revised demonstrations to inform Medicaid policymakers, advocates, and stakeholders. Recommendations for improvement can be just as significant as identifying current successful strategies. Based on the evaluation results, the state should address the following questions:

1. What lessons were learned as a result of the demonstration?
2. What would you recommend to other states which may be interested in implementing a similar approach?

State of Arkansas

Arkansas Health and Opportunity for Me (ARHOME) Section 1115 Medicaid Demonstration Waiver

New Initiatives Implementation Plan

July 1, 2023

ARHOME New Initiatives Implementation Plan
July 1, 2023

The New Initiatives Implementation Plan, at a minimum, must provide a description of the state's strategic approach to implementing the key demonstration policies, including timelines for meeting critical implementation stages or milestones, as applicable, to support successful implementation.

Medicaid Waiver STC 64. The New Initiatives Implementation Plan must include information on, but not limited to, the following:

A plan for establishing and/or improving data sharing and partnerships with an array of health system and social services stakeholders to the extent those entities are vital to provide needed administrative and HRSN-related data on screenings, referrals, and provision of services, which are critical for understanding program implementation and conducting demonstration monitoring and evaluation

DHS is partnering with an array of groups across the state to collaboratively address Health-Related Social Needs (HRSN) and reduce silos between state agencies. Specifically, DHS is partnering on efforts to implement collaborative and consistent HRSN screening, social service community resource directories and data sharing across agencies to streamline access to services.

HRSN screening
DHS is working with a group of health care providers and the state's Health Information Exchange, the Arkansas State Health Alliance for Records Exchange (SHARE), to develop a shared approach to HRSN screening and referrals. The group meets bi-monthly and includes insurance carriers, hospital systems, medical groups, and behavioral health providers. The partnership's goal is to map the current landscape of HRSN screening and referrals and increase capacity across healthcare and related providers to standardized coding for SDOH screening and referrals. Health care providers report that the most significant barriers to conducting HRSN screens are 1) a lack of reimbursement for administering screens and 2) a lack of resources to address needs identified through the screens. The Life360 HOME program addresses those issues by reducing the provider's burden to screen and refer. Instead, the Life360 HOME program will administer HRSN screening for program participants and, with the beneficiary's consent, provide the results to their care providers. The Life360 HOME will be responsible for making service referrals and following up, and the provider will receive the screening results to better inform treatment plans.

Community resource directories
To understand potential community resource platforms available for Life360 HOME's closed loop services tracking, DHS reviewed several community resource platforms used by state agencies, health care providers and local social service organizations. DHS anticipates developing or acquiring its own resource platform if CMS approves the state's Opportunities for Success Initiative waiver amendment,[6] and DHS intends to make its chosen platform available for use by Life360 HOMEs. DHS has reviewed Unite US, Find Help, 211, HARK-USA, Good Grid, and the VA's Camp Kiosk, as well as the state's own web-based resource directories developed by DHS, the Arkansas Department of Education (ADE), the Arkansas Department of Health (ADH) and others. DHS is currently assessing each platform's robustness in

[6] Submitted June 1, 2023 and available at this link: Request to Amend the ARHOME Section 1115 Demonstration Project (medicaid.gov)

maintaining accurate resources and its usefulness in capturing data on closed loop referrals and assisting with identifying local community needs that may be contributing to individual HRSN barriers.

Data sharing
DHS is working with the Division of Information Systems (DIS) to share data across state agencies, including employment, education, and workforce training data. DIS already maintains the Arkansas Statewide Longitudinal Data System (SLDS), which links state data across sources and over time to answer critical questions about education, workforce, social programs, and the economy. DIS has already matched ARHOME enrollee data with data in the SLDS to better understand the proportion of the ARHOME population who are employed or enrolled in school or workforce training programs or have been previously incarcerated. DHS anticipates future data sharing through the state's data infrastructure will provide Life360 HOMEs information about beneficiaries' education level, employment, and previous incarceration status, and Life360 HOMEs could also share their data with other entities who may request it.

Partnerships for referrals
DHS expects Life360 HOME programs to develop robust relationships with health care providers and community organizations to develop beneficiary referral networks. To support those beneficiary referral resources, DHS has also developed partnerships internally and across state agencies to ensure eligible individuals are referred to Life360 HOME programs and receive services as timely as possible. DHS is developing a process with the Arkansas Department of Corrections (DOC) to help transition incarcerated individuals back into the community. The process will include referrals to Success or Rural Life360 HOME programs for eligible beneficiaries when a program is available in their area.

DHS also has developed internal partnerships with the DHS Division of Youth Services (DYS) and the Division of Children and Family Services (DCFS) to develop referral processes to the Success Life360 HOME program for eligible beneficiaries upon their exit from foster care or the juvenile justice system.

DHS has begun discussions with the Arkansas Veterans Administration and the Central Arkansas Veterans Healthcare System to encourage referrals to the Success or Rural Life360 HOME program when veterans move into Arkansas and for former military service men and women who may not be receiving veteran's benefits. Developing an accurate picture of our veteran population with the ARHOME program has been a challenge due to restrictions on veterans' personal information at the federal level. However, DHS's Medicaid application captures voluntary identification of veteran status, and we expect Success Life360 HOME to partner with veterans' organizations in their community to encourage referrals. DHS will ensure that each Life360 HOME is familiar with the Veterans liaison for its area through the Arkansas Department of Veteran Affairs. The Veterans Liaison can help connect beneficiaries to local and regional veterans support organizations. Also, DHS has connected with individuals involved in the Governor's Challenge on Suicide Prevention Among Service Members, Veterans and their Families. Through this partnership we've shared information on Life360 HOME implementation to organizations such as the Central Arkansas Veterans Healthcare System and community-based organizations in Northwest and Central Arkansas as well as other areas of the state. We will facilitate the Life360 HOMEs connecting with these VA providers to identify eligible veterans for Life360 HOME services.

The Life360 HOME services can help improve participants' health outcomes and the QHPs' quality metrics (i.e., percentage of births that are preterm) and will not be an expense for the QHPs. QHPs will be expected to identify beneficiaries eligible for Life360 HOME programs and refer them for services,

specifically, women with high-risk pregnancies for referrals to Maternal Life360 Homes and individuals in rural areas with SMI or SUD for Rural Life360 Homes.

Maternal Home Visiting Partnerships

DHS has developed partnerships with state home visiting program partners to support Maternal Life360 HOME implementation. The Arkansas Department of Health (ADH) receives the federal Maternal Infant and Early Childhood Home Visiting (MIECHV) funding. ADH oversees implementation of the Nurse Family Partnership (NFP) program and, through a professional services contract with Arkansas Children's Hospital (ACH), provides funding for the Arkansas Home Visiting Network (AHVN). The AHVN oversees several dozen home-visiting providers and provides training, technical assistance, data collection and evaluation for these providers and others across the state. DHS has developed relationships with ADH NFP, AHVN, and the local home visiting sites to learn about their programming and identify opportunities to collaborate. ADH NFP and AVHN have also worked closely with DHS to support outreach to local programs to provide input and identify capacity and interest in partnering with hospitals for the Maternal Life360 program. AHVN's service provider directory was also used to create a county-by-county map of the evidence-based home visiting programs eligible to partner with a hospital. This map along with a contact list of the home visiting providers by model and location that meet the Maternal Life360 criteria can be shared with hospitals as needed and is available on our website.

AHVN through the contract with ADH and as required for the MIECHV program must tracks required program data, including screening other aspects of services. This data will help DHS verify eligible Maternal Life360 beneficiaries are not already being served in a MIECHV or other evidence-based home visiting program. The AHVN data also may be useful to link data on HRSN screening and referrals and other data metrics. In addition to the programs AHVN oversees, the ADH program also collects and reports MIECHV required data for NFP. DHS will work with the NFP program to ensure services are not duplicated with Maternal Life360 programs. A few local Early Head Start (EHS) programs receive direct federal funding to provide home visits to EHS eligible individuals who are pregnant. The MaternalLife360 programs will work directly with any of these sites as well to avoid duplication.

DHS is also part of the Pritzker Foundation-funded Excel by Eight statewide collaborative that includes multiple state and community services providers and advocates and that promotes policy to address maternal health and early childhood development in Arkansas. This group focuses specifically on improving availability of home visiting services from prenatal to age three and other supports such as quality childcare for low-income families. Its local partnership sites have also worked with DHS to identify potential partners to apply to implement Life360 HOMEs, including one for Maternal Life360.

Information about key partnerships related to HRSN service delivery, including plans for capacity building for community partners and for soliciting and incorporating input from impacted groups (e.g., community partners, health care delivery system partners, and beneficiaries)

One of the foundational principles of the Life360 HOME programs is ensuring Life360 hospitals connect with their community resource providers, such as food banks, shelters, and veterans' organizations. The state expects Life360 HOMEs to develop relationships with organizations in their community that connect beneficiaries to needed services, but that also serve as a referral network to the Life360 HOME. For example, developing a relationship between the Life360 HOME Hospital and the local food bank will lead to the food bank referring potential beneficiaries to the Life360 HOME.

When applying to become a Life360 HOME, hospitals will be required to provide a community needs assessment and a plan for developing relationships with social service organizations in their service area. In their application, they will identify available community resource providers for each type of HRSN and describe their referral processes for connecting participants to those providers. During the readiness review, DHS will confirm the process the program will use to ensure the development of a consistent approach for tracking referrals and services provided. If needed, DHS may support standardized referral agreement language and provide technical assistance on available resource platforms at the state and local level. Life360 HOMEs will be required to reassess available community resources and services annually, providing feedback to DHS on needed resources in short supply and communities that have developed service delivery models that could be replicated in other parts of the state. DHS will facilitate learning opportunities based on the needs and interests of the Life360 HOME providers as well as its monitoring/technical assistance (TA). DHS's approach could include providing information or contacts directly through TA/monitoring conversations or connecting Life360 HOME providers with innovative practices to other Life360 HOME providers. DHS may also distribute information via e-mail for all providers or host webinars for interested Life360 HOMEs on a specific topic or program based on the interest/needs of the providers and feature a Life360 HOME program, or other outside programs implementing successful approaches.

The state is also supplementing these foundational community-level relationships with extensive partnerships at the state level.

Leading up to the implementation of Life360 HOMEs, DHS met with several dozen home visiting providers, ADH Nurse Family Partnership, multiple behavioral health providers, Early Head Start providers, FQHCs, community mental health centers, housing providers and CoCs as well as the Association for Community Health Workers, Arkansas Department of Corrections, Arkansas Rural Health Partnership, Central Arkansas Veterans Health Services and other regional service providers/collaboratives such as Baptist health System, Mercy Health, and the Northwest Arkansas Healthcare Transformation collaborative as well as key policymakers. We have also engaged the ARHOME Advisory Panel which consists of key policymakers and state agency partners. Through these meetings and presentations, DHS has been able to assess capacity for service delivery, learn about community barriers and obtain input on implementation of the program. DHS also compiled data on the number of eligible beneficiaries in each county and the hospitals that are eligible for each type of Life360 HOME and posted it on the Life360 HOME website. The data are displayed on a map that is posted on the Life360 HOME website.

DHS has been able to connect with some beneficiaries directly through stakeholder outreach, and through public forums in different parts of the state. DHS will also leverage the Medicaid Client Voice Council's feedback. The Council is a body of individual Medicaid beneficiaries representing different regions of the state that advises DHS on Medicaid services. The Life360 HOME website includes a page for beneficiaries and also accepts feedback from those beneficiaries. Finally, the Waiver demonstration evaluation will conduct beneficiary surveys to assess satisfaction with Life360 HOME services.

At the request of DHS Secretary Kristi Putnam, Arkansas is receiving pro-bono technical assistance from Data Labs, a collaboration between the National Governors Association and Georgetown University. The technical assistance will focus on improving access to and administration of state and federal programs such as Medicaid, Supplemental Nutrition Assistance Program (SNAP), and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). The assistance will focus on developing an

integrated service delivery or “no wrong door” approach to delivering intergovernmental services, encouraging partners to develop and share a common vision that connects citizens with the full range of services available in their communities and facilitating coordination of services to align resources and maximize outcomes for our citizens, employers, and the economy. The vision for the project is to support Governor Sarah Huckabee Sanders’s Workforce Cabinet in the development of a strategic plan for data-driven supports to integrate services, increase operational efficiency and improve citizen outcomes.

In conjunction with the Data Labs technical assistance, DHS is working with the state Division of Information Systems in its partnership with the Google.org philanthropy to implement CiviForm, an online portal to allow citizens to find and apply for community services. The portal will allow information to be used across state agency program enrollment forms, reducing application time and improving data consistency, and it will notify applicants when new programs are added, or eligibility requirements change.

DHS will work with the U.S. Department of Housing and Urban Development’s five local HUD Continuum of Care organizations (COCs), including Balance of the State CoC, Central Arkansas CoC, Southeast Arkansas CoC, Fayetteville/Northwest AR CoC, and Fort Smith CoC. The use of coordinated entry systems and HMIS for referrals is still emergent, or not yet in place, for most of the CoCs. Therefore, referrals for housing are made to each individual housing provider, and services are available on a first come, first serve basis. Life360 HOMEs will make housing referrals when a need is identified and will document if the referral cannot be accepted to monitor for community affordable housing availability. DHS’s capacity building plan includes helping Life360 HOMEs collect and analyze their referral data to identify gaps. It also includes helping the Life360 HOMEs and partner housing organizations use referral data in their service planning and funding requests. DHS also will use the data to identify service gaps for state and federal policymakers. This information could assist policymakers better understand where in the state a lack of affordable housing may be inhibiting employment and consider policy changes to address it.

Hospitals will submit a community resource network inventory with their Life360 Home application identifying housing service providers and describing their existing referral process through the CoC or local housing providers. Life360 HOMEs will utilize available resource platforms and develop partnerships/referral arrangements with housing service providers during the startup phase and establish how they will track services. As outlined in the state’s *Protocol for Assessment of Beneficiary Need, Infrastructure Planning and Provider Qualifications*, Life360 HOMEs will document HRSN services needed, service referrals made and outcomes of services rendered in the person-centered action plan (PCAP). DHS will provide a standardized PCAP template to providers during the startup period to capture these data elements. DHS also is collaborating with the Arkansas Division of Information Services and health care provider groups to coordinate and leverage state resources to develop and avoid duplication of HRSN screenings, resources referrals and education/workforce connections data. Life360 HOMEs will work with the PHAs, which cover more than 100 jurisdictions around the State, to submit applications/make referrals for eligible beneficiaries. DHS will also ensure the CoCs/PHAs are familiar with the Life360 HOME program and support Life360 HOMEs to build strong partnerships with the local housing providers.

Life360 HOMEs must demonstrate in the readiness review how they intend to work with HRSN service partners to address housing and other needs. In the startup phase, DHS will review and provide feedback on the development of the Life360 HOMEs’ referral processes and/or referral agreements through the regular TA meetings. Through TA, DHS will identify progress and challenges to building these

partnerships and provide recommendations as needed and additional support connect with area service providers. DHS will also ensure Life360 HOMEs are able to make referrals to DHS programs including Emergency Services Grant (ESG) program, TANF emergency assistance, foster care programs, and others when needed. DHS will provide program information and contacts for the grant organizations DHS funds to the Life360 HOMEs. We will also share resources available through state partners such as McKinney Vento (Arkansas Department of Education), Arkansas-Department of Corrections transitional housing for formerly incarcerated, foster care transitional housing (AR-DHS Division of Children and Family Services), affordable housing and domestic violence programs overseen by Department of Finance Administration, and the Department of Veteran's housing.

In addition to connecting Life360 HOME beneficiaries to social services, the state is also developing partnerships to connect beneficiaries to education, workforce training and employment. Secretary Putnam was appointed to the Governor's Workforce Cabinet (the Cabinet) along with the Secretaries of five other state agencies. The Cabinet's mission is to strategically align state agencies and organizations to drive workforce, education and economic development. The Cabinet will review and make recommendations on the coordinated use of funds and services to maximize the state's workforce outcomes. One component of this effort is the development of an online tool to help people connect to meaningful employment openings, explore career paths, and find educational opportunities. In coordination with DHS, DIS and the Arkansas Division of Workforce Services (DWS) are developing an online tool to use government administrative data to deliver personalized career recommendations in growing industries and match residents to best-fit available job opportunities. The tool will be available to Life360 HOMEs to help enrolled beneficiaries explore their career potential and engage in education or workforce opportunities when appropriate.

Referrals will be tracked by either local resources platforms or processes developed by the service providers and Life360 HOMEs and must be documented in the beneficiary's PCAP.

Plans for changes to information technology (IT) infrastructure that will support HRSN-related data exchange, including development and implementation of data systems necessary to support program implementation, monitoring, and evaluation. These existing or new data systems should, at a minimum, collect data on beneficiary characteristics, eligibility and consent, screening, referrals, and service provision.

Enrollment Data System Infrastructure

DHS has implemented changes to its MMIS system to process beneficiary eligibility, collect consent forms and process program enrollment. These changes created the necessary infrastructure for Life360 HOME provider enrollment and payment, for providers to submit a beneficiary enrollment request to confirm eligibility for Life360 services and gather required enrollment documentation, including signed consent forms, required medical documentation, such as a medical referral for high-risk pregnancy or verification of veteran status. The required beneficiary consent form will include with whom their data will be shared and how it will be used for monitoring, evaluation and service provision. The MMIS system changes establish a program enrollment record for Life360 that allows for data collection on beneficiary characteristics through its connection to the beneficiary's Medicaid enrollment record. As of June 2023, system testing is completed and the changes are operational. Once Life360 providers are approved, we will provide training on how to use MMIS for these processes and will work with providers and our MMIS team continuously to improve the system and process.

Program Report Portal
Beyond beneficiary enrollment, a program reporting portal will be developed. The new portal will have similar functionality to our current Patient-Centered Medical Home (PCMH) portal used by primary care providers that tracks quality of care metrics. Life360 HOME providers will upload or enter their program data into the system, and DHS will monitor and track their progress on different performance metrics. Through the portal, the Life360 Homes will report beneficiary visits, Person-Centered Action Plan (PCAP) milestones and other required beneficiary metrics (e.g., HRSN screenings completed, prenatal care visits, education enrollment, etc.) on at least a quarterly basis. Eventually, the portal will link Medicaid and administrative data related to healthcare services metrics, health outcomes and other state funded services and benefits available that are needed for the Waiver demonstration reporting and Life360 performance metrics.

We anticipate the portal development will begin after the vendor agreement is reviewed by the legislature in July. The timeline for completion is expected to be 3 to 4 months. While we anticipate the portal will be in place in some initial form in time for implementation of services, if necessary, we will gather the required data directly from each provider securely through a Move it account created for our program. We are also assessing any other beneficial tools that would support secure reporting.

***A plan for tracking and improving the share of Medicaid beneficiaries who are eligible and enrolled in the Supplemental Nutrition Assistance Program (SNAP), the Special Supplemental Nutrition Program for Women, Infants and Children (WIC), and federal and state housing assistance programs, relative to the number of total eligible beneficiaries, including establishing a timeline for reporting*.**

Plan for WIC
DHS has established a data sharing agreement with the Arkansas Department of Health's WIC program to establish for the baseline of Medicaid beneficiaries enrolled in WIC and to track progress of the percentage of Medicaid beneficiaries who are eligible for WIC and who are enrolled. Generally, most Medicaid eligible individuals are eligible for WIC as the WIC income limit is higher than most Medicaid eligibility limits.. DHS and ADH initiated the first data exchange in June 2023 and DHS and are currently analyzing results. DHS will periodically examine the number of Life360 HOME beneficiaries enrolled in WIC and monitor changes in dual participation in the programs. DHS will work with ADH to identify any strategies needed to improve participation and streamline enrollment in both programs for those who are eligible.

Plan for SNAP
DHS houses both the state's Medicaid program and the state's SNAP program. Recent data matches of beneficiaries indicate that about 12% of the ARHOME population is also enrolled in the SNAP program. As with the WIC program, DHS will examine at least annually the number of ARHOME enrollees that are enrolled in SNAP and monitor changes in dual participation in the programs and work with its sister division, the Division of County Operations, which is responsible for administration of the SNAP program, to identify any improvements needed. Because DHS uses an integrated eligibility system (ARIES), beneficiaries who are enrolled in either program are simultaneously assessed for eligibility in both programs at renewal.

Plan for Housing and Other Services
When an individual applies for Medicaid, they are asked about their housing status. DHS will review this data to develop an estimate of housing needs among beneficiaries served in the Life360 HOME program in addition to the data captured by the Life360 HOME during HRSN screening and through any other state and local partners.

The Life360 HOME program and DHS will work to track referrals using the Homeless Management Information System (HMIS) in the service areas that use it. However, a majority of the state's service areas do not use the HMIS at this time. For those that don't, DHS and the Life360 HOME will rely on the Life360's resource directory platform or other available tool. If HMIS or a resource platform cannot be used, Life360 HOMEs will gather the data directly from their local housing referral partner(s). During the application process, the Life360 HOME will identify HRSN screening tools, referral agreements, and data systems tracking that will be utilized, and DHS will review and provide any feedback during the readiness review. As DHS works on data sharing with state partners to improve service connections and data collection as described in this implementation plan, opportunities to gather data on existing housing programs and other services will be reviewed, and Life360 HOMEs will track any services that may be received through these specific programs.

An implementation timeline and evaluation considerations impacted by the timeline, such as staged rollout that can facilitate robust evaluation designs if these implementation strategies are culturally appropriate.

DHS has completed work on its MMIS system to allow hospitals to enroll as Life360 HOMEs and to allow beneficiaries to enroll as Life360 Home participants. As of June 2023, the state has received ten letters of intent (the first step in the application process) from hospitals that would like to enroll as Life360 providers (one has since withdrawn) and three applications (the next step). Nine of the letters of intent received were for Maternal Life360, and one is for Rural Life360. All approved Life360 HOME providers must successfully complete a readiness review before they can begin enrolling beneficiaries and up to six months is allowed to complete readiness. DHS anticipates no hospital will complete readiness review before the end of the third quarter of 2023. This may result in delayed data collection for the Life360 HOME evaluation to the start of 2024, which is Demonstration Year Three.

DHS anticipates administering the program in a portal that is connected to MMIS but is separate. The portal will be designed to populate enrollment data from MMIS and allow Life360 HOMEs to enter required monthly individual programmatic data and expenditure data. The portal will be designed to capture data necessary for the interim and summative evaluations of the Life360 HOME program. However, we do not believe perfect alignment between the start of the first Life360 HOME program and the portal's final completion are likely, nor is alignment required to allow for necessary evaluation activities. DHS will develop manual data collection processes to ensure a complete evaluation can be conducted.

Maintenance of Effort (MOE)

Under ARHOME Special Terms and Condition #54, Arkansas must maintain the level of state funding for social service programs related to housing transitions supports and nutrition supports for the duration of the demonstration. STC #54 requires the state to submit a plan to CMS that outlines how it will assess the current availability of these services throughout the State. The annual MOE will be reported and monitored as part of the Annual Monitoring Reports described in STC #66, including any justifications necessary to describe the findings.

The total Maintenance of Effort calculation of the state investment in social service programs related to nutrition supports is $43,370,669.

For housing supports, the total state investment for housing for persons and households experiencing domestic violence is $435,000, of which $350,000 is fee generated and can fluctuate. The state's spending for housing related services for foster care youth is $2,459,410.

Nutritional Supports

Women Infants and Children (WIC)

USDA provides federal grants to states to provide supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age 5 who are found to be at nutritional risk.

In Arkansas pregnant women and their children are eligible for WIC if they are under 185% of the federal poverty level. All pregnant women in ARHOME and most pregnant women in other Medicaid eligibility categories are eligible for WIC.

This program in Arkansas is administered by the Arkansas Department of Health.

Benefits are available statewide. On average, 56,000 people in Arkansas are served by this program each month, including 14,200 women (5,800 of whom are pregnant) and 16,700 infants. Through the WIC program, Arkansas spends about $22.8 million a year in nutritional supports and administrative costs.[7]

No state funding is used in this program, so this program will not be included in the annual MOE reporting on state funding. However, a Life360 HOME program goal is to increase beneficiaries' connections to health-related social needs, including WIC services beneficiaries. We have begun the process of matching Medicaid beneficiary data to WIC recipient data to determine the percentage of Medicaid-enrolled pregnant women and their eligible children who are receiving WIC and the percentage who are eligible for the WIC program but are not currently being served. An important goal of the Life360 HOME program—particularly the Maternal Life360 HOME —is to ensure appropriate enrollments are being made. We will monitor these data for Life360 HOME beneficiaries on a quarterly basis and for the entire Medicaid population on at least an annual basis.

[7] https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Ffns-prod.azureedge.us%2Fsites%2Fdefault%2Ffiles%2Fresource-files%2FWICAgencies2022ytd-1.xlsx&wdOrigin=BROWSELINK

Supplemental Nutritional Assistance Program
SNAP provides funding to assist low-income individuals and families with the purchase of food in grocery stores and other food venues. Households containing an individual with disability or a member age 60 or older are eligible for SNAP if they meet all program requirements and have a net income at or below 100% of the federal poverty guidelines. All other households must have both a gross income at or below 130% of the federal poverty guidelines and a net income at or below 100% of the federal poverty guidelines.

In Arkansas, this program is administered by the Arkansas Department of Human Services.

Benefits are available statewide. In state fiscal year 2022, 462,877 people received SNAP benefit assistance totaling $585,107,157. SNAP benefit assistance is entirely federally funded; however, SNAP administrative expenses are shared 50% by the state and 50% by the USDA. In federal fiscal year 2022, the state's share of SNAP administrative expenses totaled $42,706,250. We will monitor and report state expenditures to CMS on an annual basis with an explanation of any decreases in state administrative expenditures outside of the Life360 HOME's control. A goal of the Life360 HOME program is to increase participants' connections to health-related social needs, including SNAP benefits for eligible beneficiaries. As a result, we don't anticipate decreases in funding for this program.

Child and Adult Care Food Program
The Child and Adult Care Food Program provides funding for meals for eligible children and adults who enrolled in child and adult day care centers or afterschool programs, children in emergency shelters, and adults who are over 60 or disabled and enrolled in day care programs.

In Arkansas, this program is administered by the Arkansas Department of Education.
In federal fiscal year 2022, the program had an average daily attendance of 45,080 with cash payment of more than $47 million.[8] No state funding is used in this program, so this program will not be included in the annual MOE reporting on state funding.

Summer Food Service Program
The Summer Food Service Program reimburses program operators who serve free healthy meals and snacks to children and teens in low-income areas.

In Arkansas, this program is administered by the Arkansas Department of Education.

In federal fiscal year 2022, the program had an average daily attendance of 9,873 people in Arkansas with cash payments of more than $2 million.[9] No state funding is used in this program, so this program will not be included in the annual MOE reporting on state funding.

The Emergency Food Assistance Program
The Emergency Food Assistance Program provides emergency food assistance. The state provides commodity foods to selected local agencies, usually food banks and Casualty Assistance Program agencies, which in turn distribute the food to local organizations, such as food pantries, mass distribution

[8] Child Nutrition Tables | Food and Nutrition Service (usda.gov)
[9] Child Nutrition Tables | Food and Nutrition Service (usda.gov)

sites and soup kitchens. These local organizations distribute the donated commodities to eligible recipients for home consumption or use the commodities to prepare and serve meals in a congregate setting. In Arkansas, recipients of food for home use must be at or below 130% of the federal poverty level.

In Arkansas, this program is administered by the Arkansas Department of Human Services. In state fiscal year 2022, the Emergency Food Assistance Program spent $664,419 in state funding. We will monitor and report those expenditures to CMS on an annual basis with an explanation of any decreases in state administrative expenditures beyond the control of the Life360 HOME. One of the goals of the Life360 HOMEs is to increase connections to health-related social needs, including Emergency Food Assistance, when needed for eligible beneficiaries.

Other Nutritional Support Program

The state also administers the Commodity Supplemental Food Program and the National School Lunch Program. Both of these programs serve beneficiaries outside the age range served by the Life360 HOMEs and will not be included in the annual MOE reporting on state funding.

Additional Nutrition Assistance Funding under American Rescue Plan Act (ARPA)

Arkansas used about $585,000 of its federal ARPA funding for the Arkansas Alliance of Boys & Girls Clubs nutrition program. The funding helped Boys & Girls Clubs provide food, weekend backpacks, nutrition instruction, supplies and transportation of food to communities in need. This federal funding will not be included in the annual MOE reporting. [10]

Housing Supports

A major goal of the Life360 HOME program is to connect beneficiaries to health-related social needs, including housing services. The following provides information about housing services and assistance programs available in Arkansas.

Continuum of Care (CoC)

The Continuum of Care (CoC) program provides funding for efforts by nonprofit providers and state and local governments to quickly rehouse homeless individuals and families including those who are fleeing domestic violence. The program promotes access to and utilization of mainstream programs by those being served and optimizes self-sufficiency among individuals and families experiencing homelessness.

In Arkansas, this program is administered by local entities funded directly by the U.S. Housing and Urban Development agency. The four (4) CoCs include Little Rock/Central Arkansas, Fayetteville/Northwest Arkansas, Southeast Arkansas, and Arkansas Balance of the State (includes portions of Southwest and Northeast Arkansas). Each CoC distributes funding and supports a range of housing programs through local partners including emergency and transitional shelters, rapid re-housing, and permanent supportive housing. CoCs also lead planning and evaluation of the overall programs and services needed to address homelessness.

[10] SLFRF-Recovery_Plan.pdf (arkansas.gov)

The CoCs received $4.2 M in FY 2021. No state funding is used in this program, so this program will not be included in the annual MOE reporting on state funding. A goal of the Life360 HOME program is to increase participants' connections to health-related social needs, including housing when needed for eligible beneficiaries.

Emergency Solutions Grant

The Emergency Solutions Grant (ESG) Program is designed to end homelessness by providing funding to eligible non-profit organizations or general units of local government. Covered services include four different areas: outreach to engage individuals who are homeless and not staying in a shelter or other housing; rental assistance and other supports for those who are at risk of becoming homeless to stay housed or relocate; help finding and paying for housing for those who are experiencing homelessness and case management during the transition to stability; and support for emergency shelter operations along with critical services such as child care, skills training, and transportation assistance.

In Arkansas, ESG is administered by the Arkansas Department of Human Services (DHS), Division of County Operations, which distributes ESG funding to community-based service providers and local government across the state. The program assists more than 2,000 individuals and families annually. The state received a total of $2.2M in ESG funding in FY 2022. No state funding is used in this program, so this program will not be included in the annual MOE reporting on state funding.

Tenant Based Rental Assistance (TBRA)

The Tenant-Based Rental Assistance Program (TBRA), administered through Arkansas Development Finance Authority (ADFA), is designed to provide temporary assistance to participants awaiting a permanent subsidy through the Housing Choice Voucher program. The program provides short-term rental or housing assistance payments and utility payments to landlords to prevent homelessness for up to 24 months. On average 260 households annually receive support through this program.

ADFA funds public housing authorities (PHAs) to supplement Section 8 vouchers and to agencies in the community that lack rental assistance to address housing cost burden. TBRA is included in the state's larger HOME Investment Partnership program grant that promotes the development of affordable housing units for low-income families. The state received approximately $11M in HOME funding in FY 2022, and five metropolitan PHAs each received HOME allocations from $240,000 to $845,000.

No state funding is used in this program, so this program will not be included in the annual MOE reporting on state funding.

Affordable Housing Programs

ADFA also administers and monitors affordable housing programs that support affordable housing for more than 20,000 Arkansans in 450 units. These programs' total annual average funding include Low Income Housing Credit Tax ($8.5 million), as well as the HOME Investment Partnerships Act and National Housing Trust Fund ($6.5 million).

No state funding is used in these programs, so they will not be included in the annual MOE reporting.

Programs for specific populations

Incarcerated Individuals– The Arkansas Department of Corrections (DOC) Transitional Housing program serves individuals who have been transferred or paroled from the Division of Corrections or Division of

Community Corrections. Transitional housing services are provided through community transitional housing facilities with funding from the AR-DOC for up to 120 days. Transitional housing providers must provide meals and assist with identifying stable housing in the community and ensure access to substance abuse treatment and recovery services. This program is funded through state resources at $1.8M in FY 2023.

This funding is state funding and will be included in the annual MOE reporting.

Victims of Domestic Violence - Administered by the Arkansas Department of Finance and Administration (DFA), the Arkansas Domestic Violence Shelter Grant Program is designed to assist in the funding of domestic violence shelters in Arkansas. The Domestic Violence Shelter Fund (DVSF) was created by Arkansas Act 583 of 2017 to provide a method of helping support domestic violence shelters and programs through grants funded by special revenues under A.C.A. § 9-15-202(d) and A.C.A. § 16-10-305(h). This program provides services including food, housing, advice, counseling and assistance to victims of domestic abuse and their dependents. The DVSF provided $2,833 per shelter to 30 shelters in FY 2023, approximately $85,000 overall. Each shelter may use the funds differently, for food purchases, or maintenance for the facility, but is towards the overall operations of the shelter. This funding will be included in the annual MOE reporting.

The Domestic Peace Fund managed by the Domestic Violence Coalition receives the funding generated through fees charged in criminal cases. The amount fluctuates based on fees collected. Currently, there are 30 Coalition-affiliated shelters that receive about $11,000 annually from this fund, approximately $350,000 total in the current year budget.

Since this program is also state funded, we will include it in the annual MOE reporting, though as noted, this amount may change year to year. DHS will provide this amount separately.

Federal grant funds are awarded to the State of Arkansas through DHS to support programs and projects statewide that establish, maintain and expand programs and projects to prevent family violence and provide immediate shelter and related assistance for victims of family violence and their dependents. This domestic violence (DV) shelter program receives a total of $144,959 divided among 10 shelters in five regions for bed nights for adult participants. The funds can be used for any shelter needs. Each region receives a different amount divided between two shelters per region.

The DHS DV shelter program is federally funded and will not be part of the MOE.

Former Foster Care Youth – The Division of Children and Family Services (DCFS) Extended Foster Care Program provides money and support to assist former foster youth in making a successful transition to adulthood, including help enrolling in and attending school (including college), getting job training, and finding a place to live. To be eligible for Extended Foster Care, youth must either be enrolled in school, working at least 80 hours per month, enrolled in a program designed to remove barriers from employment, or have a documented medical condition that prevents them from participating in any of the required activities. Youth ages 18 to 21 who elect to participate in the Extended Foster Care Program receive a monthly board payment. The board payment amount is based on the youth's specific budget, including any income the youth may earn, and averages around $750 per month. Typically, the board payment is paid directly to the youth's selected Transitional Youth Services (TYS) Sponsor who helps the youth to manage his or her board payment and serves as the youth's mentor and coach.

Youth in Extended Foster Care are also eligible for other supplemental, one-time financial supports, such as the following:

- $1,000 in start-up funding, which can be used for an apartment deposit, furnishings or other items needed for an apartment, groceries, etc.
- Car repairs in the amount of $500, and
- $200 toward the cost of a cell phone or phone minutes.

Board payments are funded by a mix of Title IV-E dollars as well as State General Revenue (SGR). The remaining one-time financial benefits through Extended Foster Care are supported by federal Chafee funds.

DCFS has placement contracts throughout the state for Supervised Independent Living (SIL) for youth ages 18 to 21 to help youth transition to adulthood. These providers provide an apartment or shared housing placement for youth and case management services in addition to the services from the assigned DCFS caseworker. As of June 2023, a total of 41 youth in Extended Foster Care are placed with an SIL provider. The funds for these contracts are blended from federal Title IV-E funds, federal Chafee funds, and State General Revenue. The total amount of SGR expended on the Extended Foster Care Program between board payments and SIL contracts in state fiscal year 2022 was $2,459,410. This funding will be tracked for the MOE.

DCFS also has an agreement with local housing authorities for the Foster Youth to Independence (FYI) Housing Choice Vouchers. Young adults ages 18 to 24 who are no longer in foster care, or who will leave foster care within 90 days may qualify if living in a participating county. FYI vouchers may be used to provide housing assistance for a maximum of 36 months. DCFS has MOUs with 7 counties for this program and as of June 2023, a total of 17 youth was placed in housing with an FYI voucher, 3 had a pending application, 6 had applied and were pending paperwork, and 3 had voluntarily left the program. For youth who age out of foster care at 18 and choose not to participate in the Extended Foster Care Program, Aftercare funding is available to help pay for school or job training programs, housing, insurance, transportation, or utility bills/setup. Funds are paid directly to the goods or services provider or to the youth on a reimbursement basis. Up to $2,000 can be provided, though typically not more than $500 is spent per month. Aftercare funds come out of federal Chafee funding and will not be included in the MOE.

DCFS also partners with the Arkansas Department of Workforce Services (DWS). Through this partnership, DWS provides Temporary Assistance for Needy Families (TANF) funds to support Immerse Arkansas's LifeBase Program. which provides in-home, two-generational coaching and case management, including ongoing assessment to promote progress for those in a resource home or teens who were adopted from foster care. This program currently operates in Pulaski County and Faulkner County with a focus on supporting teens adopted from foster care and their adoptive families with a range of supports. LifeBase:

- Focuses on safe and stable housing by:
  - empowering and guiding youth and families to create a home atmosphere that has physical and psychological safety
  - increasing placement stability through appropriately identifying and addressing the needs of youth and families

    - empowering youth and families through building resiliency, implementing protective factors, and strengthening developmental assets
    - assisting in the development and implementation of a plan towards independent housing when appropriate
- Provides 24/7 crisis intervention and support and equipping youth and families with resources and tools for educational and employment stability and growth.
- Provides a therapeutic component including individual scheduled therapy, evidence-based treatment including long-term therapy for the youth and families, and immediate counseling on-site

In addition, DCFS also contracts with Youth Villages to provide the LifeSet Program to youth ages 17 to 21 in foster care. LifeSet is an individualized, evidence-informed intensive community-based program. Specialists help young people build healthy relationships, obtain safe housing, education and employment through weekly meetings and other contacts. All Specialists receive weekly clinical supervision and can provide 24/7 crisis intervention and support. LifeSet is offered in DCFS Areas 1 and 2 (Northwest AR) and will launch in Areas 8 and 9 (Northeast AR) in July 2023.

On average, a little over 300 youth are participating in the Extended Foster Care Program at any given time. In state fiscal year 2022, 26 youth received After Care funding in some amount. In state fiscal year 2022, 101 youth received ETV awards.

Title IV-E is an entitlement program so there is not a set amount of those funds designated for youth in Extended Foster Care. The Chafee and ETV awards run on a two-year cycle. The current federal Chafee award (cycle 10/1/21-9/30/23) amount is $1,348,638. The current ETV award amount is $447,434. These amounts are federal funds and will not be included in the MOE.

TANF Assistance

Arkansas' TANF program, known as Temporary Employment Assistance (TEA), provides one-time assistance to address emergency housing needs that may hinder employment. The program also supports childcare assistance for qualified children up to 2 years for persons receiving and/or transitioning from TEA. On average, the state serves 3,000 individuals in TEA each year.

The total federal funding for this program in FY 2022 was $56.5M. The state's MOE for the TEA program in FY 2022 was $33,464,340.

Additional Housing Assistance Funding under American Rescue Plan Act (ARPA)

Emergency Solutions Grants-CARES Act (ESG-CV) and Emergency Housing Vouchers (EHV)
ESG programs as well as other community development programs received substantial funding through ARPA. This funding was applied more flexibly or expanded existing services to address urgent needs during the pandemic. The Emergency Housing Voucher (EHV) program provided $4.7M to local Public Housing Authorities (PHAs), and 355 households have been able to secure permanent housing through the program. Since the funding was intended for one-time use and is federal funds only, it will not be included in the MOE reporting.

HOME Investment Partnerships American Rescue Plan Program (HOME-ARP)

Once approved by U.S. Department of Housing and Urban Development, ADFA will be responsible for administering and overseeing the $37.5M in planned projects and services in its HOME-ARP plan completed in September 2022. States can use this funding to support activities including acquisition and development of shelter, supportive services, tenant based rental assistance, HOME-ARP rental housing, planning and administration, and nonprofit operating and capacity building. (A portion of funds must assist qualifying populations, including those experiencing homelessness). The state's plan will prioritize supportive services and the acquisition and development of shelter and related non-profit operations capacity and supportive services to address needs identified through the state's planning process. This funding approach will complement the state's existing plans to add more than 1,500 affordable housing units. The proposed services funding will leverage Medicaid, CoC and other supportive resources, including behavioral health services to strengthen services needed to transition to housing.

No state funding is used in this program, so this program will not be included in the annual MOE reporting on state funding.

Appendix B: Partnerships with State and Local Entities, STC 55

The state must have in place partnerships with other state and local entities (e.g., HUD Continuum of Care Program, local housing authority, SNAP state agency, etc.) to assist beneficiaries in obtaining non-Medicaid funded housing and nutrition supports, if available, upon the conclusion of temporary Medicaid payment for such supports, in alignment with beneficiary needs identified in the person-centered plans as appropriate. The state must submit a plan to CMS as part of the New Initiatives Implementation Plan (see STC 64) that outlines how it will put into place the necessary arrangements with other state and local entities and also work with those entities to beneficiaries in obtaining available non-Medicaid funded housing and nutrition supports upon conclusion of temporary Medicaid payment as stated above. The plan must provide a timeline for the activities outlined.

As mentioned previously in this implementation plan, DHS is partnering with an array of organizations and agencies across the state to collaboratively address Health-Related Social Needs (HRSN) and reduce silos between state agencies.

Partnerships for Housing Supports
DHS will work with the U.S. Department of Housing and Urban Development's five local HUD Continuum of Care organizations (COCs), including Balance of the State CoC, Central Arkansas CoC, Southeast Arkansas CoC, Fayetteville/Northwest AR CoC, and Fort Smith CoC. The use of coordinated entry systems and HMIS for referrals is still emergent or not yet in place for most of the CoCs. Therefore, referrals to housing are made to each individual housing provider, and services are available on a first come, first serve basis.

DHS will also ensure the CoCs/PHAs are familiar with the Life360 HOMEs and will support Life360s to build strong partnerships with the local housing providers included in the CoC. DHS will also provide feedback on referral processes and/or agreements outlined by the partners and will ensure that Life360 HOMEs connect individuals with housing needs who would meet criteria for housing resources through our state partners. These partners include TANF housing and childcare (Arkansas Division of Workforce Services), McKinney Vento (Arkansas Department of Education), Arkansas Department of Corrections transitional housing for formerly incarcerated, foster care transitional housing (DHS Division of Children and Family Services), affordable housing programs overseen by Department of Finance Administration, and the Department of Veteran's housing.

Partnerships for Nutritional Supports
Most Medicaid eligible pregnant or postpartum women in Arkansas are eligible for WIC, so DHS has begun developing a relationship with the Arkansas Department of Health's WIC program. DHS has established a data sharing agreement with the Arkansas Department of Health's WIC program to establish baseline data for Medicaid beneficiaries enrolled in WIC, as well as those who are not but could be eligible, and to track progress in the percentage of Medicaid beneficiaries who are eligible for WIC and who are enrolled. Through this partnership, DHS plans to provide Life360 HOMEs with information about participants who are not enrolled in WIC but are eligible for the program and expects the Life360 HOME program to encourage and assist participants in enrolling.

Beyond the Life360 HOME program, DHS anticipates the partnership with ADH's WIC program will lead to more communication between the two agencies, greater understanding of one another's programs and ultimately efficiency in enrolling individuals eligible for both Medicaid and WIC.

DHS houses both the state's Medicaid program and the state’s SNAP program. Recent data matches of beneficiaries indicate that about 12% of the ARHOME population is enrolled in the SNAP program. As with the WIC program, DHS will periodically examine the number of ARHOME enrollees enrolled in SNAP and monitor changes in membership with dual participation in the programs. Because DHS uses an integrated eligibility system (ARIES), beneficiaries who are enrolled in either program are assessed for eligibility in both programs. This ensures that all Medicaid beneficiaries are easily enrolled in SNAP if they are eligible.

Appendix C: Rate Methodology STC 53

On June 30, 2023, DHS submitted the Rate Methodology to CMS.

Attachment E
Monitoring Protocol (RESERVED)

Attachment F

Life 360 Home

Evaluation Design

Arkansas Health and Opportunity for Me
Program Evaluation for Life360 HOME Amendment
Project Number 11-W-00379/6

Evaluation Design

Draft Submittal Date: April 28, 2023

Final Submittal Date: April 16, 2024

Revised Final Submittal Date: December 18, 2024

Revised Final Submittal Date: January 15, 2025

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GENERAL BACKGROUND INFORMATION

In 2014, Arkansas expanded Medicaid for the new adult group under the Affordable Care Act (ACA). The new adult group includes individuals between 19 and 64 years of age with incomes at or below 138 percent of the federal poverty level (FPL). In September 2013, the Centers for Medicare and Medicaid Services (CMS) approved a Medicaid demonstration for the new adult group developed by Arkansas state leadership. This demonstration was entitled "Arkansas Health Care Independence Program" (HCIP). With premium assistance from Medicaid, the HCIP demonstration allowed Arkansas to support healthcare coverage for the new adult group through qualified health plans (QHPs) offered on the Health Insurance Marketplace (Marketplace), effective January 1, 2014 through December 31, 2016. In June 2016, the state requested an extension and amendment application of the HCIP in accordance with Arkansas Works Act of 2016. The request's purpose was intended to build upon the HCIP's success of providing health insurance coverage for over 240,000 Arkansans and accomplish other Waiver goals. The request included adding premiums, job referral, and training requirements for beneficiaries who met certain criteria and as allowed by Medicaid. CMS approved this request on December 8, 2016, updating the special terms and conditions (STCs) and acknowledging the demonstration project name change as "Arkansas Works."

In anticipation of the Arkansas Works demonstration expiration at the end of 2021, the Department of Human Services (DHS), Arkansas Insurance Department (AID), former Arkansas Governor Asa Hutchinson, and legislators collaborated to make further improvements to the Medicaid program for eligible adults under the authority of the Arkansas Health and Opportunity for Me ("ARHOME") Act 530, enacted in March 2021. On July 19, 2021, Arkansas submitted a proposal to CMS to continue covering the new adult group and for the state to implement new health improvement initiatives through the QHPs with a new program focused on high-risk Medicaid beneficiaries and performance measurement accountability for the QHPs through a new joint executive-legislative policy committee. CMS approved the coverage and QHP health improvement components on December 21, 2021, and two separate revised evaluation designs were submitted to CMS on March 15, 2024, and December 18, 2024.

On November 1, 2022, CMS gave approval for the Life360 HOME amendment of the ARHOME program. This amendment addresses health-related social needs (HRSN) among targeted populations through coverage of intensive care coordination and other support identified in a person-centered action plan.

Table 1 below provides an overview of key information for the Arkansas Section 1115 Demonstration Project.

Table 1: Arkansas Medicaid Section 1115 Demonstration Project Key Information

Arkansas Medicaid Section 1115 Demonstration Project Key Information	
HCIP Waiver Application Submitted to CMS	August 6, 2013
HCIP Waiver Application Approved by CMS	September 27, 2013
HCIP Waiver Period	October 1, 2013 – December 31,
HCIP Evaluation Design Submitted to CMS	February 20, 2014
HCIP Evaluation Design Approved by CMS	March 24, 2014
HCIP Summative Evaluation Submitted to CMS	June 30, 2018
Arkansas Works Waiver Application Submitted to CMS	July 7, 2016
Arkansas Works Waiver Application Approved by CMS	December 8, 2016
Arkansas Works Waiver Period	January 1, 2017 – December 31,
Arkansas Works Evaluation Design Submitted to CMS	May 4, 2021
Arkansas Works Evaluation Design Approved by CMS	June 17, 2021
Arkansas Works Interim Evaluation Submitted to CMS	June 30, 2021
Arkansas Works Summative Evaluation Submitted to CMS	June 30, 2023
ARHOME Waiver Application Submitted to CMS	July 19, 2021
ARHOME Waiver Application Approved by CMS	December 21, 2021
ARHOME Waiver Period	January 1, 2022 – December 31,
ARHOME Evaluation Design Submitted to CMS	June 17, 2022, November 4, 2022, February 10, 2023, March 15, 2024, and December 18, 2024
ARHOME Life360 HOMEs Approved by CMS	November 1, 2022
ARHOME Life360 HOMEs Evaluation Design Submitted to CMS	April 28, 2023, April 16, 2024, December 18, 2024, and January 15, 2025

Life360 HOMEs (also called Life360s) will address many of the complex challenges facing many of Arkansas's most vulnerable residents, including beneficiaries with high-risk pregnancies, beneficiaries in rural areas with serious mental illness (SMI) and substance use disorder (SUD) diagnoses, and young adults identified as most at risk for long-term poverty and poor health outcomes. The aim of Life360 HOMEs program is to reduce maternal and infant mortality rates around the state, fill gaps in the continuum of care for beneficiaries with SMI and SUD diagnoses, especially in rural areas, and increase active participation among high-risk beneficiaries in improving their health and addressing HRSN.

The intended Life360 populations are listed below:

1) Rural Life360 HOME will support beneficiaries with SMI or SUD diagnosis who live in rural areas of the state.
2) Maternal Life 360 HOME will support beneficiaries with high-risk pregnancies, as identified by their physician.
3) Success Life360 HOME will support young adults at high-risk for long-term poverty due to prior incarceration or involvement with the juvenile justice system (ages 19-24),

involvement with the foster care system (ages 19-27), and veterans (ages 19-30) who are at high risk of homelessness.

Between the approval of the Life360 HOMEs amendment and the start-up of the program, operationalization of both Rural and Success Life360 HOMEs were placed on hold. Rural Life360 HOME was paused due to a lack of approval for several reimbursement mechanisms needed by potential participating hospitals. The eligible population for Success Life360 HOME was too narrowly defined to be considered viable by possible participating providers, which may have led to less interest in the program from providers. While Maternal Life360 HOME is the only program component currently moving forward with operationalization, all three Life360 HOMES will be described in this evaluation design.

The Life360 HOMEs are designed to provide beneficiaries with intensive care coordination and connect them to necessary health services and community support, address HRSNs, and actively engage beneficiaries in promoting their own health care.

Through the amendment, Arkansas can also now provide or increase coverage of certain services that address HRSN for Life360 HOME beneficiaries, as evidence indicates that HRSNs are a critical driver in health outcomes and beneficiaries' access to health services that help to keep them well.[11] [12] These services include critical housing and nutritional services, as well as case management, outreach, education, and infrastructure investments.

Services authorized in this amendment to address HRSN must be medically appropriate for the eligible beneficiary as based on clinical and other health-related social needs criteria. In Arkansas, Life360 HOME HRSN services will be provided for beneficiaries enrolled in a Life360 HOME, as described above. Coverage of Life360 HOME HRSN services and supports (which includes screening of HRSN needs and ongoing support to address them) will presumably assist in promoting the objectives of Medicaid. Specifically, the services will be expected to help beneficiaries stay connected to coverage and to provide a regular source of needed care to meet beneficiaries' comprehensive health needs. This will expand the degree to which eligible beneficiaries receive medical assistance they are qualified to receive. A central objective of Medicaid is to furnish medical assistance primarily to low-income people. The Life360 HOME HRSN services can be expected to promote this objective in several ways. For example, lack of stable housing or inadequate nutrition may impede a beneficiary's ability to enroll in coverage and access needed health care. Such circumstances may also create physical, social, or

[11] As discussed in a letter to State Health Officials issued on January 7, 2021, https://www medicaid.gov/federal policy-guidance/downloads/sho21001.pdf, addressing Social Determinants of Health can more effectively improve population health, reduce disability, and lower overall health care costs in the Medicaid program. While "social determinants of health" is a broad term that relates to the health of all people, HRSN relates more specifically to an individual's adverse conditions reflecting needs that are unmet and contribute to poor health. See also https://www healthaffairs.org/do/10.1377/forefront.20191025.776011/full/.

[12] Bachrach, D., Pfister, H., Wallis, K., Lipson, M. Addressing Patients' Social Needs: An Emerging Business Case for Provider Investment. The Commonwealth Fund; 2014. https://www.commonwealthfund.org/sites/default/files/documents/____media_files_publications_fund_report_2014_may_1749_bachrach_addressing_patients_social_needs_v2.pdf

emotional conditions that are counterproductive to the otherwise positive effects of the health care services a beneficiary does receive, including those through Medicaid.[13] Addressing these conditions is also critically important for overall health. Citing the opportunity to address beneficiary health and other potential positive impacts, CMS has published a framework of services and supports to address HRSNs that CMS considers allowable under specific Medicaid and CHIP authorities.[14] CMS has provided policy guidance outlining ways for states to provide these types of services.[15] Arkansas is one of a few states currently implementing an 1115 Medicaid demonstration to address HRSN. The overall Life360 HOME design, including the housing and nutritional support services covered under the amendment, can be expected to stabilize the housing and nutritional situations and improve the health outcomes for this high-risk population.

The following ARHOME demonstration goals inform this evaluation design:

1. Providing continuity of coverage for beneficiaries
2. Improving access to providers and quality of care
3. Improving continuity of care across the continuum of coverage
4. Furthering quality improvement and delivery system reform initiatives that are successful across population groups

In addition to the evaluation goals for ARHOME policies above, the Life360 HOMEs amendment of the demonstration will focus on the following:

- Increasing beneficiary utilization of HRSN screening and corresponding services, including home visitation, to reduce the severity of beneficiaries' social needs (1.G.1-11, 1.I.1-11, 2.F.1-12, 2.H.1-9, 3.F.1-12, and 3.H.1-9)
- Effectiveness of services received for mitigation of identified needs (1.F.5, 2.B.5, and 3.B.5)
- Reducing disparities in health care access, quality of care, or health outcomes at the beneficiary and community level through stratified analyses (1.A.1, 1.A.6-7, 1.A.10-11, 1.B.1-2, 1.C.1-2, 1.D.10-11, 1.D.18-19, 1.E.1, 1.E.3-6, 1.F.1-5, 2.A.6-7, 2.A.12-13, 2.B.1-5 2.C.1-2, 2.D.1-2, 2.E.2-3, 2.E.7-10, 3.A.5-6, 3.A.10-11, 3.B.5, 3.C.1-2, 3.D.1-2, 3.E.2-3, and 3.E.7-10)
- Increasing utilization of preventive and routine care (1.A.1-13, 1.D.3, 1.D.10-16, 2.A.1-7, 2.A.8-14, 2.E.2, 2.E.4, 3.A.1-12, 3.E.2, 3.E.4, and 3.E.11)

[13] Schilbach, F., Schofield, H., Mullainathan, S. The Psychological Lives of the Poor. American Economic Review: Papers & Proceedings; 2016; http://dx.doi.org/10.1257/aer.p20161101.
[14] Coverage of Health-Related Social Needs (HRSN) Services in Medicaid and the Children's Health Insurance Program (CHIP) November 2023. The Centers for Medicare & Medicaid Services (CMS). Accessed 12/6/2024: https://www.medicaid.gov/health-related-social-needs/downloads/hrsn-coverage-table.pdf
[15] Tsai, D. Coverage of Services and Supports to Address Health-Related Social Needs in Medicaid and the Children's Health Insurance Program; 2024. Accessed January 13, 2025: https://www.medicaid.gov/federal-policy-guidance/downloads/cib12102024.pdf

- Decreasing utilization of and costs associated with potentially avoidable, high acuity health care (1.B.1-2, 1.C.1-2, 1.H.1-3, 2.C.1-2, 2.D.1-3, 2.G.1-3, 3.C.1-2, 3.D.1-2, and 3.G.1-3)
- Identifying beneficiary physical and mental health outcomes:
    - Improving maternal and infant health outcomes for participants in the Maternal Life360 HOME (1.D.12-15, 1.D.17-19, and 1.E.1-6)
    - Increasing utilization of behavioral health and substance use disorder treatments for beneficiaries with relevant diagnoses in Rural Life360 HOME (2.E.1-11)
    - Increasing outreach and HRSN support services to assist beneficiaries in Success Life360 HOME (4.E.7 and 4.E.8)

This evaluation will also assess the effectiveness of investments authorized through the amendment to support the development and implementation of the HRSN initiatives such as the following:

- Assess over time the local availability and investments in social services, such as housing, nutrition, and any other type of allowable HRSN services in concert with new Medicaid funding toward those services (4.E.2 and 4.E.9)
- Assess potential improvements and barriers in the quality and effectiveness of beneficiary participation and downstream services that can be provided under the state plan authority (4.A.4, 4.B.1, and 4.E.5-8)
- Perform a cost analysis to support the development of cost estimates for providing HRSN services (4.A.3)
- Life360 HOME cost assessment will include, but is not limited to, administrative costs of implementation and operation, Medicaid health services expenditures, and provider uncompensated care costs (4.A.1-3, 1.H.1-3, 2.G.1-3, 3.G.1-3, and 4.D.1)
- Assess alignment of findings with other Life360 HOME goals and cost analyses to assess the amendment's effects overall on the fiscal sustainability of the state's Medicaid program (4.C.1)
- Assess the effective use of infrastructure investments to support the development and implementation of HRSN initiatives (4.E.3)

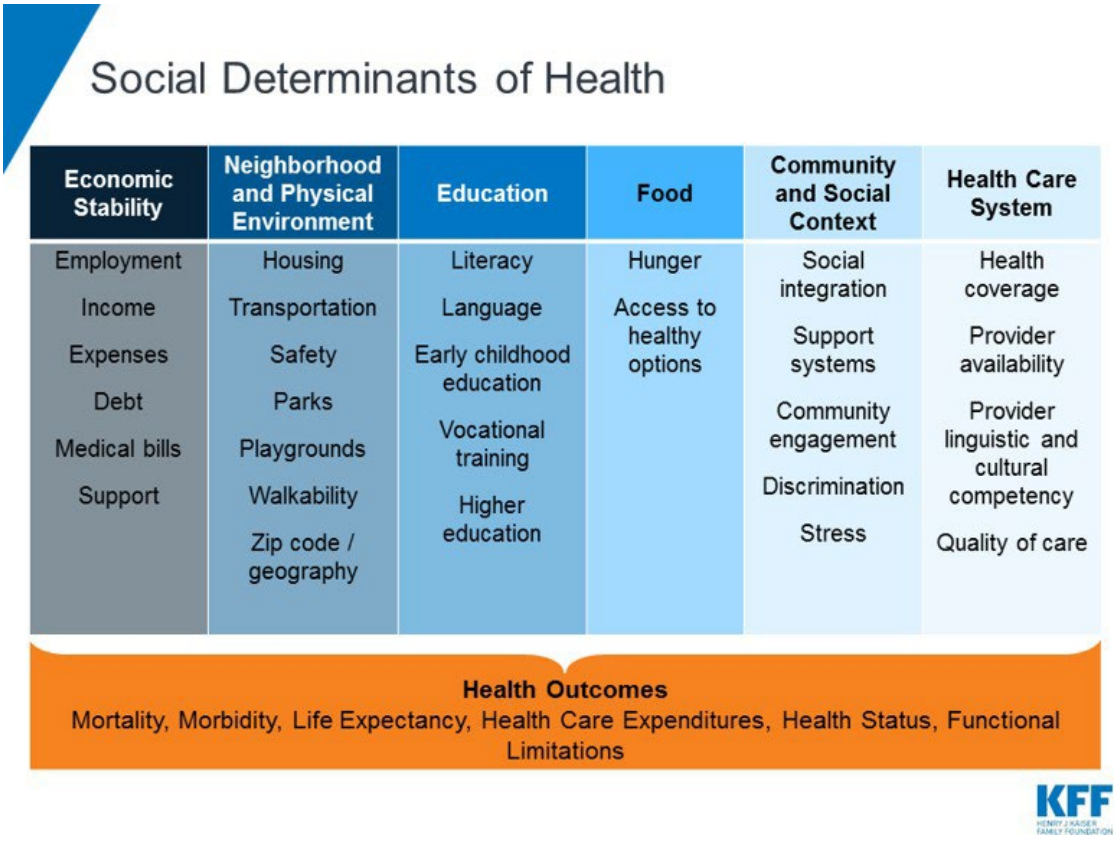
Arkansas Health Related Social Needs

The World Health Organization defines social determinants of health as, "the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, development agendas, social norms, social policies, and political systems."[16] Similarly, health-related social needs are "the social and economic needs that beneficiaries experience that affect their ability to maintain their health and well-being. They include things such as housing instability, housing quality, food insecurity, employment, personal safety, lack of

[16] Social determinants of health. World Health Organization (WHO). Accessed March 30, 2023. http://www.who.int/social_determinants/en

transportation and affordable utilities, and more."[17] As a result of social determinants of health, beneficiaries may face certain disparities in health-related social needs. Providers, policymakers, care providers, and payer organizations can help address these needs and understand the unique needs that might impact a beneficiary or population.

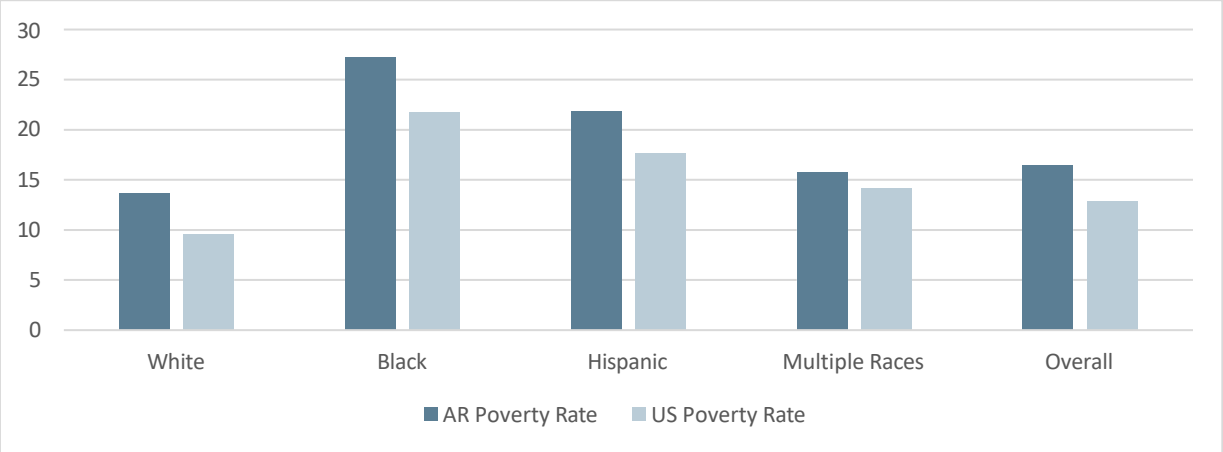
Figure 1: Social Determinants of Health from Kaiser Family Foundation (KFF)



Factors such as household income, educational attainment, race, ethnicity, and poverty rate can have a significant impact on health-related outcomes and access to care. In many health and socioeconomic indicators, Arkansas fares worse than most states. Arkansas ranks 42nd in overall poverty rate. The U.S. Census Bureau reports a higher poverty rate (16.3%) for Arkansas compared to the national poverty rate (11.6%). Analyzing the poverty rate by race also demonstrates that Arkansas falls behind the U.S. average for every racial category as well as overall, as indicated in the figure below.[18]

[17] HRSN def: https://www.oregon.gov/oha/HPA/dsi-pcpch/AdditionalResources/Health-related%20Social%20Needs%20vs%20the%20Social%20Determinants%20of%20Health.pdf
[18] Poverty Rate by Race and Ethnicity. Kaiser Family Foundation. Accessed March 30, 2023. https://www.kff.org/other/state-indicator/poverty-rate-by-raceethnicity/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D

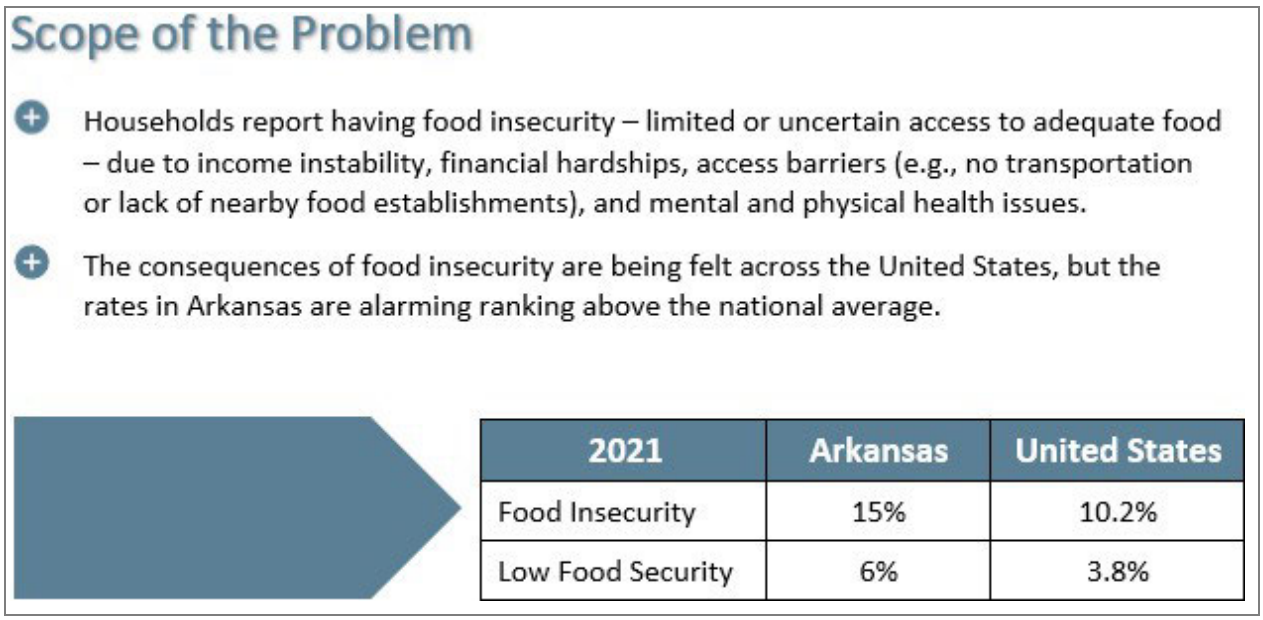
Figure 2: Arkansas vs. U.S. Poverty Rate by Race



According to the Census Bureau, approximately 25.3% of the population was 25 years or older in Arkansas held a bachelor's degree in 2021; this number is lower than the national average of 33.7%. The high school graduation rate in Arkansas is also slightly lower (87.7%) compared to the national average (88.9%).[19] On average, between 2017-2021, Arkansas also reported lower median income ($52,123) compared to the national median income ($69,021).[20] In 2020, 9.2% of the Arkansas population was uninsured, slightly higher than the national average of 8.6%[21], and 2021 data shown in the figure below highlights Arkansas' opportunity to address its difference from national food insecurity rates.[22]

[19] S1501 Educational Attainment. American Community Survey. Accessed March 30, 2023. https://data.census.gov/table?g=040XX00US05&tid=ACSST1Y2021.S1501
[20] U.S. Census Bureau Quick Facts. U.S. Census Bureau. Accessed March 30, 2023. https://www.census.gov/quickfacts/fact/table/AR/EDU685221
[21] Health Insurance Coverage of the Total Population. Kaiser Family Foundation. Accessed March 30, 2023. https://www.kff.org/other/state-indicator/total-population/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D
[22] Food-Desert-Working-Group-Report.22.pdf (arhungeralliance.org)

Figure 3: Arkansas vs. U.S. Food Insecurity



Maternity Care in Arkansas

According to a report from the Centers for Disease Control and Prevention (CDC), the United States saw a 40% increase in deaths due to maternal causes. Furthermore, compilation of state committee review data by the CDC suggests that 84% of these deaths were preventable.[23]

According to the Kaiser Family Foundation, between 2018 and 2020, Arkansas had the highest maternal mortality rate across all states in the United States (40.4 maternal deaths per 100,000 live births). This statistic is nearly double the maternal mortality rate for the entire nation (20.4 maternal deaths per 100,000 live births).[24] Furthermore, Arkansas scores 96 on a scale of 100 on the Maternal Vulnerability Index (MVI), an open-source, national-scale and county-level index developed by the March of Dimes organization to identify areas in the United States where mothers are at highest risk during pregnancy due to clinical, social, environmental, and contextual factors. Higher scores on the MVI scale indicate greater vulnerability to poor pregnancy outcomes.[25]

[23] Maternal Deaths in the U.S. Spiked in 2021, CDC Reports. National Public Radio (NPR). Accessed March 30, 2023. https://www.npr.org/sections/health-shots/2023/03/16/1163786037/maternal-deaths-in-the-u-s-spiked-in-2021-cdc-reports

[24] Maternal Deaths and Mortality Rates per 100,000 Live Births. Kaiser Family Foundation. Accessed March 30, 2023. https://www.kff.org/other/state-indicator/maternal-deaths-and-mortality-rates-per-100000-live-births/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D

[25] The U.S. Maternal Vulnerability Index: Maternal Vulnerability in the United States. Surgo Ventures. Accessed March 30, 2023. https://mvi.surgoventures.org/

In addition, according to the March of Dimes report card for Arkansas, more than 1 out of 5 (or 20%) pregnant women receive inadequate prenatal care in the state. Nationally, this number stands at a little over 14.5% of pregnant women.[26]

According to the CDC, Arkansas had the second-highest rate of teen births at 27.8 births per 1,000 females aged 15-19 years in 2020.[27] Additionally, March of Dimes assigned Arkansas a grade of "F" for pre-term births on the Maternal Mortality Report Card. Arkansas also suffers from a higher infant mortality rate than the national average (7.3 infant deaths per 1,000 live births in Arkansas compared to 5.4 infant deaths per 1,000 live births nationally).[28] According to the March of Dimes 2022 Maternity Care Deserts Report, almost half of all counties (37 counties) in Arkansas are "maternity care deserts," defined by March of Dimes as "as any county without a hospital or birth center offering obstetric care and without any obstetric providers."[29]

It is crucial to improve maternal and infant health outcomes in Arkansas. Women with high-risk pregnancies who participate in one of the Maternal Life360 HOME will benefit from home visitation supports beginning during pregnancy through the first two years of the child's life. The Maternal Life360 HOME was created to address the state's low ranking in maternal and child health indicators. Medicaid finances nearly 60 percent of all births in the state. Improving the state's ranking requires an emphasis on the Medicaid population. Medicaid spends approximately $140 million on costs related to poor birth outcomes. The Maternal Life360 HOME will be administered through hospitals throughout the state that provide labor and delivery services. They will use a home visitation model to support the mother and child.

Mental Illness and Substance Abuse in Arkansas

According to the CDC, 40.3 million Americans aged 12 or older reported having a substance use disorder in the past year. Substance use disorders can be applied to alcohol, cannabis, hallucinogens, inhalants, opioids, sedatives, hypnotics, anxiolytics, stimulants, tobacco, and other or unknown substances. The CDC defines Substance Use Disorders as "treatable, chronic diseases characterized by a problematic pattern of use of a substance or substances leading to impairments in health, social function, and control over substance use. It is a cluster of cognitive, behavioral, and physiological symptoms indicating that the beneficiary continues

[26] 2022 March of Dimes Report Card for Arkansas. March of Dimes. Accessed March 29, 2023. https://www.marchofdimes.org/peristats/reports/arkansas/report-card
[27] Teen Birth Rate by State. Centers for Disease Control (CDC). Accessed March 29, 2023. https://www.cdc.gov/nchs/pressroom/sosmap/teen-births/teenbirths.htm
[28] 2022 March of Dimes Report Card for Arkansas. March of Dimes. Accessed March 29, 2023. https://www.marchofdimes.org/peristats/reports/arkansas/report-card
[29] 2022 Maternity Care Report. March of Dimes. Accessed March 29, 2023.https://www.marchofdimes.org/sites/default/files/2022-10/2022_Maternity_Care_Report.pdf

using the substance despite harmful consequences."[30] Mental illness and SUD are serious concerns that contribute to negative health-related outcomes.

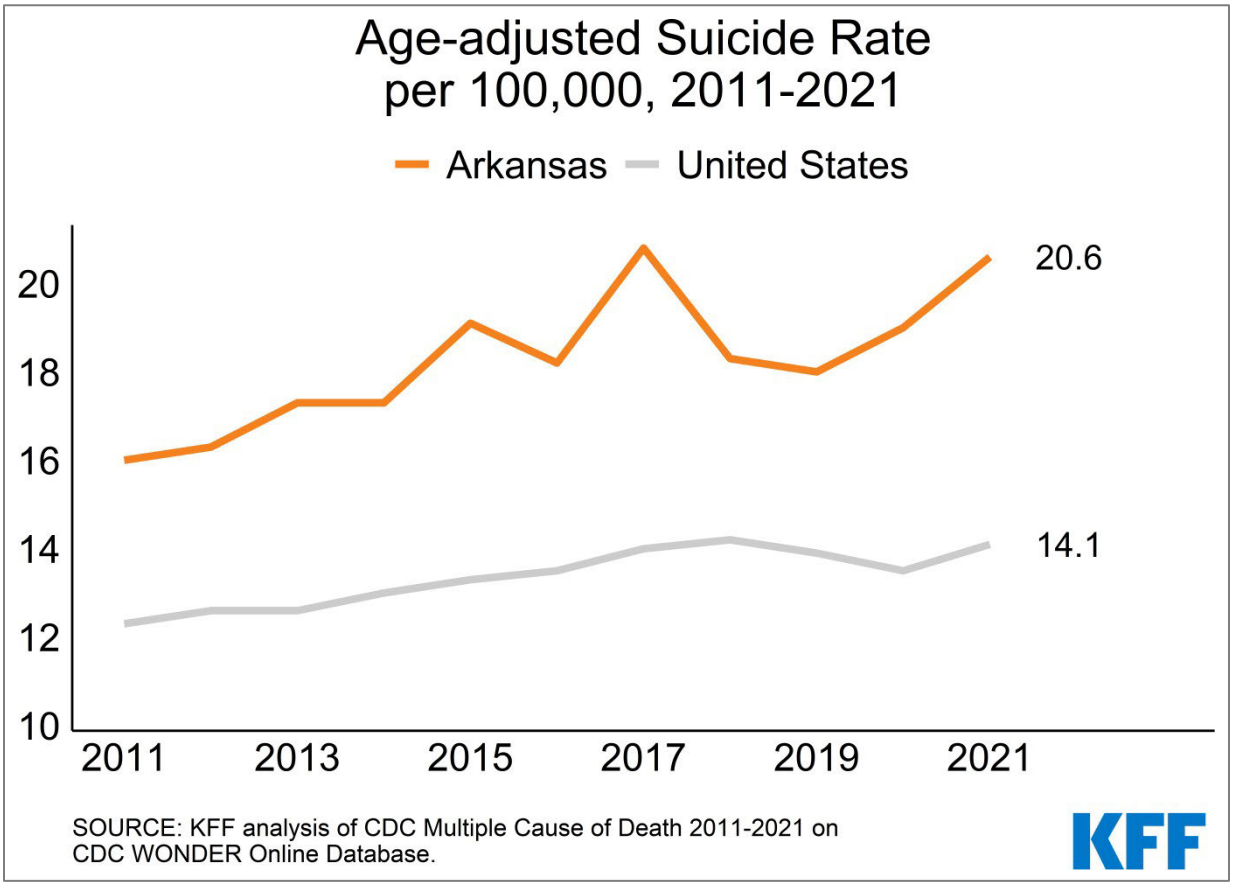
According to data from the National Survey on Drug Use and Health (NSDUH) and the National Survey of Drug Abuse Treatment Services, 50.4% of those with any mental illness in Arkansas reported using mental health services in the last year; this number is higher than the national average of 43.6% in 2019.[31] About a third of the population (approximately 33%) in Arkansas reports having symptoms of anxiety or depression; this number is comparable to the national average (approximately 32%). Comparable to national trends in drug overdose deaths across the country, drug overdose deaths in Arkansas have also steadily increased in the last ten years, up from 12.6 per 100,000 in 2011 to 22.3 per 100,000 in 2021. Most of all drug overdose deaths in Arkansas in 2021 (61%) were related to opioid overdose.

According to the National Alliance on Mental Illness (NAMI), 125,000 adults in Arkansas have been diagnosed with a serious mental illness. NAMI also reports that 145,000 adults in Arkansas did not receive needed mental health care; of those, nearly half reported not receiving care due to cost.[32]

Furthermore, over the last ten years, Arkansas has on average historically reported a higher age-adjusted rate of suicide per 100,000 than across the United States. In 2021, this rate was 20.6 suicides per 100,000, compared to the national average of 14.1 suicides per 100,000. Similarly, Arkansas also reported a higher rate of fire-arm related suicides (12.5 per 100,000) compared to the national average (7.5 suicides per 100,000) in 2021. Arkansas also reported a higher percentage of adults reporting anxiety or depression symptoms with unmet needs for counseling or therapy compared to the national average (38.4% in Arkansas vs. 28.2% nationally). In Arkansas, just over 1 out of 4 people who report having any mental illness are also on Medicaid. Nationally, just over 1 out of 5 people who report having any mental illness are on Medicaid.[33]

[30] Substance Use Disorders. Centers for Disease Control. Accessed March 30, 2023. https://www.cdc.gov/dotw/substance-use-disorders/index.html
[31] Behavioral Health Barometer. Substance Abuse and Mental Health Services Administration (SAMHSA). Accessed March 30, 2023. https://www.samhsa.gov/data/sites/default/files/reports/rpt32820/Arkansas-BH-Barometer_Volume6.pdf
[32] Mental Health in Arkansas. National Alliance for Mental Illness. Accessed March 30, 2023. https://www.nami.org/NAMI/media/NAMI-Media/StateFactSheets/ArkansasStateFactSheet.pdf
[33] Mental Health in Arkansas. Kaiser Family Foundation. Accessed March 30, 2023. https://www.kff.org/statedata/mental-health-and-substance-use-state-fact-sheets/arkansas/

Figure 4: Suicide Rate in Arkansas vs. United States



The Rural Life360 HOME will help address HRSN factors and will likely increase utilization of appropriate medical services. This is especially applicable for the target population, which could benefit from treatment due to behavioral health needs. There is a shortage of mental health professionals throughout much of the state. The screening for HRSNs and referral to local community resources provided by the Rural Life360 HOME will be available to all Arkansans regardless of age or eligibility for Medicaid. The Rural Life360 HOME will be administered through small hospitals in rural areas. Hospital employees will be trained to become "coaches" and will go to their beneficiaries in the community to link their beneficiaries to medical services and coordinate nonmedical local community resources to address a beneficiary's HRSN.

High Risk Young Adults for Poverty

Success Life360 HOME will target 3 categories of young adults who are at the most risk of long-term poverty and its associated risks of poor health: 1) Formerly in foster care (ages 19-27); 2) Formerly incarcerated or involved with the juvenile justice system (ages 19-24); 3) Veterans (ages 19-30) at high risk of homelessness. In Child Poverty and Adult Success, research from the Urban Institute shows that, when compared to their counterparts who also experienced poverty as children but were not "persistently" poor, persistently poor children are 13% less

likely to complete their high school education by age 20, 29% less likely to enroll in post-secondary education by age 25, and 43% less likely to complete a four-year college degree by age 25. Persistently poor children, defined as those living half their lives or more below the poverty level, are 37% less likely to be consistently employed as young adults than their counterparts who experienced poverty as children but were not "persistently" poor. "Overall, these statistics show that children who have a long and persistent exposure to poverty are disadvantaged in their educational achievement and employment."[34]

Initial target populations for the Success Life360 HOME include young adults ages 19-27 formerly in foster care. Being in foster care is an indicator for increased risk of homelessness, suffering from behavioral health conditions, being unemployed, and skipping college. "Youth who have been in foster care (YFC) are at high risk of many health problems in young adulthood including hypertension, diabetes, being a smoker, heart disease, stroke, attention deficit hyperactivity disorder, and asthma compared with peers who have not resided in foster care."[35]

Life 360 HOME also includes young adults ages 19-24 who were formerly incarcerated or under supervision of the DHS Division of Youth Services juvenile justice system. The relationship between incarceration and long-term poverty is well established. Research at the American Action Forum also examines the relationship between incarceration and homelessness, the failure to pay child support, the inability to pay even small fines which may result in re-incarceration, and drug use. "Poverty and drug use perpetuate each other and often inhibit escape from the cycles of addiction and poverty; substance abuse may result from poverty as a person uses drugs or alcohol as a way to cope with their financial stresses, and alternatively, poverty can be the result of chronic and expensive drug abuse that leads to overwhelming debt."[36]

In March 2018, the Brookings Institution published "Work and Opportunity Before and After Incarceration" which shows the struggles of beneficiaries before and after incarceration:

> "The data show that ex-prisoners struggle in the labor market after their period of incarceration. In the first full calendar year after their release, only 55% have any reported earnings. Among those with jobs, their median annual earnings is $10,090 and only 20% earn more than $15,000 that year—an amount roughly equivalent to the earnings of a full-time worker at the federal minimum wage. The struggles of ex-prisoners after leaving prison are mirrored by their struggles prior to being incarcerated. Three years prior to incarceration, only 49% of prime-age men are employed, and, when employed, their

[34] Ratcliffe, Caroline. Child Poverty and Adult Success. Urban Institute. Accessed March 30, 2023.https://www.urban.org/sites/default/files/publication/65766/2000369-Child-Poverty-and-Adult-Success.pdf
[35] Ahrens et al. Health Outcomes from Foster Care and Economically Diverse Backgrounds. Pediatrics. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4243069/
[36] Hayes, Tara. Incarceration and Poverty in the United States. American Action Forum. Accessed March 30, 2023. https://www.americanactionforum.org/research/incarceration-and-poverty-in-the-united-states/

> median earnings were only $6,250. Only 13% earned more than $15,000. Tracking prisoners over time and comparing employment and earnings before and after incarceration we find surprisingly little difference in labor market outcomes like employment and earnings. This doesn't necessarily mean that incarceration has no effect on their earnings, which might otherwise have been increasing as workers age and as the economy emerged from recession or have been previously impaired by a prior conviction. Hence, we interpret this pattern less as evidence that incarceration has little effect on employment, but rather as an indication that the challenges ex-prisoners face in the labor market start well before the period of incarceration we observe (emphasis added)."[37]

As referenced in the 2021 ARHOME application, more than 40% of beneficiaries, at the time in the Arkansas Works program, who were previously in Division of Youth Services (DYS) supervision became incarcerated as adults. Additionally, nearly 18,000 ARHOME beneficiaries were formerly incarcerated. Those ages 18-24 have the highest rates of recidivism (68% for males and 50% for females).

The Success Life360 population includes veterans aged 19-30. Nationally, it is estimated that more than 40% of veterans enrolled in Medicaid had two or more chronic conditions, 11% have a SMI, and 12% have a SUD. More than 10% of the Arkansas homeless population are veterans. Although working aged veterans in the labor force are less likely to be in poverty than non-veterans, the poverty rate for veterans is still significant and highest among the youngest veterans, veterans with a disability, female veterans, and racial and ethnic minority veterans.[38]

ARHOME LIFE360 HOME PROGRAM OVERVIEW

Life360 HOME will provide specific required program activities to connect beneficiaries to medical services and nonmedical supports in their communities to address their HRSN through intensive care coordination. The care coordination will help connect beneficiaries with services that are available in their communities, such as those offering assistance with housing, food assistance, education and training, and other services needed. DHS will contract with hospitals that want to become Life360 HOMEs, and approved Life360 HOMEs will select the service area they want to serve. The Life360 will hire staff to deliver care coordination, create infrastructure through IT systems and partnerships with other providers to make referrals to the Life360

[37] Looney, Adam, and Nicholas Turner. "The Brookings Institution | March 2018 Work and Opportunity before and ..." Economic Studies at Brookings Institution, Brookings Institution, https://www.brookings.edu/wp-content/uploads/2018/03/es_20180314_looneyincarceration_final.pdf?source=post_page

[38] The Veteran Working-Poor: The Relationship between Labor Force Activity and Poverty Status. Department of Veterans Affairs. Accessed March 30, 2023. https://www.va.gov/vetdata/docs/SpecialReports/The_Veteran_Working_Poor.pdf

HOME and to conduct health-related social need screenings and develop a referral network with community entities to support beneficiaries with housing, food, and other social services. The amount of funding and allowed uses are described in the Beneficiary Protocol as well as the state's provider manual, startup funding ranges from $100,000 for Maternal and Rural Life360 HOMEs. The state will also allocate funding for transportation for Maternal and Rural Life360 HOMEs to support access to HRSN services and/or services delivery up to $50,000 annually for each program. Rural Life360 HOME will also receive funding for creation of an Acute Care Unit observation and stabilization staff as well. All Life360 HOMEs will also receive funding to provide the care coordination including support for program staffing, training, and other direct program costs and to provide the allowed housing and nutritional supports under the demonstration.

Summarized from the Life360 HOME provider manual, the Maternal Life360 provides directly or through its selected community partner organization(s) the following services and supports for their beneficiaries:

- Request from DHS enrollment and eligibility verification for beneficiaries referred or identified for home-visiting supports, including assisting beneficiaries with the diagnosis for high-risk pregnancy and obtaining appropriate consents to share their personal information with DHS, medical care providers, and other service providers.
- Administer screenings that includes HRSN screenings (upon beneficiary enrollment in Life360 and every six (6) months during program participation) as well as other appropriate health screenings that will help inform the supports and referrals delivered to improve outcomes in the following:
    - Maternal Health
    - Child Health
    - Family Economic Self-Sufficiency
    - Positive Parenting Practices
- Provide home visitation services with fidelity to an evidence-based home visiting model and linkages to community resources and supports. Home visiting may be provided directly by the hospital or through contract with an evidence-based home visitation program.
- Assist with any needs for coordination of medical services including support identifying and connecting both the beneficiary and her baby to a primary care provider (PCP) or OB/GYN and any other needed medical and behavioral health providers or culturally relevant supports.
- Document home-visiting services provided.
- Disenroll beneficiaries who have asked to stop receiving services or who are uncooperative with receiving services after three consecutive attempts to schedule a visit. (Please see Section 4 for methodological limitations.) Disenrolled beneficiaries can

re-enroll at their request within their pregnancy or, for ARHOME enrollees, within the first twenty-four (24) months after delivery.

- Ensure coordination with home visiting programs as applicable.

The Rural Life360 provides the following community screening and referral supports to the general population and care coordination to identified beneficiaries:

- Create a plan and implement the plan to screen anyone in the community for HRSN needs and provide support for community providers to complete and submit HRSN screens for the people they serve.
- Connect beneficiaries whose HRSN screen identifies an HRSN need to local medical and non-medical resources, including food, housing, and transportation.
- Accept referrals for care coordination supports for eligible beneficiaries from health care providers treating beneficiaries with mental illness or substance use disorder.

The Rural Life360 provides the following healthcare capacity building activities:

- Develop and operate an acute crisis unit (ACU) that meets the requirements of §218.400 of the Arkansas Medicaid Hospital Provider Manual or a psychiatric care unit that meets the requirements specified in the Rules for Hospitals and Related Institutions in Arkansas. The ACU or psychiatric unit must serve beneficiaries in need of mental health or substance use crisis services in the Rural Life360 hospital. The Rural Life360 hospital must begin acute crisis unit or psychiatric services during the startup period.

The Rural Life360 provides the following care coordination supports:

- Request from DHS enrollment and eligibility verification for beneficiaries referred or identified for intensive care coordination supports including appropriate consents.
- Provide intensive care coordination and coaching supports for enrolled beneficiaries. Intensive care coordination and coaching includes:
    - Collecting or completing an HRSN screen upon beneficiary enrollment in Rural Life360 and every six (6) months during program participation
    - Conducting an in-depth personal interview related to the health-related social needs identified in the screening and the barriers to resolving health-related social needs. The Rural Life360 is responsible for developing the interview tool to be used, the implementation process and the staff training process for engaging beneficiaries.
    - Developing and maintaining a person-centered action plan (PCAP) for each beneficiary that includes the following:
        - The beneficiary's goals and preferences for addressing needs. Goals must include accessing a PCP, all needed medical providers and services, and specific goals related to HRSN, such as mental and emotional wellness or obtaining or sustaining safe housing.

        - Results of the HRSN screen and personal interview including strengths and relevant personal history.
        - Plan for overcoming barriers to accessing services and use of preventative care to avoid non-emergent Emergency Department (ED) visits.
        - Unmet needs for medical services and non-medical community supports and a plan for meeting those needs.
    - Working directly with beneficiaries and their families to improve their skills to be healthy physically, socially, emotionally and to thrive in their communities. Follow up supports may include the following activities as specified in the PCAP:
        - Engaging beneficiaries in promoting their own health.
        - Coordinating with external medical and non-medical providers to connect beneficiaries with needed health services and community supports.
        - Assisting beneficiaries with applying for services including housing and nutrition assistance and/or other public benefits that may be needed and scheduling and completing assessments for entry into the Provider-Led Arkansas Shared Savings Entity (PASSE) program, if needed.
        - Assisting beneficiaries in obtaining behavioral health and other preventative services that reduce preventable utilization of ED and inpatient hospital settings.
        - Increasing beneficiary engagement in educational and employment opportunities and other supports that reduce the risk of poverty.
        - Transporting beneficiaries to non-medical appointments that are allowed under the demonstration, including social services or to obtain HRSN supports, such as housing or nutrition.
    - Providing supports through any of the following:
        - Home visits in such frequency as is necessary to assist the beneficiary in meeting his/her documented PCAP goals
        - Office visits
        - Video-supported visits
        - Telephone or text message contacts in conjunction with in-person visits
    - Documenting beneficiary's progress toward meeting goals established on PCAP, including the following:
        - Weekly update of beneficiary and staff activities
        - Gaps in available community services
        - Responsiveness from beneficiary
        - Any completed or newly identified goals or unmet needs

The Success Life360 will work with its partner organization to provide the following services:

- Request from DHS enrollment and eligibility verification for beneficiaries referred or identified for intensive care coordination and supports.
- Obtain a signed consent form from beneficiary to participate in the program and to authorize the Success Life360 HOME to share the beneficiary's personal information with DHS, partner organizations, relevant community service providers, and relevant healthcare providers.
- Provide intensive care coordination and coaching supports for beneficiaries to include:
    - Collecting or completing a HRSN screen (upon enrollment in and every six (6) months during program participation)
    - Conducting more detailed assessment of HRSN identified in the screening and the barriers to addressing those needs.
    - Developing and maintaining a PCAP for each beneficiary that includes the following:
        - Beneficiary goals and preferences for addressing needs. Goals should address the following:
            - Obtaining a primary care physician and addressing unmet medical needs
            - Mental and emotional wellness
            - Financial needs, including applying for or completing workforce training or education programs
            - Obtaining or maintaining employment, and
            - Obtaining or sustaining safe housing
        - Identified HRSN needs and personal interview results, including strengths and personal history if applicable, such as criminal justice involvement
        - Plan for overcoming barriers for accessing services and avoidance of non-emergent emergency department visits
        - Unmet needs for non-medical community supports and a plan for meeting those needs
    - Working directly with beneficiaries and their families to improve their skills to be physically, socially, and emotionally healthy; and to thrive in their communities. Services may include the following activities as specified in the PCAP:
        - Engaging beneficiaries in promoting their own health
        - Coordinating with external medical and non-medical providers to connect beneficiaries with needed health services and community supports
        - Assisting beneficiaries in obtaining services that reduce preventable utilization of emergency departments and inpatient hospital settings
        - Strengthening beneficiary life skills and implement plan to maximize participation in education, employment training and other supports that reduce the risk of poverty

        - Transporting beneficiaries to non-medical appointments. Life360 funds cannot be used for costs transporting a beneficiary or assisting with transportation of a beneficiary to a job interview.
    - Providing supports through the following:
        - Home or community visits
        - Office visits including career center
        - Video-supported visits
        - Telephone or text message contacts, though not exclusively so
    - Documenting beneficiary's progress toward meeting goals established in the PCAP, including the following:
        - Weekly update of beneficiary and staff activities
        - Gaps in available community services
        - Responsiveness from beneficiary
        - Any completed or newly identified goals or unmet needs

ARHOME Life360 HOME Program Diagrams

The driver diagram below provides a visual representation of how the Life360 HOME program goals support outcomes.

Figure 5: Life360 Driver Diagram

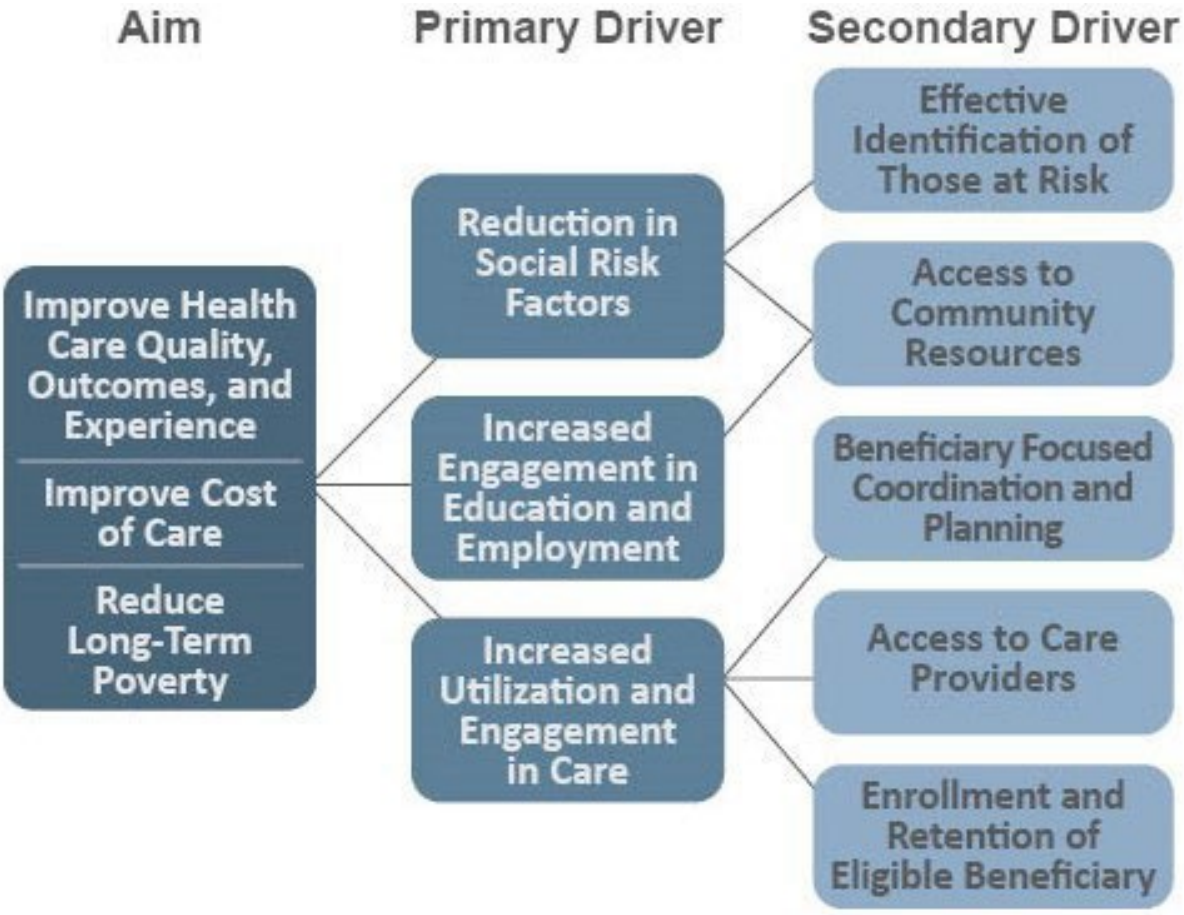
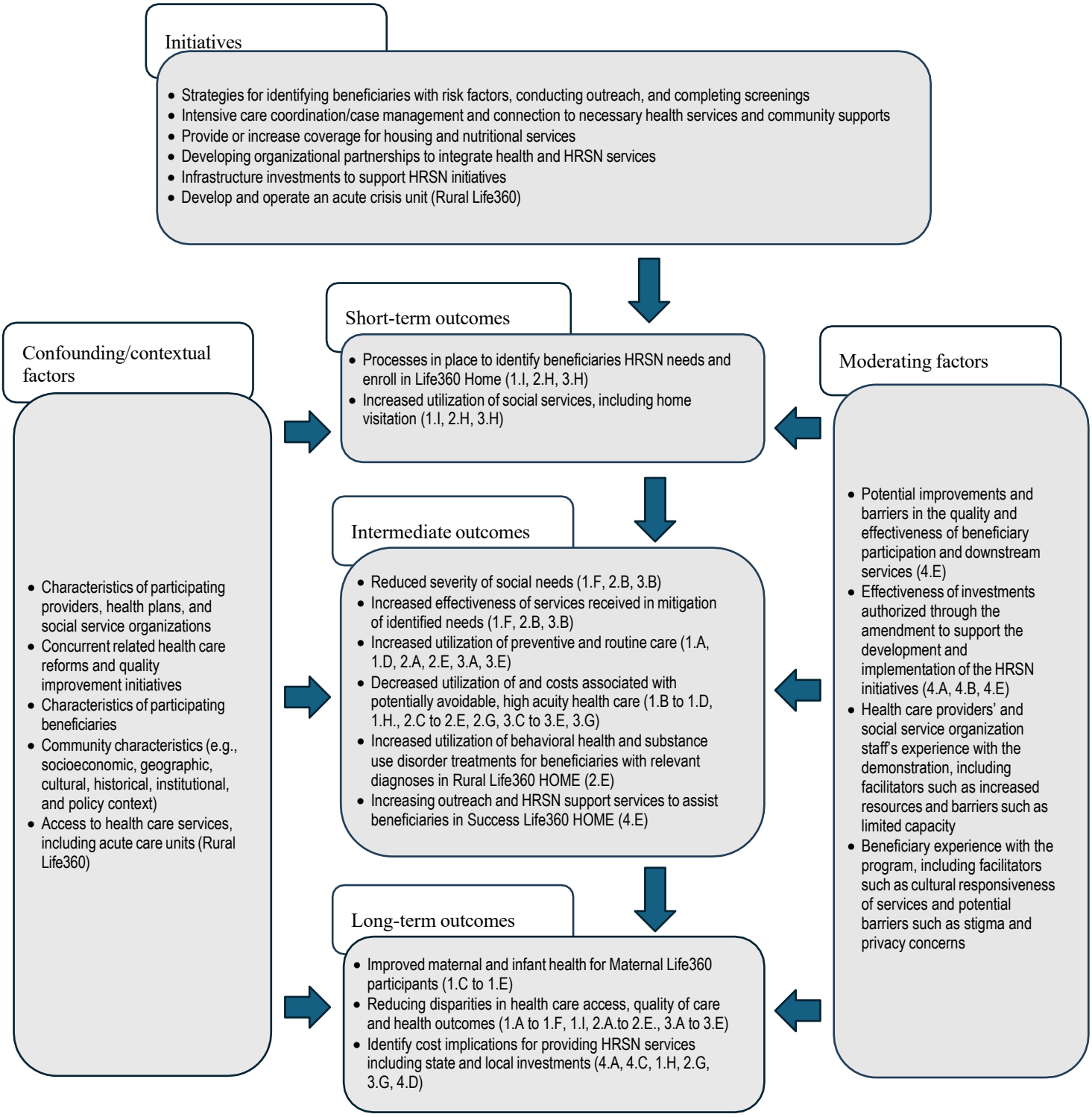


Figure 6: Life360 Logic Model



Note: Numbers and letters in parentheses refer to the goals and hypotheses in Section 2. EVALUATION QUESTIONS AND HYPOTHESES. Moderating and confounding/contextual factor without corresponding goals and hypotheses refer to important factors to control for or to take into consideration but do not correspond to a specific goal. The Life360 Initiatives are designed to contribute to most if not all of the goals and hypotheses, thus, specific indicators are not provided in the graphic.

Evaluation Questions and Hypotheses

Implementation Questions

Implementation questions are included to assess the Life360 HOMEs program from the perspective of stakeholders and participating Life360 HOME hospitals. For hospitals that did not choose to participate in Life360 HOMEs, a brief survey was used to understand reasons that impacted a hospital's decision not to participate as a Life360 HOME. Questions from the Arkansas Hospital Association (AHA) provider focus group additionally provided valuable feedback on the Life360 program overall.

Please note for **Table 2** below, providers consist of hospitals offering Maternal Life360 HOME services. Stakeholders consist of various groups such as policy makers, health care professionals, educators, nonprofit leaders, and community organizers committed to increasing health and education outcomes for mothers and children.

Table 2: Provider & Stakeholder Interview Questions

Provider & Stakeholder Interview Questions	Survey Repondents	
Interviewee Background Questions	**Providers**	**Stakeholders**
What organization are you affiliated with or employed by?	✓	✓
How long have you been affiliated with or employed by this organization?	✓	✓
What is your job title and role within the organization?	✓	✓
What role do you play related to the Life360 HOMEs Maternal program?	✓	✓
Over the past year or two, has your role within the organization changed or evolved? If so, how has the role you play changed? • Probe: Was the change prompted by participation in the Life360 HOMEs Maternal program?	✓	✓
Life360 HOMEs Program	**Providers**	**Stakeholders**
In your own words, please describe the Life360 HOMEs Maternal program that is currently being implemented. • Probe: What are the key components of the program? • Probe: What criteria must patients meet to be eligible for your specific program? • Probe: Who are the key partners (internal to the hospital, externally, etc.)	✓	

Broadly speaking (across the entire Program), what would a successful Maternal program look like to you three years from now? What would a failed Maternal program look like?	✓	
Decision to Apply/Application Process	**Providers**	**Stakeholders**
From your perspective, what were the key considerations in determining whether to participate in the Life360 HOMEs Maternal program?	✓	
What are your thoughts on the application process? • Probe: Was the application process difficult? • Probe: Was it easy or difficult to organize preparation of the materials or design the program? • Probe: Who was involved in the application process? Was any one internal or external to your organization perceived to be a key facilitator or a barrier to application completion? In what ways?	✓	
Implementation	**Providers**	**Stakeholders**
How has implementation of your program gone thus far?	✓	
What barriers have you or your organization experienced while implementing the program? • Probe: What strategies have key entities used to overcome barriers?	✓	
Have you found that any specific partners or processes have been particularly helpful in helping get your program started? If so, what have they done (or what processes) to help make progress toward getting the program activated?	✓	
How has enrollment gone thus far? How many patients have been enrolled in the program to date? What is your target number of patients when fully implemented? • Probe: What strategies and tools are being used to identify beneficiaries with social risk factors? • Probe: What strategies or tools are being used increase enrollment?	✓	
If you have any of this feedback thus far, what barriers to participation do patients experience, and what does this information suggest about the need for refinements to the program, provider outreach, etc.?	✓	
How is the program implementing HRSN case management and providing HRSN services through the demonstration? • Probe: If you are providing multiple types (e.g., nutrition, housing support), how are these operationalized/being implemented?	✓	
How, if at all (or what is the future plan), has the program established a process to share and receive screening results among key partners? • Probe: How, if at all, have health care providers modified their clinical practice in response to this information?	✓	
Infrastructure Support	**Providers**	**Stakeholders**
What new (or enhanced) infrastructure or capacity (e.g., technology platforms, departmental improvements, staffing, etc.) is the program developing or acquiring for Life360?	✓	

Sustainability	Providers	Stakeholders
What discussions have you and/or your organization had about sustaining the program following the waiver demonstration period? • Probe: Who is involved in those discussions? • Probe: If you haven't begun those discussions yet, is there a timetable? • Probe: What outcomes might be included in your determination as to whether you will continue the program and its operations following the funding period?	✓	
Investment in Social Services	**Providers**	**Stakeholders**
How, if at all, is the local availability of and investment in social services outside of the demonstration (such as housing supports) changing during the demonstration?	✓	
How, if at all, is enrollment in SNAP and/or WIC changing for enrollees in the program?	✓	
What role does the Life360 HOMEs program play in any broader investment in HRSNs or programs focused on addressing the social determinants of health in Arkansas? • Probe: Housing, Nutrition, etc.	✓	
Questions for State Program Staff	**Providers**	**Stakeholders**
Have you been involved in reviewing or supporting the applicant organizations? • Probe: If yes, what is your perception of the quality of applications you've received thus far. (e.g., are the applications meeting the standard or purpose for what the Life360 HOMEs Maternal program is designed to do? Why or why not?)	✓	
From your perspective, how has the implementation of the Life360 program gone thus far? • Probe: What were the initial barriers to program implementation? • Probe: How was communication and coordination between the State and the interested Life360 applicants prior to beginning operations? • Probe: Have applications for program participation been submitted to the state at the rate you expected? Why do you think that has happened?	✓	
What lessons have you learned that you would implement should you create a similar program in the future?	✓	
To what extent is the state integrating the demonstration with its other existing programs and infrastructure?	✓	
Other	**Providers**	**Stakeholders**
If you had to begin the application and implementation process over again, what is one thing that you would have done differently?	✓	
Given the nature of the Life360 program, is there anything that we did not ask about your role or the program, that you believe we should know?	✓	✓

What role might programs, such as Maternal, play in the development of future 1115 waivers in Arkansas?	✓	
Additional Questions	**Providers**	**Stakeholders**
What role might programs, such as Maternal, play in the development of future 1115 waivers in Arkansas?		✓
If you had to begin the process of designing the Program over again, what is one (or multiple) thing(s) that you would have done differently?		✓
What are the biggest challenges with getting programs, such as Life360 HOMEs, passed through the legislature?		✓
Who are the key partners that needed to be involved in helping gain support for the Life360 Maternal program? What role did they play in collaborating with you or other legislators while the program was under development? What role did any of the Senate committees play in supporting this program or the waiver more generally?		✓
What, if any, are the most highly politicized issues related to the ARHOME 1115 waiver, and specifically, the Life360 HOMEs program? Why? What initiatives is the legislature considering that aim to address the social determinants of health in Arkansas? • Are there specific topics being addressed by the either the Senate Public Health, Welfare and Labor Committee or the Hospital and Medicaid Subcommittee that we should be aware of as we consider what is being done to improve maternal outcomes and the delivery of care to women and children?		✓

Table 3: Non-Participant Provider Survey Questions

Non-Participant Provider Survey Questions (Hospitals that chose not to participate in Life360 HOMEs)
1. Is your hospital aware of the Life360 HOMEs program administered by Arkansas Medicaid?
2. How likely is your hospital to participate in the Life360 HOMEs program in the near future?
3. Which of the following reasons would strongly contribute to your decision in becoming a Life360 HOMEs participant?
4. What barriers did you perceive or directly experience when deciding to participate in the Life360 HOMEs program?
5. Does your hospital routinely screen patients for health-related social needs (HRSNs)?
6. Does the subset of patients who are screened for HRSNs include women with high-risk pregnancies?
7. For patients that screen positive for one or more HRSNs, does your hospital already have referral programs in place that provide appropriate resources to address these HRSNs?
8. Does your hospital follow up with patients who participate in a referral program to see whether their HRSNs have been addressed?
9. Please provide any additional comments you may have related to the Life360 HOMEs program below.

Table 4: AHA Provider Focus Group - Life360 HOMEs Questions

Arkansas Hospital Association (AHA) Provider Focus Group - Life360 HOMEs Questions
1. Is your hospital aware of the Life360 program?
2. How likely is your hospital to participate in the Life360 programs?
3, 4. Have you begun the process to become a Life360 participant? If so, what was your motivation to do so? Which Life360 program are you considering applying for?
5. Does potential reimbursement for these services - including infrastructure costs - make the Life360 program appealing to your organization? Why, or why not?
6. From your hospital's perspective, what are the barriers to participating in the Life360 program?

Measure Diagrams

An effective evaluation design was developed with a Measure Diagram to help clearly depict the fundamental relationship between the aims for the amendment, considered hypotheses, research questions, and identified measures to analyze the performance. The diagrams below provide a visual display of measurable criteria to verify the achievement of the amendment's goals. Each aim represents how the Life360 HOME programs will positively affect its beneficiaries as compared to a comparison population. The hypotheses associate specific STCs from CMS to guide the comparison, research questions provide specific objectives for each hypothesis, and the measures stipulate the metrics applied to each hypothesis that will be analyzed validate the performance of Life360 HOME. Detailed information about each metric can be found in Section 3.4 of this document.

Figure 7: Measure Diagram Goal 1

GOAL 1: Maternal Life360 HOME will support beneficiaries with high-risk pregnancies, as identified by their physician, and up to two years post-partum, even if the beneficiary is no longer eligible for Medicaid under any other category, either through Maternal Life360 HOME's hospital's direct provision of evidence-based home visitation or through contracts with evidence-based home visitation programs

HYPOTHESIS	RESEARCH QUESTION	MEASURE
A. ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life 360 HOME will have greater use of preventive and other primary care services	Do ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life360 HOME use more preventive and other primary care services than similar ARHOME beneficiaries not receiving services from a Maternal Life360 HOME?	1 – 8. Screenings, Care for Chronic Conditions, Preventive Health Services, Contraceptive Care, Pre- and Post-Natal Care
		9. PCAP Milestone Achievement
		10 – 13. PCP Visits and Screenings
B. ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life360 HOME will have lower non-emergent and emergent use of emergency department (ED) services	Do ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life360 HOME have less non-emergent and emergent ED visits than similar ARHOME beneficiaries not receiving services from a Maternal Life360 HOME?	1. Non-Emergent ED Visits
		2. Emergent ED Visits
C. ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life 360 HOME will have lower use of potentially preventable emergency department services and lower incidence of preventable hospital admissions and readmissions	Do ARHOME beneficiaries with high-risk pregnancies who receive services from Maternal Life360 HOME have less preventable ED visits and readmissions than similar ARHOME beneficiaries not receiving services from a Maternal Life360 HOME?	1. Preventable ED Visits
		2. PCR-AD Plan All-Cause Readmissions
	Do ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life360 HOME have a higher rate of follow-up after ED visits than similar ARHOME beneficiaries not receiving services from a Maternal Life360 HOME?	3. Follow-Up After Emergency Department Visit for People with Multiple High-Risk Chronic Conditions

D. ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life 360 HOME will receive better quality of care	**Do ARHOME beneficiaries with high-risk pregnancies and diagnosis of mental illness or substance use disorder who receive services from a Maternal Life360 HOME have higher rates of treatment, medication adherence, preventive screenings, as well as follow-up after ED visits and hospitalizations than similar ARHOME beneficiaries not receiving services from a Maternal Life360 HOME?**	**1 – 9. Medication Use, Adherence and Management; Treatment for SUD; Follow-Up After ED**
	Do ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life360 HOME have lower use of opioids and benzodiazepines than similar ARHOME beneficiaries not receiving services from a Maternal Life360 HOME?	
	Do ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life360 HOME utilize more home visits for themselves and their children?	**10 – 11. Pregnancy/Child Home Visits** **12 – 15. Prenatal/ Postpartum Depression Screening/Follow-up**
	Are more ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life360 HOME screened and followed-up for postpartum depression?	
	Do ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life360 HOME have lower rates of c-sections and mortality than similar ARHOME beneficiaries not receiving services from a Maternal Life360 HOME?	**16. MPM** **17. Low Risk C-section** **18. C-section Rate**

E. ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life 360 HOME will have improved birth outcomes for their infants	Do ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life360 HOME have a lower rate of low birth weight or preterm births, NICU stays, and infant mortality than similar ARHOME beneficiaries not receiving services from a Maternal Life360 HOME?	1 – 2. Low/Very Low Birth Rates 3 – 4. Pre-Term/Live Births 5. Infant Mortality Rate 6. NICU Stays

Figure 8: Measure Diagram Goal 1 Cont.

- **GOAL 1: Maternal Life360 HOME will support beneficiaries with high-risk pregnancies, as identified by their physician, and up to two years post-partum, even if the beneficiary is no longer eligible for Medicaid under any other category, either through Maternal Life360 HOME's hospital's direct provision of evidence-based home visitation or through contracts with evidence-based home visitation programs**

• HYPOTHESIS	• RESEARCH QUESTION	• MEASURE
F. ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life 360 HOME will have greater satisfaction in the care provided	Are ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life360 HOME more satisfied with their health care and providers than similar ARHOME beneficiaries not receiving services from a Maternal Life360 HOME?	1 – 2. Health Plan/Care Rating 3 – 4. PCP/Specialist Rating 5. Life360 Services Rating
G. ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life360 HOME will have fewer health related social needs (HRSNs) and improved HRSN for the mother and infant compared to similar ARHOME beneficiaries in areas without a Maternal Life360 HOME	Do Arkansas residents who live in a service area of a Maternal Life360 HOME have fewer overall HRSNs (income, employment, housing and food security, educational attainment, and safety) than similar Arkansas residents who do not reside in a service area of a Maternal Life360 HOME?	• 1 – 11. Health-Related Social Need Population Comparisons

H. ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life360 HOME will have lower total health care cost for the mother and infant through the first two years of life compared to similar ARHOME beneficiaries in areas without a Maternal Life360 HOME	**Do ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life360 HOME have lower total health care costs that includes ED and hospitalization costs in the two years after birth than similar ARHOME beneficiaries not receiving services from a Maternal Life360 HOME?**	**1. Total Medicaid Spend** **2. ED Costs** **3. Hospitalization Costs**
I. Maternal Life360 HOME beneficiaries will be screened for unmet HRSNs and receive a corresponding intervention if they screened positive	**Are ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life360 HOME being screened for nutrition, housing, and interpersonal violence as well as receiving the corresponding support services to address their needs?**	• **1 – 2. Food Screening / Intervention** • **3 – 4. Housing Screen / Intervention** • **5 – 6. Transportation Screening / Intervention** • **7 – 8. Interpersonal Violence Screening / Intervention** • **9 – 10. Prior HRSN Screening and Utilization of HRSN Services** • **11. SNAP / WIC Enrollment**

Figure 9: Measure Diagram Goal 2

- **GOAL 2: Rural Life360 HOME will support beneficiaries with a serious mental illness (SMI) or substance use disorder (SUD) diagnosis who live in rural areas of the state through intensive care coordination provided directly or through contracts between the hospital and organizations to provide care coordination**

• HYPOTHESIS	• RESEARCH QUESTION	• MEASURE
A. ARHOME beneficiaries with SMI or SUD who receive services from a Rural Life360 HOME will have greater use of	**Do ARHOME beneficiaries with SMI or SUD who receive services from a Rural Life360 HOME use more preventive and other primary care services than**	• **1 – 11. Screenings, Care for Chronic Conditions, Preventive Health Services, and Contraceptive Care**

preventive and other primary care services	similar ARHOME beneficiaries not receiving services from a Rural Life360 HOME?	• 12. PCP Assigned • 13. PCP Visits
		14. PCAP Milestone Achievement
B. ARHOME beneficiaries with SMI or SUD who receive services from a Rural Life360 HOME will have greater satisfaction in the care provided	Are ARHOME beneficiaries with SMI or SUD who receive services from a Rural Life360 HOME more satisfied with their health care and providers than similar ARHOME beneficiaries not receiving services from a Rural Life360 HOME?	1 – 2. Health Plan/Care Rating
		3 – 4. PCP/Specialist Rating
		5. Life360 Services Rating
C. ARHOME beneficiaries with SMI or SUD who receive services from a Rural Life360 HOME will have lower non-emergent use of emergency department services	Do ARHOME beneficiaries with SMI or SUD who receive services from a Rural Life360 HOME have less non-emergent and emergent ED visits than similar ARHOME beneficiaries not receiving services from a Rural Life360 HOME?	1. Non-Emergent ED Visits
		2. Emergent ED Visits
D. ARHOME beneficiaries with SMI or SUD who receive services from a Rural Life360 HOME will have lower incidence of preventable hospital admissions and readmissions	Do ARHOME beneficiaries with SMI or SUD who receive services from a Rural Life360 HOME have less preventable ED visits and readmissions than similar ARHOME beneficiaries not receiving services from a Rural Life360 HOME?	• 1. Preventable ED Visits
		• 2. Plan All-Cause Readmissions
	Do ARHOME beneficiaries with SMI or SUD who receive services from a Rural Life360 HOME have a higher rate of follow-up after ED visits than similar ARHOME beneficiaries not receiving services from a Rural Life360 HOME?	• 3 – 4. Unplanned Readmissions and Follow-Up After ED

E. ARHOME beneficiaries with SMI or SUD who receive services from a Rural Life360 HOME will receive better quality of care	**Do ARHOME beneficiaries with SMI or SUD who receive services from a Rural Life360 HOME have higher rates of treatment, medication adherence, preventive screenings, as well as follow-up after ED visits and hospitalizations than similar ARHOME beneficiaries not receiving services from a Rural Life360 HOME?**	• **1 – 10. Medication Use, Adherence and Management; Treatment for SUD; Follow-Up After ED**
	Do ARHOME beneficiaries with SMI or SUD who receive services from a Rural Life360 HOME have lower use of opioids and benzodiazepines than similar ARHOME beneficiaries not receiving services from a Rural Life360 HOME?	
	What is the average time to treatment of behavioral health services for Rural Life360 HOME beneficiaries with SMI or SUD?	• **11. Average Time to Treatment**
	Do ARHOME beneficiaries with SMI or SUD who receive services from a Rural Life360 HOME have a lower mortality rate than ARHOME beneficiaries not receiving services from a Rural Life360 HOME?	**12. Mortality**

Figure 10: Measure Diagram Goal 2 Cont.

GOAL 2: Rural Life360 HOME will support beneficiaries with a serious mental illness (SMI) or substance use disorder (SUD) diagnosis who live in rural areas of the state through intensive care coordination provided directly or through contracts between the hospital and organizations to provide care coordination

HYPOTHESIS	RESEARCH QUESTION	MEASURE
F. ARHOME beneficiaries with SMI or SUD who receive services from Rural Life360 HOME will have fewer health-related social needs and improved HRSN compared to similar ARHOME beneficiaries in rural areas without a Rural Life360 HOME	Do Arkansas residents who live in a service area of a Rural Life360 HOME have fewer overall HRSNs (income, employment, housing and food security, educational attainment, and safety) than similar Arkansas residents who do not reside in a service area of a Rural Life360 HOME?	1 – 12. Health-Related Social Need Population Comparisons
G. ARHOME beneficiaries with a serious mental illness (SMI) or substance use disorder (SUD) who live in rural areas with a Rural Life360 HOME will have lower total health care costs compared to similar ARHOME beneficiaries in rural areas without a Rural Life360 HOME; Cost of claims/encounters per beneficiary per year	Do ARHOME beneficiaries with SMI or SUD who receive services from a Rural Life360 HOME have lower total health care costs that includes ED and hospitalization costs?	1. Total Medicaid Spend 2. ED Costs 3. Hospitalization Costs
H. Rural Life360 HOME beneficiaries will be screened for unmet HRSN and receive a corresponding intervention if they screened positive.	Are ARHOME beneficiaries with SMI or SUD who receive services from a Rural Life360 HOME being screened for nutrition and housing needs and subsequently receiving the corresponding support services to address their needs?	1 – 2. Food Screening/Intervention 3 – 4. Housing Screening/ Intervention 5 – 6. Transportation Screening/ Intervention 7 – 8. Prior HRSN Screening and Utilization of HRSN Services 9. SNAP/WIC Enrollment

Figure 11: Measure Diagram Goal 3

- **GOAL 3: Success Life360 HOME will support young adults (ages 19-27) at high-risk for long-term poverty due to prior incarceration, involvement with the foster care system, or young adults (ages 19 – 24) with involvement with the juvenile justice system and veterans ages 19-30 who are at high risk of homelessness. Success Life360s will provide intensive care coordination directly or contract with organizations to provide care coordination**

• HYPOTHESIS	• RESEARCH QUESTION	• MEASURE
A. ARHOME beneficiaries most at risk for long-term poverty who receive services from a Success Life360 HOME will have great use of preventive and other primary care services	Do ARHOME beneficiaries most at risk for long-term poverty who receive services from a Success Life360 HOME use more preventive and other primary care services than similar ARHOME beneficiaries not receiving services from a Success Life360 HOME?	• 1 – 9. Screenings, Care for Chronic Conditions, Preventative Health Services, and Contraceptive Care 10. PCP Assigned 11. PCP Visits • 12. PCAP Milestone Achievement
B. ARHOME beneficiaries most at risk for long-term poverty who receive services from a Success Life360 HOME will have greater satisfaction in the care provided	Are ARHOME beneficiaries most at risk for long-term poverty who receive services from a Success Life360 HOME more satisfied with their health care and providers than similar ARHOME beneficiaries not receiving services from a Success Life360 HOME?	• 1 – 2. Health Plan/Care Rating • 3 – 4. PCP/Specialist Rating 5. Life360 Services Rating
C. ARHOME beneficiaries most at risk for long-term poverty who receive services from a Success Life360 HOME will have lower non-emergent use of emergency department services	Do ARHOME beneficiaries most at risk for long-term poverty who receive services from a Success Life360 HOME have less non-emergent and emergent ED visits than similar ARHOME beneficiaries not receiving services from a Success Life360 HOME?	1. Non-Emergent ED Visits 2. Emergent ED Visits

D. ARHOME beneficiaries most at risk for long-term poverty who receive services from a Success Life360 HOME will have lower use of potentially preventable emergency department services and lower incidence of preventable hospital admission and readmissions	Do ARHOME beneficiaries most at risk for long-term poverty who receive services from Success Life360 HOME have less preventable ED visits and readmissions than similar ARHOME beneficiaries not receiving services from a Success Life360 HOME?	1. Preventable ED Visits
		2. Plan All-Cause Readmissions
	Do ARHOME beneficiaries most at risk for long-term poverty who receive services from a Success Life360 HOME have a higher rate of follow-up after ED visits than similar ARHOME beneficiaries not receiving services from a Success Life360 HOME?	• 3. Follow-Up After ED Visit for People with Multiple High-Risk Chronic Conditions

Figure 12: Measure Diagram Goal 3 Cont.

GOAL 3: Success Life360 HOME will support young adults (ages 19-27) at high-risk for long-term poverty due to prior incarceration, involvement with the foster care system, or young adults (19-24) with involvement with the juvenile justice system and veterans ages 19-30 who are at high risk of homelessness. Success Life360s will provide intensive care coordination directly or contract with organizations to provide care coordination

HYPOTHESIS	RESEARCH QUESTION	MEASURE
E. ARHOME beneficiaries most at risk for long-term poverty who receive services from a Success Life360 HOME will receive better quality of care	Do ARHOME beneficiaries most at risk for long-term poverty and diagnosis of mental illness or substance use disorder who receive services from a Success Life360 HOME have higher rates of treatment, medication adherence, preventive screenings, as well as follow-up after ED visits and hospitalizations than similar ARHOME beneficiaries not receiving services from a Success Life360 HOME?	1 – 11. Medication Use, Adherence and Management; Treatment for SUD; Follow-Up After ED

	Do ARHOME beneficiaries most at risk for long-term poverty who receive services from a Success Life360 HOME have lower use of opioids and benzodiazepines than similar ARHOME beneficiaries not receiving services from a Success Life360 HOME?	
	Do ARHOME beneficiaries most at risk for long-term poverty who receive services from a Success Life360 HOME have fewer deaths than similar ARHOME beneficiaries not receiving services from a Success Life360 HOME?	12. Mortality
F. Young ARHOME beneficiaries most at risk for long-term poverty who receive services from a Success Life360 HOME will be more successful in living in their community compared to similar ARHOME beneficiaries in areas without a Success Life360 HOME	Do Arkansas residents who live in a service area of a Success Life360 HOME have fewer overall HRSNs (income, employment, housing and food security, educational attainment, and safety, interactions with the criminal justice system) than similar Arkansas residents who do not reside in a service area of a Success Life360 HOME?	1 – 12. Health-Related Social Need Population Comparisons
G. Total average health care costs for Success Life360 HOME participants will be less compared to similar ARHOME beneficiaries in areas without a Life360 HOME	Do ARHOME beneficiaries most at risk for long-term poverty who receive services from a Success Life360 HOME have lower total health care costs that includes ED and hospitalization costs than similar ARHOME beneficiaries not receiving services from a Success Life360 HOME?	1. Total Medicaid Spend 2. ED Costs 3. Hospitalization Costs
H. Success Life360 HOME beneficiaries will be screened for unmet HRSN and receive a corresponding intervention if they screened positive.	Are ARHOME beneficiaries most at risk for long-term poverty who receive services from a Success Life360 HOME being screened for nutrition and housing and subsequently receiving the corresponding support services to address their needs?	1 – 2. Food Screening/Intervention 3 – 4. Housing Screening/Intervention

		5 – 6. Transportation Screening/Intervention 7 – 8. Prior HSRN Screening and Utilization of HRSN Services 9. SNAP/WIC Enrollment

Figure 13: Measure Diagram Goal 4

GOAL 4: Life360 HOME costs and efforts will meet or exceed program expectations

HYPOTHESIS	RESEARCH QUESTION	MEASURE
A. Costs of the Life360 HOME program will be commensurate with the program goals and objectives and controlled prudently	Will Life360 HOME program (administrative, infrastructure, service) costs be greater than or within the range of expected spending according to program goals and objectives?	1. Life360 HOME Administrative Costs 2. Life360 HOME Infrastructure Costs 3. Life360 HOME Services Costs
	What is the average time to launch the Life360 HOME program for each participating Life360 HOME provider?	4. Average Time to Launch Life360 HOME
B. Life360 HOME providers will meet or exceed the established metrics	Are Life360 HOME providers meeting or exceeding annual targets as set by the State of Arkansas?	1. Life360 HOMEs Provider Performance
C. Arkansas will maintain funding for social service programs related to housing transition supports and nutrition supports for the duration of the demonstration	Is Arkansas maintaining similar if not higher levels of funding for social service programs related to housing and nutrition supports?	1. Social Service Program Provisions Over Time
D. The Life360 HOMEs program will support provider financial health improvement	Are providers satisfied with the Life360 HOME program contributing to provider's uncompensated care?	1. Provider Financial Health Improvement
E. Key entities during the start of Life360 HOME program will report on implementation	For each participating Life360 HOME provider, what are the characteristics related to key	1. Key Entities 2. HRSN Services

activities, infrastructure development, overcoming barriers in the facilitation of Life360 HOME, and on adopted strategies that identify and provide services to beneficiaries with HRSN needs	**entities and their roles as well as types of HRSN services provided?**	
	How are participating Life360 HOME providers integrating the program with existing infrastructure and maintaining organizational partnerships?	**3. Integration with Existing Programs and Infrastructure** **4. Maintenance of Organizational Partnerships**
	What are the key barriers in program implementation and beneficiary participation?	**5 – 6. Barriers in Implementation, Beneficiary Outreach, and Beneficiary Participation**
	What strategies have been successful in resolving key barriers to program implementation and beneficiary participation?	**7 – 8. Strategies Adopted to Facilitate and Reduce Barriers in Implementation and Beneficiary Experience**
	Has the local availability of social services increased during the ARHOME demonstration?	**9. Local Availability of Social Services**

METHODOLOGY

METHODOLOGICAL DESIGN

The evaluation will test hypotheses of Health-Related Social Needs (HRSNs), care, quality, outcomes, and cost-effectiveness using data from eligibility, claims, surveys, interviews, focus groups, vital records, the immunization registry, HRSN screening tools, provider referrals, and case management information. Measures will evaluate outcomes for beneficiaries who receive services from Life360 HOME and similar ARHOME beneficiaries residing in areas not serviced by Life360 HOME for each calendar year of the amendment period, as applicable. Additionally, measures will be reported by each Life360 HOME and stratified by subpopulations of interest. To further investigate whether measure outcomes trend across years, longitudinal analyses will be conducted on select measures to understand impacts prior to and after Life360 HOME implementations.

Goals 1-3 are tailored to each of the Life360 HOME programs (Maternal, Rural, and Success) and focus on specific goals that aim to improve HRSN for each of these vulnerable populations. Goal 1 aims to support women with high-risk pregnancies through home visitation services during pregnancy and up to 2 years after birth. Medical care during and after pregnancy, quality of care, as well as birth and infant outcomes for both mother and infant will be analyzed using eligibility, claims, immunization registry data, vital records, and survey data. Specifically, the Consumer Assessment of Healthcare Provider and Systems (CAHPS) survey will be administered

to beneficiaries in a Life360 HOME and compared to beneficiaries not enrolled in a Life360 HOME. Goal 2 focuses on care coordination for beneficiaries with Severe Mental Illness (SMI) and Substance Use Disorder (SUD) residing in the rural areas of Arkansas. Eligibility, claims, surveys, interviews, and focus groups will be used to assess medical care with an emphasis on care related to SMI and SUD as well as quality of care. Goal 3 aims to improve life skills and other social needs of at-risk young adults by analyzing medical care and quality of care using eligibility, claims, and survey data.

In each of the above 3 goals, unmet HRSN and timely receipt of appropriate interventions using provider collected HRSN screening data with a focus on food, housing, and transportation will be further examined. History of prior HRSN screening and utilization of social services will also be captured to look at changes in HRSN related screening and utilization prior to and during Life360 HOME. Additional HRSN-related measures include SNAP and WIC enrollment, financial health, employment, and educational attainment. Total average health care costs for Life360 HOME participants (target population) will also be examined in comparison to health care costs for similar beneficiaries in areas not serviced by a Life360 HOME (comparison population).

Cost effectiveness and implementation efforts will be examined in Goal 4 for each of the Life360 HOMEs to evaluate the overall costs, efforts made by key entities (i.e. health plans, health care providers, and social service organizations) to operationalize the amendment, and whether providers meet established cost and care metrics. Arkansas will maintain a steady level of funding to various social service programs and will support provider financial health improvement goals. As part of the State's implementation plan, beneficiary understanding of the amendment policy and its components have been assessed through stakeholder outreach as well as public forums across the state and will continue to be assessed using feedback from the Life360 HOME website and by leveraging the Medicaid Client Voice Council's feedback. Beneficiary surveys will include questions on awareness of the Life360 HOME program and focus groups with members of the Medicaid Client Voice Council will allow us to further gauge the level of understanding of the amendment policy. Implementation efforts will specifically include measures that seek to understand the roles of key entities, the provision of HRSN services over time, collaboration efforts among key entities, as well as barriers and strategies in beneficiary participation and experience.

When possible, annual public use data files (see Section 3.5 for public use data file details) will be used to examine selected HRSN metrics for which there are no currently available beneficiary-level data. Also, this data will be used to evaluate the use of HRSN-related community services by the larger community. Areas of interest include educational attainment, housing affordability and security, food security, safety, and criminal offenses. While it is important to address the impacts the Life360 HOME will have on eligible beneficiaries in the provider service areas, assessing the impacts in the context of the larger Arkansas community may also provide additional information.

To evaluate Life360 HOME target populations against similar beneficiaries not residing in areas served by a Life360 HOME, comparison populations will consist of beneficiaries in non-Life360 areas that have similar geographic and population characteristics. For annual claims-based measures, comparable target and comparison populations will be achieved through matching at the county-level for each Life360 HOME. Propensity Score Matching (PSM) at the county-level will be utilized to achieve balance across groups on baseline covariates. Analysis of the Life360 HOME evaluation metrics will utilize beneficiary-level weighted regression models. Measure results at the aggregate level will be compared using weighted group means that adjust for additional covariates when possible.

Descriptive analyses will be performed on most measures related to HRSN screening results, assignment of a Primary Care Physician (PCP), Person-Centered Action Plans (PCAPs), Life360 program satisfaction, and pregnancy/child home visitation. These measures will focus on the Life360 HOME beneficiaries receiving services for their unmet HRSN needs. Special attention will be paid to areas of income, employment, housing, educational attainment, and food security. To understand how the demonstration impacts rates of HRSN and their severities, we will also explore a pre-post comparison analyses to compare baseline rates of HRSN screening and service use characteristics with Life360 HOME rates. Data will be collected through beneficiary surveys.

To assess cost-effectiveness for Goal 4, program characteristics will be compared at the regional and state levels, in relation to Arkansas Medicaid fee-for-service costs. Comparisons will be performed for Total Health Expenditures (THEs) per beneficiary per year, Administrative Costs (ACs) of implementation and operation for the Life360 HOME amendment, HRSN initiative expenditures (HIEs) for each Life360 HOME, as well as provider uncompensated care costs (PUC). The THEs, ACs, HIEs, and PUCs metrics will allow fiscal health to be analyzed overall and for each type of Life360 HOME. For cost metrics that will be compared to AR Medicaid, a pre-post design, comparing trends in cost outcomes between the policy implementation period (2024–2026) and the baseline period (2017-2023), will be utilized. Costs associated with Life360 HOME implementation, services, and programmatic costs will be evaluated descriptively, and trends tracked throughout the entirety of the implementation period. Both qualitative and quantitative analyses will be used to observe and assess trends in participating entities; improvements to barriers in provider and beneficiary participation; strategies in HRSN screening, case management, as well as service use; changes in clinical practice related to social risk factors, and enrollment characteristics of SNAP and WIC programs.

Since Life360 HOME is a multi-year program scheduled to run through 2026, longitudinal analysis for a core set of metrics in addition to cost outcomes following each calendar-year cohort across multiple years will be performed. For these measures, we will consider an interrupted time series (ITS) design, difference-in-differences (DiD) analyses, or regression discontinuity design (RDD) to compare trends in outcomes during Life360 HOME implementation years (2024–2026) with outcomes in baseline years (2017-2023). For example, the DiD analysis will compare differences in metric outcome trends between pre- and post-

policy implementation (2 periods) and between 2 county categories (counties with versus without a Life360 HOMEs provider), as an interaction term between the 2 covariates (period and county category). Beneficiaries identified in the target and comparison populations at the beginning of the program can be followed over time while accounting for serial autocorrelation and attrition. This type of analysis can leverage each beneficiary's calendar-year metric results to provide a better understanding of potential changes and improvements in health outcomes for a given beneficiary over the course of Life360 HOME participation.

To supplement the ITS analysis, an annual pre-post analysis will be conducted to assess differences in metric outcomes between the baseline period (2017-2023) and the policy implementation period (2024-2026). The ITS analysis requires at least 4-5 years of data for each of the two periods in order to establish a confident regression trendline (and hence, will need to wait until data collection is complete through at least 2025). The advantage of pre-post analysis is that only one year of data is required to conduct the between-period comparison, which allows this analysis to be performed annually, starting in the first year of the policy implementation.

In addition to the pre-post analysis, a DiD analysis will also be conducted to assess the period-by-county interaction between the baseline and policy implementation periods and between two county categories: Counties with Life360 HOME providers, and counties without a Life360 HOME provider. This county distinction serves as a proxy for the presence and accessibility of Life360 HOME provider services. (It is hypothesized that beneficiaries residing in a county that has a Life360 HOME provider will have easier, more immediate access to their services and hence will more likely use these services, compared to beneficiaries residing in counties without a Life360 HOME provider.) For each of the two county categories, differences in metric outcome between the baseline and policy implementation periods will be calculated. Equivalently, for each of the two periods, differences in metric outcome between the two county categories will be calculated. Then, DiD will be calculated as the difference between these two difference values, effectively evaluating the impact of the presence/accessibility of Life360 HOME provider services on the sensitivity (or rate of change) of metric outcome resulting from policy implementation. The DiD evaluates how this sensitivity in metric outcome to policy implementation changes between the 2 county categories. DiD is an interaction term, a second-order derivative in the response (or dependent) variable (metric outcome) with respect to changes in 2 covariates or independent variables (period and county category). The DiD measures how the rate of change in metric outcome with respect to changes in 1 covariate varies with changes in the other covariate. As a built-in quality assurance/quality control check, these two methods of calculating DiD should result in the same DiD value.

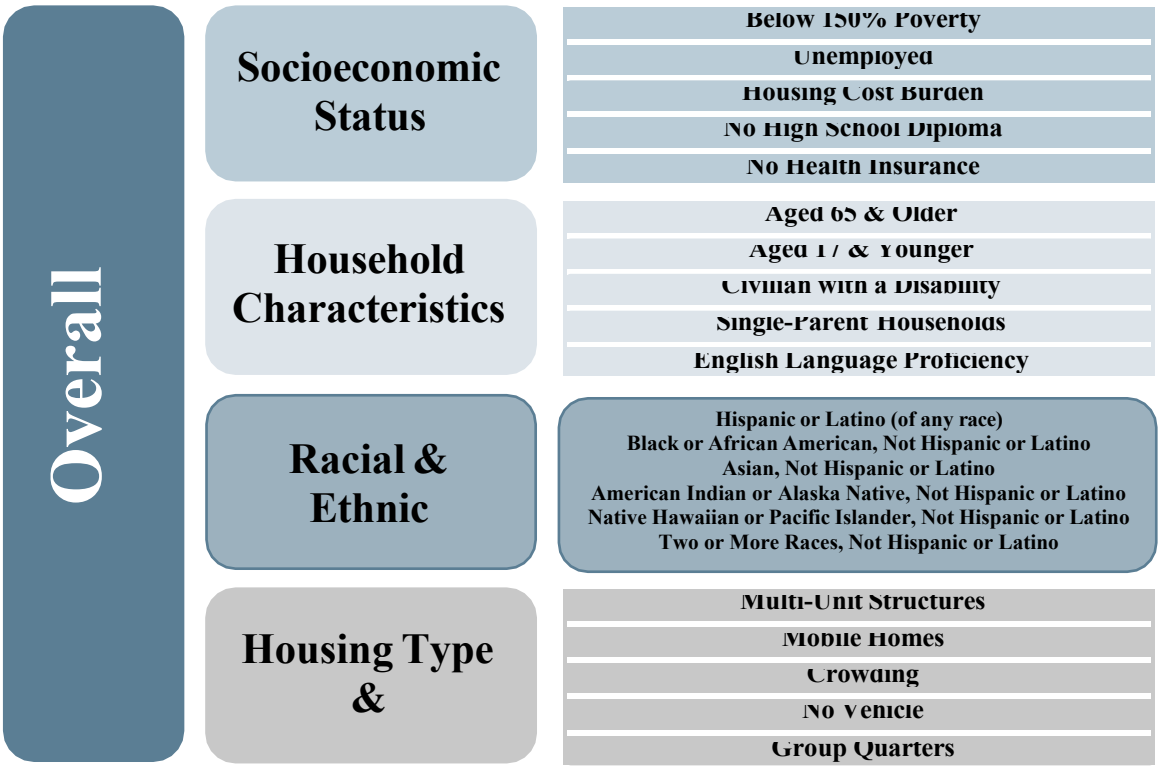
To further evaluate Goals 1-4, analyses will be stratified by key subpopulations of interest to inform a fuller understanding of disparities that may exist for these especially vulnerable populations related to HRSN, health care access, quality of care, and health outcomes. Measures will be stratified by variables, such as age, sex, race/ethnicity, geography, and primary language.

Target and Comparison Populations

Providers who choose to become a Life360 HOME must be a birthing hospital (Maternal Life360), a small rural general or critical access hospital (Rural Life360), or an acute care hospital (Success Life360), and provide services within their designated service area. Eligible Life360 HOME beneficiaries will be enrolled in ARHOME, live in a county or service area served by an appropriate Life360 HOME provider, and be identified through referrals from those providers or other organizations.

Comparison populations will consist of ARHOME beneficiaries who are representative of beneficiaries residing in non-Life360 HOME service areas that would have otherwise been eligible for services had they resided in a Life360 HOME service area. Since there may be differences in geographic and population characteristics in Life360 HOME service areas as compared to non- Life360 HOME service areas, areas will be matched by county on variables/themes in the Centers for Disease Control (CDC)/Agency for Toxic Substances and Disease Registry (ATSDR) Social Vulnerability Index (SVI) and urban/rural status to account for factors that may influence comparability of outcomes. The SVI is a weighted index that includes county information for the following themes: socioeconomic status, household characteristics, racial and minority status, as well as housing type and transportation (Figure 13).

Figure 14: Variables Used in the CDC/ATSDR SVI



These characteristics, along with urban-rural classification from the Federal Office of Rural Health Policy (FORHP), will serve as baseline covariates in a propensity score model (PSM) to adjust for potential bias in the selection and assignment of beneficiaries into the comparison population. Separate comparison populations will be created for each of the Life360 HOME as the provider service areas may consist of a different mix of counties and thus, have different geographic and population characteristics. Since not all non-Life360 HOME counties are a suitable match for a Life360 HOME county, included counties will have a covariate balance that most closely matches the target counties for analytics. The analytics will aim for at least one comparison county per target county. Aggregate baseline characteristics for target and comparison counties for each Life360 HOME will be evaluated to ensure final comparability among both groups.

Specific eligibility requirements for each target and comparison population are shown **in Table 5** along with preliminary key demographic characteristics for 2021 in **Table 6**.

Table 5: Life360 HOME and Comparison Population Eligibility Characteristics

	HOME	Life360 Eligibility	Comparison Population Eligibility
Beneficiaries living in a service area served by the appropriate Life360 Provider Includes both the hospital and community partner organization(s)	**Maternal Life360**[a]	Enrolled in AR Medicaid at the time of receiving Maternal Life360 services AND is pregnant with a high-risk pregnancy OR Enrolled in ARHOME any time during enrollment in Maternal Life360 AND had a high-risk pregnancy AND delivered within the last 2 years OR Enrolled in AR Medicaid for the entirety of Maternal Life360 AND had a high-risk pregnancy AND delivered within the last year AND Cannot receive other state/federal home visiting services for the first 2 years of baby's life	Cannot have ever been enrolled in Maternal Life360 in prior years or disenrolled due to non-cooperation (missed 3 attempts) or asking to stop services AND Reside in a county that is not serviced by a Maternal Life360 provider AND Enrolled in ARHOME, had a high-risk pregnancy, and delivered within the past 2 years
	Rural Life360	Enrolled in ARHOME AND Have a SMI or SUD diagnosis AND Have at least one need identified through a social determinant of health screen AND Not enrolled in PASSE	Cannot have ever been enrolled in Rural Life360 in prior years AND Reside in a Rural Area (a county with CAH or a SHIP hospital OR has less than 50,000 population) that is not served by a Rural Life360 provider AND Have a MH or SUD diagnosis AND Not enrolled in PASSE

			AND Enrolled in ARHOME
	Success Life360	Enrolled in ARHOME and <138% FPL AND not enrolled in PASSE AND 1. Between 19-24 and previously placed under supervision of DHS DYS OR 2. Between 19-24 and previously placed under supervision of AR ADC OR 3. Between 19-27 and previously placed under supervision of DHS DCFS OR 4. Is a Veteran between 19-30 verified by DD214 Certificate or Release of Discharge from Active Duty	Cannot have ever been enrolled in Success Life360 in prior years AND Reside in a county that is not serviced by a Success Life360 provider AND Not enrolled in PASSE AND Enrolled in ARHOME and <138% FPL AND In one of the four qualifying categories on the left

[a] Only women who are eligible for ARHOME will be included in our Maternal Life360 HOME target population.

Table 6: 2021 Demographic Comparisons by Group and Life360 HOME Population Category

Eligible Life360 HOME Populations[a]		
	Maternal Life360[b] (N=6,566)	**Rural Life360[c] (N=43,092)**
Age Groups (%)		
19-29	73.2	28.0
30-49	26.9	48.7
50-64	0	23.3
Gender (%)		
Male	0	33.1
Female	100	66.9
Average Income (%)		
100% FPL or Lower	74.4	79.9
Greater than 100% FPL	23.9	19.7
Unknown	1.7	0.4
Race/Ethnicity (%)		

Non-Hispanic White	56.0	72.6
Non-Hispanic Black	24.4	11.1
Hispanic	5.3	1.4
Other[d]	4.7	2.6
Unknown	9.6	12.4

[a] Success Life360 population information is not available at this time
[b] Women with high-risk pregnancies in ARHOME (aid category=06), ages 19-64. Note: Mothers with more than 1 live birth in a year with a high-risk pregnancy are counted more than once
[c] Beneficiaries with a diagnosis of SMI or SUD in Arkansas Works, ages 19-64, rural counties only
[d] Other includes American Indian, Alaska Native, Asian, Native Hawaiian, other Pacific Islander, and more than one race

Life360 HOME target and comparison populations will be a subgroup of ARHOME beneficiaries. While traditional Medicaid FFS beneficiaries are also eligible for Maternal Life360 HOME, only women who are eligible for ARHOME will be included in our Maternal Life360 HOME target population. ARHOME is composed of beneficiaries in the Medicaid expansion population (aid category 06, 19-64, ≤133% FPL, 138% FPL with 5% disregard) with a QHP from a private insurance carrier (benefit plan HCIP). Two other benefit plans within the 06-aid category identify the medically frail. The remaining benefit plan in the 06-aid category, IABP (interim alternative benefit plan), defines an interim period in which beneficiaries enrolled in ARHOME have services paid by Medicaid Fee-For-Service (FFS) before a QHP is chosen or assigned.

Operationally, beneficiaries are assigned to ARHOME based on having at least 6 months (180 days) of eligibility in qualifying segments. ARHOME beneficiaries cannot have any segments qualifying for traditional Medicaid FFS. The pregnant and medically frail are defined as beneficiaries having one or more days of coverage in qualifying segments and at least 180 days of total coverage in the measurement year. The interim alternative benefit plan (IABP) is allowed but does not contribute towards the 180-day minimum.

The following ARHOME beneficiary exclusions apply to each measurement year:

- Less than 19 years of age on January 1
- 65 years of age or older on December 31
- Medicare or third-party liability claims
- Participation in a Provider-led Arkansas Shared Savings Entity (PASSE), an Arkansas created Medicaid managed care program
- Death during the measurement year
- Overlapping eligibility segments

Although IABP is considered part of the ARHOME program as a separate health plan from the QHPs, IABP segments are included in all claims-based measures. The proposed methods of addressing IABP segments are consistent with the rationale that IABP segments occur during a beneficiary's eligibility for ARHOME but are separate from enrollment into a QHP. For claims-based measures, the evaluation includes claims from IABP segments in the measurement year(s). This ensures that diagnoses and medical services from the interim period contribute to

a complete picture of the beneficiary experience in ARHOME. Similarly, the evaluation includes claims from IABP segments prior to the measurement year(s) if a claims-based measure specifies a lookback period for prior diagnoses.

Provider Focus Groups, Interviews, and/or Surveys

The evaluator plans to engage specific provider groups to gather their feedback for awareness, acceptance, and satisfaction with the Life360 HOME program. Methods of engagement will include periodic provider focus groups, one-on-one interviews with providers, and/or surveys. Target populations include but are not limited to provider members from the Arkansas Medical Society (AMS), Arkansas Academy of Family Physicians (AAFP), and the Arkansas Hospital Association (AHA).

Key Informant Interviews for Monitoring Implementation

The evaluator plans to conduct a qualitative study of stakeholders engaged with the Life360 HOME program to understand its implementation progress and challenges. The objective of this study is to identify and interview key individuals that can help inform our understanding of how the Life360 HOME program implementation is progressing during the amendment period. Key informant interviews will be used to further understand and contextualize our quantitative data analysis focusing on the impact and effectiveness of the Life 360 HOME program in meeting its goals and objectives.

The interview process will be conducted in 3 stages: Recruitment; in-depth interviews; and data transcription, coding, and analysis.

- **Recruitment:** Several types of key informants will be recruited for interviewing in order to understand, monitor, and gain perspectives on various topics related to the implementation of the Life360 HOME program:
    - *Life 360 HOME program staff and leadership:* Individuals from sites approved by the state to participate in the program.
    - *State officials and policymakers*: Individuals from the state or who serve in policymaking roles, in order to understand the Life360 HOME program and its design and to gain their perspectives on the progress of the application process and early implementation.
    - *Other stakeholders, such as healthcare providers, HRSN providers, case managers, and other staff*: Individuals in unique roles specific to each Life360 HOME program design, in order to understand how the work is being carried out.

Key informants representing each of these groups will be interviewed where applicable, with priority given to those individuals who may be working with multiple Life360 HOMEs. Interviews will be conducted with approximately 5 individuals representing each provider (e.g., hospital) participating in each Life360 HOME program (Maternal, Rural, Success). This number of interviews should be adequate in providing sufficient information on the status of the

program's implementation and help us reach saturation. However, should specific areas of interest emerge, interviews will be continued until the area is fully explored. To gain information from non-participants of the Life360 HOME programs, we will also interview a number of key informants (approximately 5) in these or similar roles who are not participating in the program.

- **In-depth Interviews:** The evaluation team will lead the scheduling and recruitment of key informants. Interviews will take place via Zoom at a time convenient for the key informant. The team will maintain a grid that tracks scheduling and communication progress with key informants. Prior to beginning the interviews, participants will be asked to review and provide verbal consent to participate in the interview. Written consent is not warranted given the nature of the interviews and that patients are not being interviewed. The interviews will begin with an introduction of the evaluation, emphasizing the importance of participation and the commitment of the team to participant confidentiality. Interviews will be video and audio-recorded with permission of the participants via Zoom. The evaluation team will be sensitive and minimally disruptive to the schedules of the key informants and will offer to perform interviews outside of normal business hours, if needed. An interview guide with open-ended, semi-structured questions and follow-up probes will be developed to facilitate the interviews (see Appendix for example interview questions). The study team will confer with the state prior to deploying the interview guide.

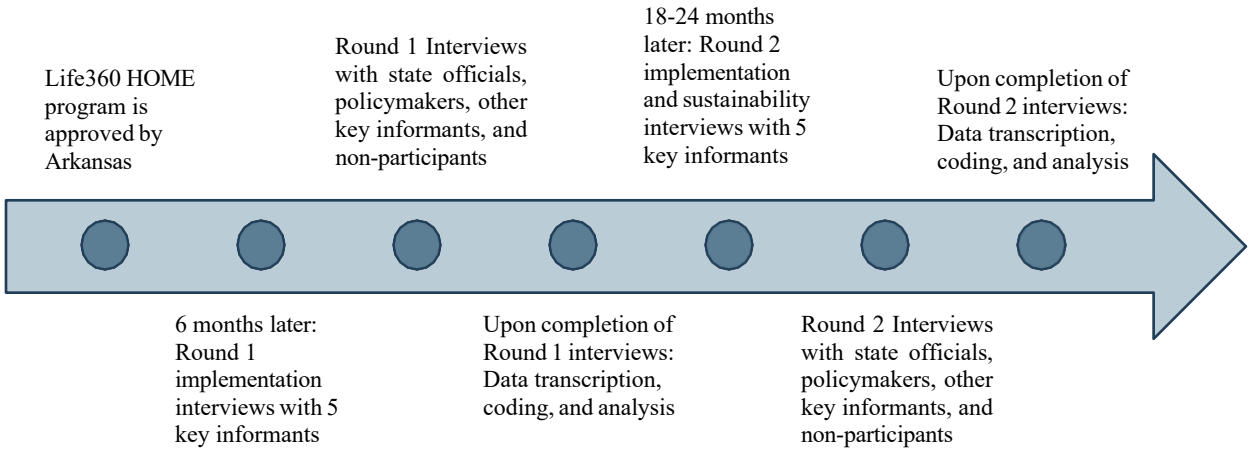
Interviews are anticipated to last approximately 45-60 minutes in duration. Interview questions will address specific topics, such as the application process, implementation barriers and successes, strategies and tools used to identify beneficiaries, HRSN services, infrastructure needs, social services, and sustainability planning. Interviews will begin with a grand tour question on implementation efforts and then delve into more specific topics. Notes will be taken during each interview by the interviewer and post-interview memorandums will be developed as a method of keeping track of key learnings and thoughts. Interviews will then be transcribed and reviewed for accuracy.

- **Data Transcription, Coding and Analysis:** All qualitative analyses will be conducted by members of the evaluation team. The analysis process will be led and performed by evaluation team members trained in qualitative research methods. Audio-recordings will not include any personally identifiable information (PII) in order to preserve confidentiality and anonymity of our key informants. After all recordings have been transcribed, they will be saved/stored on a password-protected folder that is accessible only to the study team. Grounded analysis (calibration) of the interview data will then begin. First, two transcripts will be coded independently by each analysis team member without a coding scheme to preserve the content and allow themes or patterns to emerge from the text. Once each team member has completed their coding of the first two transcripts, they will unite and discuss the findings from the interviews and begin to

develop a codebook. This process will be repeated until a total of 10 transcripts have been coded and discussed by multiple coders. Once agreement has been reached on the codes emerging from these 10 transcripts, the evaluation team will divide the remaining transcripts equally and continue to analyze the data independently in the validation process. The team will meet periodically (e.g., weekly) to discuss progress and continue developing and updating the codebook incorporating the additional coding. Each coder will note new codes or topics that emerge from each interview and will present them to the group. The group will decide which codes may be germane to the rest of the transcripts and warrant inclusion in the codebook. Moreover, the team will use an iterative process to resolve any differences of opinion through discussion and consensus. The team will repeat this process until all transcripts have been coded. Once all interviews have been coded, we will return to the data to search for common themes across the interviews and codes. In doing so, higher-level themes (often referred to in qualitative research as "second-order themes") will be developed and used to base more broad-level findings about the implementation of the Life360 HOME program. Finally, the thematic findings will be supported with anonymous exemplary quotations within each theme.

Timing of Interviews: Two rounds of interviews will be conducted with the individuals representing each provider participating in each Life360 HOME program. Round 1 interviews will occur within 6 months of application approval/program implementation beginning, and Round 2 interviews will occur approximately 12-18 months after Round 1 interviews. Dates may vary based on the program start date, and individual stakeholders interviewed in Round 1 may or may not be interviewed in Round 2 (depending on job position retention).

Figure 15: Timeline of Key Informant Interviews



Beneficiary Engagement Satisfaction Survey

The evaluator will administer a Beneficiary Engagement Satisfaction Survey (BESS) using the Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Adult

5.1, core questions with the addition of supplemental items and questions specific to the Life360 HOME evaluation. The populations surveyed will be as follows:

1. Population in the six-month timeframe prior to the survey starting. Based on monthly premium payments and inclusion in the Life360 HOME model, a beneficiary included in the survey population must be enrolled in at least five of the last six months, including the sixth month in a Life360 HOME.
2. Complete information on race, gender, and address
3. Stratified random sample of 1 beneficiary per household, stratified further by the type of Life360 HOME.

Population and Provider Summary

A descriptive summary of the following will be provided in the evaluation to further understand Life360 HOME participants:

- Percent of enrolled providers
- Percent of eligible population from enrolled providers
- Percent of enrolled population
- Percent of enrolled population receiving services
- Percent of enrolled population that disenroll or refuse services
- Percent of high risk medical or social need for eligible population
- Percent of beneficiaries with child welfare involvement

Evaluation Period

The evaluation period for the ARHOME program is January 1, 2022 through December 31, 2026. This evaluation is specific to the Life360 HOME portion of the program, which is approved for January 1, 2023 through December 31, 2026 and thus will produce reports as outlined below:

- **Draft Interim Evaluation**
  It is intended this report will be submitted by December 31, 2025 and will comply with Attachment C of the STCs. The time period of data included in this report will be January 1, 2023 through December 31, 2024. The report will highlight Life360 implementations, barriers, and stakeholder feedback in 2024 as it will be too soon to analyze outcomes.
- **Final Interim Evaluation**
  Per STC 102.d., the final version of Item 1 above will be submitted within 60 days after receipt of CMS's comments and will comply with Attachment C of the STCs. The time period of data included in this report will remain as stipulated in Item 1 above.
- **Draft Summative Evaluation**
  It is intended that this report be submitted by June 30, 2028 and also comply with Attachment C of the STCs. The time period of data included in this report will be January 1, 2023 through December 31, 2026.
- **Final Summative Evaluation**

Per STC 103.a., the final version of Item 1 above will be submitted within 60 days after receipt of CMS's comments and will comply with Attachment C of the STCs. The time period of data included in this report will remain as stipulated in Item 3 above.

Evaluation Measures by Measure Type

To ensure the evaluation is robust, the evaluator has grouped metrics by type in **Table 7** below to identify the categorical intent of each measure. Women's health especially maternal health and behavioral and mental health are target areas for DHS and Life360 HOME program. Appendix 5.4 provides full measure descriptions for the metrics by goals and hypotheses.

Table 7: Evaluation Measures by Special Populations

Acute/Chronic Condition Care		
Measure #	**Measure Name**	**Measure Data Source(s)**
2.A.5, 3.A.5	SPD Statin Therapy for Patients with Diabetes	Claims Data
2.A.6, 3.A.6	CDC Comprehensive Diabetes Care: Hemoglobin A1c Testing	Claims Data
1.A.1, 2.A.7, 3.A.7	AAP Adults' Access to Preventive/Ambulatory Health Services	Claims Data
2.A.11, 3.A.8	AMR-AD Asthma Medication Ratio: Ages 19–64	Claims Data
1.C.2, 2.D.2, 3.D.2	PCR Plan All-Cause Readmissions	Claims Data
1.D.16, 3.E.11	Annual Monitoring for Patients on Persistent Medications	Claims Data
Behavioral/Mental Health Care		
Measure #	**Measure Name**	**Measure Data Source(s)**
2.E.2, 3.E.2	AMM-AD Antidepressant Medication Management	Claims Data
1.D.2, 2.E.3, 3.E.3	FUH-AD Follow-Up After Hospitalization for Mental Illness	Claims Data
1.D.3, 2.E.4, 3.E.4	SAA-AD Adherence to Antipsychotics for Individuals with Schizophrenia	Claims Data
1.D.4, 2.E.5, 3.E.5	SSD-AD Diabetes Screening for People with Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications	Claims Data
1.D.9, 2.E.10, 3.E.10	FUM-AD Follow-Up After Emergency Department Visit for Mental Illness	Claims Data
Maternal/Perinatal Care		
Measure #	**Measure Name**	**Measure Data Source(s)**
1.A.2	CCP-AD Contraceptive Care – Postpartum Women Ages 21–44	Claims Data
1.A.3	PRSE-E Prenatal Immunization Status	Claims Data and Immunization Registry
1.A.6	PPC Timeliness of Prenatal Care	Claims Data
1.A.7	PPC Postpartum Care	Claims Data

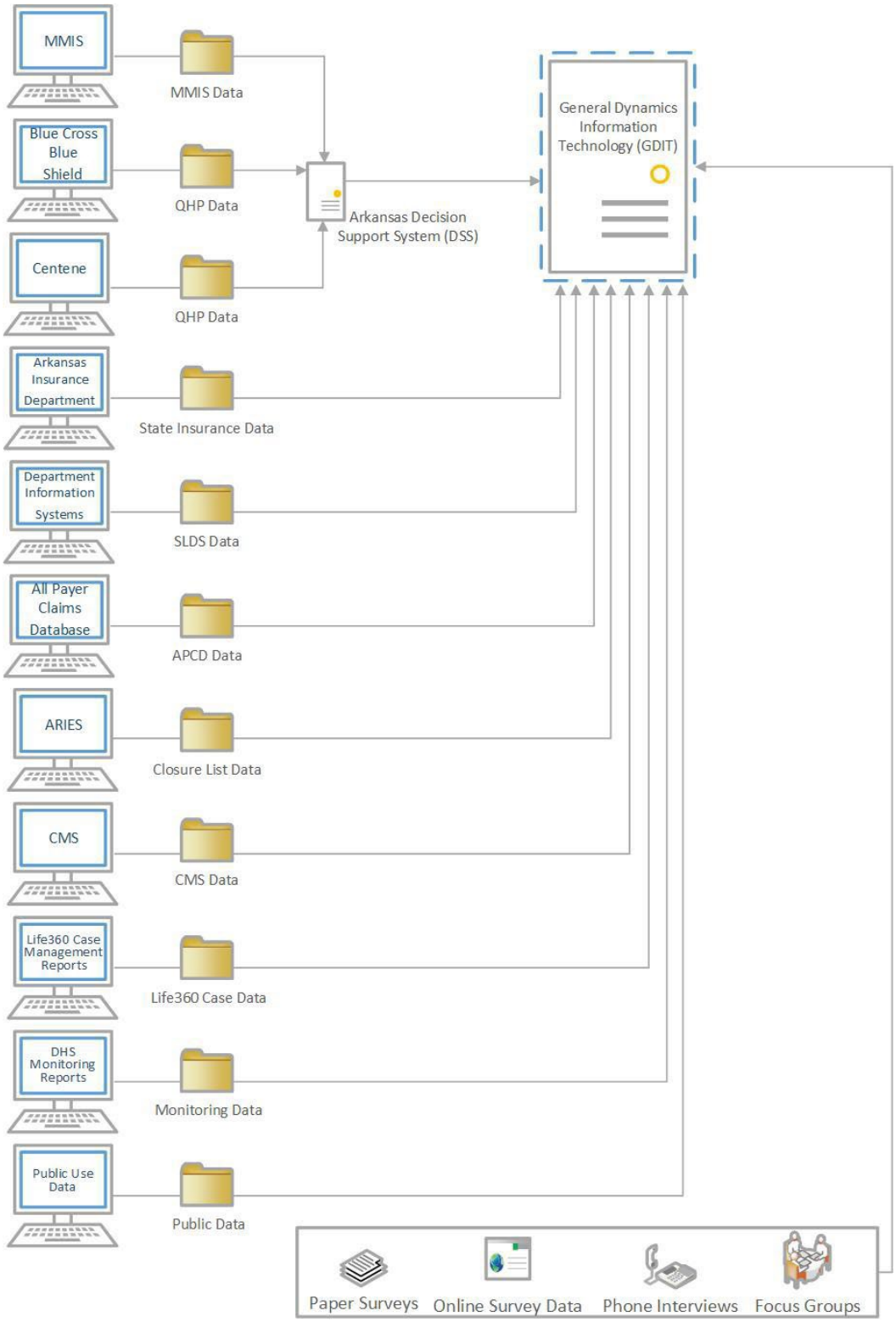
1.A.13	Gestational Diabetes Screening Rate	Claims Data
1.D.10	Pregnancy Home Visits	Claims Data and Life360 HOME Case Management Data
1.D.12, 1.D.13	PND-E Prenatal Depression Screening/Follow-up	Claims Data
1.D.13, 1.D.14	PDS-E Postpartum Depression Screening/Follow-up	Claims Data
2.A.12, 3.A.9	CCW-AD Contraceptive Care – All Women Ages 21–44	Claims Data
1.D.17	LRDCH-CH Low-Risk C-Section Rate	Claims Data
1.D.18	C-Section Rate	Claims Data
Substance Use Disorder Care		
Measure #	**Measure Name**	**Measure Data Source(s)**
1.D.1, 2.E.1, 3.E.1	IET-AD Initiation and Engagement of Substance Use Disorder Treatment	Claims Data
1.D.7, 2.E.8. 3.E.8	POD-AD Use of Pharmacotherapy for Opioid Use Disorder	Claims Data
1.D.8, 2.E.9, 3.E.9	FUA-AD Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence	Claims Data
HRSN Screening and Utilization		
Measure #	**Measure Name**	**Measure Data Source(s)**
1.I.1, 1.I.2, 2.H.1, 2.H.2, 3.H.1, 3.H.2	SNS-E Food Screening/Intervention	Life360 HOME Screening Data and Referrals
1.I.3, 1.I.4, 2.H.3, 2.H.4, 3.H.3, 3.H.4	SNS-E Housing Screening/Intervention	Life360 HOME Screening Data and Referrals
1.I.5, 1.I.6, 2.H.5, 2.H.6, 3.H.5, 3.H.6	SNS-E Transportation Screening/Intervention	Life360 HOME Screening Data and Referrals
1.I.7, 1.I.8	Interpersonal Violence Screening/Intervention	Life360 HOME Screening Data and Referrals
1.I.9, 1.I.10, 2.H.7, 2.H.8, 3.H.7, 3.H.8	Prior HRSN Screening and Service Utilization	Life360 HOME Screening Data and Referrals
1.I.11, 2.H.9, 3.H.9	SNAP/WIC Enrollment	Application for SNAP, Health Care, and TEA/RCA Benefits and WIC Data

Data Sources

The Arkansas Division of Medical Services (DMS) and its contractor will use multiple sources of data to assess the research hypotheses. The evaluation design will leverage enrollment and claims-based administrative data, survey-based scores, and other sources as applicable. Administrative data sources include information extracted from DMS' Medicaid Management Information System (MMIS) as well as information sent from the QHPs. The administrative QHP data will be transmitted quarterly to DMS from the carriers to the Arkansas Decision Support System (DSS). On a quarterly basis, the Arkansas DSS will provide the evaluation contractor with

a uniform file of the QHP data. The following figure depicts the data source flow for the evaluation.

Figure 16: Data Source Flow



Administrative and Claims Data

The MMIS data source is used to collect, manage, and maintain Medicaid beneficiary files (i.e., eligibility, enrollment, and demographics) and fee-for-service (FFS) claims. Use of FFS claims will be limited to final, paid status claims. The contractor will use raw, full sets of Medicaid data, which is provided on a weekly basis, consisting of claims, provider, beneficiary, and pharmacy data subject areas. The contractor will use fee-for-service claims and follow Healthcare Effectiveness Data and Information Set (HEDIS®) or CMS Core Set national specifications for national metrics. Applicable claim types, such as institutional, professional, and pharmacy claims, will be used to calculate the various evaluation design metrics while beneficiary demographic files will be used to assess beneficiary age, gender, and other demographic information. Eligibility files will be used to verify a beneficiary's enrollment in the State's Medicaid programs.

Statewide Longitudinal Data System

The Statewide Longitudinal Data System is maintained by the Arkansas Department of Transformation and Shared Services, Division of Information Systems. The Statewide Longitudinal Data System includes wage growth index and unemployment insurance wage data for approximately 91% of all Arkansans. The data includes all covered Arkansas employment, but does not include the following:

- Self-employed workers
- Unpaid family workers
- Federal and military employees
- Railroad employees covered by the Railroad Unemployment Insurance Act
- Employees of small agricultural establishments
- Some domestic service workers
- Insurance and real estate agents paid only on a commission basis
- Employees of churches and religious organizations, except separately incorporated schools
- People employed by other states.

Closure List Data

The contractor for the Arkansas Integrated Eligibility System (ARIES) sends monthly QHP closure lists directly to the evaluator. It is anticipated this will be used for certain disenrollment measures.

Birth Certificate Data

Patient level birth certificate data maintained by the Arkansas Department of Health (ADH); Vital Statistics department beneficiaries are transmitted to the Life360 HOME evaluator. The evaluator identifies all Medicaid, including the ARHOME population, deliveries and submits the file to ADH and ADH matches the identifier file to the birth certificate data. Birth certificate data

is utilized to calculate specific birth outcome such as preterm deliveries and low birth weight because the data is more robust than claims data.

DHS Division of Youth Services (DYS)

DHS Division of Youth Services provides youth involved in the Arkansas juvenile justice system's prevention, intervention, and treatment programs to help them succeed in the community. Data from DYS will be used to determine the eligible population in Life360 Success.

Department of Corrections

Arkansas Department of Correction oversees inmates and operates Arkansas state prisons. Information provided by this law enforcement agency will be used to determine the eligible population in Life360 Success.

DHS Division of Children and Family Services

The Division of Children and Family Services (DCFS) is responsible for child abuse prevention, protection, foster care, and adoption assistance. The information provided by this agency will be used to determine the eligible population in Life360 Success. DCFS data will also provide indication of child welfare involvement.

Military Discharge Records – U.S. Department of Veterans Affairs

Military Discharge Records provided by the U.S. Department of Veteran Affairs would allow the identification of Veterans in the state of Arkansas who are eligible for Life360 Success.

Survey Data –Beneficiary Engagement Satisfaction Surveys

The Beneficiary Engagement Satisfaction Survey (BESS) is based on the CAHPS® Adult Medicaid Health Plan Survey 5.1 and covers topics such as getting care quickly, how well doctors communicate, and access to care, among others. The evaluation contractor will field the survey and follow the NCQA CAHPS protocol. The survey will follow a traditional NCQA sampling strategy. To be eligible for the study, beneficiaries must be enrolled in the program for at least six months with no more than one 30-day gap in enrollment and must be enrolled in the last month prior to the survey. The surveys are scheduled to be administered during the evaluation period with questions to beneficiaries about their experiences over the prior six months. The evaluation contractor will mail an explanatory letter, initial survey, reminder postcard, and a second survey for non-responses. If no response is received after the second mailing, a third survey may be mailed. A unique survey identification number will be generated to track bad addresses and responses.

Survey Data – American Community Survey

The American Community Survey (ACS), sponsored jointly by the U.S. Census Bureau and the U.S. Department of Commerce, is a nationwide survey that collects and produces information on demographic, social, economic, and health insurance coverage characteristics for a representative sample of the U.S. population each year. Information from the survey generates

data that help determine how more than $400 billion in federal and state funds are distributed each year. The ACS is an ongoing national survey conducted with over 3.5 million US households. For the purposes of the Life360 HOME evaluation, the Selected Economic Characteristics data will be utilized.

Survey Data – Provider Survey(s) and Focus Group(s)

The evaluator will collect data through provider focus groups and provider surveys in order to obtain fundamental perceptions and participation concerning the Life360 HOME program. Focus groups or interviews will be conducted to assist with the survey development. The provider focus group surveys were conducted in 2023 and will be conducted again throughout the evaluation period.

Small Area Income and Poverty Estimates (SAIPE) – U.S. Census Bureau

The U.S. Census Bureau maintains and produces an annual file that contains estimates of poverty and median household income for the nation and at the state and county level. County-level unemployment rates will be utilized as a comparison for community-based measures. County-level median household income information will be utilized as a comparison for community-based measures.

Labor Force Data – U.S. Bureau of Labor Statistics (BLS)

The U.S. Bureau of Labor Statistics maintains and produces annual files related to local area unemployment statistics by state, metropolitan areas, and by county. The Labor Force Data by County tables provide information on the labor force, the number of employed beneficiaries, and the number/rate of unemployed beneficiaries. County-level unemployment rates will be utilized as a comparison for community-based measures.

County Health Rankings & Roadmaps (CHR&R)

The County Health Rankings & Roadmaps was created and is maintained by the University of Wisconsin Population Health Institute. This program produces annual rankings data that includes information related to health outcomes, health behaviors, clinical care, social and economic factors, and physical environment, for nearly all counties in all 50 states. Each county and state receive a ranking that assesses the “health” of that community. Data on housing security and affordability will be utilized as a comparison for community-based measures.

Map the Meal Gap – Feeding America

Feeding America conducts an annual Map the Meal Gap study that maps the level of food insecurity and food costs in communities ranging from the county and district level to the state and national level. The food insecurity rate will be utilized as a comparison for community-based measures.

Food Environment Atlas – U.S. Department of Agriculture (USDA)

The U.S. Department of Agriculture maintains and produces the Food Environment Atlas, which provides information on store/restaurant proximity, food and nutrition assistance programs, and community characteristics. Data on low income and low access to stores will be utilized along with food insecurity rate from Map the Meal Gap as a comparison for community-based measures.

Mortality Data – National Vital Statistics System (NVSS), NCHS, CDC

The National Vital Statistics System (NVSS), National Center for Health Statistics (NCHS) at Centers for Disease Control and Prevention (CDC) produces and maintains mortality data collected from death certificates in the U.S. Cause of death from suicides, injuries, homicides, and firearm fatalities will be used to assess safety in community-based measures.

Arkansas Department of Public Safety

Arkansas Department of Public Safety provides annual data from law enforcement agencies on several crime statistics at a county level. Count of offenses and arrests will be utilized to assess the level of criminal justice system involvement in the community-based measures.

Social Vulnerability Index (SVI) – CDC

The CDC/ Agency for Toxic Substances and Disease Registry (ATSDR) Social Vulnerability Index (SVI) data includes information on a community's social conditions, such as high poverty, low percentage of vehicle access, or crowded households. This data is available for each census tract and each county is ranked on 16 social factors indicating the level of social vulnerability. The SVI will be utilized in addition to other factors in identifying comparison Life360 counties.

Analytic Methods

The Life360 HOME evaluation time frame will be January 1, 2023, through December 31, 2026. As stated in Section 3.3, the interim evaluation will cover the entirety of calendar year 2023 with the summative evaluation continuing coverage of results through the end of 2026. Beneficiary-level weighted regression analysis will be performed for each metric and model year, separately. At the conclusion of the evaluation, longitudinal analysis, such as an Interrupted Time Series (ITS) design will be performed comparing all years of the Life360 policy implementation (2024-2026) with the Arkansas Works/ARHOME evaluation period (2017-2023) for key metrics related to health care utilization and Life360 HOME implementation costs.

The statistical analysis in this evaluation will ensure that the target and comparison populations in each measure of each Life360 HOME are comparable in baseline sociodemographic characteristics and outcome models are adjusted for relevant pre- and post-treatment effects. Unlike ARHOME, the target population will reside in participating Life360 HOME service areas while the comparison population will live in matched non-Life360 HOMs service areas or counties and consist of ARHOME beneficiaries. With the understanding that each service area and county that chooses to participate in Life360 HOME may not be representative of the

entire population eligible for Life360 HOME, the evaluator is prepared to select unbiased comparison counties that would be a suitable match in assessing impacts from Life360 HOME services. Balancing of characteristics at the county level will include Social Vulnerability Index (SVI) factors and urban/rural status that may influence population characteristics in each of the Life360 HOME target and comparison populations. Comparison counties will then be matched to Life360 counties based on weighted coefficients from propensity score modeling (PSM). Aggregate baseline population characteristics for all selected comparison counties will be evaluated against target Life360 HOME groups for comparability. For more details, please refer to Section 3.6.2 Adjust for County Selection.

Most claims-based measures have a continuous enrollment requirement during the measurement year that is stricter than that used to identify the populations. This ensures that there is enough time for events, diagnoses, or procedures to appear in health claims. All eligibility and claims-based measures will weight beneficiaries so that the target and comparison populations are comparable in their beneficiary-level baseline sociodemographic characteristics. For more details, please refer to Section 3.6.3 Adjust for Beneficiary Selection. The weighted beneficiary-level results can then be adjusted for post-treatment variables, including prior experience in the program. Risk scores will be considered a post-treatment effect because the information will come from claims during the measurement year.

The steps of the analytic process are listed below. These will apply in general to the claims-based measures. Please refer to Section 3.7 to verify whether each step will apply to a specific measure.

Determine Beneficiaries Eligible for Each Measure

Each metric's specifications will be followed to determine which beneficiaries are eligible for the denominator. These will be considered a subset of the target and comparison populations that meet additional metric requirements, such as a longer period of continuous enrollment.

Adjust for County Selection

Counties in the target and comparison populations will be matched using Propensity Score Modeling (PSM) with the goal of creating two groups that are similar in the distribution of their baseline county-level characteristics. Since Life360 HOME counties will be determined by the providers who choose to enroll in the program, this method reduces potential bias in the selection and assignment of comparison counties. To maintain statistical unbiased robustness, the underlying baseline covariates describing the eligible comparison counties should not be statistically different when compared to the Life360 HOME counties.

Adjustment for selection will occur at the county level to identify and match non- Life360 HOME service areas with participating Life360 HOME service areas (maternity, rural, and success). The Centers for Disease Control (CDC)/Agency for Toxic Substances and Disease Registry (ATSDR) Social Vulnerability Index (SVI) includes zip-code level covariates in the following themes that will be considered: socioeconomic status, household characteristics,

racial and ethnic minority status, and housing type and transportation. Additionally, overall county population and metropolitan status will be accounted for using urban-rural classification from the Federal Office of Rural Health Policy (FORHP).

The eligible comparison population is limited to counties that closely resemble each Life360 HOME county population, and as a whole, the aim is for at least a 1:1 match between target and comparison counties. The covariate balance will be assessed by looking at the standardized difference and variance ratio of each variable across Life360 HOME target counties and matched comparison counties. The standardized difference is the difference in group means (between treatment and comparison), expressed in units of standard deviation, to account for differences in sample size between the two groups. In addition to group means, the variance ratios can allow similarities in the distribution of continuous covariates to be broadly observed. Standardized mean differences between -0.1 to 0.1 for all baseline covariates will be established as the criteria for covariate balance.[39]. The evaluator will also visualize the covariate balance by graphing the numeric values of the standardized mean differences among weighted matched counties in balance plots. Additional qualitative graphical methods to compare the distribution of continuous baseline covariates in the weighted sample include empirical cumulative distribution functions (CDFs) and side-by-side boxplots. The resulting eligible beneficiaries residing in Life360 HOME target and matched comparison counties will then be used in beneficiary-level weighted models for each metric.

Participating counties in the Life360 HOME program may change from year to year as new providers are approved to participate or as providers are unable to stay in the program. This dynamic cohort will be accounted for by rebalancing the target and comparison counties on a yearly basis to ensure that the two groups remain balanced or create a new matched target and comparison sample if the two groups are no longer comparable on baseline county covariates. The evaluator will adjust for the staggered adoption and exit events both in annual and in longitudinal analyses with covariates that consider time enrolled and active during the measurement year. For each Life360 HOME program, we will also conduct sensitivity analyses between providers who remained enrolled for the entire measurement year compared with those that newly enrolled and those that exited at some point during the measurement year. Additionally, providers who choose not to stay in the program will not be eligible to be matched as comparison counties in future years due to the potential confounding effects of previous participation in Life360 HOME.

While the evaluator will create comparable Life360 HOME and Comparison counties for analytics, participation in the Life360 HOME program is voluntary. Providers who participate in the program may be different than providers who do not choose to participate. Descriptive statistics looking at characteristics of Life360 HOME providers (i.e. provider size, geographical

[39] Austin, P.C. 2009. Balance diagnostics for comparing the distribution of baseline covariates between treatment groups in propensity-score matched samples. *Statistics in Medicine* 28:3083-3107. DOI: 10.1002/sim.3697

location, patient population etc.) compared with providers that choose not to participate in Life360 HOME will be used to speculate on whether there are provider attributes that affect participation. Provider characteristics that are significantly associated with participating or non-participating providers will be adjusted for appropriately in the county matching process. Additional results from provider focus groups, surveys, and interviews that address willingness to participate in the Life360 HOME program will also be considered in in the adjustment process.

Adjust for Beneficiary Selection

Beneficiaries in the target (treatment) and comparison populations, who are eligible for each metric, will be weighted using PSM with the goal of creating two groups that do not differ in the distribution of their baseline characteristics. This method reduces potential bias in the selection and assignment of eligible beneficiaries to these two groups. To maintain statistical unbiased robustness, the underlying baseline covariates describing the eligible beneficiaries should not be statistically different between the two groups. Baseline covariates will include age, gender, race/ethnicity, county of residence or enrollment region, and income category. The use of weights will be explored using either 1) Propensity-Score Modeling (PSM) or 2) Coarsened Exact Matching (CEM).

1) A propensity score is the predicted probability of a beneficiary being assigned to the treatment group, given their observed baseline characteristics. Usually, a logistic regression is performed to arrive at each beneficiary's predicted probability. Nonparametric machine-learning models could also be explored as a sensitivity analysis. The propensity score can be used to calculate the inverse probability of treatment weight (IPTW).[40]

2) Coarsened Exact Matching (CEM) is a nonparametric method that creates strata using pre-specified variables and their binned values.[41] All beneficiaries within the treatment or comparison population in each unique stratum are assigned the same weight. The advantages of CEM are n-to-n matching, transparency, and ease of explanation.[42]

Either the PSM or CEM model (but not both in sequence) will be applied to eligible beneficiaries prior to the subsequent outcome modeling analysis with IPWS and IPWREG. Outcome modeling will include the null model (Inverse Probability Weighted Score, IPWS), full-covariate model

[40] Austin, P.C., and E.A. Stuart. 2015. Moving towards best practice when using inverse probability of treatment weighting (IPTW) using the propensity score to estimate causal treatment effects in observational studies. *Statistics in Medicine* 34(28):3661–79. DOI: 10.1002/sim.6607

[41] King, G., and R. Nielsen. 2019. Why propensity scores should not be used for matching. *Political Analysis* 27(4). Copy at http://j.mp/2ovYGsW

[42] Canes, A. 2017. Two roads diverged in a narrow dataset... when coarsened exact matching is more appropriate than propensity score matching. PharmaSUG paper HA-04.

(Inverse Probability Weighted Regression adjustment, IPWREG), and/or the REGADJ model (Regression Adjustment without adjusting for selection).

Check for Covariate Balance Across Groups

The goal of adjusting for selection using PSM or CEM is to make the beneficiaries in the treatment and comparison populations comparable, at least for the variables that can be observed. After reweighting, the covariate balance will be assessed by looking at the standardized difference and variance ratio of each variable across the groups. The standardized difference is the difference in group means (between treatment and comparison), expressed in units of standard deviation, in order to account for differences in sample size between the two groups (which typically exhibit a 5:1 or 6:1 ratio in favor of the treatment group). Standardized differences of less than or equal to 0.10, and ratios of group variances between 0.5 and 2.0, for all baseline covariates will be established as the criteria for covariate balance. Usually this is conducted for group means and variances, and prevalence for binary covariates.[43] Graphical methods include comparing side-by-side boxplots and empirical cumulative distribution functions (CDFs).[44] For weights constructed using CEM, a global balance assessment based on multivariate histograms can also be conducted.[45] If covariate balance cannot be achieved, the PSM or CEM models may need to be adjusted by varying the bin widths or adding additional variables and their interactions to the model.

Report Measure Outcomes, Adjusted for Selection

Each metric will be calculated to determine the outcome (numerator) for each eligible beneficiary. Most metrics at the beneficiary level have a binary outcome or a count for utilization measures; weights will be applied to the to the beneficiary-level outcomes. Metrics with a binary outcome will be modeled using logistic regression, whereas Poisson or negative binomial regression will be used to model those metrics with a count outcome. If the outcomes are reweighted using IPTW, the average treatment effect (ATE) can be directly calculated.[46] That is, the ATE is the average effect of being enrolled in a Life360 HOME as compared to if they were only enrolled in ARHOME. The ATE is simply the difference in weighted means of the

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[43] Austin, P.C. 2009. Using the standardized difference to compare the prevalence of a binary variable between two groups in observational research. Communications in Statistics - Simulation and Computation 38(6):1228–1234. DOI: 10.1080/03610910902859574DOI: 10.1080/03610910902859574

[44] Austin, P.C., and E.A. Stuart. 2015. Moving towards best practice when using inverse probability of treatment weighting (IPTW) using the propensity score to estimate causal treatment effects in observational studies. *Statistics in Medicine* 34(28):3661–79. DOI: 10.1002/sim.6607

[45] Berta, P., M. Bossi and S. Verzillo. 2017. %CEM: a SAS macro to perform coarsened exact matching. *Journal of Statistical Computation and Simulation* 87(2): 227–238. DOI: 10.1080/00949655.2016.1203433DOI: 10.1080/00949655.2016.1203433

[46] Austin, P.C. 2011. An introduction to propensity score methods for reducing the effects of confounding in observational studies. *Multivariate Behavioral Research* 46(3):399-424, DOI: 10.1080/00273171.2011.56878610.1080/00273171.2011.568786

outcome between the treatment and comparison populations. For measures with a beneficiary-level outcome of 0 or 1, the weighted group mean is equal to the effective percentage of the group meeting the measure.[47] If CEM weights are used, a beneficiary-level model for the measure results, with treatment as the explanatory variable, will be performed; and the coefficient of the treatment variable will be tested for statistical significance.

Adjust Measures for Post-Treatment Effects

Because the Life360 HOME Amendment evaluation period begins after Arkansas's newest 1115 waiver implementation, measure results may need to be adjusted for each beneficiary's time in the program prior to 2024, which includes Arkansas Works (2017-2021), and the first two years of ARHOME (2022-2023).

For outcome measures, adjustment for clinical severity may also be necessary if it is expected to affect measure results. Since QHP claims are only available after assignment to the treatment group, diagnosis information is considered post-treatment. Beneficiary-level risk scores will be calculated from claims diagnosis fields using the Department of Health and Human Services Hierarchical Condition Category (HHS-HCC) risk adjustment models.

A weighted regression on the beneficiary-level measure outcomes using post-treatment covariates will be run. The outcome variable will depend on the measure being analyzed. For example, whether a screening test was performed would be modeled using logistic regression, and the number of visits could be modeled with Poisson or negative binomial regression. Post-treatment covariates for consideration include the following:

- Total time enrolled in Arkansas Works/ARHOME (up to 6 years prior to analysis year)
- Risk score calculated from HHS-HCC risk adjustment models

The post-treatment model may include baseline covariates that are confounders. That is, variables that affect both treatment assignment and the measure outcome.

A sensitivity analysis will be conducted to determine whether the results change when different sets of covariates are included in the outcome model. Comparisons of outcome models with different subsets of covariates (confounders, post-treatment covariates), in addition to none (IPWS) and all (IPWREG, REGADJ) covariates, will be performed. Additionally, doubly robust estimators will be calculated to determine the sensitivity of results to misspecification of either the treatment model or the outcome model.

Using a selection-adjustment treatment model (PSM or CEM) coupled with an outcome model (e.g., IPWS, IPWREG), doubly robust estimators are calculated which are robust to

[47] Austin, P.C. 2010. The performance of different propensity-score methods for estimating differences in proportions (risk differences or absolute risk reductions) in observational studies. *Statistics in Medicine* 29(20):2137–2148. DOI:10.1002/sim.3854

misspecification of either of these two coupled models. Misspecification of the treatment model can arise from invalid assumptions associated with randomly assigning eligible beneficiaries to the treatment or comparison population to eliminate bias associated with confounding covariate (e.g., demographic) factors. Misspecification of the outcome model can arise from omitting important covariates (IPWS) or including insignificant covariates (IPWREG) impacting the outcome variable. Coupling the treatment and outcome models facilitates a doubly robust approach to estimating the measure outcome results (treatment vs. control effects or ATE) and conducting sensitivity analysis of impacts of the various covariates on the measure outcomes to assess their significance.

Both the IPWS and IPWREG outcome models are coupled with a selection-adjustment treatment model (PSM or CEM). Unlike the null IPWS model, the IPWREG model includes confounder covariates and post-treatment covariates. Examples of confounder covariates (which potentially affect both the treatment-vs.-control assignment and the measure outcome) include age, gender, age-gender interaction, race/ethnicity, minority, and rural variables. Depending on sample size adequacy, additional confounders include income category and income-age interaction. Weighted regression can be conducted on the outcomes using post-treatment covariates, such as time enrolled in a health care plan (up to 3 years prior to the measurement year), enrollment region during the measurement year, and risk score calculated from HHS-HCC risk-adjustment models.

During the measurement year, it is possible for a beneficiary to be enrolled in more than one Life360 HOME program. While this is unlikely to occur, we will evaluate whether there are multiple Life360 HOMEs enrolled in a given service area. Depending on beneficiary enrollment size in each Life360 HOME during the first measurement year, we will determine whether to exclude beneficiaries who are participating in more than one Life360 HOME or to adjust for the number of multiple enrollments a beneficiary has during the measurement year.

Adjustments for Multi-Year Analysis

A longer timeframe may be more relevant for evaluating the entirety of the Life360 HOME amendment period, which is now scheduled to run for three years (2024-2026), due to lack of enrollments in 2022 and 2023. A baseline sample using beneficiary information from 2017 through 2023 will be created prior to the first year of the amendment period (2024) and followed each subsequent year, thus generating a 7-year pre-period (2017-2023) and a 3-year amendment service period (2024-2026). The overall analytical time period should be sufficiently long to generate adequate statistically robust sample sizes for Interrupted Time Series (ITS) analysis and to identify detectable time-series baseline trends, while short enough as to avoid longer-term temporal variability, thus ensuring stability in the baseline time-series trend.

Propensity score weighting and/or coarsened exact matching (CEM) weights for each calendar year for each measure will aid in achieving similar distributions in measured characteristics between target vs. comparison populations; and the longitudinal design will consider serial

correlation over the program period. This will allow intermediate and longer-term measure outcomes to be analyzed.

Multi-Year Analyses

Multi-year analyses will consider Interrupted Time Series (ITS) analysis, pre-post analysis, Difference-in-Difference (DiD) analysis, or Regression Discontinuity Design (RDD) analysis.[48, 49] Each of these time-series longitudinal analysis methods will be examined and applied where appropriate and if the sample sizes allow for valid statistical conclusions.

The pre-implementation (baseline) period will cover 2017-2023 (7 years), which includes the Arkansas Works demonstration period (2017-2021) and the first two years of the ARHOME demonstration period (2022-2023). All longitudinal analyses will be performed at the conclusion of the Life360 HOME program in 2026 for each Life360 HOME program, separately.

Claims-based measures of adult access to preventive/ambulatory health services (1.A.1, 2.A.6, 3.A.5), total (emergent + non-emergent) emergency department visits/utilization (1.B.1-2, 2.C.1-2, 3.C.1-2), all-cause readmissions (1.C.2 , 2.D.2, 3.D.2), Medicaid costs (total, ED and hospitalization: 1.H.1-3, 2.G.1-3, 3.G.1-3), and HRSN screening and interventions (1.I.1-1.I.6, 2.H.1-6, 3.H.1-6) will be considered for analyses using various multi-year analysis methods.

A single and multiple/comparative Interrupted Time Series (ITS) estimates the impact of a temporal interruption (Life360 HOME implementation) on a select group of outcomes based on multiple measures taken before (i.e., baseline period) and after (i.e., amendment period) the Life360 HOME implementation. The regression coefficients are compared and tested for significant differences between the two time periods, in order to assess impacts of the policy implementation on the outcome variables. An advantage of the ITS is that it allows an estimate of differences in pre- and post- interruption outcomes for just the target population (single group ITS) or both the target and comparison population (multiple/robust ITS)[50, 51] for a more robust comparison analysis. A limitation of the ITS analysis is the requirement of a sufficient sample size or number of data points (years) to establish a statistically robust regression line that captures the underlying temporal trends in the data. While the 7-year pre-period (2017-2023) provides an adequate temporal sample size (n=7), the 3-year amendment period (2024-2026) temporal sample size (n=3) may not be adequate. In addition, limitations of ITS may occur in datasets where the treatment is introduced gradually, where pre-implementation

[48] Contreary K, Bradley K, and Chao S. 2018; Best Practices in Causal Inference for Evaluations of Section 1115 Eligibility and Coverage Demonstrations. Mathematica Policy Research. Accessed January 13, 2025: https://www.medicaid.gov/medicaid/section-1115-demo/downloads/evaluation-reports/causal-inference.pdf

[49] Bradley K, Heeringa JR, Pohl RV, et al. Selecting the Best Comparison Group and Evaluation Design: A Guidance Document for State Section 1115 Demonstration Evaluations. Centers for Medicare & Medicaid Services. Accessed January 13, 2025: https://www.medicaid.gov/medicaid/section-1115-demo/downloads/evaluation-reports/comparison-grp-eval-dsgn.pdf

[50] Wharton, EM. 2020. Time After Time: Differences-in-Differences and Interrupted Time Series Models in SAS. Kaiser Permanente Northern California Division of Research, SAS Global Forum 2020. Paper 4674-2020.

[51] Baicker, K., and T. Svoronos. 2019. Testing the Validity of the Single Interrupted Time Series Design. National Bureau of Economic Research working paper 26080.

trends are seasonal or non-linear, or where the baseline population changes over time, because it's important to isolate the impacts of the implementation event itself on the temporal trend after the implementation period.

In lieu of the limitations of ITS, a pre-post analysis will be considered in which the beneficiary data is lumped into one temporal category (instead of separated into individual years) for each of 2 time periods surrounding a temporal discontinuity (pre-period and amendment period). Pre-post analysis measures the change in the metric outcome between the 2 periods without requiring multiple (i.e., annual) measurements within both periods. The two periods are directly compared by calculating the difference (slope) in the outcome (dependent) variable's POM estimates between these 2 periods, for each of the 2 populations (target and comparison).

Regression discontinuity design (RDD) enables assessment of differences in an outcome based on differences in a treatment covariate on either side of a threshold discontinuity level, in the presence of a policy implementation at the threshold level (e.g., premium requirements for benes >=100%FPL). It is important to note that the resulting impact estimate of RDD applies to only a small subset of the overall population (i.e., those just above and just below the eligibility threshold 100%FPL) because it is important to capture very similar population characteristics on both sides of the discontinuity. Consequently, sample size could be restrictive and inadequate sample size could lead to reductions in confidence level and power of the analysis. The RDD design generalizes the ITS case to define a discontinuity in any covariate, not just time.

While ITS, RDD, and pre-post analyses are all 1-dimensional, Difference-in-Difference (DiD) analysis is 2-dimensional and is an extension of the pre-post analysis. The DiD analysis is most commonly used when both pre-implementation data and comparison data are available. While sample size requirements may limit the applicability of ITS and RDD, pre-post and DiD analysis are adequate substitution methods, since the discrete points are combined into 2 bulk sections on either side of the discontinuity for each covariate. The 2-dimensional DiD analysis measures the change in the metric outcome between the 2 periods (e.g., pre-period and post-policy implementation or amendment period) and between the 2 levels of the second covariate (e.g., treatment) without requiring multiple measurements within both levels of each covariate. The DiD analysis involves incorporation of interaction terms (products of two covariates) in a given regression model, which quantifies the impact of the variation of one covariate on the outcome metric on the second covariate (such as time period and 1 additional treatment covariate, such as county or age). Thus, incorporation of the time*treatment interaction into the outcome model provides a DiD estimate of the demonstration period's effects on the outcome metric. In addition, age interaction terms are incorporated in the outcome models as controls.

While pre-post analysis will be conducted to assess temporal effects across years between the pre-period and amendment period, DiD analysis will be conducted to assess interaction effects between 2 covariates on the least squares means (LSM) POM estimates of the outcome variable (i.e., various metrics evaluating program performance) across the ranges of both

covariates. Slopes will be calculated as the difference in bulk-mean POM estimates between the 2 sections of the first covariate and will be evaluated in each of the 2 sections of the second covariate (and vice versa). The DID interaction will be calculated as the difference in these slopes as a quantitative assessment of the interaction effect between these 2 covariates on the POM estimate of the outcome variable.

An example of the applicability of RDD includes an impact analysis of eligibility age cutoffs on Success Life360 HOME. Success Life360 HOME provides support for beneficiaries at high-risk for long-term poverty due to prior incarceration or involvement with the juvenile justice system (ages 19-24), involvement in former foster care FFC (ages 19-27), and veterans (ages 19-30) who are at high risk of homelessness. A quantitative assessment of impacts of Success Life360 support can be conducted by comparing beneficiaries who are eligible versus ineligible for Success Life360, specifically by focusing on one covariate criteria for eligibility: age. Eligibility age ranges are different among these 3 categories of beneficiaries eligible for Success Life360.

To assess impacts of age eligibility cutoffs on selected metrics pertinent to Success Life360, a regression discontinuity design (RDD) will be conducted by generating 2 lists of beneficiaries: 1) A list of beneficiaries that meet all eligibility requirements (including age) for Success Life360 (plotted to the left of the age discontinuity); 2) A list of beneficiaries that do not meet the age requirements but would otherwise be eligible for Success Life360 (e.g., by meeting the income FPL, continuous enrollment, coverage gap requirements, etc.) (plotted to the right of the age discontinuity). This distinction isolates age as the sole covariate distinguishing between the 2 lists with respect to beneficiary eligibility. The LSM POM estimates will be calculated for each selected HRSN metrics via regression analysis versus demographic and other significant covariates for each year, population, and beneficiary age within each year and population. POM estimates of each metric will be plotted and regressed versus beneficiary age (starting at age 19) on either side of the specified age discontinuity (e.g., 24 for formerly incarcerated, 27 for FFC, and 30 for veterans). For example, for the formerly incarcerated beneficiaries, a regression line will be drawn through the POM estimates across the age 19-24 range; and a second regression line will be drawn through the POM estimates across the age 24-30 range. The regression slopes, intercepts, and vertical gap between the 2 regression lines at age 24 (the age discontinuity) will be calculated and compared, in order to assess impacts of the age eligibility cutoff on the outcome variables. In summary, RDD and vertical gap analysis at the age eligibility cutoff provides a quantitative assessment of the impact of Success Life360 on the selected HRSN metrics measuring the performance of the Success Life360 program.

An unbiased estimate of the local treatment effect requires accurate, robust RDD modeling between the treatment and outcome variables, which can be potentially confounded by inherent non-linearity in the data. To address such non-linearities, regression analysis can be conducted not only on the two separate sections on either side of the discontinuity, but also on the combined (total) sections. Any variations in the regression slope in the vicinity of the

discontinuity region will be noted, to distinguish between the discontinuity and any inherent non-linearities in the data.

Beneficiary Engagement Satisfaction Survey

The evaluator is a National Committee for Quality Assurance (NCQA) certified CAHPS 5.1H survey vendor and will administer a Beneficiary Engagement Satisfaction Survey (BESS) using the Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Adult 5.1, core questions with the addition of supplemental items and questions specific to the Life360 HOME evaluation. The evaluator will follow survey guidelines from the Agency for Healthcare Research and Quality (AHRQ) using the National Committee for Quality Assurance (NCQA) CAHPS survey.

There are several components to successfully setting up, implementing, and analyzing a survey. Those components include the following:

1. Survey tool (English with Marshallese and Spanish versions available)
2. Process
3. Population
4. Sample size
5. Analytic method(s)
6. Administration dates

The detailed description of the plan components are as follows:

1. The survey tool utilized will be the CAHPS Health Plan Survey version 5.1 CORE questionnaire with supplemental questions and questions specific to the evaluation.
2. The process of a survey consists of multiple steps that must be in place for successful execution:
    A. Confidentiality. The evaluator will create a random number that will be on all survey materials which can only be cross walked within the evaluator's system. This process ensures their anonymity.
    B. Usage of a toll-free number. A toll-free number will be provided to all participants to answer any questions about the survey. The evaluator will also contract with a translation service for Marshallese and Spanish-speaking recipients or to request a Marshallese or Spanish version survey.
    C. Tracking incorrect addresses. All survey materials will have the ability to track bad addresses, correct, and re-mail the survey materials.

3. The definition of the survey population is a key element to a proper analysis. The populations to be surveyed will meet the below requirements:

    A. Target Population Survey

        i. Qualifying ARHOME beneficiaries residing and participating in Life360 HOME services in participating Life360 HOME service areas/counties.

    B. Comparison Population Survey

        i. Qualifying ARHOME beneficiaries residing in matched non- Life360 HOME service areas/counties.

4. The evaluator will follow the NCQA guidelines for sample size calculations using historical response rates and acknowledging potential issues with bad addresses for some of the eligible beneficiaries. NCQA states that at least 411 completed surveys for each of the target (counties with Life360 HOME) and comparison (counties without Life360 HOME) populations are needed to complete a statistically robust analysis, based on a preliminary power analysis assessment of tradeoffs among power, precision, and confidence level (**Table 7**). With a historical response rate (from the 2022 CESS survey) of approximately 11% for the target population and 7% for the comparison population and with the expected 17-18% rate of bad addresses, the evaluator will complete a random target sample of 5,220 recipients in counties with Life360 HOME and a random comparison sample of 6,270 similar recipients in counties without Life360 HOME, in order to obtain the required number of completed surveys for each population.

    A Two-Independent-Proportions Power analysis was conducted (using G*Power software) to assess relationships among sample sizes of two independent generic populations, power (=1-beta), confidence level (=1-alpha), and precision (or minimum detectable difference (MDD)), where alpha and beta are the probabilities of committing a Type I error (rejection of a true null hypothesis Ho) and Type II error (acceptance of a false Ho), respectively. Results indicated that, at the 95% confidence level (alpha=0.05), within a given typical range of sample sizes (n=350-450), the MDD in proportions ranged from 0.0929 (n1=n2=n=450) to 0.1051 (n=350) for 80% power, and from 0.1072 (n=450) to 0.1213 (n=350) for 90% power. Similarly, at the 90% confidence level (alpha=0.10), MDD ranged from 0.0825 to 0.0934 for 80% power, and 0.0969 to 0.1096 for 90% power (**Table 8**).

*Table 8: Precision or Minimum Detectable Differences (MDD) Between Two Independent Proportions: Two-Tailed z-Test (G*Power 3.1.9.7)*

Sample size of Population 1	Sample size of Population 2	alpha = 0.05		alpha = 0.10	
		Power=0.8	Power=0.9	Power=0.8	Power=0.9
350	350	0.1051	0.1213	0.0934	0.1096
350	375	0.1034	0.1192	0.0919	0.1078
350	400	0.1018	0.1175	0.0905	0.1062
350	425	0.1004	0.1159	0.0892	0.1048
350	450	0.0991	0.1144	0.0881	0.1035
375	375	0.1016	0.1172	0.0903	0.1060
375	400	0.1000	0.1154	0.0889	0.1043
375	425	0.0986	0.1138	0.0876	0.1029
375	450	0.0973	0.1123	0.0865	0.1015
400	400	0.0984	0.1136	0.0875	0.1027
400	425	0.0970	0.1119	0.0862	0.1012
400	450	0.0957	0.1104	0.0850	0.0998
425	425	0.0955	0.1102	0.0849	0.0997
425	450	0.0942	0.1087	0.0837	0.0983
450	450	0.0929	0.1072	0.0825	0.0969

5. Complete surveys will be analyzed according to the NCQA guidelines: "A questionnaire is considered complete if responses are available for at least half of the key survey items and at least one reportable item." Key items include questions confirming survey eligibility, questions about demographic and background information, screener questions for core composite measures, and the primary rating question.
6. To track beneficiary experience through the life of the full amendment period, these surveys were administered in 2022 and will be administered again in 2024 and 2026.

Impacts of COVID-19

Arkansas understands the value in analyzing the impacts of COVID-19 during the program implementation and will utilize CMS's COVID-19 implications to 1115 evaluations guidance at https://www.medicaid.gov/medicaid/section-1115-demo/downloads/evaluation-reports/1115-covid19-implications.pdf to assess potential impacts to the evaluation. It is anticipated that the

public health emergency (PHE), while in effect until April 2023, will impact service utilization, especially telehealth, during the pandemic and immediate post-pandemic years (2020-2023) of the baseline or pre-amendment period (2017-2023), as individuals are more likely to avoid in-person visits and unnecessary exposure to COVID-19. However, due to lack of Life360 HOME beneficiary data in 2022 and 2023 (due to a late start of providers signing up for Maternal, Rural, and Success), the amendment period is not slated to begin until 2024, well after the end of the PHE. This lack of data precludes any formal analysis of COVID-19 impacts during the amendment period (2024-2026), barring any resurgence of another pandemic and re-introduction of another PHE in the near future.

However, in the (unlikely) event of a near-future pandemic, several analyses will be conducted to minimize differential effects of COVID-19 on our target and comparison population outcomes, such as sensitivity analysis with results from prior years, adjustment for COVID-19 incidence/deaths/hospitalizations, and pre-post analysis.

The baseline or pre-implementation period (2017-2023) will overlap with the peak of the COVID-19 PHE where potential effects may need to be adjusted for in longitudinal analyses. To assess impacts of any potential future COVID-19 pandemic (up through 2026) on results for each metric, county-level data on daily COVID confirmed cases, daily COVID deaths, and populations will be obtained for the 75 Arkansas counties from the USA Facts database[52] along with matching zip code-by-county data from the US Zip Codes database[53].

A composite COVID metric will be calculated for each year and county by integrating the daily COVID cases and deaths over each year and 1) dividing by the county population to obtain per-capita cases and deaths, 2) dividing the per-capita deaths by cases to obtain deaths-per-case, and 3) averaging these three beneficiary metrics (per-capita cases, per-capita deaths, and deaths-per-case) into a composite metric. For each year of the COVID-19 PHE, all 75 Arkansas counties will be ranked from highest to lowest values of this composite metric and divided into 15-county quintiles based on these ranks. They will be assigned one of 6 COVID-19 status levels and associated numeric value (0=ZERO for non-COVID-19 years; or 1=Low, 2=Medium-Low, 3=Medium, 4-Medium-High, 5=High relative risk for COVID-19 years based on the quintile that each county falls in). County-level COVID-19 data will then be matched to the list of eligible beneficiaries based on their zip-code residence address to identify the Arkansas county of residence to assign a composite COVID-19 metric value (as a covariate) to each beneficiary, thus translating the COVID-19 information from the county-level to the bene-level.

While omitted from the group-selection adjustment model (PSM, CEM), this COVID-19 covariate can be incorporated as an additional covariate in the inverse probability weighted regression adjustment (IPWREG) model, which adjusts for selection and includes confounder covariates (such as age, gender, age-gender interaction, race/ethnicity, minority, and rural

[52] USA FACTS: Coronavirus Cases and Deaths. Data available from: https://usafacts.org/visualizations/coronavirus-covid-19-spread-map/state/arkansas/
[53] United States Zip Codes: Zip Code Database. Data available from: https://www.unitedstateszipcodes.org/zip-code-database/

variables) and post-treatment covariates. Confounder covariates potentially affect both the treatment-vs.-control assignment and the measure outcome. Pending sample size adequacy, additional confounders may include income category and income-age interaction. This COVID-19 covariate will also be incorporated as the sole covariate in the (previously null) inverse probability weighted score (IPWS) model. For each year and metric, if the selection-adjustment model (PSM or CEM) achieves balance, then the IPWREG model can be used if adjusting for measurement-year effects results in convergence. If non-convergence occurs, then the IPWS model is used instead.

To assess impacts of the COVID-19 covariate (for any potential future pandemic years up through 2026), a sensitivity analysis will be conducted in which the IPWREG or IPWS model are run both with and without the incorporated composite COVID-19 covariate. Output from these two model runs will be compared for each year and each relevant metric.

Summary Information by Measure

Table 9: Summary of Analysis Methods by Measure

Measure #	Measure Name	Comparison Population	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-Treatment Effects
1.A.1	AAP Adults' Access to Preventative/Ambulatory Health Services	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM/Pre-Post DiD/ITS	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
1.A.2	CCP Contraceptive Care Postpartum Women	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group rates	Beneficiary-level model with prior experience
1.A.3	PRS-E Prenatal Immunization Status	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.A.4	CIS Childhood Immunization Status	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.A.5	WC30 Well-Child Visits in First 15 Months of Life	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.A.6	PPC Timeliness of Prenatal Care	N/A	N/A	Annual Tables	Chi-Square w/ subpopulation analyses	N/A
1.A.7	PPC Postpartum Care	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
1.A.8	Prenatal Visits	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.A.9	Person-Centered Action Plan Milestone Achievement	N/A	N/A	Annual Tables	Chi-Square	N/A
1.A.10	PCP Assigned	N/A	N/A	Annual Tables	Chi-Square w/ subpopulation analyses	N/A

Measure #	Measure Name	Comparison Population	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-Treatment Effects
1.A.11	PCP Visits	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
1.A.12	STI Screening Rate	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.A.13	Gestational Diabetes Screening Rate	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.B.1	Non-Emergent ED Visits	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM/Pre-Post DiD/ITS	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
1.B.2	Emergent ED Visits	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM/Pre-Post DiD/ITS	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
1.C.1	Preventable ED Visits	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM/Pre-Post DiD/ITS	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
1.C.2	PCR Plan All-Cause Readmissions	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM/Pre-Post DiD/ITS	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
1.C.3	FMC Follow-Up After ED Visit for People with Multiple High-Risk Chronic Conditions	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.D.1	IET Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience

1.D.2	FUH Follow-Up after Hospitalization for Mental Illness	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience

Measure #	Measure Name	Comparison Population	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-Treatment Effects
1.D.3	SAA Adherence to Antipsychotics for Beneficiaries with Schizophrenia	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.D.4	SSD Diabetes Screening for People with Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.D.5	OHD Use of Opioids at High Dosage in Persons without Cancer	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.D.6	COB Concurrent Use of Opioids and Benzodiazepines	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.D.7	POD Use of Pharmacotherapy for Opioid Use Disorder	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.D.8	FUA Follow-Up after ED Visit for Alcohol and Other Drug Abuse or Dependence	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.D.9	FUM Follow-Up after ED Visit for Mental Illness	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.D.10	Pregnancy Home Visits	N/A	N/A	Annual Tables	Chi-Square w/ subpopulation analyses	N/A
1.D.11	Child Home Visits	N/A	N/A	Annual Tables	Chi-Square w/ subpopulation analyses	N/A

1.D.12	PND-E Prenatal Depression Screening	N/A	N/A	Annual Tables	Chi-Square	N/A
1.D.13	PND-E Prenatal Depression Follow-Up	N/A	N/A	Annual Tables	Chi-Square	N/A
Measure #	**Measure Name**	**Comparison Population**	**Analytic Method to Construct Comparable Groups**	**Comparison Method**	**Statistical Test**	**Comparison Method Adjusting for Post-Treatment Effects**
1.D.14	PDS-E Postpartum Depression Screening	N/A	N/A	Annual Tables	Chi-Square	N/A
1.D.15	PDS-E Postpartum Depression Follow-up	N/A	N/A	Annual Tables	Chi-Square	N/A
1.D.16	MPM Annual Monitoring for Patients on Persistent Medications	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.D.17	PRSD-CH Low Risk C-Section	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.D.18	C-Section Rate	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
1.E.6	Maternal Mortality Rate	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
1.E.1	Low Birth Weight	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
1.E.2	Very Low Birth Weight	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.E.3	Pre-Term Birth	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience

1.E.4	Live Birth	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
1.E.5	Infant Mortality Rates	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
Measure #	**Measure Name**	**Comparison Population**	**Analytic Method to Construct Comparable Groups**	**Comparison Method**	**Statistical Test**	**Comparison Method Adjusting for Post-Treatment Effects**
1.E.6	NICU Stays	Similar beneficiaries in counties w/o Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
1.F.1	Rating of Health Plan	Similar beneficiaries in counties w/o Maternal Life360 HOME	Survey sampling	Comparison of answer frequencies, case-mix adjustment	Chi-Square w/ subpopulation analyses	N/A
1.F.2	Rating of Health Care	Similar beneficiaries in counties w/o Maternal Life360 HOME	Survey sampling	Comparison of answer frequencies, case-mix adjustment	Chi-Square w/ subpopulation analyses	N/A
1.F.3	Rating of PCP	Similar beneficiaries in counties w/o Maternal Life360 HOME	Survey sampling	Comparison of answer frequencies, case-mix adjustment	Chi-Square w/ subpopulation analyses	N/A
1.F.4	Rating of Specialist	Similar beneficiaries in counties w/o Maternal Life360 HOME	Survey sampling	Comparison of answer frequencies, case-mix adjustment	Chi-Square w/ subpopulation analyses	N/A
1.F.5	Rating of Life360 Services	N/A	N/A	Annual Tables	Chi-Square w/ subpopulation analyses	N/A
1.G.1	Income Median Household Income	Similar beneficiaries in counties w/o a Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience

1.G.2	Income Increase	Similar beneficiaries in counties w/o a Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.G.3	Employment- Unemployment Rate	Similar beneficiaries in counties w/o a Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.G.4	Educational Attainment	Similar beneficiaries in counties w/o a Maternal Life360 HOME	N/A	Annual Tables	Chi-Square	N/A
1.G.5	Employment, Training, or Post-Secondary Education	Similar beneficiaries in counties w/o a Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.G.6	Housing Security/Affordability- ≤30% of Income	Similar beneficiaries in counties w/o a Maternal Life360 HOME	N/A	Annual Tables	Chi-Square	N/A
1.G.7	Housing Security/Affordability- Severe Cost Burden	Similar beneficiaries in counties w/o a Maternal Life360 HOME	N/A	Annual Tables	Chi-Square	N/A
1.G.8	Food Security- Insecurity Rate	Similar beneficiaries in counties w/o a Maternal Life360 HOME	N/A	Annual Tables	Chi-Square	N/A
1.G.9	Food Security- Access	Similar beneficiaries in counties w/o a Maternal Life360 HOME	N/A	Annual Tables	Chi-Square	N/A
1.G.10	Safety- Suicides, Injuries, Homicides, & Firearm Fatalities	Similar beneficiaries in counties w/o a Maternal Life360 HOME	N/A	Annual Tables	Chi-Square	N/A
1.G.11	Receipt of Educational, Employment, or Other Social Services	Similar beneficiaries in counties w/o a Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.H.1	Total Medicaid Spend	Similar beneficiaries in counties w/o a Maternal Life360 HOME	IPTW/CEM/Pre-Post DiD/ITS	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience

1.H.2	Emergency Department Costs	Similar beneficiaries in counties w/o a Maternal Life360 HOME	IPTW/CEM/Pre-Post DiD/ITS	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.H.3	Hospitalization Costs	Similar beneficiaries in counties w/o a Maternal Life360 HOME	IPTW/CEM/Pre-Post DiD/ITS	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.I.1	SNS-E Food Screening	N/A	Pre-Post DiD	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
Measure #	**Measure Name**	**Comparison Population**	**Analytic Method to Construct Comparable Groups**	**Comparison Method**	**Statistical Test**	**Comparison Method Adjusting for Post-Treatment Effects**
1.I.2	SNS-E Food Intervention	N/A	Pre-Post DiD	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.I.3	SNS-E Housing Screening	N/A	Pre-Post DiD	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.I.4	SNS-E Housing Intervention	N/A	Pre-Post DiD	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.I.5	SNS-E Transportation Screening	N/A	Pre-Post DiD	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.I.6	SNS-E Transportation Intervention	N/A	Pre-Post DiD	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.I.7	Interpersonal Violence Screening	N/A	N/A	Annual Tables	Chi-Square	N/A
1.I.8	Interpersonal Violence Intervention	N/A	N/A	Annual Tables	Chi-Square	N/A
1.I.9	Prior Screening of HRSN Needs	N/A	N/A	Annual Tables	Chi-Square	N/A
1.I.10	Prior Utilization of HRSN Related Services	N/A	N/A	Annual Tables	Chi-Square	N/A
1.I.11	SNAP/WIC Enrollment	Similar beneficiaries in counties w/o a Maternal Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience

2.A.1	COL Colorectal Cancer Screening	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.A.2	BCS Breast Cancer Screening	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.A.3	CCS Cervical Cancer Screening	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
Measure #	**Measure Name**	**Comparison Population**	**Analytic Method to Construct Comparable Groups**	**Comparison Method**	**Statistical Test**	**Comparison Method Adjusting for Post-Treatment Effects**
2.A.4	CHL Chlamydia Screening in Women	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.A.5	SPD Statin Therapy for Patients with Diabetes	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.A.6	CDC Comprehensive Diabetes Care	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
2.A.7	AAP Adults' Access to Preventative/Ambulatory Health Services	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM/Pre-Post/ITS	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
2.A.8	SMD Diabetes Monitoring for People with Schizophrenia or Bipolar Disorder	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.A.9	SMC Cardiovascular Monitoring for People with Schizophrenia or Bipolar Disorder	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.A.10	AMR Asthma Medication Ratio	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience

2.A.11	CCW Contraceptive Care- All Women	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.A.12	PCP Assigned	N/A	N/A	Annual Tables	Chi-Square w/ subpopulation analyses	N/A
2.A.13	PCP Visits	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
2.A.14	Person-Centered Action Plan Milestone Achievement	N/A	N/A	Annual Tables	Chi-Square	N/A
Measure #	**Measure Name**	**Comparison Population**	**Analytic Method to Construct Comparable Groups**	**Comparison Method**	**Statistical Test**	**Comparison Method Adjusting for Post-Treatment Effects**
2.B.1	Rating of Health Plan	Similar beneficiaries in counties w/o Rural Life360 HOME	Survey sampling	Comparison of answer frequencies, case-mix adjustment	Chi-Square w/ subpopulation analyses	N/A
2.B.2	Rating of Health Care	Similar beneficiaries in counties w/o Rural Life360 HOME	Survey sampling	Comparison of answer frequencies, case-mix adjustment	Chi-Square w/ subpopulation analyses	N/A
2.B.3	Rating of PCP	Similar beneficiaries in counties w/o Rural Life360 HOME	Survey sampling	Comparison of answer frequencies, case-mix adjustment	Chi-Square w/ subpopulation analyses	N/A
2.B.4	Rating of Specialist	Similar beneficiaries in counties w/o Rural Life360 HOME	Survey sampling	Comparison of answer frequencies, case-mix adjustment	Chi-Square w/ subpopulation analyses	N/A
2.B.5	Rating of Life360 Services	N/A	N/A	Annual Tables	Chi-Square w/ subpopulation analyses	N/A
2.C.1	Non-Emergent ED Visits	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM/Pre-Post/ITS	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience

2.C.2	Emergent ED Visits	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM/Pre-Post/ITS	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
2.D.1	Preventable ED Visits	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM/Pre-Post/ITS	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
2.D.2	PCR Plan All-Cause Readmissions	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM/Pre-Post/ITS	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
Measure #	**Measure Name**	**Comparison Population**	**Analytic Method to Construct Comparable Groups**	**Comparison Method**	**Statistical Test**	**Comparison Method Adjusting for Post-Treatment Effects**
2.D.3	IPF 30-day All-Cause Unplanned Readmission following Psychiatric Hospitalization in an Inpatient Psychiatric Facility	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.D.4	FMC Follow-Up after ED Visit for People with Multiple High-Risk Chronic Conditions	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.E.1	IET Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.E.2	AMM Antidepressant Medication Management	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
2.E.3	FUH Follow-Up after Hospitalization for Mental Illness	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
2.E.4	SAA Adherence to Antipsychotics for	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience

	Beneficiaries with Schizophrenia					
2.E.5	SSD Diabetes Screening for People with Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.E.6	OHD Use of Opioids at High Dosage in Persons Without Cancer	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
Measure #	**Measure Name**	**Comparison Population**	**Analytic Method to Construct Comparable Groups**	**Comparison Method**	**Statistical Test**	**Comparison Method Adjusting for Post-Treatment Effects**
2.E.7	COB Concurrent Use of Opioids and Benzodiazepines	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
2.E.8	POD Use of Pharmacotherapy for Opioid Use Disorder	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
2.E.9	FUA Follow-Up after ED Visit for Alcohol and Other Drug Abuse or Dependence	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
2.E.10	FUM Follow-Up after ED Visit for Mental Illness	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
2.E.11	Average Time to Treatment	N/A	N/A	Annual Tables	Chi-Square	N/A
2.E.12	Mortality Rate	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.F.1	Income Median Household Income	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience

2.F.2	Income Increase	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.F.3	Employment- Unemployment Rate	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.F.4	Educational Attainment	Similar beneficiaries in counties w/o Rural Life360 HOME	N/A	Annual Tables	Chi-Square	N/A
2.F.5	Employment, Training, or Post-Secondary Education	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
Measure #	**Measure Name**	**Comparison Population**	**Analytic Method to Construct Comparable Groups**	**Comparison Method**	**Statistical Test**	**Comparison Method Adjusting for Post-Treatment Effects**
2.F.6	Housing Security/Affordability- ≤30% of Income	Similar beneficiaries in counties w/o Rural Life360 HOME	N/A	Annual Tables	Chi-Square	N/A
2.F.7	Housing Security/Affordability- Severe Cost Burden	Similar beneficiaries in counties w/o Rural Life360 HOME	N/A	Annual Tables	Chi-Square	N/A
2.F.8	Food Security- Insecurity Rate	Similar beneficiaries in counties w/o Rural Life360 HOME	N/A	Annual Tables	Chi-Square	N/A
2.F.9	Food Security- Access	Similar beneficiaries in counties w/o Rural Life360 HOME	N/A	Annual Tables	Chi-Square	N/A
2.F.10	Safety- Suicides, Injuries, Homicides, & Firearm Fatalities	Similar beneficiaries in counties w/o Rural Life360 HOME	N/A	Annual Tables	Chi-Square	N/A
2.F.11	Criminal Justice Involvement	Similar beneficiaries in counties w/o Rural Life360 HOME	N/A	Annual Tables	Chi-Square	N/A

2.F.12	Receipt of Educational, Employment, or Other Social Services	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.G.1	Total Medicaid Spend	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM/Pre-Post/ITS	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.G.2	Emergency Department Costs	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM/Pre-Post/ITS	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.G.3	Hospitalization Costs	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM/Pre-Post/ITS	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.H.1	SNS-E Food Screening	N/A	Pre-Post DiD	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
Measure #	**Measure Name**	**Comparison Population**	**Analytic Method to Construct Comparable Groups**	**Comparison Method**	**Statistical Test**	**Comparison Method Adjusting for Post-Treatment Effects**
2.H.2	SNS-E Food Intervention	N/A	Pre-Post DiD	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.H.3	SNS-E Housing Screening	N/A	Pre-Post DiD	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.H.4	SNS-E Housing Intervention	N/A	Pre-Post DiD	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.H.5	SNS-E Transportation Screening	N/A	Pre-Post DiD	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.H.6	SNS-E Transportation Intervention	N/A	Pre-Post DiD	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.H.7	Prior Screening of HRSN Needs	N/A	N/A	Annual Tables	Chi-Square	N/A
2.H.8	Prior Utilization of HRSN Related Services	N/A	N/A	Annual Tables	Chi-Square	N/A

2.H.9	SNAP/WIC Enrollment	Similar beneficiaries in counties w/o Rural Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.A.1	COL Colorectal Cancer Screening	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.A.2	BCS Breast Cancer Screening	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.A.3	CCS Cervical Cancer Screening	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.A.4	CHL Chlamydia Screening in Women	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
Measure #	**Measure Name**	**Comparison Population**	**Analytic Method to Construct Comparable Groups**	**Comparison Method**	**Statistical Test**	**Comparison Method Adjusting for Post-Treatment Effects**
3.A.5	SPD Statin Therapy for Patients with Diabetes	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
3.A.6	CDC Comprehensive Diabetes Care	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
3.A.7	AAP Adults' Access to Preventative/Ambulatory Health Services	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM/Pre-Post/ITS	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.A.8	AMR Asthma Medication Ratio	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.A.9	CCW Contraceptive Care- All Women	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience

3.A.10	PCP Assigned	N/A	N/A	Annual Tables	Chi-Square w/ subpopulation analyses	N/A
3.A.11	PCP Visits	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
3.A.12	Person-Centered Action Plan Milestone Achievement	N/A	N/A	Annual Tables	Chi-Square	N/A
3.B.1	Rating of Health Plan	Similar beneficiaries in counties w/o Success Life360 HOME	Survey sampling	Comparison of answer frequencies, case-mix adjustment	Chi-Square w/ subpopulation analyses	N/A
3.B.2	Rating of Health Care	Similar beneficiaries in counties w/o Success Life360 HOME	Survey sampling	Comparison of answer frequencies, case-mix adjustment	Chi-Square w/ subpopulation analyses	N/A
Measure #	**Measure Name**	**Comparison Population**	**Analytic Method to Construct Comparable Groups**	**Comparison Method**	**Statistical Test**	**Comparison Method Adjusting for Post-Treatment Effects**
3.B.3	Rating of PCP	Similar beneficiaries in counties w/o Success Life360 HOME	Survey sampling	Comparison of answer frequencies, case-mix adjustment	Chi-Square w/ subpopulation analyses	N/A
3.B.4	Rating of Specialist	Similar beneficiaries in counties w/o Success Life360 HOME	Survey sampling	Comparison of answer frequencies, case-mix adjustment	Chi-Square w/ subpopulation analyses	N/A
3.B.5	Rating of Life360 Services	N/A	N/A	Annual Tables	Chi-Square w/ subpopulation analyses	N/A
3.C.1	Non-Emergent ED Visits	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM/Pre-Post/ITS	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience

3.C.2	Emergent ED Visits	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM/Pre-Post/ITS	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
3.D.1	Preventable ED Visits	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM/Pre-Post/ITS	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
3.D.2	PCR Plan All-Cause Readmissions	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM/Pre-Post/ITS	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
3.D.3	FMC Follow-Up after ED Visit for People with Multiple High-Risk Chronic Conditions	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.E.1	IET Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience

Measure #	Measure Name	Comparison Population	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-Treatment Effects
3.E.2	AMM Antidepressant Medication Management	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
3.E.3	FUH Follow-Up after Hospitalization for Mental Illness	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
3.E.4	SAA Adherence to Antipsychotics for Beneficiaries with Schizophrenia	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.E.5	SSD Diabetes Screening for People with Schizophrenia or Bipolar Disorder Who Are	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience

	Using Antipsychotic Medications					
3.E.6	OHD Use of Opioids at High Dosage in Persons Without Cancer	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.E.7	COB Concurrent Use of Opioids and Benzodiazepines	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
3.E.8	POD Use of Pharmacotherapy for Opioid Use Disorder	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
3.E.9	FUA Follow-Up after ED Visit for Alcohol and Other Drug Abuse or Dependence	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
3.E.10	FUM Follow-Up after ED Visit for Mental Illness	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means w/ subpopulation analyses	Beneficiary-level model with prior experience
3.E.11	MPM Annual Monitoring for Patients on Persistent Medications	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience

Measure #	Measure Name	Comparison Population	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-Treatment Effects
3.E.12	Mortality Rate	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.F.1	Income Median Household Income	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.F.2	Income Increase	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience

3.F.3	Employment- Unemployment Rate	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.F.4	Educational Attainment	Similar beneficiaries in counties w/o Success Life360 HOME	N/A	Annual Tables	Chi-Square	N/A
3.F.5	Employment, Training, or Post-Secondary Education	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.F.6	Housing Security/Affordability- ≤30% of Income	Similar beneficiaries in counties w/o Success Life360 HOME	N/A	Annual Tables	Chi-Square	N/A
3.F.7	Housing Security/Affordability- Severe Cost Burden	Similar beneficiaries in counties w/o Success Life360 HOME	N/A	Annual Tables	Chi-Square	N/A
3.F.8	Food Security- Insecurity Rate	Similar beneficiaries in counties w/o Success Life360 HOME	N/A	Annual Tables	Chi-Square	N/A
3.F.9	Food Security- Access	Similar beneficiaries in counties w/o Success Life360 HOME	N/A	Annual Tables	Chi-Square	N/A

Measure #	Measure Name	Comparison Population	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-Treatment Effects
3.F.10	Safety- Suicides, Injuries, Homicides, & Firearm Fatalities	Similar beneficiaries in counties w/o Success Life360 HOME	N/A	Annual Tables	Chi-Square	N/A
3.F.11	Receipt of Educational, Employment, or Other Social Services	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience

3.F.12	Criminal Justice System Avoidance	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.G.1	Total Medicaid Spend	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM/Pre-Post/ITS	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.G.2	Emergency Department Costs	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM/Pre-Post/ITS	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.G.3	Hospitalization Costs	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM/Pre-Post/ITS	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.H.1	SNS-E Food Screening	N/A	Pre-Post DiD	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.H.2	SNS-E Food Intervention	N/A	Pre-Post DiD	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.H.3	SNS-E Housing Screening	N/A	Pre-Post DiD	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.H.4	SNS-E Housing Intervention	N/A	Pre-Post DiD	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.H.5	SNS-E Transportation Screening	N/A	Pre-Post DiD	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience

Measure #	Measure Name	Comparison Population	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-Treatment Effects
3.H.6	SNS-E Transportation Intervention	N/A	Pre-Post DiD	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience

3.H.7	Prior Screening of HRSN Needs	N/A	N/A	Annual Tables	Chi-Square	N/A
3.H.8	Prior Utilization of HRSN Related Services	N/A	N/A	Annual Tables	Chi-Square	N/A
3.H.9	SNAP/WIC Enrollment	Similar beneficiaries in counties w/o Success Life360 HOME	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.A.1	Life360 HOME Administrative Costs	N/A	N/A	Annual Tables	Chi-Square w/ subpopulation analyses	N/A
4.A.2	Life360 HOME Infrastructure Costs	N/A	N/A	Annual Tables	Chi-Square w/ subpopulation analyses	N/A
4.A.3	Life360 HOME Services Costs	N/A	N/A	Annual Tables	Chi-Square w/ subpopulation analyses	N/A
4.A.4	Average Time to Launch Life360 HOME	N/A	N/A	Annual Tables	Chi-Square w/ subpopulation analyses	N/A
4.B.1	Life360 HOME Provider Performance	N/A	N/A	Annual Tables	Chi-Square w/ subpopulation analyses	N/A
4.C.1	Social Service Program Provisions Over Time	N/A	N/A	Annual Tables	N/A	N/A
4.D.1	Provider Financial Health Improvement	N/A	N/A	Annual Tables	N/A	N/A
4.E.1	Key Entities	N/A	N/A	Annual Tables	N/A	N/A

Measure #	Measure Name	Comparison Population	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-Treatment Effects

4.E.2	Types of HRSN Services	N/A	N/A	Annual Tables	N/A	N/A
4.E.3	Integration of Amendment with Existing Programs and Infrastructure	N/A	N/A	Annual Tables	N/A	N/A
4.E.4	Maintenance of Organizational Partnerships	N/A	N/A	Annual Tables	N/A	N/A
4.E.5	Key Entity Barriers in Implementing Demonstration	N/A	N/A	Annual Tables	N/A	N/A
4.E.6	Barriers in Beneficiary Outreach and Participation	N/A	N/A	Annual Tables	N/A	N/A
4.E.7	Strategies Adopted to Facilitate and Reduce Barriers in Implementation	N/A	N/A	Annual Tables	N/A	N/A
4.E.8	Strategies Adopted to Improve Beneficiary Experience	N/A	N/A	Annual Tables	N/A	N/A
4.E.9	Local Availability of Social Services Over Time	N/A	N/A	Annual Tables	N/A	N/A

METHODOLOGICAL LIMITATIONS

While the Life360 HOME evaluation design has many strengths that include a county-level match design coupled with selection adjusted beneficiary-level weighted regression analytics, there are limitations. The main considerations relate to the final sample size and comparability of the target and comparison populations, which will be dependent on the participating providers and service areas. To account for potential limitations in number, models evaluating the target and comparison populations will be adjusted for differences in sociodemographic factors by using propensity score matching and/or coarsened exact matching (CEM) to balance and make both groups more comparable.

Matching by county can only be done on observable and identifiable characteristics. For those factors that are unobservable, weighted beneficiary-level regression models will attempt to minimize all factors, observed and unobserved, by using weights that represent the likelihood of an eligible beneficiary being in the target and comparison populations.

Comparison counties chosen for matching will not necessarily be representative of all counties that may be eligible for Life360 HOME but did not choose to participate. While overall representation is ideal, it is more important to assess the potential benefits of Life360 HOME using comparison counties that consist of an eligible population that is similar to the beneficiaries residing in a Life360 HOME county, so that other factors are not driving any observed differences in outcomes.

Since the number of providers that choose to participate in Life360 HOME has not yet been finalized and may change from year to year, the effectiveness of identifying matched comparison counties will be evaluated once that information is available. It is possible that many of the counties within a particular Life360 HOME have similar population characteristics and there are not enough available comparison counties that are a close match for a 1:1 ratio. For example, if all counties within a Life360 HOME's program are classified as urban counties. Closely matched counties may still be different on certain county level characteristics associated with a more metropolitan community. However, beneficiary-level regression models will adjust for additional beneficiary factors that are relevant to the eligible beneficiary population.

It is possible for beneficiaries participating in Life360 HOME to seek HRSN-related services outside of the provider service area. While this may happen, we expect the number of beneficiaries who do this to be relatively small due to the working relationship that will be established between the beneficiary, provider, and Life360 HOME case manager; and in comparison, to beneficiaries residing in counties that do not have a Life360 HOME program.

Regardless of the reason that a beneficiary may have to seek HRSN-related services outside of the provider service area, their motivation to do so will most likely further mitigate their HRSN needs. The monitoring of care plan for each Life360 HOME beneficiary aims to connect beneficiaries to the social services that best address their HRSN needs and monitor progress.

Maternal Life360 beneficiaries can be disenrolled if they ask to stop receiving services or if they are uncooperative with receiving services (i.e. stop participating in the program) after three consecutive attempts to schedule a visit. While we expect that the number of beneficiaries who disenroll due to these reasons will be low, their data may have varying levels of completion that can lead to a reduced sample size in some of the measures and beneficiaries who do not want to continue receiving services may be inherently different from those who do. Beneficiaries who are no longer receiving Life360 HOMEs services also prevents continued per member per month payments to the provider. Depending on the extent of the potential sample size reduction and the minimum sample size requirements of different models, such a limitation may necessitate a change in the model type and/or statistical methodology used for analysis of those measures requiring this enrollment/disenrollment data. Depending on when these beneficiaries are disenrolled, we will adjust analyses accordingly to account for beneficiaries with missing or incomplete information.

Information used for beneficiary weights will come from the eligibility determination process. Causal analysis requires that the baseline variables are known before assignment to the treatment or comparison population, and that they are not affected by the assignment. Therefore, it can be assumed the baseline covariates for each beneficiary did not change during the calendar year.

Due to ongoing COVID-19 impacts and the public health emergency, certain measures will need special considerations. It is acknowledged that healthcare utilization has changed because of the pandemic, so the aim is to contextualize the findings within the time period within which they occurred.

Since only paid claims will be available from QHPs, the claims-based measures will be restricted to paid claims only for both the target and comparison populations. Services billed on claims that were suspended or denied will not be included.

Required premium contributions for beneficiaries with an income at 101-138% FPL occurs during the baseline period, 2017-2023, and not during the implementation period. This may affect the results of the longitudinal analyses in that the magnitude of this effect will not be accounted for when comparing results between baseline and implementation periods.

Survey data (ACS) is used for some metrics and comparison county matching. Limitations to relying on self-report survey data include self-selection bias, and social-desirability bias. In addition, literacy levels may impact survey participation and responses.

Since the implementation data collection relies on key informant interviews, several limitations should be noted. The generalizability of these results is limited in that we are not able to interview all individuals and organizations involved in the program implementation and we cannot infer that these qualitative findings would be the same or similar in different regions of the State. Also, personal and recall bias may be present as key informants were interviewed as reflections on their participation in the program, and in some cases, months may have passed since certain parts of the program were implemented. Nonetheless, these interviews will be helpful in contextualizing how programs were implemented and identifying the barriers and successes that programs experienced.

Some publicly available sociodemographic data sources that will be used to assess community-level impacts are not updated as frequently as analytics will be run. The lag in availability of this data will be noted for all relevant metrics. The evaluator will look for the most current applicable resource when running analytics. Additionally, the goal will be to ascertain beneficiary-level data for these measures.

APPENDICES

INDEPENDENT EVALUATOR

Based on established protocols, the state did follow established policies and procedures to acquire an independent evaluator to conduct the ARHOME LIFE360 evaluation. An assessment of Medicaid waiver program evaluation experience, knowledge of State programs and populations, and resource requirements were determined during the selection of the final candidate, including steps to identify and/or mitigate any conflicts of interest.

The evaluator will maintain separation throughout the amendment evaluation as to conduct a fair and impartial evaluation. This evaluation design includes a "No Conflict of Interest" signed confirmation statement from the independent evaluator, located below.

GDIT

Conflict of Interest/Independence.

General Dynamics Information Technology Inc. ("GDIT") hereby certifies that, without limitation or qualification, has no actual, apparent, or potential conflicts of interest with, and is independent from:

1. DHS and Arkansas Medicaid.
2. Qualified Health Providers (QHP) under the ARHOME and/or Life360 program, including the following:
    a. Ambetter from Arkansas Health & Wellness (Centene Corporation).
    b. QualChoice (QCA Health Plan, Inc./QualChoice Life and Health Insurance Company, Inc.)
    c. Arkansas Blue Cross & Blue Shield.
    d. Health Advantage
3. Providers serving Medicaid or ARHOME or Life360 clients under any Arkansas Medicaid or ARHOME or Life360 program.

Independent Evaluator Name:	General Dynamics Information Technology Inc. ("GDIT")	Date:	February 22, 2023
Signature:	Lauren Barringer	Title:	Contracts Advisor
Printed Name:	Lauren Barringer		

Evaluation Budget

An estimated total cost for the development and production of this evaluation design and the resulting evaluation reports are compiled as an annual budget. This includes the total estimated costs, as well as a breakdown of estimated staff, administrative, and other costs for all aspects of the evaluation. Cost includes quantitative and qualitative data collection, development and administration of survey instruments, data cleaning and analyses, and the actual production of the evaluation design and evaluation report deliverables.

Budget will be sent to CMS as a separate attachment for informational purposes only.

Timeline and Major Milestones

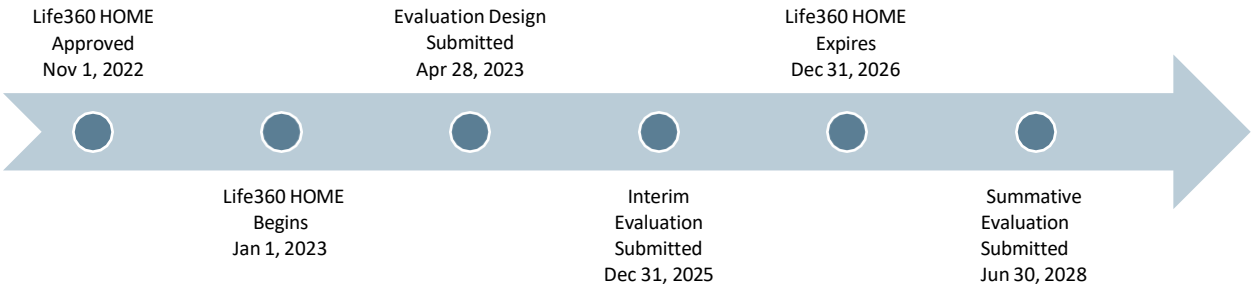
Appropriately scheduling evaluation activities will be crucial to acquiring accurate data which informs the evaluation reports and any needed policy or procedure updates. The evaluator, which began during Quarter 1 in 2023, will continually monitor monthly and quarterly delivered claims, beneficiary, and provider data ensuring the included data is as expected.

The data sets will be supplemented with surveys, interviews, and focus groups as appropriate. These will be conducted throughout the life of the Life360 HOME amendment program in order to capture the progression in access, awareness, coverage, health outcomes, participation, quality of care, program, and plan satisfaction, understanding, and utilization.

Submission Timelines

There is a specified timeline for the state's submission of Evaluation Designs and Evaluation Reports. These dates are specified in the amendment's Special Terms and Conditions (STCs) and/or otherwise negotiated for best practices. To assure the dissemination of the evaluation findings, lessons learned, and recommendations, the state will publish the Interim and Summative Evaluation Reports to the state's website within thirty (30) calendar days of CMS' approval, as per 42 CFR 431.424(d). CMS will also publish a copy to the Medicaid.gov website. The graphic below depicts the deliverables timeline for the Life360 HOME program.

Figure 17: Submission Timelines



Metric Descriptions by Goal and Hypothesis

This section describes the metrics by which the evaluation will measure the goals and hypotheses. Many of the measures are from the CMS proposed health equity measures set from the following categories: Primary and Preventive Care, Maternal and Child Health, Behavioral Health, Experience of Care, and Social Determinants of Health.

Goal 1. Maternal Life360 HOME will support beneficiaries with high-risk pregnancies, as identified by their physician, and up to two years post-partum, even if the beneficiary is no longer eligible for Medicaid under any other category, either through Maternal Life360 HOME's provision of evidence-based home visitation or through contracts with evidence-based home visitation programs.

Hypothesis 1.A. ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life360 HOME will have greater use of preventive and other primary care services.

Measure 1.A.1	AAP Adults' Access to Preventive/Ambulatory Health Services
Definition:	The percentage of Maternal Life360 HOME beneficiaries who had an ambulatory or preventive care visit during the measurement year
Numerator:	Count of Maternal Life360 HOME beneficiaries with one or more ambulatory or preventive care visits during the measurement year
Denominator:	Count of eligible Maternal Life360 HOME beneficiaries as of December 31 of the measurement year
Exclusion Criteria:	Maternal Life360 HOME beneficiaries with hospice care or using hospice service at any time during the measurement year

Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA - HEDIS AAP
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	• Inverse Probability of Treatment Weight (IPTW) / Coarsened Exact Matching (CEM), beneficiary-level weighted regression model • Interrupted Time Series (ITS) / Pre-Post Difference-Difference (DiD)
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, race/ethnicity, geography, etc.)
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rate
Deviations:	Paid claims only

Measure 1.A.2	**CCP Contraceptive Care – Postpartum Women**
Definition:	Among Maternal Life360 HOME women who had a live birth, the percentage that: • Were provided a most effective or moderately effective method of contraception within 3 and 60 days of delivery • Were provided a long-acting reversible method of contraception (LARC) within 3 and 60 days of delivery
Numerator:	• Rate 1: Count of Maternal Life360 HOME women who had a live birth in the measurement year who were provided a most or moderately effective method of contraception • Rate 2: Count of Maternal Life360 HOME women who had a live birth in the measurement year who was provided a LARC method
Denominator:	Count of Maternal Life360 HOME women as of Dec 31 of the measurement year who had a live birth with a continuous enrollment during the measurement year enrolled from the date of delivery to 60 days postpartum.
Exclusion Criteria:	Maternal Life360 HOME women with a live birth occurring after Oct 31 will be excluded from the denominator because they may not have an opportunity to receive contraception in the postpartum period.

Continuous Enrollment:	No allowable gaps in the continuous enrollment period
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – CCP-AD in Medicaid Adult Core Set
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group rates
National Benchmark:	OPA (CCP-AD in Medicaid Adult Core Set)
Deviations:	Paid claims only

Measure 1.A.3	**PRS-E Prenatal Immunization Status**
Definition:	The percentage of Maternal Life360 HOME beneficiaries with deliveries in the measurement year which had received influenza, tetanus, diphtheria toxoids and acellular pertussis (Tdap) vaccinations
Numerator:	Count of Maternal Life360 HOME beneficiaries with a delivery date in the measurement year who had a: • Influenza vaccination between July 1 of the prior year and the end of the current measurement year • Tdap vaccination during the pregnancy • Combination
Denominator:	Count of Maternal Life360 HOME beneficiaries with a delivery date in the measurement year (# of deliveries, not beneficiaries)
Exclusion Criteria:	Maternal Life360 HOME beneficiaries with deliveries of less than 37 weeks gestation and deliveries during hospice or where hospice services were used
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative and Immunization Registry
Measure Steward(s):	NCQA – PRS-E

Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	NCQA National averages available
Deviations:	N/A

Measure 1.A.4	**CIS Childhood Immunization Status**
Definition:	Percentage of Maternal Life360 HOME beneficiary's children age 2 who had four diphtheria, tetanus and acellular pertussis (DTaP); three polio (IPV); one measles, mumps and rubella (MMR); three haemophilus influenza type B (HiB); three hepatitis B (Hep B), one chicken pox (VZV); four pneumococcal conjugate (PCV); one hepatitis A (HepA); two or three rotavirus (RV); and two influenza (flu) vaccines by their second birthday.
Numerator:	Count of Maternal Life360 HOME children aged 2 who had four diphtheria, tetanus and acellular pertussis (DTaP); three polio (IPV); one measles, mumps and rubella (MMR); three haemophilus influenza type B (HiB); three hepatitis B (Hep B), one chicken pox (VZV); four pneumococcal conjugate (PCV); one hepatitis A (HepA); two or three rotavirus (RV); and two influenza (flu) vaccines by their second birthday.
Denominator:	Count of Maternal Life360 HOME children turning age 2 in the measurement year
Exclusion Criteria:	Maternal Life360 HOME children in hospice or using hospice services any time during the measurement year or any of the following on or before the child's second birthday: • Severe combined immunodeficiency. • Immunodeficiency. • HIV. • Lymphoreticular cancer, multiple myeloma or leukemia. • Intussusception
Continuous Enrollment:	No more than 1 gap in enrollment of up to 45 days during the continuous enrollment period. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative and Immunization Registry
Measure Steward(s):	NCQA – CIS

Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	NCQA National averages available
Deviations:	N/A

Measure 1.A.5	**W30 Well-Child Visits in the First 15 Months of Life**
Definition:	Percentage of Maternal Life360 HOME beneficiary's children who turned 15 months old during the measurement year and had 6 or more well-child visits with a PCP during the last 15 months
Numerator:	Count of Maternal Life360 HOME beneficiary's children with 6 or more well-child visits on different dates of service by a PCP on or before the 15-month birthday for children who turned 15 months during the measurement year
Denominator:	Count of Maternal Life360 HOME beneficiary's children who are 15 months old during the measurement year
Exclusion Criteria:	Maternal Life360 HOME beneficiary's children in hospice or using hospice services during the measurement year
Continuous Enrollment:	No more than 1 gap in enrollment of up to 45 days during the continuous enrollment period.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – W30
Comparison Population:	Similar beneficiary's children in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	NCQA National averages available
Deviations:	N/A

Measure 1.A.6	PPC Timeliness of Prenatal Care
Definition:	Percentage of deliveries of live births from beneficiaries in Maternal Life360 HOME on or between October 8 of the prior year to the measurement year and October 7 of the measurement year that received a prenatal care visit in the first trimester, on or before the enrollment start date or within 42 days of enrollment in the organization
Numerator:	Count of deliveries of Maternal Life360 HOME beneficiaries with a prenatal care visit in the first trimester, on or before the enrollment start date or within 42 days of enrollment
Denominator:	Count of deliveries from Maternal Life360 HOME beneficiaries with a delivery date in the measurement year
Exclusion Criteria:	Maternal Life360 HOME beneficiaries in hospice or using hospice services during the measurement year
Continuous Enrollment:	No allowable gaps in the continuous enrollment period; 43 days prior to delivery through 60 days after delivery
Data Source(s):	Administrative Claims and Life360 HOME Case Management Data
Measure Steward(s):	NCQA – PPC
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means with subpopulation analyses (race/ethnicity, geography, etc.)
National Benchmark:	NCQA (PPC) Medicaid and CHIP Core Set
Deviations:	Paid claims only

Measure 1.A.7	PPC Postpartum Care
Definition:	Percentage of deliveries of live births from beneficiaries in Maternal Life360 HOME on or between October 8 of the prior year to the measurement year and October 7 of the measurement year that had a postpartum visit on or between 7 and 84 days after delivery

Numerator:	Count of deliveries of Maternal Life360 HOME beneficiaries with a postpartum visit on or between 7 and 84 days after delivery
Denominator:	Count of deliveries of Maternal Life360 HOME beneficiaries with a delivery date in the measurement year
Exclusion Criteria:	Maternal Life360 HOME beneficiaries in hospice or using hospice services during the measurement year
Continuous Enrollment:	No allowable gaps in the continuous enrollment period; 43 days prior to delivery through 60 days after delivery
Data Source(s):	Administrative Claims and Life360 Case Management Data
Measure Steward(s):	NCQA – PPC
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means with subpopulation analyses (race/ethnicity, geography, etc.)
National Benchmark:	NCQA (PPC) Medicaid and CHIP Core Set
Deviations:	Paid claims only

Measure 1.A.8	**Prenatal Visits - Month Prenatal Care Began**
Definition:	The month in which prenatal care began for deliveries of live births to beneficiaries in Maternal Life360 HOME that occurred during pregnancy prior to their delivery date in the measurement year
Numerator:	Count of deliveries of Maternal Life360 HOME beneficiaries who had a prenatal care visit by month
Denominator:	Count of deliveries of Maternal Life360 HOME beneficiaries with a delivery date in the measurement year
Exclusion Criteria:	Maternal Life360 HOME beneficiaries in hospice or using hospice services during the measurement year
Continuous Enrollment:	No allowable gaps in the continuous enrollment period
Data Source(s):	ADH Birth Certificate Data

Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	CDC National Vital Statistics (NVSS)
Deviations:	N/A

Measure 1.A.9	**Person-Centered Action Plan Milestone Achievement**
Definition:	Percentage of Maternal Life360 HOME beneficiaries with person-centered action plans who achieved one or more milestones during the measurement year
Numerator:	Count of Maternal Life360 HOME beneficiaries who have met one or more milestones during the measurement year
Denominator:	Count of Maternal Life360 HOME beneficiaries who have a person-centered action plan during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Maternal Life360 Case Management Data
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	N/A
Deviations:	N/A

Measure 1.A.10	PCP Assigned
Definition:	Percentage of Maternal Life360 HOME beneficiaries that have a PCP (including OBGYN) assigned at any point during the measurement year
Numerator:	Count of Maternal Life360 HOME beneficiaries who had a PCP (including OBGYN) assigned to them during the measurement year
Denominator:	Count of Maternal Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims and Life360 Case Management Data
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	N/A
Deviations:	N/A

Measure 1.A.11	PCP Visits
Definition:	Percentage of Maternal Life360 HOME beneficiaries who had a PCP visit during the measurement year
Numerator:	Count of Maternal Life360 HOME beneficiaries who had a PCP during the measurement year
Denominator:	Count of Maternal Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A

Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims and Life360 Case Management Data
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means with subpopulation analyses (race/ethnicity, geography, etc.)
National Benchmark:	N/A
Deviations:	N/A

Measure 1.A.12	**STI Screening Rate**
Definition:	Percentage of pregnant Maternal Life360 HOME beneficiaries screened for STIs, such as chlamydia, syphilis, and gonorrhea
Numerator:	Count of pregnant Maternal Life360 HOME beneficiaries screened for chlamydia, syphilis, or gonorrhea during the measurement year
Denominator:	Count of pregnant Maternal Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A

Deviations:	N/A

Measure 1.A.13	Gestational Diabetes Screening Rate
Definition:	Percentage of pregnant Maternal Life360 HOME beneficiaries screened for gestational diabetes
Numerator:	Count of pregnant Maternal Life360 HOME beneficiaries screened for gestational diabetes during the measurement year
Denominator:	Count of pregnant Maternal Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Hypothesis 1.B. ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal LIfe360 HOME will have lower non-emergent and emergent use of emergency department (ED) services.

Measure 1.B.1	Non-Emergent Emergency Department (ED) Visits
Definition:	Non-Emergent ED visits as a percentage of all classified ED visits using the New York University (NYU) ED algorithm for Maternal LIfe360 HOME beneficiaries

Numerator:	Count of non-emergent ED visits for Maternal Life360 HOME beneficiaries
Denominator:	Count of total ED visits classified by the NYU algorithm for Maternal Life360 HOME beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	NYU ED Algorithm
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	• IPTW/CEM, beneficiary-level weighted regression model • ITS / Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (race/ethnicity, geography, etc.)
National Benchmark:	N/A
Deviations:	Paid claims only

Measure 1.B.2	**Emergent Emergency Department (ED) Visits**
Definition:	Emergent ED Visits as a percentage of all classified ED visits using the NYU ED algorithm for Maternal Life360 HOME beneficiaries
Numerator:	Count of emergent ED visits for Maternal Life360 HOME beneficiaries
Denominator:	Count of total ED visits classified by the NYU algorithm for Maternal Life360 HOME beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims

Measure Steward(s):	NYU ED Algorithm
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	• IPTW/CEM, beneficiary-level weighted regression model • ITS / Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (race/ethnicity, geography, etc.)
National Benchmark:	N/A
Deviations:	Paid claims only

Hypothesis 1.C. ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal LIfe360 HOME will have lower use of potentially preventable emergency department services and lower incidence of preventable hospital admissions and re-admissions.

Measure 1.C.1	**Preventable Emergency Department (ED) Visits**
Definition:	Percentage of emergency visits classified as preventable by the NYU ED algorithm for Maternal Life360 HOME beneficiaries
Numerator:	Count of emergency department visits classified as preventable/avoidable for Maternal Life360 HOME beneficiaries
Denominator:	Count of total emergency department visits classified as preventable/avoidable and not preventable/avoidable (equals all visits that are emergent, ED care needed) for Maternal Life360 HOME beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	NYU ED Algorithm
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	• IPTW/CEM, beneficiary-level weighted regression model

	• ITS / Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (race/ethnicity, geography, etc.)
National Benchmark:	N/A
Deviations:	Paid claims only

Measure 1.C.2	**PCR-AD Plan All-Cause Readmissions**
Definition:	Count of acute inpatient stays for Maternal Life360 HOME beneficiaries during the measurement year that were followed by an unplanned acute readmission for any diagnosis within 30 days and the predicted probability of an acute readmission.
Numerator:	Count of acute readmissions for any diagnosis within 30 days of the Index Discharge Date for Maternal Life360 HOME beneficiaries. Exclude admissions with a principal diagnosis of pregnancy, a condition originating in the perinatal period, or planned admissions
Denominator:	Count of total acute inpatient discharges for Maternal Life360 HOME beneficiaries who had one or more discharges on or between January 1 and December 1 of the measurement year
Exclusion Criteria:	Maternal Life360 HOME beneficiaries with hospital stays where the Index Admission Date is the same as the Index Discharge Date, where the beneficiary died during the stay, or with a principal diagnosis of pregnancy or a condition originating in the perinatal period
Continuous Enrollment:	365 days prior to the Index Discharge Date through 30 days after the Index Discharge Date. No more than 1 gap of 45 days or 1 month.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (PCR-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	• IPTW/CEM, beneficiary-level weighted regression model • ITS / Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (race/ethnicity, geography, etc.)
National Benchmark:	NCQA national averages available

Deviations:	Paid claims only

Measure 1.C.3	**FMC Follow-Up After Emergency Department Visit for People With Multiple High-Risk Chronic Conditions**
Definition:	Percentage of ED visits during the measurement year for Maternal LIfe360 HOME beneficiaries who have multiple high-risk chronic conditions who had a follow-up service within 7 days of the ED visit
Numerator:	Count of Maternal Life360 HOME beneficiaries who have 2 or more chronic conditions diagnosed prior to the ED visit during the measurement year and had a follow-up service within 7 days of the ED visit
Denominator:	Count of Maternal Life360 HOME beneficiaries with an ED visit who have 2 or more chronic conditions diagnosed prior to the ED visit during the measurement year
Exclusion Criteria:	Maternal Life360 HOME beneficiaries in hospice or using hospice services during the measurement year
Continuous Enrollment:	No more than one gap in enrollment of up to 45 days during the 365 days prior to the ED visit and no gap during the 7 days following the ED visit.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – FMC
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	NCQA national averages available
Deviations:	Paid claims only

Hypothesis 1.D. ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal LIfe360 HOME will experience better quality of care.

Measure 1.D.1	**IET Initiation and Engagement of Substance Use Disorder Treatment**

Definition:	Percentage of Maternal Life360 HOME beneficiaries with a new episode of substance use disorder: • Total rate of Initiation of SUD treatment • Total rate of Engagement of SUD treatment
Numerator:	• Count of Maternal Life360 HOME beneficiaries with initiation of SUD treatment within 14 days of the SUD episode date. Definition depends on whether the SUD Episode was an inpatient discharge or not. • Count of Maternal Life360 HOME beneficiaries with engagement of SUD treatment within 34 days after initiation: Identify all beneficiaries compliant for the initiation of SUD treatment numerator that have evidence of treatment. Definition depends on whether the treatment was initiated via an inpatient admission.
Denominator:	Count of Maternal Life360 HOME beneficiaries with an SUD episode as of Dec 31 of the measurement year with continuous enrollment being 194 days prior to the SUD Episode Date through 47 days after the SUD Episode Date (242 total days).
Exclusion Criteria:	• Exclude Maternal Life360 HOME beneficiaries from the denominator for both indicators (Initiation of SUD Treatment and Engagement of SUD Treatment) if the initiation of treatment event is an inpatient stay with a discharge date after November 27 of the measurement year. • Beneficiaries in hospice or using hospice services anytime during the measurement year. • Beneficiaries with any SUD diagnosis history or SUD medication history in the 194-day period before the index date.
Continuous Enrollment:	No allowable gaps in the continuous enrollment period
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (IET-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	NCQA national averages available

Deviations:	Paid claims only

Measure 1.D.2	FUH-AD Follow-Up After Hospitalization for Mental Illness
Definition:	Percentage of discharges for Maternal Life360 HOME beneficiaries who were hospitalized for treatment of selected mental illness diagnoses or intentional self-harm and who had a follow-up visit with a mental health practitioner. Two rates are reported: • Percentage of discharges for which the Maternal Life360 HOME beneficiary received follow-up within 30 days of discharge • Percentage of discharges for which the Maternal Life360 HOME beneficiary received follow-up within 7 days of discharge
Numerator:	Count of follow-up visits for Maternal Life360 HOME beneficiaries with a mental health practitioner within (30 or 7) days after discharge. Do not include visits that occur on the date of discharge
Denominator:	Count of acute inpatient discharges for Maternal Life360 HOME beneficiaries with a principal diagnosis of mental illness or intentional self-harm during the measurement year
Exclusion Criteria:	Maternal Life360 HOME beneficiaries in hospice or using hospice services during the measurement year
Continuous Enrollment:	Date of discharge through 30 days after discharge. No allowable gaps
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (FUH-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	NCQA national averages available
Deviations:	Paid claims only

Measure 1.D.3	SAA-AD Adherence to Antipsychotics for Beneficiaries with Schizophrenia
Definition:	Percentage of Maternal Life360 HOME beneficiaries with schizophrenia or schizoaffective disorder who were dispensed and remained on an antipsychotic medication for at least 80% of their treatment period during the measurement year
Numerator:	Count of Maternal Life360 HOME beneficiaries who achieved a proportion of days covered (PDC) of at least 80% for their antipsychotic medications during the measurement year
Denominator:	Count of Maternal Life360 HOME beneficiaries with at least one acute inpatient encounter with any diagnosis of schizophrenia or schizoaffective disorder, or at least two visits in an outpatient, intensive outpatient, partial hospitalization, ED or non-acute inpatient setting, on different dates of service, with any diagnosis of schizophrenia or schizoaffective disorder
Exclusion Criteria:	Maternal Life360 HOME beneficiaries in hospice or using hospice services during the measurement year; beneficiaries with a diagnosis of dementia, or who did not have at least two antipsychotic medication dispensing events, during the measurement year
Continuous Enrollment:	The measurement year. No more than one gap in enrollment of up to 45 days or 1 month during each year of continuous enrollment. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (SAA-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	NCQA national averages available
Deviations:	Paid claims only

Measure 1.D.4	SSD-AD Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (diabetes screening)

Definition:	Percentage of Maternal Life360 HOME beneficiaries with schizophrenia, schizoaffective disorder, or bipolar disorder who were dispensed an antipsychotic medication and had a diabetes screening test during the measurement year
Numerator:	Count of glucose tests or an HbA1c tests performed during the measurement year for Maternal Life360 HOME beneficiaries with schizophrenia, schizoaffective disorder, or bipolar disorder, as defined by claim/encounter or automated laboratory data
Denominator:	Count of Maternal Life360 HOME beneficiaries as of Dec 31 of the measurement year with schizophrenia, schizoaffective disorder, or bipolar disorder who were dispensed an antipsychotic medication
Exclusion Criteria:	Maternal Life360 HOME beneficiaries with hospice care or using hospice service at any time during the measurement year
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year and the year prior to the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (SSD-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	NCQA national averages available
Deviations:	Paid claims only

Measure 1.D.5	**OHD-AD Use of Opioids at High Dosage in Persons Without Cancer**
Definition:	Percentage of Maternal Life360 HOME beneficiaries who received prescriptions for opioids with an average daily dosage greater than or equal to 90 milligram equivalents (MME) over a period of 90 days or more
Numerator:	Count of Maternal Life360 HOME beneficiaries in the denominator with an average daily dosage $\geq$ 90 MMEs during the opioid episode
Denominator:	Count of Maternal Life360 HOME beneficiaries as of Dec 31 of the measurement year who received prescriptions for opioids
Exclusion Criteria:	Maternal Life360 HOME beneficiaries with a cancer diagnosis, sickle cell disease diagnosis, or in hospice or palliative care

Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	PQA (OHD-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	Paid claims only

Measure 1.D.6	**COB-AD Concurrent Use of Opioids and Benzodiazepines**
Definition:	Percentage of Maternal Life360 HOME beneficiaries with concurrent use of prescription opioids and benzodiazepines
Numerator:	Count of Maternal Life360 HOME beneficiaries in the denominator with: • Two or more prescription claims for any benzodiazepine with different dates of service, AND • Concurrent use of opioids and benzodiazepines for 30 or more cumulative days
Denominator:	Count of Maternal Life360 HOME beneficiaries as of Dec 31 of the measurement year with 2 or more prescription claims for opioid medications on different dates of service and with a cumulative days' supply of 15 or more days during the measurement year.
Exclusion Criteria:	Maternal Life360 HOME beneficiaries with a cancer diagnosis, sickle cell disease diagnosis, or in hospice or palliative care
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	PQA (COB-AD in Medicaid Adult Core Set)

Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	Paid claims only

Measure 1.D.7	**POD-AD Use of Pharmacotherapy for Opioid Use Disorder**
Definition:	Percentage of new opioid use disorder (OUD) pharmacotherapy events with OUD pharmacotherapy for 180 or more days among Maternal Life360 HOME beneficiaries with a diagnosis of OUD
Numerator:	Count of new OUD pharmacotherapy events with OUD pharmacotherapy for 180 days or more days without a gap in treatment of 8 or more consecutive days for Maternal Life360 HOME beneficiaries
Denominator:	Count of Maternal Life360 HOME beneficiaries as of Dec 31 of the measurement year with a diagnosis of OUD
Exclusion Criteria:	N/A
Continuous Enrollment:	No allowable gaps in the continuous enrollment period. Continuous enrollment period is defined as 31 days prior to the treatment period start date through 179 days after the treatment period start date (211 total days)
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (POD-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	NCQA national averages available

Deviations:	Minimum age adjusted to 19. Paid claims only

Measure 1.D.8	**FUA-AD Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence**
Definition:	Percentage of emergency department (ED) visits for Maternal LIfe360 HOME beneficiaries with a principal diagnosis of alcohol or other drug (AOD) abuse or dependence who had a follow-up visit for AOD abuse or dependence
Numerator:	• 30-day follow-up – count of follow-up visits with any practitioner, for Maternal Life360 HOME beneficiaries with a principal diagnosis of AOD abuse or dependence within 30 days after the ED visit. Include visits that occur on the date of the ED visit • 7-day follow-up – count of follow-up visits with any practitioner, for Maternal Life360 HOME beneficiaries with a principal diagnosis of AOD abuse or dependence within 7 days after the ED visit. Include visits that occur on the date of the ED visit
Denominator:	Count of ED visits for Maternal Life360 HOME beneficiaries with a principal diagnosis of alcohol or other drug (AOD) abuse or dependence as of the ED visit with continuous enrollment from the date of ED visit through 30 days after the ED visit
Exclusion Criteria:	Maternal Life360 HOME beneficiaries with a cancer diagnosis, sickle cell disease diagnosis, or in hospice or palliative care
Continuous Enrollment:	No allowable gap in coverage during continuous enrollment period
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (FUA-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	NCQA national averages available
Deviations:	Paid claims only

Measure 1.D.9	**FUM-AD Follow-Up After Emergency Department Visit for Mental Illness**

Definition:	Percentage of emergency department (ED) visits for Maternal LIfe360 HOME beneficiaries with a principal diagnosis of mental illness or intentional self-harm and who had a follow-up visit for mental illness
Numerator:	• 30-day follow-up – count of follow-up visits for Maternal LIfe360 HOME beneficiaries with a principal diagnosis of mental health disorder or with a principal diagnosis of intentional self-harm and any diagnosis of mental health disorder within 30 days after the ED visit. Include visits that occur on the date of the ED visit • 7-day follow-up - count of follow-up visits for Maternal Life360 HOME beneficiaries with a principal diagnosis of mental health disorder or with a principal diagnosis of intentional self-harm and any diagnosis of mental health disorder within 7 days after the ED visit. Include visits that occur on the date of the ED visit
Denominator:	Count of ED visits for Maternal Life360 HOME beneficiaries with a principal diagnosis of mental illness or intentional self-harm as of the date of ED visit with continuous enrollment from date of the ED visit through 30 days after the ED visit
Exclusion Criteria:	N/A
Continuous Enrollment:	No allowable gap in coverage during continuous enrollment period
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (FUM-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	NCQA national averages available
Deviations:	Paid claims only

Measure 1.D.10	**Pregnancy Home Visits**

Definition:	Home visits per month for Maternal Life360 HOME pregnant women during the measurement year
Numerator:	Count of home visits for Maternal Life360 HOME pregnant women during eligible beneficiary months in the measurement year
Denominator:	Count of eligible beneficiary months Maternal Life360 HOME pregnant women during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims and Life360 Case Management Data
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	N/A
Deviations:	N/A

Measure 1.D.11	**Child Home Visits**
Definition:	Home visits per month for children delivered to Maternal Life360 HOME mothers during the measurement year
Numerator:	Count of home visits for children delivered to Maternal Life360 HOME mothers during eligible beneficiary months in the measurement year
Denominator:	Count of eligible beneficiary months of children 0-2 during the measurement year who were delivered to Maternal Life360 HOME mothers
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims and Life360 Case Management Data

Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	N/A
Deviations:	N/A

Measure 1.D.12	**PND-E Prenatal Depression Screening**
Definition:	Percentage of deliveries in which Maternal Life360 HOME beneficiaries were screened for clinical depression during pregnancy using a standardized instrument.
Numerator:	Count of Maternal Life360 HOME beneficiaries with a depression screening between the pregnancy diagnosis date and the delivery date
Denominator:	Count of Maternal Life360 HOME beneficiaries with a delivery
Exclusion Criteria:	N/A
Continuous Enrollment:	Continuous enrollment during the pregnancy in a Maternal Life360 HOME.
Data Source(s):	Administrative Claims and Life360 Case Management Data
Measure Steward(s):	NCQA (PND-E)
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	NCQA national averages available
Deviations:	Paid claims only

Measure 1.D.13	PND-E Prenatal Depression Follow-up
Definition:	Percentage of deliveries in which Maternal Life360 HOME beneficiaries received follow-up care within 30 days of a positive depression screen finding.
Numerator:	Count of deliveries in which Maternal Life360 HOME beneficiaries received follow-up care on or up to 30 days after the date of the first positive depression screen
Denominator:	Count of all deliveries for Maternal Life360 HOME beneficiaries with a depression screening with a positive finding for depression during pregnancy.
Exclusion Criteria:	N/A
Continuous Enrollment:	Continuous enrollment during the pregnancy in a Maternal Life360 HOME.
Data Source(s):	Administrative Claims and Life360 Case Management Data
Measure Steward(s):	NCQA (PND-E)
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	NCQA national averages available
Deviations:	Paid claims only

Measure 1.D.14	PDS-E Postpartum Depression Screening
Definition:	Percentage of deliveries in which Maternal Life360 HOME beneficiaries were screened for clinical depression using a standardized instrument during the postpartum period.
Numerator:	Count of Maternal Life360 HOME beneficiaries with a depression screening between the delivery date and the end of the post-partum period after delivery (60 days)
Denominator:	Count of Maternal Life360 HOME beneficiaries with a delivery

Exclusion Criteria:	N/A
Continuous Enrollment:	Continuous enrollment during postpartum in a Maternal Life360 HOME.
Data Source(s):	Administrative Claims and Life360 Case Management Data
Measure Steward(s):	NCQA (PDS-E)
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	NCQA national averages available
Deviations:	Paid claims only

Measure 1.D.15	**PDS-E Postpartum Depression Follow-up**
Definition:	Percentage of deliveries in which Maternal Life360 HOME beneficiaries received follow-up care within 30 days of a positive depression screen finding.
Numerator:	Count of deliveries in which Maternal Life360 HOME beneficiaries received follow-up care on or up to 30 days after the date of the first positive depression screen
Denominator:	Count of all deliveries for Maternal Life360 HOME beneficiaries with a depression screening with a positive finding for depression during post-partum.
Exclusion Criteria:	N/A
Continuous Enrollment:	Continuous enrollment during the pregnancy in a Maternal Life360 HOME.
Data Source(s):	Administrative Claims and Life360 Case Management Data
Measure Steward(s):	NCQA (PDS-E)
Comparison Population:	N/A
Comparison Method(s):	Annual Tables

Statistic to Be Tested:	Descriptive with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	NCQA national averages available
Deviations:	Paid claims only

Measure 1.D.16	MPM Annual Monitoring for Patients on Persistent Medications
Definition:	Percentage of Maternal Life360 HOME beneficiaries who received at least 180 treatment days of ambulatory medication therapy for a select therapeutic agent during the measurement year and at least one therapeutic monitoring event for the therapeutic agent in the measurement year. Each of the two rates reported separately and as a total rate. • Annual monitoring for beneficiaries on angiotensin converting enzyme (ACE) inhibitors or angiotensin receptor blockers (ARB) • Annual monitoring for beneficiaries on diuretics • Total rate
Numerator:	Count of Maternal Life360 HOME beneficiaries with at least one serum potassium and a serum creatinine therapeutic monitoring test in the measurement year
Denominator:	Count of Maternal Life360 HOME beneficiaries on persistent medications (i.e., beneficiaries who received at least 180 treatment days of ambulatory medication in the measurement year)
Exclusion Criteria:	Maternal Life360 HOME beneficiaries with hospice care
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during each measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – MPM-AD in Medicaid Adult Core Set
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	NCQA national averages available

Deviations:	Paid claims only

Measure 1.D.17	**LRCD-CH Low Risk C-Section Rate**
Definition:	Percentage of Maternal Life360 HOME beneficiaries who delivered with classification as low risk C-section
Numerator:	Count of Maternal Life360 HOME beneficiaries who delivered via C-section and all the following additional criteria must be met: • The birth is a first live birth (Live Birth Order is "1") • Fetal Presentation is "Cephalic"; • The obstetric estimate of gestational age (OE Gestational Age Recode) is greater than or equal to 37 weeks • Plurality is "Single"
Denominator:	Count of live births for Maternal Life360 HOME beneficiaries with all the following additional criteria must be met: • The birth is a first live birth (Live Birth Order is "1") • Fetal Presentation is "Cephalic" • The obstetric estimate of gestational age (OE Gestational Age Recode) is greater than or equal to 37 weeks • Plurality is "Single"
Exclusion Criteria:	• Births to beneficiaries with previous live births or unknown parity (live birth order > 1 or "Unknown or Not Stated") • Delivery method is "Unknown or Not Stated" • Multiple gestations (plurality equal to "Twin," "Triplet," "Quadruplet," or "Quintuplet or higher") • Other or unknown presentations (fetal presentation equal to "Breech," "Other," "Unknown or Not Stated," or "Not Reported") • Gestational age < 37 weeks or "Unknown or Not Stated"
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims, ADH Birth Certificate Data
Measure Steward(s):	CMS/CDC Low Risk Cesarean Delivery- Child (LRCD-CH)

Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	Paid claims only

Measure 1.D.18	**C-Section Rate**
Definition:	Percentage of Maternal Life360 HOME beneficiaries with a delivery who delivered via C-section during the measurement year
Numerator:	Count of Maternal Life360 HOME beneficiaries who delivered via C-section during the measurement year
Denominator:	Count of Maternal Life360 HOME beneficiaries with a single live delivery during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims, ADH Birth Certificate Data
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	• Difference in group means • Subpopulation analyses (age, race/ethnicity, geography, etc.)
National Benchmark:	N/A
Deviations:	N/A

Measure 1.D.19	Maternal Mortality Rates
Definition:	Count of maternal deaths of Maternal Life360 HOME beneficiaries while pregnant or within 42 days of termination of pregnancy, per 100,000 during the measurement year
Numerator:	Count of maternal deaths of Maternal Life360 HOME beneficiaries within 42 days during the measurement year
Denominator:	Count of live births during the measurement year for Maternal Life360 HOME beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative and ADH Birth Certificate Data
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means with subpopulation analyses (age, race/ethnicity, geography, etc.)
National Benchmark:	N/A
Deviations:	N/A

Hypothesis 1.E. ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life360 HOME will have improved birth outcomes for their infants.

Measure 1.E.1	Low Birth Weight
Definition:	Percentage of live births weighing ≥ 1,500 grams and less than 2,500 grams at birth during the measurement year for Maternal Life360 HOME beneficiaries
Numerator:	Count of live births to Maternal Life360 HOME beneficiaries weighing ≥ 1,500 grams and less than 2,500 grams during the measurement year

Denominator:	Count of live births to Maternal Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	Birth weights that are "Unknown or Not Stated"
Continuous Enrollment:	Refer to population definition
Data Source(s):	ADH Birth Certificate Data
Measure Steward(s):	NCQA – LBW-CH in Medicaid Child Core Set
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means with subpopulation analyses (age, race/ethnicity, geography, etc.)
National Benchmark:	NCQA national averages available
Deviations:	N/A

Measure 1.E.2	**Very Low Birth Weight**
Definition:	Percentage of live births weighing less than 1,500 grams at birth during the measurement year for Maternal Life360 HOME beneficiaries
Numerator:	Count of live births to Maternal Life360 HOME beneficiaries weighing less than 1,500 grams during the measurement year
Denominator:	Count of live births to Maternal Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	Birth weights that are “Unknown or Not Stated”
Continuous Enrollment:	Refer to population definition
Data Source(s):	ADH Birth Certificate Data
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means

National Benchmark:	N/A
Deviations:	N/A

Measure 1.E.3	Pre-Term Births
Definition:	Percentage of live births occurring less than 37 weeks of pregnancy during the measurement year for Maternal Life360 HOME beneficiaries
Numerator:	Count of live births to Maternal Life360 HOME beneficiaries occurring less than 37 weeks of pregnancy during the measurement year
Denominator:	Count of live births to Maternal Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	ADH Birth Certificate Data
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	• Difference in group means • Subpopulation analyses (age, race/ethnicity, geography, etc.)
National Benchmark:	N/A
Deviations:	N/A

Measure 1.E.4	Live Births
Definition:	Percentage of live births during the measurement year for Maternal Life360 HOME beneficiaries

Numerator:	Count of Maternal Life360 HOME beneficiaries with live births during the measurement year
Denominator:	Count of Maternal Life360 HOME beneficiaries with deliveries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	ADH Birth Certificate Data
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means with subpopulation analyses (age, race/ethnicity, geography, etc.)
National Benchmark:	N/A
Deviations:	N/A

Measure 1.E.5	**Infant Mortality Rates**
Definition:	Count of child deaths of Maternal Life360 HOME beneficiaries within 60 days, 12 months, and 24 months of live birth, per 1,000 during the measurement year
Numerator:	Count of child deaths of Maternal Life360 HOME beneficiaries that occurred within 60 days, 12 months, and 24 months of live birth during the measurement year
Denominator:	Count of live births to Maternal Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative and ADH Birth Certificate Data

Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means with subpopulation analyses (age, race/ethnicity, geography, etc.)
National Benchmark:	N/A
Deviations:	N/A

Measure 1.E.6	**NICU Stay Rate**
Definition:	Percentage of live births to Maternal Life360 HOME beneficiaries with NICU stays during the measurement year
Numerator:	Count of NICU stays for babies born to Maternal Life360 HOME beneficiaries during the measurement year
Denominator:	Count of live births for Maternal Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims and ADH Birth Certificate Data
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means with subpopulation analyses (age, race/ethnicity, geography, etc.)
National Benchmark:	N/A
Deviations:	N/A

Hypothesis 1.F. ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life360 HOME will have greater satisfaction in the care provided.

Measure 1.F.1	Average Rating of Health Plan
Definition:	Percentage of Maternal Life360 HOME beneficiary responses with favorable ratings for health plan
Numerator:	Count of Maternal Life360 HOME beneficiary responses with ratings of 8, 9, or 10 (i.e., favorable) for best health plan
Denominator:	Count of Maternal Life360 HOME beneficiary respondents who answered the survey question
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	Comparison of answer frequency categories (low is a response of 0–7 and high is a response of 8–10), case-mix adjustment
Statistic to Be Tested:	Descriptive with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	CAHPS Health Plan Survey Database Chartbook
Deviations:	N/A

Measure 1.F.2	Average Rating of Health Care
Definition:	Percentage of Maternal Life360 HOME beneficiary responses with favorable ratings for overall health care received in the last 6 months
Numerator:	Count of Maternal Life360 HOME beneficiary responses with ratings of 8, 9, or 10 (i.e., favorable) for overall health care received in the last 6 months

Denominator:	Count of Maternal Life360 HOME beneficiary respondents who answered the survey question
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	Comparison of answer frequency categories (low is a response of 0–7 and high is a response of 8–10), case-mix adjustment
Statistic to Be Tested:	Descriptive with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	CAHPS Health Plan Survey Database Chartbook
Deviations:	N/A

Measure 1.F.3	**Average Rating of Primary Care Provider (PCP)**
Definition:	Percentage of Maternal Life360 HOME beneficiary responses with favorable ratings for personal doctor seen in the last 6 months
Numerator:	Count of Maternal Life360 HOME beneficiary responses with ratings of 8, 9, or 10 (i.e., favorable) for best personal doctor seen in the last 6 months
Denominator:	Count of Maternal Life360 HOME beneficiary respondents who answered the survey question and indicated they have a personal doctor
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences

Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	Comparison of answer frequency categories (low is a response of 0–7 and high is a response of 8–10), case-mix adjustment
Statistic to Be Tested:	Descriptive with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	CAHPS Health Plan Survey Database Chartbook
Deviations:	N/A

Measure 1.F.4	**Average Rating of Specialist**
Definition:	Percentage of Maternal Life360 HOME beneficiary responses with favorable ratings for a specialist the beneficiary saw the most in the last 6 months
Numerator:	Count of Maternal Life360 HOME beneficiary responses with ratings of 8, 9, or 10 (i.e., favorable) for best specialist the beneficiary saw the most in the last 6 months
Denominator:	Count of Maternal Life360 HOME beneficiary respondents who answered the survey question and indicated they have seen at least one specialist
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	Comparison of answer frequency categories (low is a response of 0–7 and high is a response of 8–10), case-mix adjustment
Statistic to Be Tested:	Descriptive with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	CAHPS Health Plan Survey Database Chartbook

Deviations:	N/A

Measure 1.F.5	Average Rating of Life360 Services
Definition:	Percentage of Maternal Life360 HOME beneficiary responses with favorable ratings in the ability of Maternal Life360 services to effectively address and mitigate identified HRSN needs
Numerator:	Count of Maternal Life360 HOME beneficiary responses with ratings of 8, 9, or 10 (i.e., favorable) for best Maternal Life360 services.
Denominator:	Count of Maternal Life360 HOME beneficiary respondents who answered the survey question
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	CAHPS Health Plan Survey Database Chartbook
Deviations:	N/A

Hypothesis 1.G. ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life360 HOME will have fewer health related social needs (HRSNs) for the mother compared to similar ARHOME beneficiaries in areas without a Maternal Life360 HOME.

Measure 1.G.1	Income – Average Household Income
Definition:	Average Maternal Life360 HOME beneficiary household income
Numerator:	Maternal Life360 HOME beneficiary household income during the measurement year

Denominator:	Count of Maternal Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Statewide Longitudinal Data System (SLDS)
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Measure 1.G.2	**Income Increase**
Definition:	Percentage change in income for Maternal Life360 HOME beneficiaries
Numerator:	Difference in income at the end of the measurement year compared to income at the end of the prior year for Maternal Life360 HOME beneficiaries
Denominator:	Income at the end of the prior year for Maternal Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Statewide Longitudinal Data System (SLDS)
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model

Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Measure 1.G.3	**Employment - Unemployment Rate (%) Annual Averages**
Definition:	Unemployment rate for Maternal Life360 HOME beneficiaries
Numerator:	Count of unemployed Maternal Life360 HOME beneficiaries during the measurement year
Denominator:	Count of Maternal Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Statewide Longitudinal Data System (SLDS)
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Measure 1.G.4	**Educational Attainment - High School Completion and Some College**
Definition:	Percentage of residents in Maternal Life360 HOME counties with high school completion and some college
Numerator:	Count of residents in Maternal Life360 counties with high school completion and some college during the measurement year

Denominator:	Count of residents in Maternal Life360 HOME counties during the measurement year with available educational attainment information
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	American Community Survey (ACS)
Measure Steward(s):	American Community Survey (ACS)
Comparison Population:	Similar residents in counties w/o Maternal Life360 HOME
Comparison Method(s):	Annual table
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	ACS national averages available
Deviations:	N/A

Measure 1.G.5	**Participated in Employment, Employment Training, or Post-Secondary Education**
Definition:	Percentage of Maternal Life360 HOME beneficiaries who participated in employment, employment training, or post-secondary education
Numerator:	Count of Maternal Life360 HOME beneficiaries who indicate participation in employment, employment training, or post-secondary education during the measurement year
Denominator:	Count of Maternal Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Statewide Longitudinal Data System (SLDS)
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME

Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Measure 1.G.6	**Housing Security/Affordability - ≥ 30% of Income**
Definition:	Percentage of residents in Maternal Life360 HOME counties who spend 30% or more of their household income on housing
Numerator:	Count of residents in Maternal Life360 HOME counties who spend 30% or more of their household income on housing during the measurement year
Denominator:	Count of residents in Maternal Life360 HOME counties during the measurement year with available income and housing information
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	American Community Survey (ACS)
Measure Steward(s):	American Community Survey (ACS)
Comparison Population:	Similar residents in counties w/o Maternal Life360 HOME
Comparison Method(s):	Annual table
Statistic to Be Tested:	Descriptive with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	ACS national averages available
Deviations:	N/A

Measure 1.G.7	**Housing Security/Affordability - Severe Housing Burden**

Definition:	Percentage of residents in Maternal Life360 HOME counties with high housing costs, with overcrowding, and lack of kitchen/plumbing facilities
Numerator:	Count of residents in Maternal Life360 HOME counties with high housing costs, with overcrowding, and lack of kitchen/plumbing facilities during the measurement year
Denominator:	Count of residents in Maternal Life360 HOME counties during the measurement year with available income, housing, and utilities information
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	American Community Survey (ACS)
Measure Steward(s):	American Community Survey (ACS)
Comparison Population:	Similar residents in counties w/o Maternal Life360 HOME
Comparison Method(s):	Annual table
Statistic to Be Tested:	Descriptive with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	ACS national averages available
Deviations:	N/A

Measure 1.G.8	Food Security - Food Insecurity Rate
Definition:	Food insecurity rate among residents in Maternal Life360 HOME counties modeled on the following county characteristics: unemployment rate, poverty rate, median income, percent Hispanic, percent African American, percent of residents who are homeowners, and percent of residents who report a disability.
Numerator:	Refer to methods in the technical brief, Map the Meal Gap 2022
Denominator:	Refer to methods in the technical brief, Map the Meal Gap 2022
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A

Data Source(s):	Feeding America (Map the Meal Gap)
Measure Steward(s):	Feeding America (Map the Meal Gap)
Comparison Population:	Similar residents in counties w/o Maternal Life360 HOME
Comparison Method(s):	Annual table
Statistic to Be Tested:	Descriptive with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	Map the Meal Gap national averages available
Deviations:	N/A

Measure 1.G.9	**Food Security - % Low Income & Low Access to Store / % No Car & Low Access to Store**
Definition:	Food security based on the percentage of residents in Maternal Life360 HOME counties with low income and low access to stores and percentage of residents with no car and low access to stores
Numerator:	• Count of residents in Maternal Life360 HOME counties with low income and living more than 1 mile from a supermarket or large grocery store if in an urban area, or more than 10 miles from a supermarket or large grocery store if in a rural area. • Count of housing units in the Maternal Life360 HOME county without a car and more than 1 miles from a supermarket or large grocery store
Denominator:	• Residents in Maternal Life360 HOME counties with low income • Housing units in Maternal Life360 HOME counties
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Food Environment Atlas, USDA
Measure Steward(s):	Food Environment Atlas, USDA
Comparison Population:	Similar residents in counties w/o Maternal Life360 HOME
Comparison Method(s):	Annual table
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square

National Benchmark:	Food Environment Atlas national averages available
Deviations:	N/A

Measure 1.G.10	Safety - Suicides, Injuries, Homicides, Firearm Fatalities
Definition:	Percentage of residents in Maternal Life360 HOME counties with deaths from suicides, injuries, homicides, or firearm fatalities
Numerator:	Count of residents in Maternal Life360 HOME counties with a cause of death listed as suicide, injury, homicide, or firearm fatality during the measurement year
Denominator:	Count of residents in Maternal Life360 HOME counties during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	National Vital Statistics System (NVSS)
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar residents in counties w/o Maternal Life360 HOME
Comparison Method(s):	Annual table
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	N/A
Deviations:	N/A

Measure 1.G.11	Receipt of Educational, Employment, or Other Social Services
Definition:	Percentage of Maternal Life360 HOME beneficiaries receiving educational, employment, or other social services
Numerator:	Count of Maternal Life360 HOME beneficiaries receiving educational, employment, or other social services
Denominator:	Count of Maternal Life360 HOME beneficiaries during the measurement year

Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative, Statewide Longitudinal Data System (SLDS)
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Hypothesis 1.H. ARHOME beneficiaries with high-risk pregnancies who receive services from a Maternal Life360 HOME will have lower total health care cost for the mother and infant through the first two years of life compared to similar ARHOME beneficiaries in areas without a Maternal Life360 HOME.

Measure 1.H.1	Total Medicaid Spend
Definition:	Total Medicaid spend per Maternal Life360 HOME beneficiary
Numerator:	Total Medicaid spend - Inpatient/outpatient/emergency/ pharmacy spend for Maternal Life360 HOME beneficiaries
Denominator:	Count of Maternal Life360 HOME beneficiaries
Exclusion Criteria:	Post-acute, durable medical equipment (DME), and hospice claims
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	North Carolina Department of Health and Human Services – Enhanced Case Management and Other Services Pilots Evaluation Design
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	• IPTW / CEM, beneficiary-level weighted regression model • ITS / Pre-Post DiD

Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Measure 1.H.2	**Emergency Department (ED) Costs**
Definition:	Total Medicaid spend on ED visits per Maternal Life360 HOME beneficiary
Numerator:	Total Medicaid spend on ED visits for Maternal Life360 HOME beneficiaries
Denominator:	Count of Maternal Life360 HOME beneficiaries
Exclusion Criteria:	Post-acute, durable medical equipment (DME), and hospice claims
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	• IPTW / CEM, beneficiary-level weighted regression model • ITS / Pre-Post DiD
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Measure 1.H.3	**Hospitalization Costs**
Definition:	Total Medicaid spend on Inpatient hospitalizations (including psychiatric care) per Maternal Life360 HOME beneficiary
Numerator:	Total Medicaid spend on inpatient hospitalizations for Maternal Life360 HOME beneficiaries
Denominator:	Count of Maternal Life360 HOME beneficiaries
Exclusion Criteria:	Post-acute, durable medical equipment (DME), and hospice claims

Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	• IPTW / CEM, beneficiary-level weighted regression model • ITS / Pre-Post DiD
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Hypothesis 1.I. ARHOME Maternal Life360 beneficiaries will be screened for unmet HRSN and receive a corresponding intervention if they screened positive.

Measure 1.I.1	**SNS-E Food Screening**
Definition:	Percentage of Maternal Life360 HOME beneficiaries who were screened for food insecurity
Numerator:	Count of Maternal Life360 HOME beneficiaries screened for a food insecurity such as uncertain, limited, or unstable access to food that is: adequate in quantity and in nutritional quality; culturally acceptable; safe and acquired in socially acceptable ways.
Denominator:	Count of Maternal Life360 HOME beneficiaries
Exclusion Criteria:	Less than 18 years old or older than 65 years old
Continuous Enrollment:	Refer to population definition
Data Source(s):	Maternal Life360 HOME HRSN Screening Data and Referrals
Measure Steward(s):	NCQA Social Need Screening & Intervention (SNS-E)
Comparison Population:	N/A
Comparison Method(s):	Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square

National Benchmark:	NCQA National averages available
Deviations:	N/A

Measure 1.I.2	SNS-E Food Intervention
Definition:	Percentage of Maternal Life360 HOME beneficiaries who received a corresponding intervention within 1 month of screening positive for food insecurity.
Numerator:	Count of Maternal Life360 HOME beneficiaries that screened positive for a food insecurity who received an intervention within 1 month of identification
Denominator:	Count of Maternal Life360 HOME beneficiaries who screened positive for a food insecurity
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Maternal Life360 HOME HRSN Screening Data and Referrals
Measure Steward(s):	NCQA Social Need Screening & Intervention (SNS-E)
Comparison Population:	N/A
Comparison Method(s):	Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	NCQA National averages available
Deviations:	N/A

Measure 1.I.3	SNS-E Housing Screening
Definition:	Percentage of Maternal Life360 HOME beneficiaries who were screened for housing instability, homelessness, or housing inadequacy.

Numerator:	Count of Maternal Life360 HOME beneficiaries that screened for a housing insecurity such as for housing instability, homelessness, or housing inadequacy.
Denominator:	Count of Maternal Life360 HOME beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Maternal Life360 HOME HRSN Screening Data and Referrals
Measure Steward(s):	NCQA Social Need Screening & Intervention (SNS-E)
Comparison Population:	N/A
Comparison Method(s):	Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	NCQA National averages available
Deviations:	N/A

Measure 1.I.4	**SNS-E Housing Intervention**
Definition:	Percentage of Maternal Life360 HOME beneficiaries who received a corresponding intervention within 1 month of screening positive for housing instability, homelessness, or housing inadequacy.
Numerator:	Count of Maternal Life360 HOME beneficiaries that screened positive for a housing insecurity who received a corresponding intervention within 1 month of identification
Denominator:	Count of Maternal Life360 HOME beneficiaries who screened positive for a housing insecurity
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Maternal Life360 HOME HRSN Screening Data and Referrals
Measure Steward(s):	NCQA Social Need Screening & Intervention (SNS-E)

Comparison Population:	N/A
Comparison Method(s):	Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	NCQA National averages available
Deviations:	N/A

Measure 1.I.5	**SNS-E Transportation Screening**
Definition:	Percentage of Maternal Life360 HOME beneficiaries who were screened for transportation insecurity.
Numerator:	Count of Maternal Life360 HOME beneficiaries who were screened for uncertain, limited or no access to safe, reliable, accessible, affordable, and socially acceptable transportation infrastructure and modalities necessary for maintaining one's health, well-being or livelihood.
Denominator:	Count of Maternal Life360 HOME beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Maternal Life360 HOME HRSN Screening Data and Referrals
Measure Steward(s):	NCQA Social Need Screening & Intervention (SNS-E)
Comparison Population:	N/A
Comparison Method(s):	Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	NCQA National averages available
Deviations:	N/A

Measure 1.I.6	**SNS-E Transportation Intervention**

Definition:	Percentage of Maternal Life360 HOME beneficiaries who received a corresponding intervention within 1 month of screening positive for transportation insecurity.
Numerator:	Count of Maternal Life360 HOME beneficiaries that screened positive for a transportation insecurity who received a corresponding intervention within 1 month of identification
Denominator:	Count of Maternal Life360 HOME beneficiaries who screened positive for a transportation insecurity
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Maternal LIfe360 HOME HRSN Screening Data and Referrals
Measure Steward(s):	NCQA Social Need Screening & Intervention (SNS-E)
Comparison Population:	N/A
Comparison Method(s):	Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	NCQA National averages available
Deviations:	N/A

Measure 1.I.7	**Interpersonal Violence Screening**
Definition:	Percentage of Maternal Life360 HOME beneficiaries who were screened for interpersonal violence
Numerator:	Count of Maternal Life360 HOME beneficiaries screened for interpersonal violence
Denominator:	Count of Maternal Life360 HOME beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Maternal Life360 HOME HRSN Screening Data and Referrals

Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	N/A
Deviations:	N/A

Measure 1.I.8	**Interpersonal Violence Intervention**
Definition:	Percentage of Maternal Life360 HOME beneficiaries who received a corresponding intervention within 1 month of screening positive for interpersonal violence
Numerator:	Count of Maternal Life360 HOME beneficiaries that screened positive for interpersonal violence who received a corresponding intervention within 1 month of identification
Denominator:	Count of Maternal Life360 HOME beneficiaries who screened positive for interpersonal violence
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Maternal Life360 HOME HRSN Screening Data and Referrals
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive with subpopulation analyses (age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	N/A
Deviations:	N/A

Measure 1.I.9	Prior Screening of HRSN Needs
Definition:	Percentage of Maternal Life360 HOME beneficiaries that were ever screened for HRSN needs prior to enrollment
Numerator:	Count of Maternal Life360 HOME beneficiaries in the measurement year that were ever screened for HRSN needs prior to enrollment
Denominator:	Count of Maternal Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Life360 Case Management Data
Measure Steward(s):	DMS Homegrown
Comparison Group:	N/A
Comparison Method(s):	Annual tables
Statistic to Be Tested:	Descriptive; Chi-square
National Benchmark:	N/A
Deviations:	N/A

Measure 1.I.10	Prior Utilization of HRSN related Services
Definition:	Percentage of Maternal Life360 HOME beneficiaries that had ever utilized HRSN social services prior to enrollment
Numerator:	Count of Maternal Life360 HOME beneficiaries in the measurement year that has ever utilized HRSN social services prior to enrollment
Denominator:	Count of Maternal Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A

Data Source(s):	Life360 Case Management Data
Measure Steward(s):	DMS Homegrown
Comparison Group:	N/A
Comparison Method(s):	Annual tables
Statistic to Be Tested:	Descriptive; Chi-square
National Benchmark:	N/A
Deviations:	N/A

Measure 1.I.11	Supplemental Nutrition Assistance Program (SNAP/WIC) Enrollment
Definition:	Percentage of Maternal Life360 HOME beneficiaries who were enrolled in SNAP/WIC during the measurement year
Numerator:	Count of Maternal Life360 HOME beneficiaries enrolled in SNAP/WIC during the measurement year
Denominator:	Count of Maternal Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	SNAP/WIC data
Measure Steward(s):	DMS Homegrown
Comparison Group:	Similar beneficiaries in counties w/o Maternal Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Goal 2. Rural Life360 HOME will support beneficiaries with a serious mental illness (SMI) or substance use disorder (SUD) diagnosis who live in rural areas of the state through intensive care coordination provided directly or through contracts with organizations to provide care coordination.

Hypothesis 2.A. ARHOME beneficiaries with SMI or SUD who receive services from a Rural Life360 HOME will have greater use of preventive and other primary care services.

Measure 2.A.1	COL-AD Colorectal Cancer Screening
Definition:	Percentage of Rural Life360 HOME beneficiaries who had a screen for colorectal cancer
Numerator:	Count of Rural Life360 HOME beneficiaries with one or more screens for colorectal cancer during the measurement year or the 12 months prior to the measurement year
Denominator:	Count of Rural Life360 HOME beneficiaries on the anchor (last) date of the measurement year
Exclusion Criteria:	Rural Life360 HOME beneficiaries with hospice care
Continuous Enrollment:	Year prior to the measurement year through December 31 of the measurement year. No more than 45 days or a 1-month gap of coverage during each full calendar year of continuous enrollment. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – COL-AD (Adult) in Medicaid Adult Core Set
Comparison Group:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM; beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set
Deviations:	Maximum age adjusted to 64. Paid claims only.

Measure 2.A.2	BCS-AD Breast Cancer Screening
Definition:	Percentage of Rural Life360 HOME beneficiaries who had a mammogram to screen for breast cancer
Numerator:	Count of Rural Life360 HOME beneficiaries with one or more mammograms during the measurement year or the 15 months prior to the measurement year
Denominator:	Count of Rural Life360 HOME beneficiaries on the anchor (last) date of the measurement year
Exclusion Criteria:	Rural Life360 HOME beneficiaries with hospice care
Continuous Enrollment:	October 1 two years prior to the measurement year through December 31 of the measurement year. No more than 45 days or a 1-month gap of coverage during each full calendar year of continuous enrollment. No gaps in enrollment are allowed from October 1 through December 31, two years prior to the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – BCS-AD (Adult) in Medicaid Adult Core Set
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM; beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set
Deviations:	Maximum age adjusted to 64. Paid claims only.

Measure 2.A.3	CCS-AD Cervical Cancer Screening
Definition:	Percentage of Rural Life360 HOME beneficiaries who were screened for cervical cancer

Numerator:	Count of Rural Life360 HOME beneficiaries who were screened for cervical cancer, as defined by • Cervical cytology performed during the measurement year or the two years prior to the measurement year • Or cervical cytology/human papillomavirus (HPV) co-testing performed during the measurement year or the four years prior to the measurement year, for beneficiaries who were at least 30 years old on the date of both tests
Denominator:	Count of Rural Life360 HOME beneficiaries as of December 31 of the measurement year who were eligible for cervical cancer screenings
Exclusion Criteria:	Rural Life360 HOME beneficiaries with hospice care. Hysterectomy with no residual cervix, cervical agenesis, or acquired absence of cervix any time during the beneficiary's history through December 31 of the measurement year
Continuous Enrollment:	No more than one gap in enrollment of up to 45 days or 1 month during each year of continuous enrollment. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – CCS-AD (Adult) in Medicaid Adult Core Set
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM; beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set
Deviations:	Paid claims only

Measure 2.A.4	**CHL-AD Chlamydia Screening in Women**
Definition:	Percentage of Rural Life360 HOME women who were identified as sexually active and who had at least one test for chlamydia during the measurement year
Numerator:	Count of Rural Life360 HOME women with at least one chlamydia test during the measurement year

Denominator:	Count of Rural Life360 HOME women as of December 31 of the measurement year who are sexually active
Exclusion Criteria:	Rural Life360 HOME women who qualified for the denominator based on a pregnancy test alone and who meet either of the following: • A pregnancy test during the measurement year and a prescription for isotretinoin on the date of the pregnancy test or within the 6 days after the pregnancy test • A pregnancy test during the measurement year and an x-ray on the date of the pregnancy test or within the 6 days after the pregnancy test
Continuous Enrollment:	No more than one gap in enrollment of up to 45 days or 1 month during each year of continuous enrollment. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – CHL-AD (Adult) in Medicaid Adult Core Set
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM; beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set
Deviations:	Paid claims only

Measure 2.A.5	SPD Statin Therapy for Patients with Diabetes
Definition:	Percentage of Rural Life360 HOME beneficiaries during the measurement year with diabetes who do not have clinical atherosclerotic cardiovascular disease (ASCVD) who were dispensed at least one statin medication of any intensity during the measurement year.
Numerator:	Count of Rural Life360 HOME beneficiaries who were dispensed at least one statin medication of any intensity during the measurement year
Denominator:	Count of Rural Life360 HOME beneficiaries during the measurement year with diabetes who do not have clinical atherosclerotic cardiovascular disease (ASCVD)

Exclusion Criteria:	Rural Life360 HOME beneficiaries with hospice care. Rural Life360 HOME beneficiaries with cardiovascular disease identified by event or diagnosis; diagnosis of pregnancy; in vitro fertilization; dispensed clomiphene; ESRD without telehealth; cirrhosis; or myalgia, myositis, myopathy, or rhabdomyolysis
Continuous Enrollment:	The measurement year and the year prior to the measurement year. No more than one gap in enrollment of up to 45 days or 1 month during each year of continuous enrollment. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – Healthcare Effectiveness Data and Information Set (HEDIS) SPD
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM; beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	HEDIS Medicaid national rates
Deviations:	Maximum age adjusted to 64. Paid claims only.

Measure 2.A.6	CDC Comprehensive Diabetes Care: Hemoglobin A1c Testing
Definition:	Percentage of Rural Life360 HOME beneficiaries with diabetes (type 1 or type 2) who had Hemoglobin A1c (HbA1c) testing performed
Numerator:	Count of Rural Life360 HOME beneficiaries with diabetes (type 1 or 2) and an HbA1c test performed during the measurement year
Denominator:	Count of Rural Life360 HOME beneficiaries identified as having diabetes (type 1 or 2) during the measurement year or the year prior to the measurement year
Exclusion Criteria:	Rural Life360 HOME beneficiaries with hospice care
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – HA1C-AD in Medicaid Adult Core Set
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM; beneficiary-level weighted regression model

Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, race/ethnicity, geography, etc.)
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rate
Deviations:	Minimum age adjusted to 19, and maximum age adjusted to 64. Paid claims only.

Measure 2.A.7	**AAP Adults' Access to Preventive/Ambulatory Health Services**
Definition:	Percentage of Rural Life360 HOME beneficiaries who had an ambulatory or preventive care visit during the measurement year
Numerator:	Count of Rural Life360 HOME beneficiaries with one or more ambulatory or preventive care visits during the measurement year
Denominator:	Count of eligible Rural Life360 HOME beneficiaries as of December 31 of the measurement year
Exclusion Criteria:	Rural Life360 HOME beneficiaries with hospice care or using hospice service at any time during the measurement year
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA - HEDIS AAP
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	• IPTW / CEM, beneficiary-level weighted regression model • ITS / Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, race/ethnicity, geography, etc.)
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rate
Deviations:	Maximum age adjusted to 64. Paid claims only.

Measure 2.A.8	SMD Diabetes Monitoring for People with Diabetes and Schizophrenia
Definition:	Percentage of Rural Life360 HOME beneficiaries with schizophrenia and diabetes who had had both an LDL-C test and an HbA1c test during the measurement year
Numerator:	Count of Rural Life360 HOME beneficiaries with schizophrenia and diabetes who had both an LDL-C test and an HbA1c test during the measurement year
Denominator:	Count of Rural Life360 HOME beneficiaries with schizophrenia and diabetes as of Dec 31 of the measurement year
Exclusion Criteria:	Rural Life360 HOME beneficiaries in hospice or using hospice services during the measurement year
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year and the year prior to the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – SMD
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	Minimum age adjusted to 19, and maximum age adjusted to 64. Paid claims only.

Measure 2.A.9	SMC Cardiovascular Monitoring for People with Cardiovascular Disease and Schizophrenia
Definition:	Percentage of Rural Life360 HOME beneficiaries with schizophrenia and cardiovascular disease who had an LDL-C test during the measurement year
Numerator:	Count of Rural Life360 HOME beneficiaries with schizophrenia and cardiovascular disease who had an LDL-C test during the measurement year
Denominator:	Count of Rural Life360 HOME beneficiaries with schizophrenia and cardiovascular disease as of Dec 31 of the measurement year

Exclusion Criteria:	Rural Life360 HOME beneficiaries in hospice or using hospice services during the measurement year
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year and the year prior to the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – SMC
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	Minimum age adjusted to 19, and maximum age adjusted to 64. Paid claims only.

Measure 2.A.10	**AMR Asthma Medication Ratio**
Definition:	Percentage of Rural Life360 HOME beneficiaries who were identified as having persistent asthma and had a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year
Numerator:	Count of Rural Life360 HOME beneficiaries who were identified as having persistent asthma and had a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year
Denominator:	Count of Rural Life360 HOME beneficiaries who were identified as having persistent asthma as of December 31 of the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year and the year prior to the measurement year. Anchor date: December 31 of the measurement year.

Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA –AMR-AD in Medicaid Adult Core Set
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rate
Deviation(s):	Paid claims only

Measure 2.A.11	**CCW Contraceptive Care – All Women**
Definition:	Percentage of Rural Life360 HOME women at risk of unintended pregnancy that were provided a most effective or moderately effective method of contraception
Numerator:	Count of Rural Life360 HOME women at risk of unintended pregnancy that were provided a most effective or moderately effective method of contraception
Denominator:	Count of Rural Life360 HOME women at risk of unintended pregnancy as of Dec 31 of the measurement year
Exclusion Criteria:	Rural Life360 HOME women not at risk of unintended pregnancy because they were infecund due to non-contraceptive reasons such as natural menopause or oophorectomy; Had a live birth in the last 2 months of the measurement year. Women still pregnant at the end of the year.
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year and the year prior to the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – CCW-AD in Medicaid Adult Core Set
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates

Deviation(s):	Paid claims only. Only calculating Rate 1 of CCW.

Measure 2.A.12	PCP Assigned
Definition:	Percentage of Rural Life360 HOME beneficiaries that have a PCP assigned at any point during the measurement year
Numerator:	Count of Rural Life360 HOME beneficiaries who had a PCP assigned to them during the measurement year
Denominator:	Count of Rural Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims and Life360 Case Management Data
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	N/A
Deviations:	N/A

Measure 2.A.13	PCP Visits
Definition:	Percentage of Rural Life360 HOME beneficiaries who had a PCP visit during the measurement year
Numerator:	Count of Rural Life360 HOME beneficiaries who had a PCP visit during the measurement year
Denominator:	Count of Rural Life360 HOME beneficiaries during the measurement year

Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims and Life360 Case Management Data
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, race/ethnicity, geography, etc.)
National Benchmark:	N/A
Deviations:	N/A

Measure 2.A.14	**Person-Centered Action Plan Milestone Achievement**
Definition:	Percentage of Rural Life360 HOME beneficiaries with person-centered action plans who achieved one or more milestones during the measurement year
Numerator:	Count of Rural Life360 HOME beneficiaries who have met one or more milestones during the measurement year
Denominator:	Count of Rural Life360 HOME beneficiaries who have a person-centered action plan during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Life360 Case Management Data
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	Annual Tables

Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	N/A
Deviations:	N/A

Hypothesis 2.B. ARHOME beneficiar ies with SMI or SUD who receive services from a Rural Life360 HOME will have greater satisfaction in the care provided.

Measure 2.B.1	**Average Rating of Health Plan**
Definition:	Percentage of Rural Life360 HOME beneficiary responses with favorable ratings for health plan
Numerator:	Count of Rural Life360 HOME beneficiary responses with ratings of 8, 9, or 10 (i.e., favorable) for best health plan
Denominator:	Count of Rural Life360 HOME beneficiary respondents who answered the survey question
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	Comparison of answer frequency categories (low is a response of 0–7 and high is a response of 8–10), case-mix adjustment
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	CAHPS Health Plan Survey Database Chartbook
Deviations:	N/A

Measure 2.B.2	Average Rating of Health Care
Definition:	Percentage of Rural Life360 HOME beneficiary responses with favorable ratings for overall health care received in the last 6 months
Numerator:	Count of Rural Life360 HOME beneficiary responses with ratings of 8, 9, or 10 (i.e., favorable) for overall health care received in the last 6 months
Denominator:	Count of Rural Life360 HOME beneficiary respondents who answered the survey question
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	Comparison of answer frequency categories (low is a response of 0–7 and high is a response of 8–10), case-mix adjustment
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	CAHPS Health Plan Survey Database Chartbook
Deviations:	N/A

Measure 2.B.3	Average Rating of Primary Care Provider (PCP)
Definition:	Percentage of Rural Life360 HOME beneficiary responses with favorable ratings for personal doctor seen in the last 6 months
Numerator:	Count of Rural Life360 HOME beneficiary responses with ratings of 8, 9, or 10 (i.e., favorable) for best personal doctor seen in the last 6 months
Denominator:	Count of Rural Life360 HOME beneficiary respondents who answered the survey question and indicated they have a personal doctor
Exclusion Criteria:	N/A

Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	Comparison of answer frequency categories (low is a response of 0–7 and high is a response of 8–10), case-mix adjustment
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	CAHPS Health Plan Survey Database Chartbook
Deviations:	N/A

Measure 2.B.4	**Average Rating of Specialist**
Definition:	Percentage of Rural Life360 HOME beneficiary responses with favorable ratings for a specialist the beneficiary saw the most in the last 6 months
Numerator:	Count of Rural Life360 HOME beneficiary responses with ratings of 8, 9, or 10 (i.e., favorable) for best specialist the beneficiary saw the most in the last 6 months
Denominator:	Count of Rural Life360 HOME beneficiary respondents who answered the survey question and indicated they have seen at least one specialist
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	Comparison of answer frequency categories (low is a response of 0–7 and high is a response of 8–10), case-mix adjustment
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	CAHPS Health Plan Survey Database Chartbook

Deviations:	N/A

Measure 2.B.5	Average Rating of Life360 Services
Definition:	Percentage of Rural Life360 HOME beneficiary responses with favorable ratings in the ability of Rural Life360 services to effectively address and mitigate identified HRSN needs
Numerator:	Count of Rural Life360 HOME beneficiary responses with ratings of 8, 9, or 10 (i.e., favorable) for best Rural Life360 services.
Denominator:	Count of Rural Life360 HOME beneficiary respondents who answered the survey question
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	CAHPS Health Plan Survey Database Chartbook
Deviations:	N/A

Hypothesis 2.C. ARHOME beneficiaries with SMI or SUD who receive services from a Rural Life360 HOME will have lower non-emergent use of emergency department services.

Measure 2.C.1	Non-Emergent Emergency Department (ED) Visits
Definition:	Non-Emergent ED visits as a percentage of all classified ED visits using the New York University (NYU) ED algorithm for Rural Life360 HOME beneficiaries
Numerator:	Count of non-emergent ED visits for Rural Life360 HOME beneficiaries
Denominator:	Count of total ED visits classified by the NYU algorithm for Rural

	Life360 HOME beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	NYU ED Algorithm
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	• IPTW / CEM, beneficiary-level weighted regression model • ITS / Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, race/ethnicity, geography, etc.)
National Benchmark:	N/A
Deviations:	Paid claims only

Measure 2.C.2	**Emergent Emergency Department (ED) Visits**
Definition:	Emergent ED Visits as a percentage of all classified ED visits using the NYU ED algorithm for Rural Life360 HOME beneficiaries
Numerator:	Count of emergent ED visits for Rural Life360 HOME beneficiaries
Denominator:	Count of total ED visits classified by the NYU algorithm for Rural Life360 HOME beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	NYU ED Algorithm
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME

Comparison Method(s):	• IPTW / CEM, beneficiary-level weighted regression model • ITS / Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, race/ethnicity, geography, etc.)
National Benchmark:	N/A
Deviations:	Paid claims only

Hypothesis 2.D. ARHOME beneficiaries with SMI or SUD who receive services from a Rural Life360 HOME will have lower incidence of preventable hospital admissions and re-admissions.

Measure 2.D.1	**Preventable Emergency Department (ED) Visits**
Definition:	Percentage of emergency visits classified as preventable by the NYU ED algorithm for Rural Life360 HOME beneficiaries
Numerator:	Count of emergency department visits classified as preventable/avoidable for Rural Life360 HOME beneficiaries
Denominator:	Count of total emergency department visits classified as preventable/avoidable and not preventable/avoidable (equals all visits that are emergent, ED care needed) for Rural Life360 HOME beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	NYU ED Algorithm
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	• IPTW / CEM, beneficiary-level weighted regression model • ITS / Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, race/ethnicity, geography, etc.)
National Benchmark:	N/A

Deviations:	Paid claims only

Measure 2.D.2	PCR-AD Plan All-Cause Readmissions
Definition:	Count of acute inpatient stays for Rural Life360 HOME beneficiaries during the measurement year that were followed by an unplanned acute readmission for any diagnosis within 30 days and the predicted probability of an acute readmission.
Numerator:	Count of acute readmissions for any diagnosis within 30 days of the Index Discharge Date for Rural Life360 HOME beneficiaries. Exclude admissions with a principal diagnosis of pregnancy, a condition originating in the perinatal period, or planned admissions
Denominator:	Count of total acute inpatient discharges for Rural Life360 HOME beneficiaries who had one or more discharges on or between January 1 and December 1 of the measurement year
Exclusion Criteria:	Rural Life360 HOME beneficiaries with hospital stays where the Index Admission Date is the same as the Index Discharge Date, where the beneficiary died during the stay, or with a principal diagnosis of pregnancy or a condition originating in the perinatal period
Continuous Enrollment:	365 days prior to the Index Discharge Date through 30 days after the Index Discharge Date. No more than 1 gap of 45 days or 1 month.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (PCR-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	• IPTW / CEM, beneficiary-level weighted regression model • ITS / Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, race/ethnicity, geography, etc.)
National Benchmark:	NCQA national averages available
Deviations:	Paid claims only

Measure 2.D.3	IPF 30-Day All-Cause Unplanned Readmission Following Psychiatric Hospitalization in an Inpatient Psychiatric Facility
Definition:	Facility-level measure for Rural Life360 HOME beneficiaries estimates for an unplanned, 30 days, risk-standardized readmission rate for adult patients discharged from an inpatient psychiatric facility with a principal discharge diagnosis of a psychiatric disorder or dementia/Alzheimer's disease.
Numerator:	The risk-adjusted outcome measure does not have a traditional numerator. A readmission is defined as any admission, for any reason, to an IPF or a short-stay acute care hospital (including Critical Access Hospitals) that occurs within 3-30 days after the discharge date from an eligible index admission to an IPF. The measure uses the CMS 30-day HWR Measure Planned Readmission Algorithm, Version 4.0, to identify planned readmissions.
Denominator:	The risk-adjusted outcome measure does not have a traditional denominator. The measure is based on all eligible index admissions from any Rural Life360 HOME beneficiary. A readmission within 30 days will also be eligible as an index admission if it meets all other eligibility criteria. Rural Life360 HOME beneficiaries may have more than one index admission within the measurement period. The denominator includes admissions to IPFs for Rural Life360 HOME beneficiaries: - Discharged with a principal diagnosis that indicates psychiatric disorder (AHRQ CCS 650-670) - Discharged alive - Age 18 or older at admission - Enrolled in Medicare FFS Parts A and B during the 12 months before the admission date, month of admission, and at least one month after the month of discharge from the index admission. The performance period used to identify cases in the denominator is 24 months. Data from 12 months prior to the start of the performance period through the performance period are used to identify risk factors.
Exclusion Criteria:	The denominator excludes admissions for Rural Life360 HOME beneficiaries with the following characteristics: 1. Discharged against medical advice (AMA) 2. With unreliable demographic and vital status data defined as the following: - Age greater than 115 years - Missing gender - Discharge status of "dead" but with subsequent admissions - Death date prior to admission date - Death date within the admission and discharge dates but the discharge status was not "dead" 3. Readmissions on the day of discharge or day following discharge because those readmissions are likely transfers to another inpatient facility. The hospital that discharges the Rural Life360 HOME beneficiary to home or a non-acute care setting is accountable for subsequent readmissions.
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims

Measure Steward(s):	Centers for Medicare & Medicaid Services (CMS)
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	Paid claims only

Measure 2.D.4	**FMC Follow-Up After Emergency Department Visit for People With Multiple High-Risk Chronic Conditions**
Definition:	Percentage of ED visits during the measurement year for Rural Life360 HOME beneficiaries who have multiple high-risk chronic conditions who had a follow-up service within 7 days of the ED visit
Numerator:	Count of Rural Life360 HOME beneficiaries who have 2 or more chronic conditions diagnosed prior to the ED visit during the measurement year and had a follow-up service within 7 days of the ED visit
Denominator:	Count of Rural Life360 HOME beneficiaries who have 2 or more chronic conditions diagnosed prior to the ED visit during the measurement year
Exclusion Criteria:	Rural Life360 HOME beneficiaries in hospice or using hospice services during the measurement year
Continuous Enrollment:	No more than one gap in enrollment of up to 45 days during the 365 days prior to the ED visit and no gap during the 7 days following the ED visit.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – FMC
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	NCQA national averages available

Deviations:	Paid claims only

Hypothesis 2.E. ARHOME beneficiaries with SMI or SUD who receive services from a Rural Life360 HOME will experience better quality of care.

Measure 2.E.1	**IET Initiation and Engagement of Substance Use Disorder Treatment**
Definition:	Percentage of Rural Life360 HOME beneficiaries with a new episode of substance use disorder: • Total rate of Initiation of SUD treatment • Total rate of Engagement of SUD treatment
Numerator:	• Count of Rural Life360 HOME beneficiaries with initiation of SUD treatment within 14 days of the SUD episode date – definition depends on whether the SUD Episode was an inpatient discharge or not. • Count of Rural Life360 HOME beneficiaries with engagement of SUD treatment within 34 days after initiation: Identify all beneficiaries compliant for the initiation of SUD treatment numerator that have evidence of treatment– definition depends on whether the treatment was initiated via an inpatient admission.
Denominator:	Count of Rural Life360 HOME beneficiaries as of Dec 31 of the measurement year with continuous enrollment being 194 days prior to the SUD Episode Date through 47 days after the SUD Episode Date (242 total days).
Exclusion Criteria:	• Exclude Rural Life360 HOME beneficiaries from the denominator for both indicators (Initiation of SUD Treatment and Engagement of SUD Treatment) if the initiation of treatment event is an inpatient stay with a discharge date after November 27 of the measurement year. • Beneficiaries in hospice or using hospice services anytime during the measurement year. • Beneficiaries with any SUD diagnosis history or SUD medication history in the 194-day period before the index date.
Continuous Enrollment:	No allowable gaps in the continuous enrollment period
Data Source(s):	Administrative Claims

Measure Steward(s):	NCQA (IET-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	NCQA national averages available
Deviations:	Paid claims only

Measure 2.E.2	**AMM Antidepressant Medication Management**
Definition:	Percentage of Rural Life360 HOME beneficiaries who were treated with antidepressant medication, had a diagnosis of major depression, and who remained on an antidepressant medication treatment
Numerator:	Two rates: • Effective Acute Phase Treatment – count of Rural Life360 HOME beneficiaries with at least 84 days of treatment with antidepressant medication beginning on the Index Prescription Start Date (IPSD) through 114 days after the IPSD. Allowable gaps total up to 31 days. • Effective continuation phase treatment – count of Rural Life360 HOME beneficiaries with at least 180 days of treatment with antidepressant medication beginning on the IPSD through 231 days after IPSD. Allowable gaps total up to 52 days
Denominator:	Count of Rural Life360 HOME beneficiaries as of April 30 of the measurement year with continuous enrollment of 105 days prior to the IPSD through 231 days after the IPSD
Exclusion Criteria:	N/A
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year and the year prior to the measurement year. Anchor date: IPSD
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA –AMM-AD in Medicaid Adult Core Set

Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means, results reported at two rates with subpopulation analyses (sex, age, race/ethnicity, geography, etc.)
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates
Deviation(s):	Minimum age adjusted to 19, and maximum age adjusted to 64. Paid claims only.

Measure 2.E.3	**FUH-AD Follow-Up After Hospitalization for Mental Illness**
Definition:	Percentage of discharges for Rural Life360 HOME beneficiaries who were hospitalized for treatment of selected mental illness diagnoses or intentional self-harm and who had a follow-up visit with a mental health practitioner. Two rates are reported: • Percentage of discharges for which the Rural Life360 HOME beneficiaries received follow-up within 30 days of discharge • Percentage of discharges for which the Rural Life360 HOME beneficiaries received follow-up within 7 days of discharge
Numerator:	Count of follow-up visits for Rural Life360 HOME beneficiaries with a mental health practitioner within (30 or 7) days after discharge. Do not include visits that occur on the date of Discharge.
Denominator:	Count of acute inpatient discharges for Rural Life360 HOME beneficiaries with a principal diagnosis of mental illness or intentional self-harm during the measurement year
Exclusion Criteria:	Rural Life360 HOME beneficiaries in hospice or using hospice services during the measurement year
Continuous Enrollment:	Date of discharge through 30 days after discharge. No allowable gaps
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (FUH-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME

Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, race/ethnicity, geography, etc.)
National Benchmark:	NCQA national averages available
Deviations:	Paid claims only

Measure 2.E.4	**SAA-AD Adherence to Antipsychotics for Beneficiaries with Schizophrenia**
Definition:	Percentage of Rural Life360 HOME beneficiaries with schizophrenia or schizoaffective disorder who were dispensed and remained on an antipsychotic medication for at least 80% of their treatment period during the measurement year
Numerator:	Count of Rural Life360 HOME beneficiaries who achieved a proportion of days covered (PDC) of at least 80% for their antipsychotic medications during the measurement year
Denominator:	Count of Rural Life360 HOME beneficiaries with at least one acute inpatient encounter with any diagnosis of schizophrenia or schizoaffective disorder, or at least two visits in an outpatient, intensive outpatient, partial hospitalization, ED or non-acute inpatient setting, on different dates of service, with any diagnosis of schizophrenia or schizoaffective disorder
Exclusion Criteria:	Rural Life360 HOME beneficiaries in hospice or using hospice services during the measurement year; beneficiaries with a diagnosis of dementia, or who did not have at least two antipsychotic medication dispensing events, during the measurement year
Continuous Enrollment:	The measurement year. No more than one gap in enrollment of up to 45 days or 1 month during each year of continuous enrollment. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (SAA-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	NCQA national averages available

Deviations:	Paid claims only

Measure 2.E.5	**SSD-AD Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications**
Definition:	Percentage of Rural Life360 HOME beneficiaries with schizophrenia, schizoaffective disorder, or bipolar disorder who were dispensed an antipsychotic medication and had a diabetes screening test during the measurement year
Numerator:	Count of glucose tests or an HbA1c tests performed during the measurement year for Rural Life360 HOME beneficiaries, as defined by claim/encounter or automated laboratory data
Denominator:	Count of Rural Life360 HOME beneficiaries as of Dec 31 of the measurement year with schizophrenia, schizoaffective disorder, or bipolar disorder who were dispensed an antipsychotic medication
Exclusion Criteria:	Rural Life360 HOME beneficiaries with hospice care or using hospice service at any time during the measurement year
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year and the year prior to the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (SSD-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	NCQA national averages available
Deviations:	Paid claims only

Measure 2.E.6	**OHD-AD Use of Opioids at High Dosage in Persons Without Cancer**
Definition:	Percentage of Rural Life360 HOME beneficiaries who received prescriptions for opioids with an average daily dosage greater than or equal to 90 milligram equivalents (MME) over a period of 90 days or more

Numerator:	Count of Rural Life360 HOME beneficiaries in the denominator with an average daily dosage ≥ 90 MMEs during the opioid episode
Denominator:	Count of Rural Life360 HOME beneficiaries as of Dec 31 of the measurement year who received prescriptions for opioids
Exclusion Criteria:	Rural Life360 HOME beneficiaries with a cancer diagnosis, sickle cell disease diagnosis, or in hospice or palliative care
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	PQA (OHD-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	Paid claims only

Measure 2.E.7	**COB-AD Concurrent Use of Opioids and Benzodiazepines**
Definition:	Percentage of Rural Life360 HOME beneficiaries with concurrent use of prescription opioids and benzodiazepines
Numerator:	Count of Rural Life360 HOME beneficiaries in the denominator with • Two or more prescription claims for any benzodiazepine with different dates of service, AND • Concurrent use of opioids and benzodiazepines for 30 or more cumulative days
Denominator:	Count of Rural Life360 HOME beneficiaries as of Dec 31 of the measurement year with 2 or more prescription claims for opioid medications on different dates of service and with a cumulative days' supply of 15 or more days during the measurement year
Exclusion Criteria:	Rural Life360 HOME beneficiaries with a cancer diagnosis, sickle cell disease diagnosis, or in hospice or palliative care

Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	PQA (COB-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	Paid claims only

Measure 2.E.8	**POD-AD Use of Pharmacotherapy for Opioid Use Disorder**
Definition:	Percentage of new opioid use disorder (OUD) pharmacotherapy events with OUD pharmacotherapy for 180 or more days among Rural Life360 HOME beneficiaries with a diagnosis of OUD
Numerator:	Count of new OUD pharmacotherapy events with OUD pharmacotherapy for 180 days or more days without a gap in treatment of 8 or more consecutive days for Rural Life360 HOME beneficiaries
Denominator:	Count of Rural Life360 HOME beneficiaries as of Dec 31 of the measurement with a diagnosis of OUD
Exclusion Criteria:	N/A
Continuous Enrollment:	No allowable gaps in the continuous enrollment period. Continuous enrollment period is defined as 31 days prior to the treatment period start date through 179 days after the treatment period start date (211 total days)
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (POD-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME

Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	Minimum age adjusted to 19. Paid claims only.

Measure 2.E.9	**FUA-AD Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence**
Definition:	Percentage of emergency department (ED) visits for Rural Life360 HOME beneficiaries with a principal diagnosis of alcohol or other drug (AOD) abuse or dependence who had a follow-up visit for AOD abuse or dependence
Numerator:	• 30-day follow-up – count of follow-up visits with any practitioner, for Rural Life360 HOME beneficiaries with a principal diagnosis of AOD abuse or dependence within 30 days after the ED visit. Include visits that occur on the date of the ED visit • 7-day follow-up – count of follow-up visits with any practitioner, for Rural Life360 HOME beneficiaries with a principal diagnosis of AOD abuse or dependence within 7 days after the ED visit. Include visits that occur on the date of the ED visit
Denominator:	Count of ED visits for Rural Life360 HOME beneficiaries with a principal diagnosis of alcohol or other drug (AOD) abuse or dependence as of the ED visit with continuous enrollment from the date of ED visit through 30 days after the ED visit
Exclusion Criteria:	Rural Life360 HOME beneficiaries with a cancer diagnosis, sickle cell disease diagnosis, or in hospice or palliative care
Continuous Enrollment:	No allowable gap in coverage during continuous enrollment period
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (FUA-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means

National Benchmark:	N/A
Deviations:	Paid claims only

Measure 2.E.10	**FUM-AD Follow-Up After Emergency Department Visit for Mental Illness**
Definition:	Percentage of emergency department (ED) visits for Rural Life360 HOME beneficiaries with a principal diagnosis of mental illness or intentional self-harm and who had a follow-up visit for mental illness
Numerator:	• 30-day follow-up – count of follow-up visits for Rural Life360 HOME beneficiaries with a principal diagnosis of mental health disorder or with a principal diagnosis of intentional self-harm and any diagnosis of mental health disorder within 30 days after the ED visit. Include visits that occur on the date of the ED visit • 7-day follow-up - count of follow-up visits for Rural Life360 HOME beneficiaries with a principal diagnosis of mental health disorder or with a principal diagnosis of intentional self-harm and any diagnosis of mental health disorder within 7 days after the ED visit. Include visits that occur on the date of the ED visit
Denominator:	Count of ED visits for Rural Life360 HOME beneficiaries with a principal diagnosis of mental illness or intentional self-harm as of the date of ED visit with continuous enrollment from date of the ED visit through 30 days after the ED visit
Exclusion Criteria:	N/A
Continuous Enrollment:	No allowable gap in coverage during continuous enrollment period
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (FUM-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, race/ethnicity, geography, etc.)
National Benchmark:	N/A

Deviations:	Paid claims only

Measure 2.E.11	Average Time to Treatment
Definition:	Average time from enrollment in the Rural Life360 HOME to first treatment visit for Rural Life360 HOME beneficiaries
Numerator:	Time from enrollment in Rural Life360 HOME to first treatment visit that occurred during the measurement year for Rural Life360 HOME beneficiaries
Denominator:	Count of Rural Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims and Life360 Case Management Data
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	N/A
Statistic to Be Tested:	Descriptive with subpopulation analyses; Chi-square
National Benchmark:	N/A
Deviations:	N/A

Measure 2.E.12	Mortality Rates
Definition:	Count of deaths of Rural Life360 HOME beneficiaries per 100,000 during the measurement year
Numerator:	Count of deaths of Rural Life360 HOME beneficiaries during the measurement year

Denominator:	Count of Rural Life360 beneficiaries on January 1st of the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Eligibility and enrollment data
Measure Steward(s):	DMS Homegrown
Comparison Group:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Hypothesis 2.F. ARHOME beneficiaries with SMI or SUD who receive services from a Rural Life360 HOME will have fewer health-related social needs and improved HRSN compared to similar ARHOME beneficiaries in rural areas without a Rural Life360 HOME.

Measure 2.F.1	Income - Average Household Income
Definition:	Average Rural Life360 HOME beneficiary household income
Numerator:	Rural Life360 HOME beneficiary household income during the measurement year
Denominator:	Count of Rural Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Statewide Longitudinal Data System (SLDS)
Measure Steward(s):	DMS Homegrown

Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Measure 2.F.2	**Income Increase**
Definition:	Percentage change in income for Rural Life360 HOME beneficiaries
Numerator:	Difference in income at the end of the measurement year compared to income at the end of the prior year for Rural Life360 HOME beneficiaries
Denominator:	Income at the end of the prior year for Rural Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Statewide Longitudinal Data System (SLDS)
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Measure 2.F.3	**Employment - Unemployment Rate (%) Annual Averages**
Definition:	Unemployment rate for Rural Life360 HOME beneficiaries

Numerator:	Count of unemployed Rural Life360 HOME beneficiaries during the measurement year
Denominator:	Count of Rural Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Statewide Longitudinal Data System (SLDS)
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Measure 2.F.4	**Educational Attainment - High School Completion and Some College rate**
Definition:	Percentage of residents in Rural Life360 HOME counties with high school completion and some college
Numerator:	Count of residents in Rural Life360 counties with high school completion and some college during the measurement year
Denominator:	Count of residents in Rural Life360 HOME counties during the measurement year with available educational attainment information
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	American Community Survey (ACS)
Measure Steward(s):	American Community Survey (ACS)
Comparison Population:	Similar residents in counties w/o Rural Life360 HOME
Comparison Method(s):	Annual table

Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	ACS national averages available
Deviations:	N/A

Measure 2.F.5	**Participated in Employment, Employment Training, or Post-Secondary Education**
Definition:	Percentage of Rural Life360 HOME beneficiaries who participated in employment, employment training, or post-secondary education
Numerator:	Count of Rural Life360 HOME beneficiaries who indicate participation in employment, employment training, or post-secondary education during the measurement year
Denominator:	Count of Rural Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Statewide Longitudinal Data System (SLDS)
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Measure 2.F.6	**Housing Security/Affordability - ≥ 30% of Income**
Definition:	Percentage of residents in Rural Life360 HOME counties who spend 30% or more of their household income on housing
Numerator:	Count of residents in Rural Life360 HOME counties who spend 30% or more of their household income on housing during the measurement year
Denominator:	Count of residents in Rural Life360 HOME counties during the measurement year with available income and housing information

Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	American Community Survey (ACS)
Measure Steward(s):	American Community Survey (ACS)
Comparison Population:	Similar residents in counties w/o Rural Life360 HOME
Comparison Method(s):	Annual table
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	ACS national averages available
Deviations:	N/A

Measure 2.F.7	**Housing Security/Affordability - Severe Housing Burden**
Definition:	Percentage of residents in Rural Life360 HOME counties with high housing costs, with overcrowding, and lack of kitchen/plumbing facilities
Numerator:	Count of residents in Rural Life360 HOME counties with high housing costs, with overcrowding, and lack of kitchen/plumbing facilities during the measurement year
Denominator:	Count of residents in Rural Life360 HOME counties during the measurement year with available income, housing, and utilities information
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	American Community Survey (ACS)
Measure Steward(s):	American Community Survey (ACS)
Comparison Population:	Similar residents in counties w/o Rural Life360 HOME
Comparison Method(s):	Annual table
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	ACS national averages available

Deviations:	N/A

Measure 2.F.8	Food Security - Food Insecurity Rate
Definition:	Food insecurity rate among residents in Rural Life360 HOME counties modeled on the following county characteristics: unemployment rate, poverty rate, median income, percent Hispanic, percent African American, percent of residents who are homeowners, and percent of residents who report a disability.
Numerator:	Refer to methods in the technical brief, Map the Meal Gap 2022
Denominator:	Refer to methods in the technical brief, Map the Meal Gap 2022
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Feeding America (Map the Meal Gap)
Measure Steward(s):	Feeding America (Map the Meal Gap)
Comparison Population:	Similar residents in counties w/o Rural Life360 HOME
Comparison Method(s):	Annual table
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	Map the Meal Gap national averages available
Deviations:	N/A

Measure 2.F.9	Food Security - % Low Income & Low Access to Store / % No Car & Low Access to Store (2015)
Definition:	Food security based on the percentage of residents in Rural Life360 HOME counties with low income and low access to stores and percentage of residents with no car and low access to stores

Numerator:	• Count of residents in Rural Life360 HOME counties with low income and living more than 1 mile from a supermarket or large grocery store if in an urban area, or more than 10 miles from a supermarket or large grocery store if in a rural area. • Count of housing units in the Rural Life360 HOME county without a car and more than 1 miles from a supermarket or large grocery store
Denominator:	• Residents in Rural Life360 HOME counties with low income • Housing units in the Rural Life360 HOME county
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Food Environment Atlas, USDA
Measure Steward(s):	Food Environment Atlas, USDA
Comparison Population:	Similar residents in counties w/o Rural Life360 HOME
Comparison Method(s):	Annual table
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	Food Environment Atlas national averages available
Deviations:	N/A

Measure 2.F.10	**Safety - Suicides, Injuries, Homicides, Firearm Fatalities**
Definition:	Percentage of residents in Rural Life360 HOME counties with deaths from suicides, injuries, homicides, or firearm fatalities
Numerator:	Count of residents in Rural Life360 HOME counties with a cause of death listed as suicide, injury, homicide, or firearm fatality during the measurement year
Denominator:	Count of residents in Rural Life360 HOME counties during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A

Data Source(s):	National Vital Statistics System (NVSS)
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar residents in counties w/o Rural Life360 HOME
Comparison Method(s):	Annual table
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	N/A
Deviations:	N/A

Measure 2.F.11	**Criminal Justice System Involvement - Count of Offenses, Count of Arrests**
Definition:	Average number of criminal offenses and arrests, separately, for residents in Rural Life360 HOME counties during the measurement year
Numerator:	• Count of criminal offenses in Rural Life360 HOME counties • Count of arrests in Rural Life360 HOME counties
Denominator:	Count of Rural Life360 HOME residents during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Arkansas Department of Public Safety, Crime Information Center
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar residents in counties w/o Rural Life360 HOME
Comparison Method(s):	Annual table
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	N/A
Deviations:	N/A

Measure 2.F.12	Receipt of Educational, Employment, or Other Social Services
Definition:	Percentage of Rural Life360 HOME beneficiaries receiving educational, employment, or other social services
Numerator:	Count of Rural Life360 HOME beneficiaries receiving educational, employment, or other social services
Denominator:	Count of Rural Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative, Statewide Longitudinal Data System (SLDS)
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Hypothesis 2.G. ARHOME beneficiaries with a serious mental illness (SMI) or substance use disorder (SUD) who live in rural areas with a Rural Life360 HOME will have lower total health care costs compared to similar ARHOME beneficiaries in rural areas without a Rural Life360 HOME; Cost of claims/encounters per beneficiary per year.

Measure 2.G.1	Total Medicaid Spend
Definition:	Total Medicaid spend per Rural Life360 HOME beneficiary
Numerator:	Total Medicaid spend - Inpatient/outpatient/emergency/ pharmacy spend for Rural Life360 HOME beneficiaries
Denominator:	Count of Rural Life360 HOME beneficiaries

Exclusion Criteria:	Hospice claims
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	North Carolina Department of Health and Human Services - Enhanced Case Management and Other Services Pilots Evaluation Design
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	• IPTW / CEM, beneficiary-level weighted regression model • ITS / Pre-Post DiD
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Measure 2.G.2	**Emergency Department (ED) Costs**
Definition:	Total Medicaid spend on ED visits per Rural Life360 HOME beneficiary
Numerator:	Total Medicaid spend on ED visits for Rural Life360 HOME beneficiaries
Denominator:	Count of Rural Life360 HOME beneficiaries
Exclusion Criteria:	
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	• IPTW / CEM, beneficiary-level weighted regression model • ITS / Pre-Post DiD
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A

Deviations:	N/A

Measure 2.G.3	Hospitalization Costs
Definition:	Total Medicaid spend on Inpatient hospitalizations (including psychiatric care) per Rural Life360 HOME beneficiary
Numerator:	Total Medicaid spend on inpatient hospitalizations for Rural Life360 HOME beneficiaries
Denominator:	Count of Rural Life360 HOME beneficiaries
Exclusion Criteria:	
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	• IPTW / CEM, beneficiary-level weighted regression model • ITS / Pre-Post DiD
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Hypothesis 2.H. ARHOME Rural Life360 beneficiaries will be screened for unmet HRSN and receive a corresponding intervention if they screened positive.

Measure 2.H.1	SNS-E Food Screening
Definition:	Percentage of Rural Life360 HOME beneficiaries who were screened for food insecurity
Numerator:	Count of Rural Life360 HOME beneficiaries screened for a food insecurity such as uncertain, limited, or unstable access to food that is: adequate in quantity and in nutritional quality; culturally acceptable; safe and acquired in socially acceptable ways.
Denominator:	Count of Rural Life360 HOME beneficiaries

Exclusion Criteria:	Less than 18 years old or older than 65 years old
Continuous Enrollment:	Refer to population definition
Data Source(s):	Rural Life360 HOME HRSN Screening Data and Referrals
Measure Steward(s):	NCQA Social Need Screening & Intervention (SNS-E)
Comparison Population:	N/A
Comparison Method(s):	Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	NCQA National averages available
Deviations:	N/A

Measure 2.H.2	**SNS-E Food Intervention**
Definition:	Percentage of Rural Life360 HOME beneficiaries who received a corresponding intervention within 1 month of screening positive for food insecurity.
Numerator:	Count of Rural Life360 HOME beneficiaries that screened positive for a food insecurity who received a corresponding intervention within 1 month of identification
Denominator:	Count of Rural Life360 HOME beneficiaries who screened positive for a food insecurity
Exclusion Criteria:	Less than 18 years old or older than 65 years old
Continuous Enrollment:	Refer to population definition
Data Source(s):	Rural Life360 HOME HRSN Screening Data and Referrals
Measure Steward(s):	NCQA Social Need Screening & Intervention (SNS-E)
Comparison Population:	N/A
Comparison Method(s):	Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square

National Benchmark:	NCQA National averages available
Deviations:	N/A

Measure 2.H.3	**SNS-E Housing Screening**
Definition:	Percentage of Rural Life360 HOME beneficiaries who were screened for housing instability, homelessness, or housing inadequacy.
Numerator:	Count of Rural Life360 HOME beneficiaries that screened for a housing insecurity such as for housing instability, homelessness, or housing inadequacy.
Denominator:	Count of Rural Life360 HOME beneficiaries
Exclusion Criteria:	Less than 18 years old or older than 65 years old
Continuous Enrollment:	Refer to population definition
Data Source(s):	Rural Life360 HOME HRSN Screening Data and Referrals
Measure Steward(s):	NCQA Social Need Screening & Intervention (SNS-E)
Comparison Population:	N/A
Comparison Method(s):	Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	NCQA National averages available
Deviations:	N/A

Measure 2.H.4	**SNS-E Housing Intervention**
Definition:	Percentage of Rural Life360 HOME beneficiaries who received a corresponding intervention within 1 month of screening positive for housing instability, homelessness, or housing inadequacy.
Numerator:	Count of Rural Life360 HOME beneficiaries that screened positive for a housing insecurity who received a corresponding intervention within 1 month of identification
Denominator:	Count of Rural Life360 HOME beneficiaries who screened positive for a housing insecurity
Exclusion Criteria:	Less than 18 years old or older than 65 years old

Continuous Enrollment:	Refer to population definition
Data Source(s):	Rural Life360 HOME HRSN Screening Data and Referrals
Measure Steward(s):	NCQA Social Need Screening & Intervention (SNS-E)
Comparison Population:	N/A
Comparison Method(s):	Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	NCQA National averages available
Deviations:	N/A

Measure 2.H.5	**SNS-E Transportation Screening**
Definition:	Percentage of Rural Life360 HOME beneficiaries who were screened for transportation insecurity.
Numerator:	Count of Rural Life360 HOME beneficiaries who were screened for uncertain, limited or no access to safe, reliable, accessible, affordable, and socially acceptable transportation infrastructure and modalities necessary for maintaining one's health, well-being or livelihood.
Denominator:	Count of Rural Life360 HOME beneficiaries
Exclusion Criteria:	Less than 18 years old or older than 65 years old
Continuous Enrollment:	Refer to population definition
Data Source(s):	Rural Life360 HOME HRSN Screening Data and Referrals
Measure Steward(s):	NCQA Social Need Screening & Intervention (SNS-E)
Comparison Population:	N/A
Comparison Method(s):	Pre-Post DiD

Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	NCQA National averages available
Deviations:	N/A

Measure 2.H.6	SNS-E Transportation Intervention
Definition:	Percentage of Rural Life360 HOME beneficiaries who received a corresponding intervention within 1 month of screening positive for transportation insecurity.
Numerator:	Count of Rural Life360 HOME beneficiaries that screened positive for a transportation insecurity who received a corresponding intervention within 1 month of identification
Denominator:	Count of Rural Life360 HOME beneficiaries who screened positive for a transportation insecurity
Exclusion Criteria:	Less than 18 years old or older than 65 years old
Continuous Enrollment:	Refer to population definition
Data Source(s):	Rural Life360 HOME HRSN Screening Data and Referrals
Measure Steward(s):	NCQA Social Need Screening & Intervention (SNS-E)
Comparison Population:	N/A
Comparison Method(s):	Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	NCQA National averages available
Deviations:	N/A

Measure 2.H.7	SNS-E Prior Screening of HRSN Needs
Definition:	Percentage of Rural Life360 HOME beneficiaries that were ever screened for HRSN needs prior to enrollment
Numerator:	Count of Rural Life360 HOME beneficiaries in the measurement year that were ever screened for HRSN needs prior to enrollment

Denominator:	Count of Rural Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Life360 Case Management Data
Measure Steward(s):	DMS Homegrown
Comparison Group:	N/A
Comparison Method(s):	Annual tables
Statistic to Be Tested:	Descriptive; Chi-square
National Benchmark:	N/A
Deviations:	N/A

Measure 2.H.8	**Prior Utilization of HRSN Related Services**
Definition:	Percentage of Rural Life360 HOME beneficiaries that had ever utilized HRSN services prior to enrollment
Numerator:	Count of Rural Life360 HOME beneficiaries in the measurement year that has ever utilized HRSN services prior to enrollment
Denominator:	Count of Rural Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Life360 Case Management Data
Measure Steward(s):	DMS Homegrown
Comparison Group:	N/A
Comparison Method(s):	Annual tables
Statistic to Be Tested:	Descriptive; Chi-square

National Benchmark:	N/A
Deviations:	N/A

Measure 2.H.9	**Supplemental Nutrition Assistance Program (SNAP/WIC) Enrollment**
Definition:	Percentage of Rural Life360 HOME beneficiaries who were enrolled in SNAP/WIC during the measurement year
Numerator:	Count of Rural Life360 HOME beneficiaries who were enrolled in SNAP/WIC during the measurement year
Denominator:	Count of Rural Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	SNAP/WIC data
Measure Steward(s):	DMS Homegrown
Comparison Group:	Similar beneficiaries in counties w/o Rural Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Goal 3. Success Life360 HOME will support young adults (ages 19-27) at high-risk for long-term poverty due to prior incarceration, involvement with the foster care system, or young adults (ages 19-24) with involvement with the juvenile justice system and veterans ages 19-30 who are at high risk of homelessness. Success Life360s will provide intensive care coordination directly or contract with organizations to provide care coordination.

Hypothesis 3.A. ARHOME beneficiaries most at risk for long-term poverty who receive services from a Success Life360 HOME will have great use of preventive and other primary care services.

Measure 3.A.1	COL-AD Colorectal Cancer Screening
Definition:	Percentage of Success Life360 HOME beneficiaries who had a screen for colorectal cancer
Numerator:	Count of Success Life360 HOME beneficiaries with one or more screens for colorectal cancer during the measurement year or the 12 months prior to the measurement year
Denominator:	Count of Success Life360 HOME beneficiaries on the anchor (last) date of the measurement year
Exclusion Criteria:	Success Life360 HOME beneficiaries with hospice care
Continuous Enrollment:	Year prior to the measurement year through December 31 of the measurement year. No more than 45 days or a 1-month gap of coverage during each full calendar year of continuous enrollment. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – COL-AD (Adult) in Medicaid Adult Core Set
Comparison Group:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM; beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set
Deviations:	Maximum age adjusted to 64. Paid claims only.

Measure 3.A.2	BCS-AD Breast Cancer Screening
Definition:	Percentage of Success Life360 HOME beneficiaries who had a mammogram to screen for breast cancer
Numerator:	Count of Success Life360 HOME beneficiaries with one or more mammograms during the measurement year or the 15 months prior to the measurement year

Denominator:	Count of Success Life360 HOME beneficiaries on the anchor (last) date of the measurement year
Exclusion Criteria:	Success Life360 HOME beneficiaries with hospice care
Continuous Enrollment:	October 1 two years prior to the measurement year through December 31 of the measurement year. No more than 45 days or a 1-month gap of coverage during each full calendar year of continuous enrollment. No gaps in enrollment are allowed from October 1 through December 31, two years prior to the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – BCS-AD (Adult) in Medicaid Adult Core Set
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM; beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set
Deviations:	Maximum age adjusted to 64. Paid claims only.

Measure 3.A.3	**CCS-AD Cervical Cancer Screening**
Definition:	Percentage of Success Life360 HOME beneficiaries who are women and screened for cervical cancer
Numerator:	Count of Success Life360 HOME beneficiaries who were screened for cervical cancer, as defined by • Cervical cytology performed during the measurement year or the two years prior to the measurement year • Or cervical cytology/human papillomavirus (HPV) co-testing performed during the measurement year or the four years prior to the measurement year, for beneficiaries who were at least 30 years old on the date of both tests
Denominator:	Count of Success Life360 HOME beneficiaries as of December 31 of the measurement year

Exclusion Criteria:	Success Life360 HOME beneficiaries with hospice care. Hysterectomy with no residual cervix, cervical agenesis, or acquired absence of cervix any time during the beneficiary's history through December 31 of the measurement year
Continuous Enrollment:	No more than one gap in enrollment of up to 45 days or 1 month during each year of continuous enrollment. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – CCS-AD (Adult) in Medicaid Adult Core Set
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM; beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set
Deviations:	Maximum age adjusted to 30. Paid claims only.

Measure 3.A.4	**CHL-AD Chlamydia Screening in Women**
Definition:	Percentage of Success Life360 HOME women who were identified as sexually active and who had at least one test for chlamydia during the measurement year
Numerator:	Count of Success Life360 HOME women identified as sexually active with at least one chlamydia test during the measurement year
Denominator:	Count of Success Life360 HOME women as of December 31 of the measurement year who are sexually active
Exclusion Criteria:	Success Life360 HOME women who qualified for the denominator based on a pregnancy test alone and who meet either of the following: • A pregnancy test during the measurement year and a prescription for isotretinoin on the date of the pregnancy test or within the 6 days after the pregnancy test • A pregnancy test during the measurement year and an x-ray on the date of the pregnancy test or within the 6 days after the pregnancy test
Continuous Enrollment:	No more than one gap in enrollment of up to 45 days or 1 month during each year of continuous enrollment. Anchor date: December 31 of the measurement year.

Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – CHL-AD (Adult) in Medicaid Adult Core Set
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM; beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set
Deviations:	Paid claims only

Measure 3.A.5	**SPD Statin Therapy for Patients with Diabetes**
Definition:	Percentage of Success Life360 HOME beneficiaries during the measurement year with diabetes who do not have clinical atherosclerotic cardiovascular disease (ASCVD) who were dispensed at least one statin medication of any intensity during the measurement year
Numerator:	Count of Success Life360 HOME beneficiaries with diabetes who do not have ASCVD who were dispensed at least one statin medication of any intensity during the measurement year
Denominator:	Count of Success Life360 HOME beneficiaries during the measurement year with diabetes who do not have clinical atherosclerotic cardiovascular disease (ASCVD)
Exclusion Criteria:	Success Life360 HOME beneficiaries with hospice care. Success Life360 HOME beneficiaries with cardiovascular disease identified by event or diagnosis; diagnosis of pregnancy; in vitro fertilization; dispensed clomiphene; ESRD without telehealth; cirrhosis; or myalgia, myositis, myopathy, or rhabdomyolysis
Continuous Enrollment:	The measurement year and the year prior to the measurement year. No more than one gap in enrollment of up to 45 days or 1 month during each year of continuous enrollment. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – Healthcare Effectiveness Data and Information Set (HEDIS) SPD
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM; beneficiary-level weighted regression model

Statistic to Be Tested:	Difference in group means
National Benchmark:	HEDIS Medicaid national rates
Deviations:	Maximum age adjusted to 30. Paid claims only.

Measure 3.A.6	**CDC Comprehensive Diabetes Care: Hemoglobin A1c Testing**
Definition:	Percentage of Success Life360 HOME beneficiaries with diabetes (type 1 or type 2) who had Hemoglobin A1c (HbA1c) testing performed
Numerator:	Count of Success Life360 HOME beneficiaries with type 1 or 2 diabetes an HbA1c test performed during the measurement year
Denominator:	Count of Success Life360 HOME beneficiaries with type 1 or 2 diabetes identified as having diabetes during the measurement year or the year prior to the measurement year
Exclusion Criteria:	Success Life360 HOME beneficiaries with hospice care
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – HA1C-AD in Medicaid Adult Core Set
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM; beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, race/ethnicity, geography, etc.)
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rate
Deviations:	Minimum age adjusted to 19, and maximum age adjusted to 30. Paid claims only.

Measure 3.A.7	**AAP Adults' Access to Preventive/Ambulatory Health Services**

Definition:	Percentage of Success Life360 HOME beneficiaries who had an ambulatory or preventive care visit during the measurement year
Numerator:	Count of Success Life360 HOME beneficiaries with one or more ambulatory or preventive care visits during the measurement year
Denominator:	Count of eligible Success Life360 HOME beneficiaries as of December 31 of the measurement year
Exclusion Criteria:	Success Life360 HOME beneficiaries with hospice care or using hospice service at any time during the measurement year
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA - HEDIS AAP
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	• IPTW / CEM, beneficiary-level weighted regression model • ITS / Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, race/ethnicity, geography, etc.)
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rate
Deviations:	Maximum age adjusted to 30. Paid claims only.

Measure 3.A.8	**AMR Asthma Medication Ratio**
Definition:	Percentage of Success Life360 HOME beneficiaries who were identified as having persistent asthma and had a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year
Numerator:	Count of Success Life360 HOME beneficiaries who were identified as having persistent asthma and had a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year
Denominator:	Count of Success Life360 HOME beneficiaries who were identified as having persistent asthma as of December 31 of the measurement year

Exclusion Criteria:	N/A
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year and the year prior to the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA –AMR-AD in Medicaid Adult Core Set
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM; beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rate
Deviation(s):	Paid claims only

Measure 3.A.9	**CCW Contraceptive Care – All Women**
Definition:	Percentage of Success Life360 HOME women at risk of unintended pregnancy that were provided a most effective or moderately effective method of contraception
Numerator:	Count of Success Life360 HOME women at risk of unintended pregnancy that were provided a most effective or moderately effective method of contraception
Denominator:	Count of Success Life360 HOME women at risk of unintended pregnancy as of Dec 31 of the measurement year
Exclusion Criteria:	Success Life360 HOME women not at risk of unintended pregnancy because they were infecund due to non-contraceptive reasons such as natural menopause or oophorectomy; Had a live birth in the last 2 months of the measurement year. Women still pregnant at the end of the year.
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year and the year prior to the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – CCW-AD in Medicaid Adult Core Set

Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates
Deviation(s):	Adjustment to ages 15-44. Paid claims only

Measure 3.A.10	**PCP Assigned**
Definition:	Percentage of Success Life360 HOME beneficiaries that have a PCP assigned at any point during the measurement year
Numerator:	Count of Success Life360 HOME beneficiaries who had a PCP assigned to them during the measurement year
Denominator:	Count of Success Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims and Life360 Case Management Data
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	N/A
Deviations:	N/A

Measure 3.A.11	**PCP Visits**
Definition:	Percentage of Success Life360 HOME beneficiaries who had a PCP visit during the measurement year
Numerator:	Count of Success Life360 HOME beneficiaries who had a PCP visit during the measurement year

Denominator:	Count of Success Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims and Life360 Case Management Data
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, race/ethnicity, geography, etc.)
National Benchmark:	N/A
Deviations:	N/A

Measure 3.A.12	**Person-Centered Action Plan Milestone Achievement**
Definition:	Percentage of Success Life360 HOME beneficiaries with person-centered action plans who achieved one or more milestones during the measurement year
Numerator:	Count of Success Life360 HOME beneficiaries who have met one or more milestones during the measurement year
Denominator:	Count of Success Life360 HOME beneficiaries who have a person-centered action plan during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Life360 Case Management Data
Measure Steward(s):	DMS Homegrown

Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	N/A
Deviations:	N/A

Hypothesis 3.B. ARHOME beneficiaries most at risk for long-term poverty who receive services from a Success Life360 HOME will have greater satisfaction in the care provided.

Measure 3.B.1	Average Rating of Health Plan
Definition:	Percentage of Success Life360 HOME beneficiary responses with favorable ratings for health plan
Numerator:	Count of Success Life360 HOME beneficiary responses with ratings of 8, 9, or 10 (i.e., favorable) for best health plan
Denominator:	Count of Success Life360 HOME beneficiary respondents who answered the survey question
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	Comparison of answer frequency categories (low is a response of 0–7 and high is a response of 8–10), case-mix adjustment
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square

National Benchmark:	CAHPS Health Plan Survey Database Chartbook
Deviations:	N/A

Measure 3.B.2	**Average Rating of Health Care**
Definition:	Percentage of Success Life360 HOME beneficiary responses with favorable ratings for overall health care received in the last 6 months
Numerator:	Count of Success Life360 HOME beneficiary responses with ratings of 8, 9, or 10 (i.e., favorable) for overall health care received in the last 6 months
Denominator:	Count of Success Life360 HOME beneficiary respondents who answered the survey question
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	Comparison of answer frequency categories (low is a response of 0–7 and high is a response of 8–10), case-mix adjustment
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	CAHPS Health Plan Survey Database Chartbook
Deviations:	N/A

Measure 3.B.3	**Average Rating of Primary Care Provider (PCP)**
Definition:	Percentage of Success Life360 HOME beneficiary responses with favorable ratings for personal doctor seen in the last 6 months
Numerator:	Count of Success Life360 HOME beneficiary responses with ratings of 8, 9, or 10 (i.e., favorable) for best personal doctor seen in the last 6 months

Denominator:	Count of Success Life360 HOME beneficiary respondents who answered the survey question and indicated they have a personal doctor
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	Comparison of answer frequency categories (low is a response of 0–7 and high is a response of 8–10), case-mix adjustment
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	CAHPS Health Plan Survey Database Chartbook
Deviations:	N/A

Measure 3.B.4	**Average Rating of Specialist**
Definition:	Percentage of Success Life360 HOME beneficiary responses with favorable ratings for a specialist the beneficiary saw the most in the last 6 months
Numerator:	Count of Success Life360 HOME beneficiary responses with ratings of 8, 9, or 10 (i.e., favorable) for best specialist the beneficiary saw the most in the last 6 months
Denominator:	Count of Success Life360 HOME beneficiary respondents who answered the survey question and indicated they have seen at least one specialist
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME

Comparison Method(s):	Comparison of answer frequency categories (low is a response of 0–7 and high is a response of 8–10), case-mix adjustment
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	CAHPS Health Plan Survey Database Chartbook
Deviations:	N/A

Measure 3.B.5	**Average Rating of Life360 Services**
Definition:	Percentage of Success Life360 HOME beneficiary responses with favorable ratings in the ability of Success Life360 services to effectively address and mitigate identified HRSN needs
Numerator:	Count of Success Life360 HOME beneficiary responses with ratings of 8, 9, or 10 (i.e., favorable) for best Success Life360 HOME services.
Denominator:	Count of Success Life360 HOME beneficiary respondents who answered the survey question
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	CAHPS Health Plan Survey Database Chartbook
Deviations:	N/A

Hypothesis 3.C. ARHOME beneficiaries most at risk for long-term poverty who receive services from a Success Life360 HOME will have lower non-emergent use of emergency department services.

Measure 3.C.1	Non-Emergent Emergency Department (ED) Visits
Definition:	Non-Emergent ED visits as a percentage of all classified ED visits using the New York University (NYU) ED algorithm for Success Life360 HOME beneficiaries
Numerator:	Count of non-emergent ED visits for Success Life360 HOME beneficiaries
Denominator:	Count of total ED visits classified by the NYU algorithm for Success Life360 HOME beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	NYU ED Algorithm
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	• IPTW / CEM, beneficiary-level weighted regression model • ITS / Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, race/ethnicity, geography, etc.)
National Benchmark:	N/A
Deviations:	Paid claims only

Measure 3.C.2	Emergent Emergency Department (ED) Visits
Definition:	Emergent ED Visits as a percentage of all classified ED visits using the NYU ED algorithm for Success Life360 HOME beneficiaries
Numerator:	Count of emergent ED visits for Success Life360 HOME beneficiaries
Denominator:	Count of total ED visits classified by the NYU algorithm for Success Life360 HOME beneficiaries
Exclusion Criteria:	N/A

Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	NYU ED Algorithm
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	• IPTW / CEM, beneficiary-level weighted regression model • ITS / Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, race/ethnicity, geography, etc.)
National Benchmark:	N/A
Deviations:	Paid claims only

Hypothesis 3.D. ARHOME beneficiaries most at risk for long - term poverty who receive services from a Success Life360 HOME will have lower use of potentially preventable emergency department services and lower incidence of preventable hospital admissions and re-admissions.

Measure 3.D.1	**Preventable Emergency Department (ED) Visits**
Definition:	Percentage of emergency visits classified as preventable by the NYU ED algorithm for Success Life360 HOME beneficiaries
Numerator:	Count of emergency department visits classified as preventable/avoidable for Success Life360 HOME beneficiaries
Denominator:	Count of total emergency department visits classified as preventable/avoidable and not preventable/avoidable (equals all visits that are emergent, ED care needed) for Success Life360 HOME beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	NYU ED Algorithm
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	• IPTW / CEM, beneficiary-level weighted regression model • ITS / Pre-Post DiD

Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, race/ethnicity, geography, etc.)
National Benchmark:	N/A
Deviations:	Paid claims only

Measure 3.D.2	**PCR-AD Plan All-Cause Readmissions**
Definition:	Count of acute inpatient stays for Success Life360 HOME beneficiaries during the measurement year that were followed by an unplanned acute readmission for any diagnosis within 30 days and the predicted probability of an acute readmission.
Numerator:	Count of acute readmissions for any diagnosis within 30 days of the Index Discharge Date for Success Life360 HOME beneficiaries. Exclude admissions with a principal diagnosis of pregnancy, a condition originating in the perinatal period, or planned admissions
Denominator:	Count of total acute inpatient discharges for Success Life360 HOME beneficiaries who had one or more discharges on or between January 1 and December 1 of the measurement year
Exclusion Criteria:	Success Life360 HOME beneficiaries with hospital stays where the Index Admission Date is the same as the Index Discharge Date, where the beneficiary died during the stay, or with a principal diagnosis of pregnancy or a condition originating in the perinatal period
Continuous Enrollment:	365 days prior to the Index Discharge Date through 30 days after the Index Discharge Date. No more than 1 gap of 45 days or 1 month.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (PCR-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	• IPTW / CEM, beneficiary-level weighted regression model • ITS / Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, race/ethnicity, geography, etc.)
National Benchmark:	NCQA national averages available

Deviations:	Paid claims only

Measure 3.D.3	**FMC Follow-Up After Emergency Department Visit for People With Multiple High-Risk Chronic Conditions**
Definition:	Percentage of ED visits during the measurement year for Success Life360 HOMs beneficiaries who have multiple high-risk chronic conditions who had a follow-up service within 7 days of the ED visit
Numerator:	Count of Success Life360 HOME beneficiaries who have 2 or more chronic conditions diagnosed prior to the ED visit during the measurement year and had a follow-up service within 7 days of the ED visit
Denominator:	Count of Success Life360 HOME beneficiaries who have 2 or more chronic conditions diagnosed prior to the ED visit during the measurement year
Exclusion Criteria:	Success Life360 HOME beneficiaries in hospice or using hospice services during the measurement year
Continuous Enrollment:	No more than one gap in enrollment of up to 45 days during the 365 days prior to the ED visit and no gap during the 7 days following the ED visit.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – FMC
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	NCQA national averages available
Deviations:	Paid claims only

Hypothesis 3.E. ARHOME beneficiaries most at risk for long-term poverty who receive services from a Success Life360 HOME will receive better quality of care.

Measure 3.E.1	**IET Initiation and Engagement of Substance Use Disorder Treatment**

Definition:	Percentage of Success Life360 HOME beneficiaries with a new episode of substance use disorder: • Total rate of Initiation of SUD treatment • Total rate of Engagement of SUD treatment
Numerator:	• Count of Success Life360 HOME beneficiaries with initiation of SUD treatment within 14 days of the SUD episode date – definition depends on whether the SUD Episode was an inpatient discharge or not. • Count of Success Life360 HOME beneficiaries with engagement of SUD treatment within 34 days after initiation: Identify all beneficiaries compliant for the initiation of SUD treatment numerator that have evidence of treatment– definition depends on whether the treatment was initiated via an inpatient admission.
Denominator:	Count of Success Life360 HOME beneficiaries as of Dec 31 of the measurement year with continuous enrollment being 194 days prior to the SUD Episode Date through 47 days after the SUD Episode Date (242 total days).
Exclusion Criteria:	• Exclude Success Life360 HOME beneficiaries from the denominator for both indicators (Initiation of SUD Treatment and Engagement of SUD Treatment) if the initiation of treatment event is an inpatient stay with a discharge date after November 27 of the measurement year. • Beneficiaries in hospice or using hospice services anytime during the measurement year. • Beneficiaries with any SUD diagnosis history or SUD medication history in the 194-day period before the index date.
Continuous Enrollment:	No allowable gaps in the continuous enrollment period
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (IET-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	NCQA national averages available

Deviations:	Paid claims only

Measure 3.E.2	AMM Antidepressant Medication Management
Definition:	Percentage of Success Life360 HOME beneficiaries who were treated with antidepressant medication, had a diagnosis of major depression, and who remained on an antidepressant medication treatment
Numerator:	Two rates: • Effective Acute Phase Treatment – count of Success Life360 HOME beneficiaries with at least 84 days of treatment with antidepressant medication beginning on the Index Prescription Start Date (IPSD) through 114 days after the IPSD. Allowable gaps total up to 31 days. • Effective continuation phase treatment – count of Success Life360 HOME beneficiaries with at least 180 days of treatment with antidepressant medication beginning on the IPSD through 231 days after IPSD. Allowable gaps total up to
Denominator:	Count of Success Life360 HOME beneficiaries as of April 30 of the measurement year with continuous enrollment of 105 days prior to the IPSD through 231 days after the IPSD
Exclusion Criteria:	N/A
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year and the year prior to the measurement year. Anchor date: IPSD
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA –AMM-AD in Medicaid Adult Core Set
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means, results reported at two rates with subpopulation analyses (sex, age, race/ethnicity, geography, etc.)
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates

Deviation(s):	Minimum age adjusted to 19, and maximum age adjusted to 30. Paid claims only.

Measure 3.E.3	FUH-AD Follow-Up After Hospitalization for Mental Illness
Definition:	Percentage of discharges for Success Life360 HOME beneficiaries who were hospitalized for treatment of selected mental illness diagnoses or intentional self-harm and who had a follow-up visit with a mental health practitioner. Two rates are reported: • Percentage of discharges for which the Success Life360 HOME beneficiaries received follow-up within 30 days of discharge • Percentage of discharges for which the Success Life360 HOME beneficiaries received follow-up within 7 days of discharge
Numerator:	Count of follow-up visits for Success Life360 HOME beneficiaries with a mental health practitioner within (30 or 7) days after discharge. Do not include visits that occur on the date of discharge
Denominator:	Count of acute inpatient discharges for Success Life360 HOME beneficiaries with a principal diagnosis of mental illness or intentional self-harm during the measurement year
Exclusion Criteria:	Success Life360 HOME beneficiaries in hospice or using hospice services during the measurement year
Continuous Enrollment:	Date of discharge through 30 days after discharge. No allowable gaps
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (FUH-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, race/ethnicity, geography, etc.)
National Benchmark:	NCQA national averages available
Deviations:	Paid claims only

Measure 3.E.4	SAA-AD Adherence to Antipsychotics for Beneficiaries with Schizophrenia
Definition:	Percentage of Success Life360 HOME beneficiaries with schizophrenia or schizoaffective disorder who were dispensed and remained on an antipsychotic medication for at least 80% of their treatment period during the measurement year
Numerator:	Count of Success Life360 HOME beneficiaries who achieved a proportion of days covered (PDC) of at least 80% for their antipsychotic medications during the measurement year
Denominator:	Count of Success Life360 HOME beneficiaries with at least one acute inpatient encounter with any diagnosis of schizophrenia or schizoaffective disorder, or at least two visits in an outpatient, intensive outpatient, partial hospitalization, ED or non-acute inpatient setting, on different dates of service, with any diagnosis of schizophrenia or schizoaffective disorder
Exclusion Criteria:	Success Life360 HOME beneficiaries in hospice or using hospice services during the measurement year; beneficiaries with a diagnosis of dementia, or who did not have at least two antipsychotic medication dispensing events, during the measurement year
Continuous Enrollment:	The measurement year. No more than one gap in enrollment of up to 45 days or 1 month during each year of continuous enrollment. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (SAA-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	NCQA national averages available
Deviations:	Paid claims only

Measure 3.E.5	SSD-AD Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications

Definition:	Percentage of Success Life360 HOME beneficiaries with schizophrenia, schizoaffective disorder, or bipolar disorder who were dispensed an antipsychotic medication and had a diabetes screening test during the measurement year
Numerator:	Count of glucose tests or an HbA1c tests performed during the measurement year for Success Life360 HOME beneficiaries with schizophrenia, schizoaffective disorder, or bipolar disorder who were dispensed an antipsychotic medication, as defined by claim/encounter or automated laboratory data
Denominator:	Count of Success Life360 HOME beneficiaries as of Dec 31 of the measurement year with schizophrenia, schizoaffective disorder, or bipolar disorder who were dispensed an antipsychotic medication
Exclusion Criteria:	Success Life360 HOME beneficiaries with hospice care or using hospice service at any time during the measurement year
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year and the year prior to the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (SSD-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	NCQA national averages available
Deviations:	Paid claims only

Measure 3.E.6	**OHD-AD Use of Opioids at High Dosage in Persons Without Cancer**
Definition:	Percentage of Success Life360 HOME beneficiaries who received prescriptions for opioids with an average daily dosage greater than or equal to 90 milligram equivalents (MME) over a period of 90 days or more
Numerator:	Count of Success Life360 HOME beneficiaries who received prescriptions for opioids with an average daily dosage $\geq$ 90 MMEs during the opioid episode
Denominator:	Count of Success Life360 HOME beneficiaries as of Dec 31 of the measurement year who received prescriptions for opioids
Exclusion Criteria:	Success Life360 HOME beneficiaries with a cancer diagnosis, sickle cell disease diagnosis, or in hospice or palliative care

Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	PQA (OHD-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	NCQA national averages available
Deviations:	Paid claims only

Measure 3.E.7	**COB-AD Concurrent Use of Opioids and Benzodiazepines**
Definition:	Percentage of Success Life360 HOME beneficiaries with concurrent use of prescription opioids and benzodiazepines
Numerator:	Count of Success Life360 HOME beneficiaries in the denominator with • Two or more prescription claims for any benzodiazepine with different dates of service, AND • Concurrent use of opioids and benzodiazepines for 30 or more cumulative days
Denominator:	Count of Success Life360 HOME beneficiaries as of Dec 31 of the measurement year with 2 or more prescription claims for opioid medications on different dates of service and with a cumulative days' supply of 15 or more days during the measurement year
Exclusion Criteria:	Success Life360 HOME beneficiaries with a cancer diagnosis, sickle cell disease diagnosis, or in hospice or palliative care
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	PQA (COB-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, age, race/ethnicity, geography, etc.)

National Benchmark:	N/A
Deviations:	Paid claims only

Measure 3.E.8	POD-AD Use of Pharmacotherapy for Opioid Use Disorder
Definition:	Percentage of new opioid use disorder (OUD) pharmacotherapy events with OUD pharmacotherapy for 180 or more days among Success Life360 HOME beneficiaries with a diagnosis of OUD
Numerator:	Count of new OUD pharmacotherapy events with OUD pharmacotherapy for 180 days or more days without a gap in treatment of 8 or more consecutive days for Success Life360 HOME beneficiaries
Denominator:	Count of Success Life360 HOME beneficiaries as of Dec 31 of the measurement year with a diagnosis of OUD
Exclusion Criteria:	N/A
Continuous Enrollment:	No allowable gaps in the continuous enrollment period. Continuous enrollment period is defined as 31 days prior to the treatment period start date through 179 days after the treatment period start date (211 total days)
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (POD-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, race/ethnicity, geography, etc.)
National Benchmark:	N/A
Deviations:	Minimum age adjusted to 19. Paid claims only

Measure 3.E.9	FUA-AD Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence
Definition:	Percentage of emergency department (ED) visits for Success Life360 HOME beneficiaries with a principal diagnosis of alcohol or other drug (AOD) abuse or dependence who had a follow-up visit for AOD abuse or dependence
Numerator:	• 30-day follow-up – count of follow-up visits with any practitioner, for Success Life360 HOME beneficiaries with a

	principal diagnosis of AOD abuse or dependence within 30 days after the ED visit. Include visits that occur on the date of the ED visit • 7-day follow-up – count of follow-up visits with any practitioner, for Success Life360 HOME beneficiaries with a principal diagnosis of AOD abuse or dependence within 7 days after the ED visit. Include visits that occur on the date of the ED visit
Denominator:	Count of ED visits for Success Life360 HOME beneficiaries with a principal diagnosis of alcohol or other drug (AOD) abuse or dependence as of the ED visit with continuous enrollment from the date of ED visit through 30 days after the ED visit
Exclusion Criteria:	Success Life360 HOME beneficiaries with a cancer diagnosis, sickle cell disease diagnosis, or in hospice or palliative care
Continuous Enrollment:	No allowable gap in coverage during continuous enrollment period
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (FUA-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, age, race/ethnicity, geography, etc.)
National Benchmark:	N/A
Deviations:	Paid claims only

Measure 3.E.10	**FUM-AD Follow-Up After Emergency Department Visit for Mental Illness**
Definition:	Percentage of emergency department (ED) visits for Success Life360 HOME beneficiaries with a principal diagnosis of mental illness or intentional self-harm and who had a follow-up visit for mental illness
Numerator:	• 30-day follow-up – count of follow-up visits for Success Life360 HOME beneficiaries with a principal diagnosis of mental health disorder or with a principal diagnosis of intentional self-harm and any diagnosis of mental health disorder within 30 days after the ED visit. Include visits that occur on the date of the ED visit • 7-day follow-up - count of follow-up visits for Success Life360 HOME beneficiaries with a principal diagnosis of mental health disorder or with a principal diagnosis of intentional self-harm

	and any diagnosis of mental health disorder within 7 days after the ED visit. Include visits that occur on the date of the ED visit
Denominator:	Count of ED visits for Success Life360 HOME beneficiaries with a principal diagnosis of mental illness or intentional self-harm as of the date of ED visit with continuous enrollment from date of the ED visit through 30 days after the ED visit
Exclusion Criteria:	N/A
Continuous Enrollment:	No allowable gap in coverage during continuous enrollment period
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA (FUM-AD in Medicaid Adult Core Set)
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, age, race/ethnicity, geography, etc.)
National Benchmark:	N/A
Deviations:	Paid claims only

Measure 3.E.11	**MPM Annual Monitoring for Patients on Persistent Medications**
Definition:	Percentage of Success Life360 HOME beneficiaries who received at least 180 treatment days of ambulatory medication therapy for a select therapeutic agent during the measurement year and at least one therapeutic monitoring event for the therapeutic agent in the measurement year. Each of the two rates reported separately and as a total rate. • Annual monitoring for beneficiaries on angiotensin converting enzyme (ACE) inhibitors or angiotensin receptor blockers (ARB) • Annual monitoring for beneficiaries on diuretics • Total rate
Numerator:	Count of Success Life360 HOME beneficiaries with at least one serum potassium and a serum creatinine therapeutic monitoring test in the measurement year
Denominator:	Count of Success Life360 HOME beneficiaries on persistent medications (i.e., beneficiaries who received at least 180 treatment days of ambulatory medication in the measurement year)

Exclusion Criteria:	Success Life360 HOME beneficiaries with hospice care
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during each measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	Administrative Claims
Measure Steward(s):	NCQA – MPM-AD in Medicaid Adult Core Set
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	Paid claims only

Measure 3.E.12	**Mortality Rates**
Definition:	Count of deaths of Success Life360 HOME beneficiaries per 100,000 during the measurement year
Numerator:	Count of deaths of Success Life360 HOME beneficiaries during the measurement year
Denominator:	Count of Success Life360 beneficiaries on January 1st of the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Eligibility and enrollment data
Measure Steward(s):	DMS Homegrown
Comparison Group:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A

Deviations:	N/A

Hypothesis 3.F. Young ARHOME beneficiaries most at risk for long-term poverty who receive services from a Success Life360 HOME will be more successful in living in their community compared to similar ARHOME beneficiaries in areas without a Success Life360 HOME.

Measure 3.F.1	Income – Average Household Income
Definition:	Average Success Life360 HOME beneficiary household income
Numerator:	Success Life360 HOME beneficiary household income during the measurement year
Denominator:	Count of Success Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Statewide Longitudinal Data System (SLDS)
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Measure 3.F.2	Income Increase
Definition:	Percentage change in income for Success Life360 HOME beneficiaries
Numerator:	Difference in income at the end of the measurement year compared to income at the end of the prior year for Success Life360 HOME beneficiaries
Denominator:	Income at the end of the prior year for Success Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition

Data Source(s):	Statewide Longitudinal Data System (SLDS)
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Measure 3.F.3	**Employment – Unemployment Rate (%) Annual Averages**
Definition:	Unemployment rate for Success Life360 HOME beneficiaries
Numerator:	Count of unemployed Success Life360 HOME beneficiaries during the measurement year
Denominator:	Count of Success Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Statewide Longitudinal Data System (SLDS)
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Measure 3.F.4	**Educational Attainment – High School Completion and Some College Rate**

Definition:	Percentage of residents in Success Life360 HOME counties with high school completion and some college
Numerator:	Count of residents in Success Life360 counties with high school completion and some college during the measurement year
Denominator:	Count of residents in Success Life360 HOME counties during the measurement year with available educational attainment information
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	American Community Survey (ACS)
Measure Steward(s):	American Community Survey (ACS)
Comparison Population:	Similar residents in counties w/o Success Life360 HOME
Comparison Method(s):	Annual table
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	ACS national averages available
Deviations:	N/A

Measure 3.F.5	**Participated in Employment, Employment Training, or Post-Secondary Education**
Definition:	Percentage of Success Life360 HOME beneficiaries who participated in employment, employment training, or post-secondary education
Numerator:	Count of Success Life360 HOME beneficiaries who indicate participation in employment, employment training, or post-secondary education during the measurement year
Denominator:	Count of Success Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition

Data Source(s):	Statewide Longitudinal Data System (SLDS)
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Measure 3.F.6	**Housing Security/Affordability - ≥ 30% of Income**
Definition:	Percentage of residents in Success Life360 HOME counties who spend 30% or more of their household income on housing
Numerator:	Count of residents in Success Life360 HOME counties who spend 30% or more of their household income on housing during the measurement year
Denominator:	Count of residents in Success Life360 HOME counties during the measurement year with available income and housing information
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	American Community Survey (ACS)
Measure Steward(s):	American Community Survey (ACS)
Comparison Population:	Similar residents in counties w/o Success Life360 HOME
Comparison Method(s):	Annual table
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	ACS national averages available
Deviations:	N/A

Measure 3.F.7	Housing Security/Affordability - Severe Housing Burden
Definition:	Percentage of residents in Success Life360 HOME counties with high housing costs, with overcrowding, and lack of kitchen/plumbing facilities
Numerator:	Count of residents in Success Life360 HOME counties with high housing costs, with overcrowding, and lack of kitchen/plumbing facilities during the measurement year
Denominator:	Count of residents in Success Life360 HOME counties during the measurement year with available income, housing, and utilities information
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	American Community Survey (ACS)
Measure Steward(s):	American Community Survey (ACS)
Comparison Population:	Similar residents in counties w/o Success Life360 HOME
Comparison Method(s):	Annual table
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	ACS national averages available
Deviations:	N/A

Measure 3.F.8	Food Security - Food Insecurity Rate (2020)
Definition:	Food insecurity rate among residents in Success Life360 HOME counties modeled on the following county characteristics: unemployment rate, poverty rate, median income, percent Hispanic, percent African American, percent of residents who are homeowners, and percent of residents who report a disability.
Numerator:	Refer to methods in the technical brief, Map the Meal Gap 2022
Denominator:	Refer to methods in the technical brief, Map the Meal Gap 2022
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Feeding America (Map the Meal Gap)

Measure Steward(s):	Feeding America (Map the Meal Gap)
Comparison Population:	Similar residents in counties w/o Success Life360 HOME
Comparison Method(s):	Annual table
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	Map the Meal Gap national averages available
Deviations:	N/A

Measure 3.F.9	**Food Security - % Low Income & Low Access to Store / % No Car & Low Access to Store (2015)**
Definition:	Food security based on the percentage of residents in Success Life360 HOME counties with low income and low access to stores and percentage of residents with no car and low access to stores
Numerator:	• Count of residents in Success Life360 HOME counties with low income and living more than 1 mile from a supermarket or large grocery store if in an urban area, or more than 10 miles from a supermarket or large grocery store if in a rural area. • Count of housing units in the Success Life360 HOME county without a car and more than 1 miles from a supermarket or large grocery store
Denominator:	• Residents in Success Life360 HOME counties with low income • Housing units in Success Life360 HOME counties
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Food Environment Atlas, USDA
Measure Steward(s):	Food Environment Atlas, USDA
Comparison Population:	Similar residents in counties w/o Success Life360 HOME
Comparison Method(s):	Annual table

Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	Food Environment Atlas national averages available
Deviations:	N/A

Measure 3.F.10	**Safety - Suicides, Injuries, Homicides, Firearm Fatalities**
Definition:	Percentage of residents in Success Life360 HOME counties with deaths from suicides, injuries, homicides, or firearm fatalities
Numerator:	Count of residents in Success Life360 HOME counties with a cause of death listed as suicide, injury, homicide, or firearm fatality during the measurement year
Denominator:	Count of residents in Success Life360 HOME counties during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	National Vital Statistics System (NVSS)
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar residents in counties w/o Success Life360 HOME
Comparison Method(s):	Annual table
Statistic to Be Tested:	Descriptive with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	N/A
Deviations:	N/A

Measure 3.F.11	**Receipt of Educational, Employment, or Other Social Services**
Definition:	Percentage of Success Life360 HOME beneficiaries receiving educational, employment, or other social services
Numerator:	Count of Success Life360 HOME beneficiaries receiving educational, employment, or other social services

Denominator:	Count of Success Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative, Statewide Longitudinal Data System (SLDS)
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Measure 3.F.12	Criminal Justice System Avoidance
Definition:	Percentage of Success Life360 HOME beneficiaries that did not have an interaction with the criminal justice system during the measurement year
Numerator:	Count of Success Life360 HOME beneficiaries that did not have an interaction with the criminal justice system during the measurement year
Denominator:	Count of Success Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Arkansas Department of Corrections and Division of Youth Services
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME

Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Hypothesis 3.G. Total average health care costs for Success Life360 HOME participants will be less compared to similar ARHOME beneficiaries in areas without a Life360 HOME.

Measure 3.G.1	**Total Medicaid Spend**
Definition:	Total Medicaid spend per Success Life360 HOME beneficiary
Numerator:	Total Medicaid spend - Inpatient/outpatient/emergency/ pharmacy spend for Success Life360 HOME beneficiaries
Denominator:	Count of Success Life360 HOME beneficiaries
Exclusion Criteria:	Hospice claims
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	North Carolina Department of Health and Human Services - Enhanced Case Management and Other Services Pilots Evaluation Design
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	• IPTW / CEM, beneficiary-level weighted regression model • ITS / Pre-Post DiD
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Measure 3.G.2	**Emergency Department (ED) Costs**

Definition:	Total Medicaid spend on ED visits per Success Life360 HOME beneficiary
Numerator:	Total Medicaid spend on ED visits for Success Life360 HOME beneficiaries
Denominator:	Count of Success Life360 HOME beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	• IPTW / CEM, beneficiary-level weighted regression model • ITS / Pre-Post DiD
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Measure 3.G.3	**Hospitalization Costs**
Definition:	Total Medicaid spend on Inpatient hospitalizations (including psychiatric care) per Success Life360 HOME beneficiary
Numerator:	Total Medicaid spend on inpatient hospitalizations for Success Life360 HOME beneficiaries
Denominator:	Count of Success Life360 HOME beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	Administrative Claims
Measure Steward(s):	DMS Homegrown
Comparison Population:	Similar beneficiaries in counties w/o Success Life360 HOME
Comparison Method(s):	• IPTW / CEM, beneficiary-level weighted regression model • ITS / Pre-Post DiD

Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Hypothesis 3.H. Success Life360 HOME beneficiaries will be screened for unmet HRSN and receive a corresponding intervention if they screened positive.

Measure 3.H.1	**SNS-E Food Screening**
Definition:	Percentage of Success Life360 HOME beneficiaries who were screened for food insecurity
Numerator:	Count of Success Life360 HOME beneficiaries screened for a food insecurity such as uncertain, limited, or unstable access to food that is: adequate in quantity and in nutritional quality; culturally acceptable; safe and acquired in socially acceptable ways.
Denominator:	Count of Success Life360 HOME beneficiaries
Exclusion Criteria:	Less than 18 years old or older than 65 years old
Continuous Enrollment:	Refer to population definition
Data Source(s):	Success Life360 HOME HRSN Screening Data and Referrals
Measure Steward(s):	NCQA Social Need Screening & Intervention (SNS-E)
Comparison Population:	N/A
Comparison Method(s):	Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	NCQA National averages available
Deviations:	N/A

Measure 3.H.2	SNS-E Food Intervention
Definition:	Percentage of Success Life360 HOME beneficiaries who received a corresponding intervention within 1 month of screening positive for food insecurity.
Numerator:	Count of Success Life360 HOME beneficiaries that screened positive for a food insecurity who received a corresponding intervention within 1 month of identification
Denominator:	Count of Success Life360 HOME beneficiaries who screened positive for a food insecurity
Exclusion Criteria:	Less than 18 years old or older than 65 years old
Continuous Enrollment:	Refer to population definition
Data Source(s):	Success Life360 HOME HRSN Screening Data and Referrals
Measure Steward(s):	NCQA Social Need Screening & Intervention (SNS-E)
Comparison Population:	N/A
Comparison Method(s):	Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	NCQA National averages available
Deviations:	N/A

Measure 3.H.3	SNS-E Housing Screening
Definition:	Percentage of Success Life360 HOME beneficiaries who were screened for housing instability, homelessness, or housing inadequacy.
Numerator:	Count of Success Life360 HOME beneficiaries that screened for a housing insecurity such as for housing instability, homelessness, or housing inadequacy.
Denominator:	Count of Success Life360 HOME beneficiaries
Exclusion Criteria:	Less than 18 years old or older than 65 years old
Continuous Enrollment:	Refer to population definition
Data Source(s):	Success Life360 HOME HRSN Screening Data and Referrals

Measure Steward(s):	NCQA Social Need Screening & Intervention (SNS-E)
Comparison Population:	N/A
Comparison Method(s):	Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	NCQA National averages available
Deviations:	N/A

Measure 3.H.4	**SNS-E Housing Intervention**
Definition:	Percentage of Success Life360 HOME beneficiaries who received a corresponding intervention within 1 month of screening positive for housing instability, homelessness, or housing inadequacy.
Numerator:	Count of Success Life360 HOME beneficiaries that screened positive for a housing insecurity who received a corresponding intervention within 1 month of identification
Denominator:	Count of Success Life360 HOME beneficiaries who screened positive for a housing insecurity
Exclusion Criteria:	Less than 18 years old or older than 65 years old
Continuous Enrollment:	Refer to population definition
Data Source(s):	Success Life360 HOME HRSN Screening Data and Referrals
Measure Steward(s):	NCQA Social Need Screening & Intervention (SNS-E)
Comparison Population:	N/A
Comparison Method(s):	Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	NCQA National averages available
Deviations:	N/A

Measure 3.H.5	**SNS-E Transportation Screening**

Definition:	Percentage of Success Life360 HOME beneficiaries who were screened for transportation insecurity.
Numerator:	Count of Success Life360 HOME beneficiaries who were screened for uncertain, limited or no access to safe, reliable, accessible, affordable, and socially acceptable transportation infrastructure and modalities necessary for maintaining one's health, well-being or livelihood.
Denominator:	Count of Success Life360 HOME beneficiaries
Exclusion Criteria:	Less than 18 years old or older than 65 years old
Continuous Enrollment:	Refer to population definition
Data Source(s):	Success Life360 HOME HRSN Screening Data and Referrals
Measure Steward(s):	NCQA Social Need Screening & Intervention (SNS-E)
Comparison Population:	N/A
Comparison Method(s):	Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	NCQA National averages available
Deviations:	N/A

Measure 3.H.6	**SNS-E Transportation Intervention**
Definition:	Percentage of Success Life360 HOME beneficiaries who received a corresponding intervention within 1 month of screening positive for transportation insecurity.
Numerator:	Count of Success Life360 HOME beneficiaries that screened positive for a transportation insecurity who received a corresponding intervention within 1 month of identification
Denominator:	Count of Success Life360 HOME beneficiaries who screened positive for a transportation insecurity
Exclusion Criteria:	Less than 18 years old or older than 65 years old
Continuous Enrollment:	Refer to population definition
Data Source(s):	Success Life360 HOME HRSN Screening Data and Referrals

Measure Steward(s):	NCQA Social Need Screening & Intervention (SNS-E)
Comparison Population:	N/A
Comparison Method(s):	Pre-Post DiD
Statistic to Be Tested:	Difference in group means with subpopulation analyses (sex, age, race/ethnicity, geography, etc.); Chi-square
National Benchmark:	NCQA National averages available
Deviations:	N/A

Measure 3.H.7	**Prior Screening of HRSN Needs**
Definition:	Percentage of Success Life360 HOME beneficiaries that were ever screened for HRSN needs prior to enrollment
Numerator:	Count of Success Life360 HOME beneficiaries in the measurement year that were ever screened for HRSN needs prior to enrollment
Denominator:	Count of Success Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Life360 Case Management Data
Measure Steward(s):	DMS Homegrown
Comparison Group:	N/A
Comparison Method(s):	Annual tables
Statistic to Be Tested:	Descriptive; Chi-square
National Benchmark:	N/A
Deviations:	N/A

Measure 3.H.8	**Prior Utilization of HRSN related Services**

Definition:	Percentage of Success Life360 HOME beneficiaries that had ever utilized HRSN services prior to enrollment
Numerator:	Count of Success Life360 HOME beneficiaries in the measurement year that has ever utilized HRSN services prior to enrollment
Denominator:	Count of Success Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Life360 Case Management Data
Measure Steward(s):	DMS Homegrown
Comparison Group:	N/A
Comparison Method(s):	Annual tables
Statistic to Be Tested:	Descriptive; Chi-square
National Benchmark:	N/A
Deviations:	N/A

Measure 3.H.9	**Supplemental Nutrition Assistance Program (SNAP/WIC) Enrollment**
Definition:	Percentage of Success Life360 HOME beneficiaries who were enrolled in SNAP/WIC during the measurement year
Numerator:	Count of Success Life360 HOME beneficiaries who were enrolled in SNAP/WIC during the measurement year
Denominator:	Count of Success Life360 HOME beneficiaries during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	SNAP/WIC data
Measure Steward(s):	DMS Homegrown
Comparison Group:	Similar beneficiaries in counties w/o Success Life360 HOME

Comparison Method(s):	IPTW/CEM, beneficiary-level weighted regression model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviations:	N/A

Goal 4. Life360 HOME costs and efforts will meet or exceed program expectations.

Hypothesis 4.A. Costs of the Life360 HOME program will be commensurate with the program goals and objectives and controlled prudently.

Measure 4.A.1	Life360 HOME Administrative Costs
Definition:	Cost of contracts or contract amendments and staff time equivalents required to administer Life360 HOME Amendment policies, including premium collection, healthy behavior incentives, premium assistance, and/or retroactive eligibility waivers.
Numerator:	N/A
Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	CMS-64 Reports and DMS administrative data
Measure Steward(s):	Mathematica Metric AD_45
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive with subpopulation analyses; Chi-square
National Benchmark:	N/A
Deviations:	N/A

Measure 4.A.2	Life360 HOME Infrastructure Costs
Definition:	Total infrastructure cost per Life360 HOME beneficiary enrolled
Numerator:	Count of total infrastructure expenditures related to the provision of Life360 HOME HRSN services
Denominator:	Count of total Life360 HOME beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	CMS-64 Reports and DMS administrative data
Measure Steward(s):	N/A
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive with subpopulation analyses; Chi-square
National Benchmark:	N/A
Deviations:	N/A

Measure 4.A.3	Life360 HOME Services Costs
Definition:	Total services cost per Life360 HOME beneficiary enrolled
Numerator:	Count of total services expenditures related to the provision of Life360 HOME HRSN services
Denominator:	Count of total Life360 HOME beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A

Data Source(s):	CMS-64 Reports and DMS administrative data
Measure Steward(s):	N/A
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive with subpopulation analyses; Chi-square
National Benchmark:	N/A
Deviations:	N/A

Measure 4.A.4	**Average Time to Launch Life360 HOME**
Definition:	Timing of infrastructure expenditures related to the provision of Life360 HOME HRSN services
Numerator:	Time from initial infrastructure payment to launch of Life360 HOME
Denominator:	Count of total Life360 HOME
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	CMS-64 Reports, Life360 HOME Reports
Measure Steward(s):	DMS Homegrown
Comparison Population:	Stratified by type of Life360 HOME
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive with subpopulation analyses; Chi-square
National Benchmark:	N/A
Deviations:	N/A

Hypothesis 4.B. Life360 HOME providers will meet or exceed the established metrics.

Measure 4.B.1	Life360 HOME Provider Performance
Definition:	Demonstrating beneficiary success as evidenced by meeting annual targets outlined in the Life360 provider agreement.
Numerator:	Count of total annual targets met by Life360 HOME
Denominator:	Count of total annual targets set by DMS for the Life360 HOME
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Life360 HOME Reports
Measure Steward(s):	DMS Homegrown
Comparison Population:	Stratified by type of Life360 HOME
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive with subpopulation analyses; Chi-square
National Benchmark:	N/A
Deviations:	N/A

Hypothesis 4.C. Arkansas will maintain state funding for social service programs related to housing transition supports and nutrition supports for the duration of the demonstration.

Measure 4.C.1	Social Service Program Provisions Over Time
Definition:	Maintain the level of state funding for social service programs related to housing transitions supports and nutrition supports for the duration of the amendment – percent change in funding in each measurement year as compared to the baseline year.
Numerator:	Difference in state funding for social service programs during the measurement year and the baseline year

Denominator:	State funding in the baseline year
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Maintenance of Effort under ARHOME Annual Monitoring Report
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A
Deviations:	N/A

Hypothesis 4.D. The Life360 HOME program will support provider financial health improvement.

Measure 4.D.1	Provider Financial Health Improvement
Definition:	Life360 HOME contribution to providers' uncompensated care
Numerator:	N/A
Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Provider survey/focus groups
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive analyses

National Benchmark:	N/A
Deviations:	N/A

Hypothesis 4.E. The key entities during the start of Life360 HOME program will report on implementation activities, infrastructure development, overcoming barriers in the facilitation of Life360 HOME, and on adopted strategies that identify and provide services to beneficiaries with HRSN needs.

Measure 4.E.1	Key Entities
Definition:	Description of key entities, roles, and participation in Life360 HOME
Numerator:	N/A
Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Provider and Key Entity Surveys and/or Interviews
Measure Steward(s):	DMS Homegrown
Comparison Group:	N/A
Comparison Method(s):	Annual tables in years Survey and/or Interviews were conducted
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A
Deviations:	N/A

Measure 4.E.2	Types of HRSN Services
Definition:	Description of services and supports offered to participating beneficiaries in Life360 HOME who screened positive for a HRSN need that include SNAP/WIC, housing supports, etc.
Numerator:	N/A

Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Maintenance of Effort under ARHOME Annual Monitoring Report; Provider and Key Entity Surveys and/or Interviews
Measure Steward(s):	DMS Homegrown
Comparison Group:	N/A
Comparison Method(s):	Annual tables in years Survey and/or Interviews were conducted
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A
Deviations:	N/A

Measure 4.E.3	**Integration of the Amendment with Existing Programs and Infrastructure**
Definition:	Description of how new supports are integrated with and built upon current infrastructure.
Numerator:	N/A
Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Maintenance of Effort under ARHOME Annual Monitoring Report; Provider and Key Entity Surveys and/or Interviews
Measure Steward(s):	DMS Homegrown
Comparison Group:	N/A
Comparison Method(s):	Annual tables in years Survey and/or Interviews were conducted
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A

Deviations:	N/A

Measure 4.E.4	Maintenance of Organizational Partnerships
Definition:	Description of the organizational partnerships among key entities that include health care providers, state Medicaid agencies, SSOs, etc.
Numerator:	N/A
Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Provider and Key Entity Surveys and/or Interviews
Measure Steward(s):	DMS Homegrown
Comparison Group:	N/A
Comparison Method(s):	Annual tables in years Survey and/or Interviews were conducted
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A
Deviations:	N/A

Measure 4.E.5	Key Entity Barriers in Implementing Amendment
Definition:	Description of any barriers that key entities had in their roles and participation in Life360 HOME implementation activities that may include the following areas: • Implementation of HRSN case management • Provision of HSRN services • Sharing and receiving screening results among key entities • Maintenance of organizational partnerships • Integrating Life360 HOME with existing programs and infrastructure

Numerator:	N/A
Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Provider and Key Entity Surveys and/or Interviews
Measure Steward(s):	DMS Homegrown
Comparison Group:	N/A
Comparison Method(s):	Annual tables in years Survey and/or Interviews were conducted
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A
Deviations:	N/A

Measure 4.E.6	**Barriers in Beneficiary Outreach and Participation**
Definition:	Description of barriers to participation in Life360 HOME: • Key Entities: Description of any barriers that key entities had in providing outreach to beneficiaries with social risk factors that may be eligible for Life360 HOME • Beneficiaries: Description of any barriers in enrollment and participation in Life360 HOME services that may affect the beneficiary experience
Numerator:	N/A
Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Survey-based assessment of beneficiary experiences; Provider and Key Entity Surveys and/or Interviews
Measure Steward(s):	DMS Homegrown

Comparison Group:	N/A
Comparison Method(s):	Annual tables in years Survey and/or Interviews were conducted
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A
Deviations:	N/A

Measure 4.E.7	Strategies Adopted to Facilitate and Reduce Barriers in Implementation
Definition:	Description of strategies adopted to reduce barriers to key entity roles and participation in Life360 HOME that may include the following areas: • Implementation of HRSN case management • Provision of HSRN services • Sharing and receiving screening results among key entities • Maintenance of organizational partnerships • Integrating Life360 HOME with existing programs and infrastructure
Numerator:	N/A
Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Provider and Key Entity Surveys and/or Interviews
Measure Steward(s):	DMS Homegrown
Comparison Group:	N/A
Comparison Method(s):	Annual tables in years Survey and/or Interviews were conducted
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A
Deviations:	N/A

Measure 4.E.8	Strategies Adopted to Improve Beneficiary Experience
Definition:	Description of strategies and methods used to provide outreach, identify social risk factors and HRSN needs, reducing delays in receiving services among participating Life360 HOME beneficiaries
Numerator:	N/A
Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Survey-based assessment of beneficiary experiences; Provider and Key Entity Surveys and/or Interviews
Measure Steward(s):	DMS Homegrown
Comparison Group:	N/A
Comparison Method(s):	Annual tables in years Survey and/or Interviews were conducted
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A
Deviations:	N/A

Measure 4.E.9	Local Availability of Social Services Over Time
Definition:	Percent change in number of social service programs related to housing transitions and nutrition supports for the duration of the amendment – percent change in each measurement year as compared to the baseline year.
Numerator:	Difference in number of social service programs at the end of the measurement year and the baseline year
Denominator:	Social service programs in the baseline year
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Maintenance of Effort under ARHOME Annual Monitoring Report; DMS/stakeholder interviews

Measure Steward(s):	DMS Homegrown
Comparison Group:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive
National Benchmark:	N/A
Deviations:	N/A

Acronyms

AAP: Adults' Access to Preventive/Ambulatory Health Services
ABP: Alternative Benefit Plan
AC: Administrative Cost
ACA: Affordable Care Act
ACE: Angiotensin Converting Enzyme
ACS: American Community Survey
ACU: Acute Crisis Unit
AD: Adult
ADH: Arkansas Department of Health
AHRQ: Agency for Healthcare Research and Quality
AID: Arkansas Insurance Department
APCD: All Payer Claims Database
ARB: Angiotensin Receptor Blockers
ARHOME: Arkansas Health and Opportunity for Me
ARIES: Arkansas Integrated Eligibility System
ASCVD: Atherosclerotic Cardiovascular Disease
ATE: Average Treatment Effect
ATSDR: Agency for Toxic Substances and Disease Registry
BCS: Breast Cancer Screening
BESS: Beneficiary Engagement Satisfaction Survey
BH: Behavioral Health
BLS: U.S. Bureau of Labor Statistics
CAHPS: Consumer Assessment of Health Plan Survey
CCS: Cervical Cancer Screening
CDC: Centers for Disease Control and Prevention
CDF: Cumulative Distribution Function

CEM: Coarsened Exact Matching
CDF: Cumulative Distribution Function
CHF: Congestive Heart Failure
CHIP: Children's Health Insurance Program
CHR&R: County Health Rankings & Roadmaps
CMS: Centers for Medicare & Medicaid Services
DCFS: Division of Children and Family Services
DHHS: Department of Health and Human Services
DHS: Department of Human Services
DiD: Difference-in-Difference
DIS: Department of Information Systems
DME: Durable Medical Equipment
DMS: Division of Medical Services
DSS: Decision Support System
DY: Demonstration Year
DYS: Division of Youth Services
ED: Emergency Department
ER: Emergency Room
ESRD: End Stage Renal Disease
FFS: Fee-for-Service
FORHP: Federal Office of Rural Health Policy
FPL: Federal Poverty Level
FUH: Follow-Up After Hospitalization
HbA1c: Hemoglobin A1c
HCIP: Health Care Independence Program
HEDIS: Healthcare Effectiveness Data and Information Set
HDI: Human Development Index
HHS-HCC: Department of Health and Human Services Hierarchical Condition Category
HIE: HRSN Initiative Expenditures
HRSN: Health-Related Social Needs
IABP: Interim Alternative Benefit Plan
IESD: Index Episode Start Date
IPSD: Index Prescription Start Date
IPTW: Inverse Probability of Treatment Weight
IPWREG: Inverse Probability Weighted Regression adjustment
IPWS: Inverse Probability Weighted Score

ITS: Interrupted Time Series

LDL-C: Low Density Lipoprotein Cholesterol

LRCD-CH: Low Risk Cesarean Delivery- Child

MDD: Minimum Detectable Difference

MH: Mental Health

MMIS: Medicaid Management Information System

MPM: Monitoring for Patients on Persistent Medications

MVI: Maternal Vulnerability Index

NAMI: National Alliance on Mental Illness

NCHS: National Center for Health Statistics

NCQA: National Committee for Quality Assurance

NSDUH: National Survey on Drug Use and Health

NVSS: National Vital Statistics System

NYU: New York University

OB/GYN: Obstetrics and Gynecology

O/E: Observed-to-Expected

PA: Premium Assistance

PASSE: Provider-led Arkansas Shared Savings Entity

PCAP: Person-Centered Action Plan

PCP: Primary Care Physician

PCR: Plan All-Cause Readmission

PDC: Proportion of Days Covered

PHE: Public Health Emergency

PII: Personally Identifiable Information

PSM: Propensity-Score Modeling

PUC: Provider Uncompensated Care Cost

QHP: Qualified Health Plan

RD: Regression Discontinuity

RDD: Regression Discontinuity Design

REGADJ: Regression Adjustment without Adjusting for Selection

SAA: Schizophrenia

SAIPE: Small Area Income and Poverty Estimates

SDOH: Social Determinants of Health

SLDS: Statewide Longitudinal Data System

SMI: Serious Mental Illness

SSI: Supplemental Security Income

STC: Special Terms and Conditions

SUD: Substance Use Disorder
SVI: Social Vulnerability Index
THE: Total Health Expenditures
USDA: U.S. Department of Agriculture
YFC: Youth Who Have Been in Foster Care

DISCLOSURE

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Attachment G
Life360 HOME Definitions & Eligibility

Life360 HOME	Services Definition	Eligibility	Duration	Settings and Referrals
Maternal Life360 HOME	Beneficiaries will receive intensive care coordination through home visitation services based on one of the models that has demonstrated effectiveness as assessed by the U.S. Department of Health and Human Services and linkages to community resources and supports. The Life360 HOME hospital will incorporate screening that includes health and social-related needs (HSRN) as well as any other required health screenings, which will help inform the supports to be delivered to improve outcomes in each of the following domains: • Maternal Health • Child Health • Family Economic Self-Sufficiency • Positive Parenting Practices Referral to community supports to address identified HRSN as permitted under these STCs	An individual is eligible for the Maternal Life360 HOME if : • Lives in the Maternal Life360 identified service area; and Is pregnant with a high-risk pregnancy diagnosis High-risk pregnancy may be determined by the Maternal Life360 HOME if not already documented through a medical provider.	Services begin during pregnancy and continue up to two years after birth of the baby even if the individual is no longer eligible for Medicaid under any eligibility category[54] based upon continued need of home visiting support.	Intensive Care Coordination will be delivered primarily in the home setting but could also be delivered in community or clinic settings. Maternal Life360 HOMEs will accept referrals for Maternal Life360 HOME Services from a diverse array of health and social service organizations, medical providers, and non-medical supports in the community through formal and informal agreements.

[54] If the individual would become no longer eligible for Medicaid under any eligibility category, they would still be able to receive the benefits under the Maternal Life360, based upon continued need, e.g., intensive care coordination, visiting home nursing and health related social needs assessments. The match for services to people who are no longer eligible for the adult group would be at regular FMAP.

Life360 HOME	Services Definition	Eligibility	Duration	Settings and Referrals
Rural Life360 HOME	• Screening for HRSN using a standardized tool • Referral to community supports to address identified HRSN as permitted under these STCs In addition to the services above, individuals with a mental health or substance use disorder and identified HRSN needs will receive Intensive Care Coordination services which will include: • Conducting an in-depth 1:1 interview to determine the HRSN, any unmet needs related to medical services and nonmedical supports, and system involvement such as criminal justice if applicable. • Developing an individualized Person-Centered Action Plan (PCAP) reflecting the beneficiary 's preferences for addressing the needs identified. Goals may include but are not limited to establishing and maintaining regular care for behavioral	All individuals living in the Rural Life360 HOME identified service area are eligible to receive a HRSN Screening and referrals to needed community supports regardless of Medicaid eligibility. An individual is eligible for Rural Life360 HOME intensive care coordination if the individual: • Is eligible for the ARHOME program; • Lives in the Rural Life360 identified service area; • Has a mental health or substance use disorder diagnosis; and • Has at least one HRSN need identified through a HRSN screen.	Intensive Care Coordination can be received as long as the individual is eligible for the ARHOME demonstration and resides in the service area.	Intensive Care Coordination will be delivered primarily in the home setting but could also be delivered in community, medical clinic, behavioral health clinic, or hospital settings. Hospitals will accept referrals for Rural Life360 services from a diverse array of health and social service organizations, medical providers and non-medical supports in the community through formal and informal agreements. It is expected that most referrals will come from mental health or substance used disorder treatment providers.

Life360 HOME	Services Definition	Eligibility	Duration	Settings and Referrals
	health and medical needs; strengthening life and family skills; emotional and mental wellness; and obtaining or sustaining safe housing. • Working directly with the beneficiary to improve their skills to be healthy and thrive in their community and connecting them to identified medical services and nonmedical supports. • Documenting care coordination activities including new goals and barriers/successes experienced by beneficiary			
Success Life360 HOME	Beneficiaries will receive Intensive Care Coordination services, which will include: • Screening for HRSN using a standardized tool as prescribed by the program model • Conducting in-depth 1:1 interview to determine the HRSN, any unmet needs related to medical services and nonmedical supports, and system involvement such as	An individual is eligible for Success Life360 intensive care coordination if the individual: • Lives in the Success Life360 identified service area; • Has a chronic health condition; and • Meets the criteria for at least one of the following categories: o Between nineteen (19) and twenty-four (24) years of age and has been previously placed	Length of time to receive intensive care coordination based upon obtainment of PCAP goals and is expected to be completed in 24 months or less. Services may remain in place at lesser intensity for longer than 24 months if PCAP goals	Intensive Care Coordination will be delivered primarily in the home or shelter setting but could also be delivered in community, educational or job training settings. Hospitals will accept referrals for Success Life360 services from a diverse array of health and social service organizations, medical providers and non-medical supports in the community through

Life360 HOME	Services Definition	Eligibility	Duration	Settings and Referrals
	criminal justice if applicable. • Developing an individualized PCAP reflecting the beneficiary 's preferences for addressing the needs identified. Goals may include but are not limited to establishing and maintaining regular care for behavioral health and/or medical needs; strengthening life skills; emotional and mental wellness; support applying for job training or education programs offered through the provider or other organizations; and obtaining or sustaining safe housing. • Working directly with the beneficiary to improve their skills to be healthy and thrive in their community and connecting them to identified medical services and nonmedical supports. • Documenting care coordination activities including new goals and barriers/ successes experienced by the beneficiary.	under the supervision of the Division of Youth Services as verified by Arkansas Department of Human Services o Between nineteen (19) and twenty-four (24) years of age and has been previously placed under the supervision of the Arkansas Department of Correction, as verified by the Arkansas Department of Correction o Between nineteen (19) and twenty-seven (27) years of age and has been previously placed under the supervision of the Division of Children and Family Services; as verified by Arkansas Department of Human Services. o Between nineteen (19) and thirty (30) years of age and is a veteran verified by Arkansas	have not been completed and the individual remains eligible for Medicaid.	formal and informal agreements. A large portion of referrals will come from the state agencies that serve eligible beneficiaries.

Life360 HOME	Services Definition	Eligibility	Duration	Settings and Referrals
		Veterans Administration.		

Attachment H
Life360 HOME Service Details (RESERVED)

Attachment I
Protocol for Assessment of Beneficiary Eligibility and Needs, Infrastructure Planning, and Provider Qualifications for Life360 HOMEs

Overview

As part of the new Arkansas Health and Opportunity for Me (ARHOME) program, Arkansas is creating a Life360 HOME program to create Community Bridge Organizations (CBOs), known as Life360 HOMEs, for ARHOME beneficiaries most at-risk of long-term poverty and poor health outcomes. The state will contract with hospitals to become Life360 HOMEs and address the health-related social needs (HRSN) of eligible beneficiaries. A central component of the program is screening beneficiaries enrolled in the program for HRSN and referring them to needed resources. There are three types of Life360 HOMEs:

Maternal Life360 HOMEs: The goal of the Maternal Life360 HOME is to improve state maternal health and child health outcomes, particularly birth outcomes, by providing evidence-based home visiting services to women with high-risk pregnancies.

Rural Life360 HOMEs: Rural hospitals approved to be Rural Life360 HOMEs will provide care coordination services to beneficiaries with serious mental illness or substance use disorder. Rural Life360s will also provide HRSN screenings to general community members and refer to needed resources and Life360s will operate an acute crisis unit in the hospital.

Success Life360 HOMEs: Acute care hospitals approved to become Success Life360 HOMEs will provide services to enhance life skills (e.g., resume writing, obtaining a driver's license) for young adults (ages 19-30) who are veterans or who were previously incarcerated, in the juvenile justice system, or in foster care. (As part of a separate waiver amendment application, the state is requesting to expand beneficiary eligibility to adults up to age 59. As of May 2024, this application is still pending approval.)

This Protocol must include:

- a list of the Life360 HOME services and service descriptions, outlining the name and description of each proposed service,
- the criteria for defining when each service is medically appropriate,
- the process by which that criteria will be applied including care plan requirements or other documented processes,
- proposed uses of Life360 HOME infrastructure, and
- provider qualification criteria for each service.

Identifying Beneficiaries with HRSN

A description of the process for identifying beneficiaries with health-related social needs, including

- outlining beneficiary eligibility,
- implementation settings,
- screening tool selection, and
- rescreening approach and frequency.

Life360 HOME Beneficiary Eligibility

All Life360 HOMEs enroll eligible beneficiaries into the program based on the eligibility criteria outlined below for each type of Life360 HOME. If more than one type of Life360 HOME is available and a beneficiary is eligible for both, they may choose the Life360 that best fits their needs. The Life360 HOME will either enroll the beneficiary or provide linkage to the other Life360 based on the enrollee's request. Each Life360 HOME hospital will be responsible for entering enrollment requests with the required documentation for each type of Life360 HOME to the Medicaid provider portal. Maternal and Rural Life360 HOME eligibility requires a medical diagnosis for enrollment, but referral for potential program participation may be initiated by community partners, such as homeless shelters, churches, or food banks. Clients may even self-refer based on knowledge of the program or state and community outreach efforts. Eligibility will be verified through an enrollment program reviewing each enrollment request.

As part of the enrollment request, each beneficiary will submit a consent form indicating their agreement to participate in the program and their consent to have their data shared with program partners. Participation in Life360 services is voluntary for the beneficiary; the beneficiary is not required to enroll in Life360 HOME program to continue Medicaid eligibility. Those participating in Life360 may end services at any time by informing the enrollment broker or Life360 provider.

To be eligible for Life360 HOME participation, the beneficiary must live in the service area defined by the Life360 HOME provider. Residence can be determined by the person's geographic residence, shelter or other temporary residence, such as a health facility. If no current residence exists, job history, school/childcare enrollment, or legal documents can help establish whether the beneficiary meets the residency requirements. The chart below describes the criteria beneficiaries must meet to be eligible to receive Life360 HOME services. It also describes the implementation settings for Life360 activities.

Life360 HOME	Beneficiary Eligibility for Services	Implementation Settings
Maternal Life360 HOME	Individuals are eligible to enroll in the Maternal Life360 HOME program if they: 1. Clinical criteria: Are either currently pregnant with a high-risk pregnancy or were pregnant with a high-risk pregnancy when they originally enrolled in the Maternal Life360 program. High-risk pregnancy is defined as having a diagnosis of needing supervision for high-risk pregnancy. High-risk pregnancy must be verified through a completed referral form from the beneficiary's physician that includes the most current clinical note.	Home visiting services will mostly be delivered in the beneficiary's home. The services may also be delivered in the community partner organization facility, medical clinic, behavioral health clinic, shelter, or hospital settings. Video or phone-supported visits also may be appropriate for beneficiaries being served in remote areas or experiencing contagious illness. Maternal Life360s will accept referrals

Life360 HOME	Beneficiary Eligibility for Services	Implementation Settings
	2. Are currently enrolled in Arkansas Medicaid or were enrolled in ARHOME while participating in the Maternal Life360 program. Women who were enrolled in ARHOME at the time of the child's birth are eligible to remain in the program for up to two years after the baby's birth, even if they lose Medicaid eligibility. Women who were in another Arkansas Medicaid program while enrolled in the program are eligible to participate for one year after the baby's birth but cannot continue to receive services if they lose Medicaid eligibility. 3. Are not currently receiving state- or federally funded home visiting services through a provider whose services cover pregnancy or the first two (2) years of a baby's life. To specifically qualify for housing supports (not including helping with connections to housing supports), individuals must be considered homeless or at risk of becoming homeless, as defined by the U.S. Department of Housing and Urban Development (HUD) in 24 CFR 91.5. To specifically qualify for nutritional supports (not including helping with connections to nutritional supports), individuals must be identified as meeting the USDA definition of low food security or very low food security. Further detail on the available housing or nutrition supports is available in the HRSN Services section below.	for services from a diverse array of health and social service organizations, medical providers, and non-medical supports in the community through formal and informal agreements. For persons receiving intensive care coordination, the care coordinator will communicate with partners and the individual to ensure resources are obtained to meet their needs. The Maternal Life360 HOME will document resources through either formal or informal partner agreements received in the enrollees' PCAP.
Rural Life360 HOME	**Community HRSN Screening:** All individuals living in the Rural Life360 service area are eligible for HRSN	**Community HRSN screening** and referrals will occur in settings identified by the

Life360 HOME	Beneficiary Eligibility for Services	Implementation Settings
	screening and referrals to needed community supports. These individuals will not be enrolled in the Rural Life360 HOME program through the enrollment process described above but will receive HRSN screenings and referrals if they agree to be screened. **Intensive Care Coordination** To be eligible for intensive care coordination, an individual must: 1. Be enrolled in ARHOME; 2. Have a mental health and/or substance use disorder diagnosis as verified by a qualified provider; and 3. Not be enrolled in the Provider-led Arkansas Shared Services Entity (PASSE) program, a managed care program that provides care coordination, medical care and other supports for persons with mental health or intellectual or developmental disability who meet the PASSE's established assessment criteria. To specifically qualify for housing supports (not including helping with connections to housing supports), individuals must be considered homeless or at risk of becoming homeless, as defined by the U.S. Department of Housing and Urban Development (HUD) in 24 CFR 91.5. To specifically qualify for nutritional supports (not including helping with connections to nutritional supports), individuals must be identified as meeting the USDA definition of low food security or very low food security.	Life360 hospital that ensures space for confidential communication, including but not limited to the following: • Hospital facilities • Medical and behavioral health clinics • Health fairs • Local health units • Shelters and transitional housing • Food banks and pantries DHS will review any proposed formal agreements with other service providers during the application and the readiness stage to confirm provider's ability (i.e., having funding and experience with a particular HRSN) to provide that service and that the scope of services complies with the approved HRSN in the STCs and the Life360 provider manual requirements. **Intensive care coordination** can be delivered in the community partner organization facility, medical clinic, behavioral health clinic, hospital, or the beneficiary's home, shelter, or transitional housing. Video supported visits also may be appropriate for beneficiaries, particularly those in remote areas or experiencing contagious illness.

Life360 HOME	Beneficiary Eligibility for Services	Implementation Settings
	Further detail on the available housing or nutrition supports is available in the HRSN Services section below.	
Success Life360 HOME	Individuals are eligible for Success Life360 intensive care coordination if they meet the following criteria: 1. Are enrolled in ARHOME; 2. Are not enrolled in the Provider-led Arkansas Shared Services Entity (PASSE) program; 3. Have a chronic health condition as verified by participating hospitals. 4. Meet the criteria for at least one of the following categories: • Is between nineteen (19) and twenty-four (24) years of age and has been previously placed under the supervision of the DHS Division of Youth Services as verified by DHS. • Is between nineteen (19) and twenty-four (24) years of age and has been previously placed under the supervision of the Arkansas Department of Corrections (DOC), as verified by the DOC. • Is between nineteen (19) and twenty-seven (27) years of age and has been previously placed under the supervision of the DHS Division of Children and Family Services; as verified by DHS. • Is between nineteen (19) and thirty (30) years of age and is a veteran as verified by DD214 Certificate of Release or Discharge from Active Duty. To specifically qualify for financial supports for housing (not including helping with connections to housing supports), individuals must be considered homeless or at risk of becoming homeless, as defined	Intensive care coordination will be delivered primarily in the facility of the community partner organization but may also be delivered in the beneficiary's home, shelter or transitional housing facility. Video supported visits also may be appropriate for beneficiaries, particularly those in remote areas or experiencing contagious illness.

Life360 HOME	Beneficiary Eligibility for Services	Implementation Settings
	by the U.S. Department of Housing and Urban Development (HUD) in 24 CFR 91.5. To specifically qualify for financial nutritional supports (not including helping with connections to nutritional supports), individuals must be identified as meeting the USDA definition of low food security or very low food security. Further detail on the available financial supports for housing or nutrition is available in the HRSN Services section below.	

HRSN Screening

The process for identifying beneficiaries' HRSN starts with an HRSN screening. All Life360 HOMEs will be expected to screen all enrolled beneficiaries to determine any needs or barriers a beneficiary may experience. These HRSN screenings will be expected to occur routine and must identify several required elements encompassing primary social determinants of health, including, at a minimum, housing instability, food insecurity, utility needs, interpersonal safety, transportation needs, financial strain, employment, family and community support, education, physical activity, substance use, mental health, and disabilities. Information gathered through HRSN screenings will be used to help inform care coordination plans and referrals to community services and supports.
HRSN will also be identified through the development and monitoring of the patient-centered action plan, or PCAP, as described in this protocol and included in the Life360 HOME provider manual.

- ***Screening tool selection, and rescreening approach and frequency***

The Life360 HOME program will not specify a single HRSN screening tool providers must use, but Life360 HOME providers must use a DHS-approved HRSN screening tool. Life360 provider applicants must submit their screening tool during at application and DHS will verify use of the tool during readiness review prior to service implementation. While a specific HRSN tool will not be required, each Life360 must incorporate a tool that screens across a set of required domains, is written in accessible language, conducted by staff trained to use the tool, and is coordinated with any additional screening and assessment that may be part of the program. Providers must complete necessary staff training to administer the tool, have a platform for

capturing results, and a process for linking beneficiaries to resources and monitoring the receipt of those referrals.

At readiness review and prior to starting services, DHS will ensure each Life360 and/or its partner has met each of these requirements. DHS may provide feedback on the tools and require revisions to ensure alignment with program goals. If a Life360 changes its HRSN screening tool, it must submit its new tool to DHS for approval before making the change.

HRSN screens will be conducted with every enrolled Life360 beneficiary within fifteen (15) calendar days of enrollment and every six (6) months during program participation.

Medical Appropriateness

A description of the process by which clinical criteria will be applied, including:

1. **A description of the documented process wherein a provider, using their professional judgment, may deem the service to be medically appropriate**
2. **Plan to identify medical appropriateness based on clinical and social risk factors**

For Maternal Life360, the clinical criteria applied for receiving home visiting services is a medical diagnosis of needing supervision for high-risk pregnancy which includes medical and social risk. This diagnosis must be verified through a completed referral form from the beneficiary's medical provider, including PCP, specialist or advanced nurse practitioner that includes the most current clinical note. See Appendix A for diagnosis codes that beneficiaries must have to be eligible for Life360 home visiting services.

Individuals living in the Rural Life360 service area are eligible for HRSN screening and referrals to needed community supports. To be eligible for Rural Life360 Home intensive care coordination HRSN supports, the individual must have a mental health and/or substance use disorder diagnosis verified by any qualified clinical provider in the beneficiary's QHP or Medicaid FFS for those enrolled in the Medically Frail ARHOME. Generally this includes a licensed clinician or PCP providing care to the beneficiary who meets the QHP or Medicaid program criteria. See Appendix A for diagnosis codes that beneficiaries must have to be eligible for Life360 care coordination services.

Success Life360 eligibility criteria are based on age, as well as social risk factors, including former foster care services or any supervision by the DHS children and family welfare division, juvenile justice system involvement, former incarceration, or veteran status. Success Life360 HOMEs will verify that potential enrollees have a chronic condition to be eligible for Success Life360 HOME services. DHS will develop a list of eligible chronic conditions and will require Success Life 360 hospitals to verify the client has one of the listed chronic conditions prior to enrollment.

For all three Life360 types, receipt of HRSN supports will be informed by the needs identified through the HRSN screening and as well as other documented concerns in coordination with the community referral network partners and PCP.

Life360 enrollees will continue to receive all medical care through the existing network of medical and clinical providers. Identification of appropriateness for any medical or clinical services after Life360 referrals will be determined by licensed treatment providers. Treatment services will be covered through the ARHOME or other Medicaid/insurance plan based on each plan's medical criteria.

Identification of appropriateness for social supports obtained through Life360 referrals will be determined by HRSN screening, availability of community resources and available program eligibility parameters (for example income requirements, disability, household composition, and/or other defined risk criteria).

Plan to publicly maintain these clinical/social risk criteria to ensure transparency for beneficiaries and stakeholders

DHS will post on its website the Life360 HOMEs provider manual, which describes beneficiary eligibility for Life360 services, the description of services and other information helpful to beneficiaries. The Life360 Beneficiary webpage has already been established and will be updated with Life360 HOME locations and any changes related to eligibility or services. DHS will also develop and distribute beneficiary flyers for each type of Life360 HOMES that include the eligibility criteria and other information about the program. The information will be distributed as part of community outreach by Life360s, DHS partners, and community stakeholders. The website and flyers will be available in English, Spanish and Marshallese. Flyers needed in other languages will be provided as requested by Life360 HOME providers or program enrollees and DHS will post them for availability on the agency's website.

Life360s and their partners will be responsible for outreach to ensure entities that will make referrals based on an eligible diagnosis (e.g., obstetricians and behavioral health providers) are aware of Life360 services and the referral process. Life360s and their partners will also be responsible for general community outreach and awareness activities directed at the target population as well as key community groups that have direct contact with and are trusted by the Life360 target population (e.g., veterans groups, shelters, local health units, etc.).

Care Plan Development

A description of the process for developing care plans based on assessment of need

Plan to initiate care plans and closed-loop referrals to social services and community providers based on the outcomes of screening

Life360 HOMEs beneficiaries will develop with their Life360 care coordination coach an individualized person-centered action plan (PCAP) to address health needs and HRSN . DHS's

requirements for documentation of the beneficiary's PCAP include documenting the HRSN screening results, services needed, including health care service needs, or explored with client; referrals made, and outcomes of services rendered. Client goals and milestones and the date(s) of the initial PCAP and changes or updates must also be documented. The PCAP will be updated regularly to reflect goals met and new circumstances or needs. At a minimum, the PCAP will be updated annually. These PCAP requirements are intended to align with the existing person-centered planning requirements that apply to the provision of Home and Community-Based Services in Medicaid. The PCAP must describe the beneficiary's strengths, preferences, including language or disability accommodation, and HRSN, as identified by the HRSN screen, as well as needs for connections to medical providers. The plan must include short-term (less than 6 months) goals, a crisis plan, if necessary, and longer-term goals (more than 6 months). Each PCAP must include goals and barriers in areas identified through screening and ongoing interaction with the beneficiary, including but not limited to:

- Safe housing including utilities, if necessary
- Food security and nutrition
- Employment and/or education
- Financial stability and any needed social services
- Health and emotional wellness
- Establishing a relationship with a primary care provider and all other needed healthcare providers for preventative care (and to avoid non-emergent emergency department visits)
- Criminal justice involvement, if applicable
- Transportation

Providers must have a PCAP template developed and approved by DHS prior to starting services and a plan for initiating and updating the PCAP regularly, at a minimum annually. Life360s will conduct in-depth personal interview with the individual to identify HRSN needs and potential barriers to addressing them. The Life360 will develop or determine the tools and care coordination services provided for each target population and will coordinate with other services providers. Maternal Life360s will implement the care plan development approach of the evidence-based model selected that utilize best practices and tools for quality and effectiveness of home visits and to document observations and assessments of maternal/child health and any other family outcomes included. Therefore, a separate PCAP will not be required.

Each Life360 will identify their processes for referring individuals to community resources as part of their application, and DHS will review that process as part of the readiness review. To support referrals, each Life360 must have in place a community resource network and include a description of their plan for this network in their application. For example, Life360 hospitals will complete an assessment of the service area population demographics and a community resource inventory to determine the available community resources and gaps to develop referrals to HRSN. This inventory will include community medical providers, community service organizations, and social service providers to whom the Life360 can refer beneficiaries for appropriate services and supports. Life360s will also execute community partner agreements for their referral network prior to starting services, establish agreements if needed for health information data exchange and a process for communication and tracking of referrals. The

above required components of Life360 are outlined in DHS's provider manual, and specifics are outlined in DHS's executed agreements with each Life360 provider. DHS will monitor the implementation of the requirements through the program reports.

DHS is working with Arkansas Division of Information Services (DIS) and health care provider groups to coordinate and leverage state resources to develop (and avoid duplication of) HRSN screenings, resource referral platforms, state program applications and education and workforce connections. DHS is working with these groups to ensure the tools and technology currently under development support Life360s' care coordination for care planning and documentation of services provided. A component of this project will streamline and improve applications for public benefits such as Medicaid, TANF and SNAP, as well as the process for claiming federal income tax credits through an open-source tool that integrates applications for public benefits.

DIS houses an array of federal and state employment, workforce training/education and other data. DIS has been awarded philanthropic support to continue its technical support of improvements to the state's workforce and career education platform. Additionally, DHS serves on the Governor's Workforce Cabinet along with other key state agencies. DHS will rely on data matching across DIS (workforce, incarceration) and DHS (FPL, dependents, SNAP, etc.) to develop a basic profile and also translating HRSN screening results to standardized codes that can be reported back to MMIS/Life360 portal. The available HRSN and employment/education screening and intake information will help identify beneficiary activities, characteristics and eligibility across state Workforce programs, DHS TANF/SNAP caseworkers, and Life360s.

DHS will continue to discuss with DIS, the health care provider community and other state agencies our workplan for HRSN related data to support Life360 HOMEs and integration with other key HRSN across other agencies such as workforce and education.

HRSN Services

A list of the covered HRSN services (not to exceed those allowed under STC 41), with associated service descriptions and service-specific provider qualification requirements.

The Life360 HOME will ensure enrollees with identified HRSN connect with community resources and supports as permitted under the Life360 HOME STCs and Life360 provider manual. Life360s will be expected to establish an effective community referral network to include community housing and other community resource partners to obtain any resources Life360 beneficiaries would be eligible to receive. Life360s will assist individuals in applying for and accessing state and federal benefit programs, or they may also use the state's centralized benefits portal to apply on their own. For general resources, Life360s can provide referral directly or assist client with accessing resource platforms, such as 211 and FindHelp.org.Life360s HOMEs may not supplant any other available funding sources such as housing or nutrition supports available to beneficiaries through local, state or federal programs.[55]

In addition to HRSN screenings and resource referrals, all Life360 HOMEs will provide care coordination and case management services to assist beneficiaries in receiving needed services. As part of that care coordination, all Life360 HOMEs will develop a Person-Centered Action

[55] Applies to all three types of Life360 HOMEs

Plan (PCAP) for each enrolled beneficiary as described above within the first 90 days and initial visit(s), and the process will be individualized to reflect each client's needs and preferences and recommendations for services to address HRSN The PCAP will document the needs identified through HRSN screening and through interaction with the Life360 care coordinator. The PCAP will identify the enrollee's personal goals, developed in coordination with enrollee, and the steps necessary to achieving those goals. Goals may include strengthening life and family skills, maintaining emotional and mental wellness, avoiding interaction with the criminal justice system, achieving an educational degree or career certification, and obtaining or sustaining safe housing. The PCAP will set a timeframe for meeting the goals and set milestones the enrollee should meet along the way.

Life360 HOMEs will also deliver care coordination services focused on the particular needs of the beneficiaries served in each of the three types of Life360 HOMEs. For example, Maternal Life360 HOMEs will focus on helping women with high-risk pregnancies access pre- and postnatal care and assist with newborn care, while Rural Life360 HOMEs will focus on ensuring beneficiaries with mental health needs access mental health care and needed medications. The services specific to each type of Life360 HOME are provided below.

Life360 HOME	Services Description	Provider qualifications[56]
Maternal Life360 HOME	Beneficiaries will receive maternal home visitation services based on one of the models recognized by the U.S. Department of Health and Human Services to be effective in improving maternal and child health. Home visiting is an evidence-based program that provides direct support and intensive care coordination of services for beneficiaries served by Maternal Life360s with the goals of improving maternal and infant health outcomes, promoting child development and school readiness, connecting families to needed community resources and supports and increasing a family's education and earning potential.[57] Life360 HOME hospitals will incorporate screening that identify needs and help inform the supports to be delivered in each of the following domains: • Maternal and child health • Family economic self-sufficiency • Parenting practices Specific home visiting activities will include: • Assessing the enrollee and her family's health-related social needs	A birthing hospital in the state of Arkansas or in a border state that: A. Is licensed as a general hospital; B. Provides obstetrics services; and C. Is enrolled as a provider with the Arkansas Medicaid program. The Life360 or the organization with which the Life360 contracts to provide home visiting must use an evidence-based maternal and child home visitation model. The selected model(s) must cover home visiting services from pregnancy through at least the first two (2) years of a child's life. In the Maternal Life360 HOME program, home visitors serve as the case manager/care coordinator. Home visitors must meet the following criteria: • Have a high school diploma or GED and • Have experience with early childhood education, childhood development, or

[56] Life360 HOME Provider Manual community partner organization criteria Section 203.230
[57] Life360 HOMEs Provider Manual approved December 2022.

Life360 HOME	Services Description	Provider qualifications[56]
	• Providing beneficiaries with education and support on prenatal health, birth preparation and newborn care • Helping navigate medical care and addressing barriers that could prevent regular prenatal visits and well child visits • Assisting with accessing needed resources and services, including referring to community and state resources, such as food banks, WIC, and housing services. • Assisting with enrollment in education or workforce training programs. This assistance is limited to case management coordination and does not include education application fees or other payments related to education on the person's behalf.	social work, family support, maternity services, or case management services. Home visitors must have completed all training and continued education requirements of the selected home visiting model.
Rural Life360 HOME	Individuals with a serious mental health or substance use disorder will receive intensive care coordination[58] through the Rural Life360 hospital, including: • Ensuring the PCAP establishes goals for establishing and maintaining regular care for behavioral health and medical needs; • Working directly with beneficiaries to improve their skills to be healthy and thrive in their community and connecting them to identified medical services and nonmedical supports. • Documenting care coordination activities including new goals and barriers/successes experienced by beneficiary. Rural Life360 HOMEs also must operate an Acute Care Unit that provides brief crisis	To be eligible to become a Rural Life360 HOME provider, hospitals must qualify as a small rural hospital, meeting the following criteria: A. Licensed as a critical access hospital or a general hospital; B. Located in a rural area, meaning an Arkansas county: • That contains a hospital designated as a critical access hospital or participant in the Small Rural Hospital Improvement Program or • Has a population of fifty-thousand (50,000) or less. C. Has fifty (50) or fewer staffed beds; and D. Is enrolled as a provider in the Arkansas Medicaid program.

[58] An umbrella term for a collaborative process in which a care coordinator or others assess, plan, implement, coordinate, monitor and evaluate the options, services and supports required to meet the beneficiary's health and HRSN needs. It is characterized by advocacy, communication, and resource management, and promotes quality interventions and outcomes. In addition to addressing medical services, care coordination coaches ensure that beneficiaries have safe housing, employment, education, financial stability, and emotional/mental wellness.

Life360 HOME	Services Description	Provider qualifications[56]
	treatment services to persons experiencing a psychiatric and/or substance abuse-related crisis and may pose an escalated risk of harm to themselves or others. ACUs provide hospital diversion and step-down services with psychiatry and substance use disorder services available on-site as well as on-call psychiatry available 24 hours a day. The following services must be available: Ongoing assessment and observation, crisis intervention, substance use and co-occurring treatment and referral for independent assessment[59] and care planning as needed. Short-term detoxification may also be offered.	In the Rural Life360 HOME program, individual care coordinators must be employees of the Life360 hospital and must meet the following criteria: • Have a high school diploma or GED and • Have experience working with individuals experiencing substance abuse or mental illness or providing case management services. While ACUs will be operated directly by the hospital, a separate organization may be subcontracted to staff the ACUs. These organizations will have clinical providers qualified with appropriate skills and licensure that comply with all state medical/nursing licensure and Arkansas' Medicaid ACU provider requirements.
Success Life360 HOME	Beneficiaries will receive Intensive Care Coordination services from the Success Life360, which will include: • Developing an individualized PCAP with goals that may include but are not limited to establishing and maintaining regular care for behavioral health and/or medical needs; strengthening life skills; maintaining emotional and mental wellness; applying for job training or education programs; and obtaining or sustaining safe housing. • Working directly with the beneficiary to improve their skills to be healthy and thrive in their community and connecting them to identified medical services and nonmedical supports. • Documenting care coordination activities including new goals and barriers/ successes experienced by the beneficiary.	To be eligible to become a Rural Life360 HOME provider, hospitals must qualify as: A. An acute care hospital licensed by the Arkansas Department of Health as a general hospital or a surgery and general medical care hospital; and B. Enrolled as a provider with the Arkansas Medicaid Program. The Life360 hospital or a subcontracted community organization may provide care coordination. The community partner organization must be experienced in working with young adults most at risk of long-term poverty. The partner must have experience helping individuals build life skills to be physically, socially, and emotionally

[59] An assessment used to determine eligibility for PASSE program enrollment.

Life360 HOME	Services Description	Provider qualifications[56]
		healthy to live in and contribute to their communities. In the Success Life360 HOME program, case managers must meet of the following criteria: • Have a high school diploma or GED and • Have social work experience or experience working with veterans, corrections, homelessness, family support, workforce readiness, substance abuse or mental illness.

Life360 HOME may use its program funding to provide financial assistance to beneficiaries. Allowable expenses are those that enable a beneficiary to access services or supports to address a need identified through an HRSN screening or ongoing engagement with the beneficiary.

1) Housing supports to include:
   a) Pre-tenancy and tenancy sustaining services, including tenant rights education and eviction prevention.
   b) Housing transition navigation services. One-time transition and moving costs (e.g., security deposits, first-month's rent, utilities activation fees, movers, and pest eradication).
   c) Housing deposits to secure housing, including application and inspection fees and fees to secure needed identification.
2) Nutrition Supports, including nutrition counseling and education, such as healthy meal preparation Life360 HOMEs will be responsible for identifying program participants with food insecurity and connecting them to resources, including WIC, SNAP and food banks.

Life360 HOMEs that elect to provide financial supports for housing (not including helping with connections to housing supports) will be limited to providing such support only to individuals who are homeless or at risk of becoming homeless as defined by the U.S. Department of Housing and Urban Development (HUD) in 24 CFR 91.5. This definition serves as the social risk factor for direct receipt of housing HRSN supports from a Life360 HOMEs provider.

Life360 HOMEs that elect to provide financial nutritional supports (not including helping with connections to nutritional supports) will be limited to providing such supports only to individuals identified as meeting the USDA definition of low food security or very low food security:

- **Low food security**: Individual reports reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake.
- **Very low food security**: Individual reports multiple indications of disrupted eating patterns and reduced food intake.

This definition serves as the social risk factor for direct receipt of nutritional HRSN supports from a Life360 HOMEs provider.

Description of how the state will ensure that HRSN screening and service delivery are provided to beneficiaries in ways that are culturally responsive and/or trauma-informed

Life 360s will be required to provide or contract to provide services that demonstrate cultural competency and are provided in the languages frequently spoken by the targeted population. Life360 provider applicants will identify the languages commonly spoken in the Life360 service area in the community assessment they submit in their initial provider application and update annually thereafter. Tools used for the program, including the HRSN screening tool and the PCAP, must be developed in the languages frequently spoken by the target population. Life360s will also be required to have adequate program staff and appropriate staff training to provide services effectively. Life360s also will be required to have a plan for monitoring beneficiary milestones and goals, collecting data on beneficiary outcomes, including demographics, and monitoring other quality improvement measures identified by DHS. DHS will monitor program's reporting of staff training received and other program data.

Infrastructure Expenditures

Proposed uses of HRSN infrastructure expenditures, including the type of entities to receive funding, the intended purpose of the funding, the projected expenditure amounts, and an implementation timeline.

Entities Receiving Infrastructure Funding

Hospitals enrolled as Life360 HOME providers will receive one or more of the five types of infrastructure funding described in the table below, depending on the type of Life360 HOME program in which they are enrolled. Hospitals can subcontract with community service providers to provide some functions of the Life360, including those categorized as infrastructure costs.

Infrastructure Funding Purpose and Allowable Uses

Type	Life360 HOME Receiving	Amount	Allowable Expenditures
Startup	Maternal, Rural, Success	Two payments of $50,000 for Maternal and Rural. Three payments of $75,000 for Success.	Startup costs necessary to develop staff capacity and the infrastructure necessary to accept and serve beneficiaries. Allowable uses include: • Salaries and fringe during the start-up phase for program staff, including program management, clerical and IT staff and home visitors, • Staff recruitment and training, • Information technology systems to allow for enrolling and case management of beneficiaries, Health-Related Social Needs (HRSN) screening and resource referral, tracking and monitoring program finances, reporting required program data and interfacing with community partner organization, if applicable, • Program equipment and supplies, and • Activities associated with the formulation of partners/subcontractors, including capacity assessments and development of business or operational policies including programmatic needs and referral flows
Technology	Success	Annual amount based on submitted and approved budget, divided by 12 and provided monthly; $50,000 maximum	Additional costs to support data-sharing among organizations and providers that serve beneficiaries and to make coordination more efficient and effective. Allowable uses include: IT systems to allow for enrolling beneficiaries, HRSN screening and resource referral, tracking and monitoring program finances, reporting required program data and interfacing with community partner organization

Projected Infrastructure Expenditures

Infrastructure expenditures are projected based on the cost of starting up new sites and the ongoing costs for existing sites. DHS estimates infrastructure expenditures to total $2,000,000

for the demonstration period. The chart below describes the total available infrastructure funding for each type of Life360 HOME. Each Life360 will request how much they need for their program's startup costs and other infrastructure costs up to the maximum allowable amount. However, the final amount will be based on what the state approves. The total infrastructure expenditures will not exceed the total allowable cost of $10.5M for DY 1-DY 5 included in STC 42.

Life360 HOME Type	Year 2 (2023)	Year 3 (2024)	Year 4 (2025)	Year 5 (2026)
Maternal Life360	$500,000	$500,000	$500,000	$500,000
Total Infrastructure Expenditures	$500,000	$500,000	$500,000	$500,000

Proposed Implementation Timeline

The timeline for implementation of startup funding is provided in the table below. Each Life360 will have up to 180 days from the date of the fully executed startup agreement to complete readiness review and begin enrolling beneficiaries in the Life360 to receive supports.

Implementation Milestone	Year 2	Year 3	Year 4	Year 5
Maternal Life360 providers approved for startup funding	October 1, 2023			
Rural Life360 providers approved for startup funding	October 1, 2023			
Success Life360 providers approved for startup funding	December 30, 2023			
Additional Maternal Life360 providers approved for startup		January 2024	January 2025	January 2026
Additional Rural Life360 provider approved for startup funding		Spring 2024	January 2025	January 2026
Additional Success Life360 provider approved for startup funding			January 2025	

The implementation timeline also estimates starting five Life360 HOMEs of each type—Maternal, Rural and Success—in Year 2 of the ARHOME demonstration (2023). The timeline of infrastructure expenditures is based on the number of Life360 HOMEs in operation and new Life360 HOME starting operations.

		Total Life360 HOMEs	New Life360 HOMEs
Year Two	**Maternal**	5	5
	Rural	5	5
	Success	5	5
Year Three	**Maternal**	10	5
	Rural	7	2
	Success	5	0
Year Four	**Maternal**	15	5
	Rural	9	2
	Success	8	3
Year Five	**Maternal**	20	5
	Rural	11	2
	Success	8	0

Maternal Life360 HOME: Supervision of High-Risk Diagnosis Codes

ICD-10-CM	History of Infertility
O0900	SUPERVISION OF PREGNANCY WITH HISTORY OF INFERTILITY, UNSPECIFIED TRIMESTER
O0901	SUPERVISION OF PREGNANCY WITH HISTORY OF INFERTILITY, FIRST TRIMESTER
O0902	SUPERVISION OF PREGNANCY WITH HISTORY OF INFERTILITY, SECOND TRIMESTER
O0903	SUPERVISION OF PREGNANCY WITH HISTORY OF INFERTILITY, THIRD TRIMESTER
O09811	SUPERVISION OF PREGNANCY RESULTING FROM ASSISTED REPRODUCTIVE TECHNOLOGY, FIRST TRIMESTER
O09812	SUPERVISION OF PREGNANCY RESULTING FROM ASSISTED REPRODUCTIVE TECHNOLOGY, SECOND TRIMESTER
O09813	SUPERVISION OF PREGNANCY RESULTING FROM ASSISTED REPRODUCTIVE TECHNOLOGY, THIRD TRIMESTER
O09819	SUPERVISION OF PREGNANCY RESULTING FROM ASSISTED REPRODUCTIVE TECHNOLOGY, UNSPECIFIED TRIMESTER
	History of Ectopic or Molar Pregnancy
O0910	SUPERVISION OF PREGNANCY WITH HISTORY OF ECTOPIC PREGNANCY, UNSPECIFIED TRIMESTER
O0911	SUPERVISION OF PREGNANCY WITH HISTORY OF ECTOPIC PREGNANCY, FIRST TRIMESTER
O0912	SUPERVISION OF PREGNANCY WITH HISTORY OF ECTOPIC PREGNANCY, SECOND TRIMESTER
O0913	SUPERVISION OF PREGNANCY WITH HISTORY OF ECTOPIC PREGNANCY, THIRD TRIMESTER
O09A0	SUPERVISION OF PREGNANCY WITH HISTORY OF MOLAR PREGNANCY, UNSPECIFIED TRIMESTER
O09A1	SUPERVISION OF PREGNANCY WITH HISTORY OF MOLAR PREGNANCY, FIRST TRIMESTER
O09A2	SUPERVISION OF PREGNANCY WITH HISTORY OF MOLAR PREGNANCY, SECOND TRIMESTER
O09A3	SUPERVISION OF PREGNANCY WITH HISTORY OF MOLAR PREGNANCY, THIRD TRIMESTER

	History of Pre-Term Labor
O09211	SUPERVISION OF PREGNANCY WITH HISTORY OF PRE-TERM LABOR, FIRST TRIMESTER
O09212	SUPERVISION OF PREGNANCY WITH HISTORY OF PRE-TERM LABOR, SECOND TRIMESTER
O09213	SUPERVISION OF PREGNANCY WITH HISTORY OF PRE-TERM LABOR, THIRD TRIMESTER
O09219	SUPERVISION OF PREGNANCY WITH HISTORY OF PRE-TERM LABOR, UNSPECIFIED TRIMESTER
	Insufficient Reproductive Care or OB History
O09291	SUPERVISION OF PREGNANCY WITH OTHER POOR REPRODUCTIVE OR OBSTETRIC HISTORY, FIRST TRIMESTER
O09292	SUPERVISION OF PREGNANCY WITH OTHER POOR REPRODUCTIVE OR OBSTETRIC HISTORY, SECOND TRIMESTER
O09293	SUPERVISION OF PREGNANCY WITH OTHER POOR REPRODUCTIVE OR OBSTETRIC HISTORY, THIRD TRIMESTER
O09299	SUPERVISION OF PREGNANCY WITH OTHER POOR REPRODUCTIVE OR OBSTETRIC HISTORY, UNSPECIFIED TRIMESTER
O0930	SUPERVISION OF PREGNANCY WITH INSUFFICIENT ANTENATAL CARE, UNSPECIFIED TRIMESTER
O0931	SUPERVISION OF PREGNANCY WITH INSUFFICIENT ANTENATAL CARE, FIRST TRIMESTER
O0932	SUPERVISION OF PREGNANCY WITH INSUFFICIENT ANTENATAL CARE, SECOND TRIMESTER
O0933	SUPERVISION OF PREGNANCY WITH INSUFFICIENT ANTENATAL CARE, THIRD TRIMESTER
	Grand Multiparity
O0940	SUPERVISION OF PREGNANCY WITH GRAND MULTIPARITY, UNSPECIFIED TRIMESTER
O0941	SUPERVISION OF PREGNANCY WITH GRAND MULTIPARITY, FIRST TRIMESTER
O0942	SUPERVISION OF PREGNANCY WITH GRAND MULTIPARITY, SECOND TRIMESTER
O0943	SUPERVISION OF PREGNANCY WITH GRAND MULTIPARITY, THIRD TRIMESTER
	Elderly Primigravida and Multigravida
O09511	SUPERVISION OF ELDERLY PRIMIGRAVIDA, FIRST TRIMESTER
O09512	SUPERVISION OF ELDERLY PRIMIGRAVIDA, SECOND TRIMESTER
O09513	SUPERVISION OF ELDERLY PRIMIGRAVIDA, THIRD TRIMESTER
O09519	SUPERVISION OF ELDERLY PRIMIGRAVIDA, UNSPECIFIED TRIMESTER

O09521	SUPERVISION OF ELDERLY MULTIGRAVIDA, FIRST TRIMESTER
O09522	SUPERVISION OF ELDERLY MULTIGRAVIDA, SECOND TRIMESTER
O09523	SUPERVISION OF ELDERLY MULTIGRAVIDA, THIRD TRIMESTER
O09529	SUPERVISION OF ELDERLY MULTIGRAVIDA, UNSPECIFIED TRIMESTER
	Young Primigravida and Multigravida
O09611	SUPERVISION OF YOUNG PRIMIGRAVIDA, FIRST TRIMESTER
O09612	SUPERVISION OF YOUNG PRIMIGRAVIDA, SECOND TRIMESTER
O09613	SUPERVISION OF YOUNG PRIMIGRAVIDA, THIRD TRIMESTER
O09619	SUPERVISION OF YOUNG PRIMIGRAVIDA, UNSPECIFIED TRIMESTER
O09621	SUPERVISION OF YOUNG MULTIGRAVIDA, FIRST TRIMESTER
O09622	SUPERVISION OF YOUNG MULTIGRAVIDA, SECOND TRIMESTER
O09623	SUPERVISION OF YOUNG MULTIGRAVIDA, THIRD TRIMESTER

O09629	SUPERVISION OF YOUNG MULTIGRAVIDA, UNSPECIFIED TRIMESTER
	Social Problems
O0970	SUPERVISION OF HIGH RISK PREGNANCY DUE TO SOCIAL PROBLEMS, UNSPECIFIED TRIMESTER
O0971	SUPERVISION OF HIGH RISK PREGNANCY DUE TO SOCIAL PROBLEMS, FIRST TRIMESTER
O0972	SUPERVISION OF HIGH RISK PREGNANCY DUE TO SOCIAL PROBLEMS, SECOND TRIMESTER
O0973	SUPERVISION OF HIGH RISK PREGNANCY DUE TO SOCIAL PROBLEMS, THIRD TRIMESTER
	In Utero Procedure During Previous Pregnancy
O09821	SUPERVISION OF PREGNANCY WITH HISTORY OF IN UTERO PROCEDURE DURING PREVIOUS PREGNANCY, FIRST TRIMESTER
O09822	SUPERVISION OF PREGNANCY WITH HISTORY OF IN UTERO PROCEDURE DURING PREVIOUS PREGNANCY, SECOND TRIMESTER
O09823	SUPERVISION OF PREGNANCY WITH HISTORY OF IN UTERO PROCEDURE DURING PREVIOUS PREGNANCY, THIRD TRIMESTER
O09829	SUPERVISION OF PREGNANCY WITH HISTORY OF IN UTERO PROCEDURE DURING PREVIOUS PREGNANCY, UNSPECIFIED TRIMESTER
	Supervision of Other High Risk Pregnancies
O09891	SUPERVISION OF OTHER HIGH RISK PREGNANCIES, FIRST TRIMESTER
O09892	SUPERVISION OF OTHER HIGH RISK PREGNANCIES, SECOND TRIMESTER
O09893	SUPERVISION OF OTHER HIGH RISK PREGNANCIES, THIRD TRIMESTER
O09899	SUPERVISION OF OTHER HIGH RISK PREGNANCIES, UNSPECIFIED TRIMESTER
O0990	SUPERVISION OF HIGH RISK PREGNANCY, UNSPECIFIED, UNSPECIFIED TRIMESTER
O0991	SUPERVISION OF HIGH RISK PREGNANCY, UNSPECIFIED, FIRST TRIMESTER
O0992	SUPERVISION OF HIGH RISK PREGNANCY, UNSPECIFIED, SECOND TRIMESTER
O0993	SUPERVISION OF HIGH RISK PREGNANCY, UNSPECIFIED, THIRD TRIMESTER

Rural Life360 HOME: Substance Abuse Disorder Diagnostic Codes

ICD-10 CM	Substance Use Disorder
F1010	ALCOHOL ABUSE, UNCOMPLICATED
F1011	ALCOHOL ABUSE, IN REMISSION
F10120	ALCOHOL ABUSE WITH INTOXICATION, UNCOMPLICATED
F10121	ALCOHOL ABUSE WITH INTOXICATION DELIRIUM
F10129	ALCOHOL ABUSE WITH INTOXICATION, UNSPECIFIED
F10130	ALCOHOL ABUSE WITH WITHDRAWAL, UNCOMPLICATED
F10131	ALCOHOL ABUSE WITH WITHDRAWAL DELIRIUM
F10132	ALCOHOL ABUSE WITH WITHDRAWAL WITH PERCEPTUAL DISTURBANCE
F10139	ALCOHOL ABUSE WITH WITHDRAWAL, UNSPECIFIED
F1014	ALCOHOL ABUSE WITH ALCOHOL-INDUCED MOOD DISORDER
F10150	ALCOHOL ABUSE WITH ALCOHOL-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F10151	ALCOHOL ABUSE WITH ALCOHOL-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
F10159	ALCOHOL ABUSE WITH ALCOHOL-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F10180	ALCOHOL ABUSE WITH ALCOHOL-INDUCED ANXIETY DISORDER
F10181	ALCOHOL ABUSE WITH ALCOHOL-INDUCED SEXUAL DYSFUNCTION
F10182	ALCOHOL ABUSE WITH ALCOHOL-INDUCED SLEEP DISORDER
F10188	ALCOHOL ABUSE WITH OTHER ALCOHOL-INDUCED DISORDER
F1019	ALCOHOL ABUSE WITH UNSPECIFIED ALCOHOL-INDUCED DISORDER
F1020	ALCOHOL DEPENDENCE, UNCOMPLICATED
F1021	ALCOHOL DEPENDENCE, IN REMISSION
F10220	ALCOHOL DEPENDENCE WITH INTOXICATION, UNCOMPLICATED
F10221	ALCOHOL DEPENDENCE WITH INTOXICATION DELIRIUM
F10229	ALCOHOL DEPENDENCE WITH INTOXICATION, UNSPECIFIED
F10230	ALCOHOL DEPENDENCE WITH WITHDRAWAL, UNCOMPLICATED
F10231	ALCOHOL DEPENDENCE WITH WITHDRAWAL DELIRIUM

F10232	ALCOHOL DEPENDENCE WITH WITHDRAWAL WITH PERCEPTUAL DISTURBANCE
F10239	ALCOHOL DEPENDENCE WITH WITHDRAWAL, UNSPECIFIED
F1024	ALCOHOL DEPENDENCE WITH ALCOHOL-INDUCED MOOD DISORDER
F10250	ALCOHOL DEPENDENCE WITH ALCOHOL-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F10251	ALCOHOL DEPENDENCE WITH ALCOHOL-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
F10259	ALCOHOL DEPENDENCE WITH ALCOHOL-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F1026	ALCOHOL DEPENDENCE WITH ALCOHOL-INDUCED PERSISTING AMNESTIC DISORDER
F1027	ALCOHOL DEPENDENCE WITH ALCOHOL-INDUCED PERSISTING DEMENTIA
F10280	ALCOHOL DEPENDENCE WITH ALCOHOL-INDUCED ANXIETY DISORDER
F10281	ALCOHOL DEPENDENCE WITH ALCOHOL-INDUCED SEXUAL DYSFUNCTION
F10282	ALCOHOL DEPENDENCE WITH ALCOHOL-INDUCED SLEEP DISORDER
F10288	ALCOHOL DEPENDENCE WITH OTHER ALCOHOL-INDUCED DISORDER
F1029	ALCOHOL DEPENDENCE WITH UNSPECIFIED ALCOHOL-INDUCED DISORDER
F10920	ALCOHOL USE, UNSPECIFIED WITH INTOXICATION, UNCOMPLICATED
F10921	ALCOHOL USE, UNSPECIFIED WITH INTOXICATION DELIRIUM
F10929	ALCOHOL USE, UNSPECIFIED WITH INTOXICATION, UNSPECIFIED
F10930	ALCOHOL USE, UNSPECIFIED WITH WITHDRAWAL, UNCOMPLICATED
F10931	ALCOHOL USE, UNSPECIFIED WITH WITHDRAWAL DELIRIUM
F10932	ALCOHOL USE, UNSPECIFIED WITH WITHDRAWAL WITH PERCEPTUAL DISTURBANCE
F10939	ALCOHOL USE, UNSPECIFIED WITH WITHDRAWAL, UNSPECIFIED
F1094	ALCOHOL USE, UNSPECIFIED WITH ALCOHOL-INDUCED MOOD DISORDER
F10950	ALCOHOL USE, UNSPECIFIED WITH ALCOHOL-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F10951	ALCOHOL USE, UNSPECIFIED WITH ALCOHOL-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
F10959	ALCOHOL USE, UNSPECIFIED WITH ALCOHOL-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F1096	ALCOHOL USE, UNSPECIFIED WITH ALCOHOL-INDUCED PERSISTING AMNESTIC DISORDER
F1097	ALCOHOL USE, UNSPECIFIED WITH ALCOHOL-INDUCED PERSISTING DEMENTIA
F10980	ALCOHOL USE, UNSPECIFIED WITH ALCOHOL-INDUCED ANXIETY DISORDER
F10981	ALCOHOL USE, UNSPECIFIED WITH ALCOHOL-INDUCED SEXUAL DYSFUNCTION

F10982	ALCOHOL USE, UNSPECIFIED WITH ALCOHOL-INDUCED SLEEP DISORDER
F10988	ALCOHOL USE, UNSPECIFIED WITH OTHER ALCOHOL-INDUCED DISORDER
F1099	ALCOHOL USE, UNSPECIFIED WITH UNSPECIFIED ALCOHOL-INDUCED DISORDER
F1110	OPIOID ABUSE, UNCOMPLICATED
F1111	OPIOID ABUSE, IN REMISSION
F11120	OPIOID ABUSE WITH INTOXICATION, UNCOMPLICATED
F11121	OPIOID ABUSE WITH INTOXICATION DELIRIUM
F11122	OPIOID ABUSE WITH INTOXICATION WITH PERCEPTUAL DISTURBANCE
F11129	OPIOID ABUSE WITH INTOXICATION, UNSPECIFIED
F1113	OPIOID ABUSE WITH WITHDRAWAL
F1114	OPIOID ABUSE WITH OPIOID-INDUCED MOOD DISORDER
F11150	OPIOID ABUSE WITH OPIOID-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F11151	OPIOID ABUSE WITH OPIOID-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
F11159	OPIOID ABUSE WITH OPIOID-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F11181	OPIOID ABUSE WITH OPIOID-INDUCED SEXUAL DYSFUNCTION
F11182	OPIOID ABUSE WITH OPIOID-INDUCED SLEEP DISORDER
F11188	OPIOID ABUSE WITH OTHER OPIOID-INDUCED DISORDER
F1119	OPIOID ABUSE WITH UNSPECIFIED OPIOID-INDUCED DISORDER
F1120	OPIOID DEPENDENCE, UNCOMPLICATED
F1121	OPIOID DEPENDENCE, IN REMISSION
F11220	OPIOID DEPENDENCE WITH INTOXICATION, UNCOMPLICATED
F11221	OPIOID DEPENDENCE WITH INTOXICATION DELIRIUM
F11222	OPIOID DEPENDENCE WITH INTOXICATION WITH PERCEPTUAL DISTURBANCE
F11229	OPIOID DEPENDENCE WITH INTOXICATION, UNSPECIFIED
F1123	OPIOID DEPENDENCE WITH WITHDRAWAL
F1124	OPIOID DEPENDENCE WITH OPIOID-INDUCED MOOD DISORDER
F11250	OPIOID DEPENDENCE WITH OPIOID-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F11251	OPIOID DEPENDENCE WITH OPIOID-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
F11259	OPIOID DEPENDENCE WITH OPIOID-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED

F11281	OPIOID DEPENDENCE WITH OPIOID-INDUCED SEXUAL DYSFUNCTION
F11282	OPIOID DEPENDENCE WITH OPIOID-INDUCED SLEEP DISORDER
F11288	OPIOID DEPENDENCE WITH OTHER OPIOID-INDUCED DISORDER
F1129	OPIOID DEPENDENCE WITH UNSPECIFIED OPIOID-INDUCED DISORDER
F1190	OPIOID USE, UNSPECIFIED, UNCOMPLICATED
F11920	OPIOID USE, UNSPECIFIED WITH INTOXICATION, UNCOMPLICATED
F11921	OPIOID USE, UNSPECIFIED WITH INTOXICATION DELIRIUM
F11922	OPIOID USE, UNSPECIFIED WITH INTOXICATION WITH PERCEPTUAL DISTURBANCE
F11929	OPIOID USE, UNSPECIFIED WITH INTOXICATION, UNSPECIFIED
F1193	OPIOID USE, UNSPECIFIED WITH WITHDRAWAL
F1194	OPIOID USE, UNSPECIFIED WITH OPIOID-INDUCED MOOD DISORDER
F11950	OPIOID USE, UNSPECIFIED WITH OPIOID-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F11951	OPIOID USE, UNSPECIFIED WITH OPIOID-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
F11959	OPIOID USE, UNSPECIFIED WITH OPIOID-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F11981	OPIOID USE, UNSPECIFIED WITH OPIOID-INDUCED SEXUAL DYSFUNCTION
F11982	OPIOID USE, UNSPECIFIED WITH OPIOID-INDUCED SLEEP DISORDER
F11988	OPIOID USE, UNSPECIFIED WITH OTHER OPIOID-INDUCED DISORDER
F1199	OPIOID USE, UNSPECIFIED WITH UNSPECIFIED OPIOID-INDUCED DISORDER
F1210	CANNABIS ABUSE, UNCOMPLICATED
F1211	CANNABIS ABUSE, IN REMISSION
F12120	CANNABIS ABUSE WITH INTOXICATION, UNCOMPLICATED
F12121	CANNABIS ABUSE WITH INTOXICATION DELIRIUM
F12122	CANNABIS ABUSE WITH INTOXICATION WITH PERCEPTUAL DISTURBANCE
F12129	CANNABIS ABUSE WITH INTOXICATION, UNSPECIFIED
F1213	CANNABIS ABUSE WITH WITHDRAWAL
F12150	CANNABIS ABUSE WITH PSYCHOTIC DISORDER WITH DELUSIONS
F12151	CANNABIS ABUSE WITH PSYCHOTIC DISORDER WITH HALLUCINATIONS
F12159	CANNABIS ABUSE WITH PSYCHOTIC DISORDER, UNSPECIFIED
F12180	CANNABIS ABUSE WITH CANNABIS-INDUCED ANXIETY DISORDER

F12188	CANNABIS ABUSE WITH OTHER CANNABIS-INDUCED DISORDER
F1219	CANNABIS ABUSE WITH UNSPECIFIED CANNABIS-INDUCED DISORDER
F1220	CANNABIS DEPENDENCE, UNCOMPLICATED
F1221	CANNABIS DEPENDENCE, IN REMISSION
F12220	CANNABIS DEPENDENCE WITH INTOXICATION, UNCOMPLICATED
F12221	CANNABIS DEPENDENCE WITH INTOXICATION DELIRIUM
F12222	CANNABIS DEPENDENCE WITH INTOXICATION WITH PERCEPTUAL DISTURBANCE
F12229	CANNABIS DEPENDENCE WITH INTOXICATION, UNSPECIFIED
F1223	CANNABIS DEPENDENCE WITH WITHDRAWAL
F12250	CANNABIS DEPENDENCE WITH PSYCHOTIC DISORDER WITH DELUSIONS
F12251	CANNABIS DEPENDENCE WITH PSYCHOTIC DISORDER WITH HALLUCINATIONS
F12259	CANNABIS DEPENDENCE WITH PSYCHOTIC DISORDER, UNSPECIFIED
F12280	CANNABIS DEPENDENCE WITH CANNABIS-INDUCED ANXIETY DISORDER
F12288	CANNABIS DEPENDENCE WITH OTHER CANNABIS-INDUCED DISORDER
F1229	CANNABIS DEPENDENCE WITH UNSPECIFIED CANNABIS-INDUCED DISORDER
F1290	CANNABIS USE, UNSPECIFIED, UNCOMPLICATED
F12920	CANNABIS USE, UNSPECIFIED WITH INTOXICATION, UNCOMPLICATED
F12921	CANNABIS USE, UNSPECIFIED WITH INTOXICATION DELIRIUM
F12922	CANNABIS USE, UNSPECIFIED WITH INTOXICATION WITH PERCEPTUAL DISTURBANCE
F12929	CANNABIS USE, UNSPECIFIED WITH INTOXICATION, UNSPECIFIED
F1293	CANNABIS USE, UNSPECIFIED WITH WITHDRAWAL
F12950	CANNABIS USE, UNSPECIFIED WITH PSYCHOTIC DISORDER WITH DELUSIONS
F12951	CANNABIS USE, UNSPECIFIED WITH PSYCHOTIC DISORDER WITH HALLUCINATIONS
F12959	CANNABIS USE, UNSPECIFIED WITH PSYCHOTIC DISORDER, UNSPECIFIED
F12980	CANNABIS USE, UNSPECIFIED WITH ANXIETY DISORDER
F12988	CANNABIS USE, UNSPECIFIED WITH OTHER CANNABIS-INDUCED DISORDER
F1299	CANNABIS USE, UNSPECIFIED WITH UNSPECIFIED CANNABIS-INDUCED DISORDER
F1310	SEDATIVE, HYPNOTIC OR ANXIOLYTIC ABUSE, UNCOMPLICATED
F1311	SEDATIVE, HYPNOTIC OR ANXIOLYTIC ABUSE, IN REMISSION

F13120	SEDATIVE, HYPNOTIC OR ANXIOLYTIC ABUSE WITH INTOXICATION, UNCOMPLICATED
F13121	SEDATIVE, HYPNOTIC OR ANXIOLYTIC ABUSE WITH INTOXICATION DELIRIUM
F13129	SEDATIVE, HYPNOTIC OR ANXIOLYTIC ABUSE WITH INTOXICATION, UNSPECIFIED
F13130	SEDATIVE, HYPNOTIC OR ANXIOLYTIC ABUSE WITH WITHDRAWAL, UNCOMPLICATED
F13131	SEDATIVE, HYPNOTIC OR ANXIOLYTIC ABUSE WITH WITHDRAWAL DELIRIUM
F13132	SEDATIVE, HYPNOTIC OR ANXIOLYTIC ABUSE WITH WITHDRAWAL WITH PERCEPTUAL DISTURBANCE
F13139	SEDATIVE, HYPNOTIC OR ANXIOLYTIC ABUSE WITH WITHDRAWAL, UNSPECIFIED
F1314	SEDATIVE, HYPNOTIC OR ANXIOLYTIC ABUSE WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED MOOD DISORDER
F13150	SEDATIVE, HYPNOTIC OR ANXIOLYTIC ABUSE WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F13151	SEDATIVE, HYPNOTIC OR ANXIOLYTIC ABUSE WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
F13159	SEDATIVE, HYPNOTIC OR ANXIOLYTIC ABUSE WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F13180	SEDATIVE, HYPNOTIC OR ANXIOLYTIC ABUSE WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED ANXIETY DISORDER
F13181	SEDATIVE, HYPNOTIC OR ANXIOLYTIC ABUSE WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED SEXUAL DYSFUNCTION
F13182	SEDATIVE, HYPNOTIC OR ANXIOLYTIC ABUSE WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED SLEEP DISORDER
F13188	SEDATIVE, HYPNOTIC OR ANXIOLYTIC ABUSE WITH OTHER SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED DISORDER
F1319	SEDATIVE, HYPNOTIC OR ANXIOLYTIC ABUSE WITH UNSPECIFIED SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED DISORDER
F1320	SEDATIVE, HYPNOTIC OR ANXIOLYTIC DEPENDENCE, UNCOMPLICATED
F1321	SEDATIVE, HYPNOTIC OR ANXIOLYTIC DEPENDENCE, IN REMISSION
F13220	SEDATIVE, HYPNOTIC OR ANXIOLYTIC DEPENDENCE WITH INTOXICATION, UNCOMPLICATED

F13221	SEDATIVE, HYPNOTIC OR ANXIOLYTIC DEPENDENCE WITH INTOXICATION DELIRIUM
F13229	SEDATIVE, HYPNOTIC OR ANXIOLYTIC DEPENDENCE WITH INTOXICATION, UNSPECIFIED
F13230	SEDATIVE, HYPNOTIC OR ANXIOLYTIC DEPENDENCE WITH WITHDRAWAL, UNCOMPLICATED
F13231	SEDATIVE, HYPNOTIC OR ANXIOLYTIC DEPENDENCE WITH WITHDRAWAL DELIRIUM
F13232	SEDATIVE, HYPNOTIC OR ANXIOLYTIC DEPENDENCE WITH WITHDRAWAL WITH PERCEPTUAL DISTURBANCE
F13239	SEDATIVE, HYPNOTIC OR ANXIOLYTIC DEPENDENCE WITH WITHDRAWAL, UNSPECIFIED
F1324	SEDATIVE, HYPNOTIC OR ANXIOLYTIC DEPENDENCE WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED MOOD DISORDER
F13250	SEDATIVE, HYPNOTIC OR ANXIOLYTIC DEPENDENCE WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F13251	SEDATIVE, HYPNOTIC OR ANXIOLYTIC DEPENDENCE WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
F13259	SEDATIVE, HYPNOTIC OR ANXIOLYTIC DEPENDENCE WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F1326	SEDATIVE, HYPNOTIC OR ANXIOLYTIC DEPENDENCE WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED PERSISTING AMNESTIC DISORDER
F1327	SEDATIVE, HYPNOTIC OR ANXIOLYTIC DEPENDENCE WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED PERSISTING DEMENTIA
F13280	SEDATIVE, HYPNOTIC OR ANXIOLYTIC DEPENDENCE WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED ANXIETY DISORDER
F13281	SEDATIVE, HYPNOTIC OR ANXIOLYTIC DEPENDENCE WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED SEXUAL DYSFUNCTION
F13282	SEDATIVE, HYPNOTIC OR ANXIOLYTIC DEPENDENCE WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED SLEEP DISORDER
F13288	SEDATIVE, HYPNOTIC OR ANXIOLYTIC DEPENDENCE WITH OTHER SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED DISORDER
F1329	SEDATIVE, HYPNOTIC OR ANXIOLYTIC DEPENDENCE WITH UNSPECIFIED SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED DISORDER
F1390	SEDATIVE, HYPNOTIC, OR ANXIOLYTIC USE, UNSPECIFIED, UNCOMPLICATED

F13920	SEDATIVE, HYPNOTIC OR ANXIOLYTIC USE, UNSPECIFIED WITH INTOXICATION, UNCOMPLICATED
F13921	SEDATIVE, HYPNOTIC OR ANXIOLYTIC USE, UNSPECIFIED WITH INTOXICATION DELIRIUM
F13929	SEDATIVE, HYPNOTIC OR ANXIOLYTIC USE, UNSPECIFIED WITH INTOXICATION, UNSPECIFIED
F13930	SEDATIVE, HYPNOTIC OR ANXIOLYTIC USE, UNSPECIFIED WITH WITHDRAWAL, UNCOMPLICATED
F13931	SEDATIVE, HYPNOTIC OR ANXIOLYTIC USE, UNSPECIFIED WITH WITHDRAWAL DELIRIUM
F13932	SEDATIVE, HYPNOTIC OR ANXIOLYTIC USE, UNSPECIFIED WITH WITHDRAWAL WITH PERCEPTUAL DISTURBANCES
F13939	SEDATIVE, HYPNOTIC OR ANXIOLYTIC USE, UNSPECIFIED WITH WITHDRAWAL, UNSPECIFIED
F1394	SEDATIVE, HYPNOTIC OR ANXIOLYTIC USE, UNSPECIFIED WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED MOOD DISORDER
F13950	SEDATIVE, HYPNOTIC OR ANXIOLYTIC USE, UNSPECIFIED WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F13951	SEDATIVE, HYPNOTIC OR ANXIOLYTIC USE, UNSPECIFIED WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
F13959	SEDATIVE, HYPNOTIC OR ANXIOLYTIC USE, UNSPECIFIED WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F1396	SEDATIVE, HYPNOTIC OR ANXIOLYTIC USE, UNSPECIFIED WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED PERSISTING AMNESTIC DISORDER
F1397	SEDATIVE, HYPNOTIC OR ANXIOLYTIC USE, UNSPECIFIED WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED PERSISTING DEMENTIA
F13980	SEDATIVE, HYPNOTIC OR ANXIOLYTIC USE, UNSPECIFIED WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED ANXIETY DISORDER
F13981	SEDATIVE, HYPNOTIC OR ANXIOLYTIC USE, UNSPECIFIED WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED SEXUAL DYSFUNCTION
F13982	SEDATIVE, HYPNOTIC OR ANXIOLYTIC USE, UNSPECIFIED WITH SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED SLEEP DISORDER
F13988	SEDATIVE, HYPNOTIC OR ANXIOLYTIC USE, UNSPECIFIED WITH OTHER SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED DISORDER
F1399	SEDATIVE, HYPNOTIC OR ANXIOLYTIC USE, UNSPECIFIED WITH UNSPECIFIED SEDATIVE, HYPNOTIC OR ANXIOLYTIC-INDUCED DISORDER

F1410	COCAINE ABUSE, UNCOMPLICATED
F1411	COCAINE ABUSE, IN REMISSION
F14120	COCAINE ABUSE WITH INTOXICATION, UNCOMPLICATED
F14121	COCAINE ABUSE WITH INTOXICATION WITH DELIRIUM
F14122	COCAINE ABUSE WITH INTOXICATION WITH PERCEPTUAL DISTURBANCE
F14129	COCAINE ABUSE WITH INTOXICATION, UNSPECIFIED
F1413	COCAINE ABUSE, UNSPECIFIED WITH WITHDRAWAL
F1414	COCAINE ABUSE WITH COCAINE-INDUCED MOOD DISORDER
F14150	COCAINE ABUSE WITH COCAINE-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F14151	COCAINE ABUSE WITH COCAINE-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
F14159	COCAINE ABUSE WITH COCAINE-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F14180	COCAINE ABUSE WITH COCAINE-INDUCED ANXIETY DISORDER
F14181	COCAINE ABUSE WITH COCAINE-INDUCED SEXUAL DYSFUNCTION
F14182	COCAINE ABUSE WITH COCAINE-INDUCED SLEEP DISORDER
F14188	COCAINE ABUSE WITH OTHER COCAINE-INDUCED DISORDER
F1419	COCAINE ABUSE WITH UNSPECIFIED COCAINE-INDUCED DISORDER
F1420	COCAINE DEPENDENCE, UNCOMPLICATED
F1421	COCAINE DEPENDENCE, IN REMISSION
F14220	COCAINE DEPENDENCE WITH INTOXICATION, UNCOMPLICATED
F14221	COCAINE DEPENDENCE WITH INTOXICATION DELIRIUM
F14222	COCAINE DEPENDENCE WITH INTOXICATION WITH PERCEPTUAL DISTURBANCE
F14229	COCAINE DEPENDENCE WITH INTOXICATION, UNSPECIFIED
F1423	COCAINE DEPENDENCE WITH WITHDRAWAL
F1424	COCAINE DEPENDENCE WITH COCAINE-INDUCED MOOD DISORDER
F14250	COCAINE DEPENDENCE WITH COCAINE-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F14251	COCAINE DEPENDENCE WITH COCAINE-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
F14259	COCAINE DEPENDENCE WITH COCAINE-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F14280	COCAINE DEPENDENCE WITH COCAINE-INDUCED ANXIETY DISORDER
F14281	COCAINE DEPENDENCE WITH COCAINE-INDUCED SEXUAL DYSFUNCTION

F14282	COCAINE DEPENDENCE WITH COCAINE-INDUCED SLEEP DISORDER
F14288	COCAINE DEPENDENCE WITH OTHER COCAINE-INDUCED DISORDER
F1429	COCAINE DEPENDENCE WITH UNSPECIFIED COCAINE-INDUCED DISORDER
F1490	COCAINE USE, UNSPECIFIED, UNCOMPLICATED
F14920	COCAINE USE, UNSPECIFIED WITH INTOXICATION, UNCOMPLICATED
F14921	COCAINE USE, UNSPECIFIED WITH INTOXICATION DELIRIUM
F14922	COCAINE USE, UNSPECIFIED WITH INTOXICATION WITH PERCEPTUAL DISTURBANCE
F14929	COCAINE USE, UNSPECIFIED WITH INTOXICATION, UNSPECIFIED
F1493	COCAINE USE, UNSPECIFIED WITH WITHDRAWAL
F1494	COCAINE USE, UNSPECIFIED WITH COCAINE-INDUCED MOOD DISORDER
F14950	COCAINE USE, UNSPECIFIED WITH COCAINE-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F14951	COCAINE USE, UNSPECIFIED WITH COCAINE-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
F14959	COCAINE USE, UNSPECIFIED WITH COCAINE-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F14980	COCAINE USE, UNSPECIFIED WITH COCAINE-INDUCED ANXIETY DISORDER
F14981	COCAINE USE, UNSPECIFIED WITH COCAINE-INDUCED SEXUAL DYSFUNCTION
F14982	COCAINE USE, UNSPECIFIED WITH COCAINE-INDUCED SLEEP DISORDER
F14988	COCAINE USE, UNSPECIFIED WITH OTHER COCAINE-INDUCED DISORDER
F1499	COCAINE USE, UNSPECIFIED WITH UNSPECIFIED COCAINE-INDUCED DISORDER
F1510	OTHER STIMULANT ABUSE, UNCOMPLICATED
F1511	OTHER STIMULANT ABUSE, IN REMISSION
F15120	OTHER STIMULANT ABUSE WITH INTOXICATION, UNCOMPLICATED
F15121	OTHER STIMULANT ABUSE WITH INTOXICATION DELIRIUM
F15122	OTHER STIMULANT ABUSE WITH INTOXICATION WITH PERCEPTUAL DISTURBANCE
F15129	OTHER STIMULANT ABUSE WITH INTOXICATION, UNSPECIFIED
F1513	OTHER STIMULANT ABUSE WITH WITHDRAWAL
F1514	OTHER STIMULANT ABUSE WITH STIMULANT-INDUCED MOOD DISORDER
F15150	OTHER STIMULANT ABUSE WITH STIMULANT-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS

F15151	OTHER STIMULANT ABUSE WITH STIMULANT-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
F15159	OTHER STIMULANT ABUSE WITH STIMULANT-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F15180	OTHER STIMULANT ABUSE WITH STIMULANT-INDUCED ANXIETY DISORDER
F15181	OTHER STIMULANT ABUSE WITH STIMULANT-INDUCED SEXUAL DYSFUNCTION
F15182	OTHER STIMULANT ABUSE WITH STIMULANT-INDUCED SLEEP DISORDER
F15188	OTHER STIMULANT ABUSE WITH OTHER STIMULANT-INDUCED DISORDER
F1519	OTHER STIMULANT ABUSE WITH UNSPECIFIED STIMULANT-INDUCED DISORDER
F1520	OTHER STIMULANT DEPENDENCE, UNCOMPLICATED
F1521	OTHER STIMULANT DEPENDENCE, IN REMISSION
F15220	OTHER STIMULANT DEPENDENCE WITH INTOXICATION, UNCOMPLICATED
F15221	OTHER STIMULANT DEPENDENCE WITH INTOXICATION DELIRIUM
F15222	OTHER STIMULANT DEPENDENCE WITH INTOXICATION WITH PERCEPTUAL DISTURBANCE
F15229	OTHER STIMULANT DEPENDENCE WITH INTOXICATION, UNSPECIFIED
F1523	OTHER STIMULANT DEPENDENCE WITH WITHDRAWAL
F1524	OTHER STIMULANT DEPENDENCE WITH STIMULANT-INDUCED MOOD DISORDER
F15250	OTHER STIMULANT DEPENDENCE WITH STIMULANT-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F15251	OTHER STIMULANT DEPENDENCE WITH STIMULANT-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
F15259	OTHER STIMULANT DEPENDENCE WITH STIMULANT-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F15280	OTHER STIMULANT DEPENDENCE WITH STIMULANT-INDUCED ANXIETY DISORDER
F15281	OTHER STIMULANT DEPENDENCE WITH STIMULANT-INDUCED SEXUAL DYSFUNCTION
F15282	OTHER STIMULANT DEPENDENCE WITH STIMULANT-INDUCED SLEEP DISORDER
F15288	OTHER STIMULANT DEPENDENCE WITH OTHER STIMULANT-INDUCED DISORDER
F1529	OTHER STIMULANT DEPENDENCE WITH UNSPECIFIED STIMULANT-INDUCED DISORDER
F1590	OTHER STIMULANT USE, UNSPECIFIED, UNCOMPLICATED
F15920	OTHER STIMULANT USE, UNSPECIFIED WITH INTOXICATION, UNCOMPLICATED

F15921	OTHER STIMULANT USE, UNSPECIFIED WITH INTOXICATION DELIRIUM
F15922	OTHER STIMULANT USE, UNSPECIFIED WITH INTOXICATION WITH PERCEPTUAL DISTURBANCE
F15929	OTHER STIMULANT USE, UNSPECIFIED WITH INTOXICATION, UNSPECIFIED
F1593	OTHER STIMULANT USE, UNSPECIFIED WITH WITHDRAWAL
F1594	OTHER STIMULANT USE, UNSPECIFIED WITH STIMULANT-INDUCED MOOD DISORDER
F15950	OTHER STIMULANT USE, UNSPECIFIED WITH STIMULANT-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F15951	OTHER STIMULANT USE, UNSPECIFIED WITH STIMULANT-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
F15959	OTHER STIMULANT USE, UNSPECIFIED WITH STIMULANT-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F15980	OTHER STIMULANT USE, UNSPECIFIED WITH STIMULANT-INDUCED ANXIETY DISORDER
F15981	OTHER STIMULANT USE, UNSPECIFIED WITH STIMULANT-INDUCED SEXUAL DYSFUNCTION
F15982	OTHER STIMULANT USE, UNSPECIFIED WITH STIMULANT-INDUCED SLEEP DISORDER
F15988	OTHER STIMULANT USE, UNSPECIFIED WITH OTHER STIMULANT-INDUCED DISORDER
F1599	OTHER STIMULANT USE, UNSPECIFIED WITH UNSPECIFIED STIMULANT-INDUCED DISORDER
F1610	HALLUCINOGEN ABUSE, UNCOMPLICATED
F1611	HALLUCINOGEN ABUSE, IN REMISSION
F16120	HALLUCINOGEN ABUSE WITH INTOXICATION, UNCOMPLICATED
F16121	HALLUCINOGEN ABUSE WITH INTOXICATION WITH DELIRIUM
F16122	HALLUCINOGEN ABUSE WITH INTOXICATION WITH PERCEPTUAL DISTURBANCE
F16129	HALLUCINOGEN ABUSE WITH INTOXICATION, UNSPECIFIED
F1614	HALLUCINOGEN ABUSE WITH HALLUCINOGEN-INDUCED MOOD DISORDER
F16150	HALLUCINOGEN ABUSE WITH HALLUCINOGEN-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F16151	HALLUCINOGEN ABUSE WITH HALLUCINOGEN-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
F16159	HALLUCINOGEN ABUSE WITH HALLUCINOGEN-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F16180	HALLUCINOGEN ABUSE WITH HALLUCINOGEN-INDUCED ANXIETY DISORDER
F16183	HALLUCINOGEN ABUSE WITH HALLUCINOGEN PERSISTING PERCEPTION DISORDER (FLASHBACKS)

F16188	HALLUCINOGEN ABUSE WITH OTHER HALLUCINOGEN-INDUCED DISORDER
F1619	HALLUCINOGEN ABUSE WITH UNSPECIFIED HALLUCINOGEN-INDUCED DISORDER
F1620	HALLUCINOGEN DEPENDENCE, UNCOMPLICATED
F1621	HALLUCINOGEN DEPENDENCE, IN REMISSION
F16220	HALLUCINOGEN DEPENDENCE WITH INTOXICATION, UNCOMPLICATED
F16221	HALLUCINOGEN DEPENDENCE WITH INTOXICATION WITH DELIRIUM
F16229	HALLUCINOGEN DEPENDENCE WITH INTOXICATION, UNSPECIFIED
F1624	HALLUCINOGEN DEPENDENCE WITH HALLUCINOGEN-INDUCED MOOD DISORDER
F16250	HALLUCINOGEN DEPENDENCE WITH HALLUCINOGEN-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F16251	HALLUCINOGEN DEPENDENCE WITH HALLUCINOGEN-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
F16259	HALLUCINOGEN DEPENDENCE WITH HALLUCINOGEN-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F16280	HALLUCINOGEN DEPENDENCE WITH HALLUCINOGEN-INDUCED ANXIETY DISORDER
F16283	HALLUCINOGEN DEPENDENCE WITH HALLUCINOGEN PERSISTING PERCEPTION DISORDER (FLASHBACKS)
F16288	HALLUCINOGEN DEPENDENCE WITH OTHER HALLUCINOGEN-INDUCED DISORDER
F1629	HALLUCINOGEN DEPENDENCE WITH UNSPECIFIED HALLUCINOGEN-INDUCED DISORDER
F1690	HALLUCINOGEN USE, UNSPECIFIED, UNCOMPLICATED
F16920	HALLUCINOGEN USE, UNSPECIFIED WITH INTOXICATION, UNCOMPLICATED
F16921	HALLUCINOGEN USE, UNSPECIFIED WITH INTOXICATION WITH DELIRIUM
F16929	HALLUCINOGEN USE, UNSPECIFIED WITH INTOXICATION, UNSPECIFIED
F1694	HALLUCINOGEN USE, UNSPECIFIED WITH HALLUCINOGEN-INDUCED MOOD DISORDER
F16950	HALLUCINOGEN USE, UNSPECIFIED WITH HALLUCINOGEN-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F16951	HALLUCINOGEN USE, UNSPECIFIED WITH HALLUCINOGEN-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS

F16959	HALLUCINOGEN USE, UNSPECIFIED WITH HALLUCINOGEN-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F16980	HALLUCINOGEN USE, UNSPECIFIED WITH HALLUCINOGEN-INDUCED ANXIETY DISORDER
F16983	HALLUCINOGEN USE, UNSPECIFIED WITH HALLUCINOGEN PERSISTING PERCEPTION DISORDER (FLASHBACKS)
F16988	HALLUCINOGEN USE, UNSPECIFIED WITH OTHER HALLUCINOGEN-INDUCED DISORDER
F1699	HALLUCINOGEN USE, UNSPECIFIED WITH UNSPECIFIED HALLUCINOGEN-INDUCED DISORDER
F1810	INHALANT ABUSE, UNCOMPLICATED
F1811	INHALANT ABUSE, IN REMISSION
F18120	INHALANT ABUSE WITH INTOXICATION, UNCOMPLICATED
F18121	INHALANT ABUSE WITH INTOXICATION DELIRIUM
F18129	INHALANT ABUSE WITH INTOXICATION, UNSPECIFIED
F1814	INHALANT ABUSE WITH INHALANT-INDUCED MOOD DISORDER
F18150	INHALANT ABUSE WITH INHALANT-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F18151	INHALANT ABUSE WITH INHALANT-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
F18159	INHALANT ABUSE WITH INHALANT-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F1817	INHALANT ABUSE WITH INHALANT-INDUCED DEMENTIA
F18180	INHALANT ABUSE WITH INHALANT-INDUCED ANXIETY DISORDER
F18188	INHALANT ABUSE WITH OTHER INHALANT-INDUCED DISORDER
F1819	INHALANT ABUSE WITH UNSPECIFIED INHALANT-INDUCED DISORDER
F1820	INHALANT DEPENDENCE, UNCOMPLICATED
F1821	INHALANT DEPENDENCE, IN REMISSION
F18220	INHALANT DEPENDENCE WITH INTOXICATION, UNCOMPLICATED
F18221	INHALANT DEPENDENCE WITH INTOXICATION DELIRIUM
F18229	INHALANT DEPENDENCE WITH INTOXICATION, UNSPECIFIED
F1824	INHALANT DEPENDENCE WITH INHALANT-INDUCED MOOD DISORDER
F18250	INHALANT DEPENDENCE WITH INHALANT-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F18251	INHALANT DEPENDENCE WITH INHALANT-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS

F18259	INHALANT DEPENDENCE WITH INHALANT-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F1827	INHALANT DEPENDENCE WITH INHALANT-INDUCED DEMENTIA
F18280	INHALANT DEPENDENCE WITH INHALANT-INDUCED ANXIETY DISORDER
F18288	INHALANT DEPENDENCE WITH OTHER INHALANT-INDUCED DISORDER
F1829	INHALANT DEPENDENCE WITH UNSPECIFIED INHALANT-INDUCED DISORDER
F1890	INHALANT USE, UNSPECIFIED, UNCOMPLICATED
F18920	INHALANT USE, UNSPECIFIED WITH INTOXICATION, UNCOMPLICATED
F18921	INHALANT USE, UNSPECIFIED WITH INTOXICATION WITH DELIRIUM
F18929	INHALANT USE, UNSPECIFIED WITH INTOXICATION, UNSPECIFIED
F1894	INHALANT USE, UNSPECIFIED WITH INHALANT-INDUCED MOOD DISORDER
F18950	INHALANT USE, UNSPECIFIED WITH INHALANT-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F18951	INHALANT USE, UNSPECIFIED WITH INHALANT-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
F18959	INHALANT USE, UNSPECIFIED WITH INHALANT-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F1897	INHALANT USE, UNSPECIFIED WITH INHALANT-INDUCED PERSISTING DEMENTIA
F18980	INHALANT USE, UNSPECIFIED WITH INHALANT-INDUCED ANXIETY DISORDER
F18988	INHALANT USE, UNSPECIFIED WITH OTHER INHALANT-INDUCED DISORDER
F1899	INHALANT USE, UNSPECIFIED WITH UNSPECIFIED INHALANT-INDUCED DISORDER
F1910	OTHER PSYCHOACTIVE SUBSTANCE ABUSE, UNCOMPLICATED
F1911	OTHER PSYCHOACTIVE SUBSTANCE ABUSE, IN REMISSION
F19120	OTHER PSYCHOACTIVE SUBSTANCE ABUSE WITH INTOXICATION, UNCOMPLICATED
F19121	OTHER PSYCHOACTIVE SUBSTANCE ABUSE WITH INTOXICATION DELIRIUM
F19122	OTHER PSYCHOACTIVE SUBSTANCE ABUSE WITH INTOXICATION WITH PERCEPTUAL DISTURBANCES
F19129	OTHER PSYCHOACTIVE SUBSTANCE ABUSE WITH INTOXICATION, UNSPECIFIED
F19130	OTHER PSYCHOACTIVE SUBSTANCE ABUSE WITH WITHDRAWAL, UNCOMPLICATED
F19131	OTHER PSYCHOACTIVE SUBSTANCE ABUSE WITH WITHDRAWAL DELIRIUM
F19132	OTHER PSYCHOACTIVE SUBSTANCE ABUSE WITH WITHDRAWAL WITH PERCEPTUAL DISTURBANCE
F19139	OTHER PSYCHOACTIVE SUBSTANCE ABUSE WITH WITHDRAWAL, UNSPECIFIED

F1914	OTHER PSYCHOACTIVE SUBSTANCE ABUSE WITH PSYCHOACTIVE SUBSTANCE-INDUCED MOOD DISORDER
F19150	OTHER PSYCHOACTIVE SUBSTANCE ABUSE WITH PSYCHOACTIVE SUBSTANCE-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F19151	OTHER PSYCHOACTIVE SUBSTANCE ABUSE WITH PSYCHOACTIVE SUBSTANCE-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
F19159	OTHER PSYCHOACTIVE SUBSTANCE ABUSE WITH PSYCHOACTIVE SUBSTANCE-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F1916	OTHER PSYCHOACTIVE SUBSTANCE ABUSE WITH PSYCHOACTIVE SUBSTANCE-INDUCED PERSISTING AMNESTIC DISORDER
F1917	OTHER PSYCHOACTIVE SUBSTANCE ABUSE WITH PSYCHOACTIVE SUBSTANCE-INDUCED PERSISTING DEMENTIA
F19180	OTHER PSYCHOACTIVE SUBSTANCE ABUSE WITH PSYCHOACTIVE SUBSTANCE-INDUCED ANXIETY DISORDER
F19181	OTHER PSYCHOACTIVE SUBSTANCE ABUSE WITH PSYCHOACTIVE SUBSTANCE-INDUCED SEXUAL DYSFUNCTION
F19182	OTHER PSYCHOACTIVE SUBSTANCE ABUSE WITH PSYCHOACTIVE SUBSTANCE-INDUCED SLEEP DISORDER
F19188	OTHER PSYCHOACTIVE SUBSTANCE ABUSE WITH OTHER PSYCHOACTIVE SUBSTANCE-INDUCED DISORDER
F1919	OTHER PSYCHOACTIVE SUBSTANCE ABUSE WITH UNSPECIFIED PSYCHOACTIVE SUBSTANCE-INDUCED DISORDER
F1920	OTHER PSYCHOACTIVE SUBSTANCE DEPENDENCE, UNCOMPLICATED
F1921	OTHER PSYCHOACTIVE SUBSTANCE DEPENDENCE, IN REMISSION
F19220	OTHER PSYCHOACTIVE SUBSTANCE DEPENDENCE WITH INTOXICATION, UNCOMPLICATED
F19221	OTHER PSYCHOACTIVE SUBSTANCE DEPENDENCE WITH INTOXICATION DELIRIUM
F19222	OTHER PSYCHOACTIVE SUBSTANCE DEPENDENCE WITH INTOXICATION WITH PERCEPTUAL DISTURBANCE
F19229	OTHER PSYCHOACTIVE SUBSTANCE DEPENDENCE WITH INTOXICATION, UNSPECIFIED
F19230	OTHER PSYCHOACTIVE SUBSTANCE DEPENDENCE WITH WITHDRAWAL, UNCOMPLICATED

F19231	OTHER PSYCHOACTIVE SUBSTANCE DEPENDENCE WITH WITHDRAWAL DELIRIUM
F19232	OTHER PSYCHOACTIVE SUBSTANCE DEPENDENCE WITH WITHDRAWAL WITH PERCEPTUAL DISTURBANCE
F19239	OTHER PSYCHOACTIVE SUBSTANCE DEPENDENCE WITH WITHDRAWAL, UNSPECIFIED
F1924	OTHER PSYCHOACTIVE SUBSTANCE DEPENDENCE WITH PSYCHOACTIVE SUBSTANCE-INDUCED MOOD DISORDER
F19250	OTHER PSYCHOACTIVE SUBSTANCE DEPENDENCE WITH PSYCHOACTIVE SUBSTANCE-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F19251	OTHER PSYCHOACTIVE SUBSTANCE DEPENDENCE WITH PSYCHOACTIVE SUBSTANCE-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
F19259	OTHER PSYCHOACTIVE SUBSTANCE DEPENDENCE WITH PSYCHOACTIVE SUBSTANCE-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F1926	OTHER PSYCHOACTIVE SUBSTANCE DEPENDENCE WITH PSYCHOACTIVE SUBSTANCE-INDUCED PERSISTING AMNESTIC DISORDER
F1927	OTHER PSYCHOACTIVE SUBSTANCE DEPENDENCE WITH PSYCHOACTIVE SUBSTANCE-INDUCED PERSISTING DEMENTIA
F19280	OTHER PSYCHOACTIVE SUBSTANCE DEPENDENCE WITH PSYCHOACTIVE SUBSTANCE-INDUCED ANXIETY DISORDER
F19281	OTHER PSYCHOACTIVE SUBSTANCE DEPENDENCE WITH PSYCHOACTIVE SUBSTANCE-INDUCED SEXUAL DYSFUNCTION
F19282	OTHER PSYCHOACTIVE SUBSTANCE DEPENDENCE WITH PSYCHOACTIVE SUBSTANCE-INDUCED SLEEP DISORDER
F19288	OTHER PSYCHOACTIVE SUBSTANCE DEPENDENCE WITH OTHER PSYCHOACTIVE SUBSTANCE-INDUCED DISORDER
F1929	OTHER PSYCHOACTIVE SUBSTANCE DEPENDENCE WITH UNSPECIFIED PSYCHOACTIVE SUBSTANCE-INDUCED DISORDER
F1990	OTHER PSYCHOACTIVE SUBSTANCE USE, UNSPECIFIED, UNCOMPLICATED
F19920	OTHER PSYCHOACTIVE SUBSTANCE USE, UNSPECIFIED WITH INTOXICATION, UNCOMPLICATED
F19921	OTHER PSYCHOACTIVE SUBSTANCE USE, UNSPECIFIED WITH INTOXICATION WITH DELIRIUM

F19922	OTHER PSYCHOACTIVE SUBSTANCE USE, UNSPECIFIED WITH INTOXICATION WITH PERCEPTUAL DISTURBANCE
F19929	OTHER PSYCHOACTIVE SUBSTANCE USE, UNSPECIFIED WITH INTOXICATION, UNSPECIFIED
F19930	OTHER PSYCHOACTIVE SUBSTANCE USE, UNSPECIFIED WITH WITHDRAWAL, UNCOMPLICATED
F19931	OTHER PSYCHOACTIVE SUBSTANCE USE, UNSPECIFIED WITH WITHDRAWAL DELIRIUM
F19932	OTHER PSYCHOACTIVE SUBSTANCE USE, UNSPECIFIED WITH WITHDRAWAL WITH PERCEPTUAL DISTURBANCE
F19939	OTHER PSYCHOACTIVE SUBSTANCE USE, UNSPECIFIED WITH WITHDRAWAL, UNSPECIFIED
F1994	OTHER PSYCHOACTIVE SUBSTANCE USE, UNSPECIFIED WITH PSYCHOACTIVE SUBSTANCE-INDUCED MOOD DISORDER
F19950	OTHER PSYCHOACTIVE SUBSTANCE USE, UNSPECIFIED WITH PSYCHOACTIVE SUBSTANCE-INDUCED PSYCHOTIC DISORDER WITH DELUSIONS
F19951	OTHER PSYCHOACTIVE SUBSTANCE USE, UNSPECIFIED WITH PSYCHOACTIVE SUBSTANCE-INDUCED PSYCHOTIC DISORDER WITH HALLUCINATIONS
F19959	OTHER PSYCHOACTIVE SUBSTANCE USE, UNSPECIFIED WITH PSYCHOACTIVE SUBSTANCE-INDUCED PSYCHOTIC DISORDER, UNSPECIFIED
F1996	OTHER PSYCHOACTIVE SUBSTANCE USE, UNSPECIFIED WITH PSYCHOACTIVE SUBSTANCE-INDUCED PERSISTING AMNESTIC DISORDER
F1997	OTHER PSYCHOACTIVE SUBSTANCE USE, UNSPECIFIED WITH PSYCHOACTIVE SUBSTANCE-INDUCED PERSISTING DEMENTIA
F19980	OTHER PSYCHOACTIVE SUBSTANCE USE, UNSPECIFIED WITH PSYCHOACTIVE SUBSTANCE-INDUCED ANXIETY DISORDER
F19981	OTHER PSYCHOACTIVE SUBSTANCE USE, UNSPECIFIED WITH PSYCHOACTIVE SUBSTANCE-INDUCED SEXUAL DYSFUNCTION
F19982	OTHER PSYCHOACTIVE SUBSTANCE USE, UNSPECIFIED WITH PSYCHOACTIVE SUBSTANCE-INDUCED SLEEP DISORDER
F19988	OTHER PSYCHOACTIVE SUBSTANCE USE, UNSPECIFIED WITH OTHER PSYCHOACTIVE SUBSTANCE-INDUCED DISORDER
F1999	OTHER PSYCHOACTIVE SUBSTANCE USE, UNSPECIFIED WITH UNSPECIFIED PSYCHOACTIVE SUBSTANCE-INDUCED DISORDER

Rural Life360 Serious Mental Illness Diagnostic Codes List

ICD-10-CM	Schizophrenia
F200	PARANOID SCHIZOPHRENIA
F201	DISORGANIZED SCHIZOPHRENIA
F202	CATATONIC SCHIZOPHRENIA
F203	UNDIFFERENTIATED SCHIZOPHRENIA
F205	RESIDUAL SCHIZOPHRENIA
F2081	SCHIZOPHRENIFORM DISORDER
F2089	OTHER SCHIZOPHRENIA
F209	SCHIZOPHRENIA, UNSPECIFIED
F21	SCHIZOTYPAL DISORDER
F22	DELUSIONAL DISORDERS
F23	BRIEF PSYCHOTIC DISORDER
F24	SHARED PSYCHOTIC DISORDER
F250	SCHIZOAFFECTIVE DISORDER, BIPOLAR TYPE
F251	SCHIZOAFFECTIVE DISORDER, DEPRESSIVE TYPE
F258	OTHER SCHIZOAFFECTIVE DISORDERS
F259	SCHIZOAFFECTIVE DISORDER, UNSPECIFIED
F28	OTHER PSYCHOTIC DISORDER NOT DUE TO A SUBSTANCE OR KNOWN PHYSIOLOGICAL CONDITION
F29	UNSPECIFIED PSYCHOSIS NOT DUE TO A SUBSTANCE OR KNOWN PHYSIOLOGICAL CONDITION
	Bipolar and Related Disorders
F310	BIPOLAR DISORDER, CURRENT EPISODE HYPOMANIC
F3110	BIPOLAR DISORDER, CURRENT EPISODE MANIC WITHOUT PSYCHOTIC FEATURES, UNSPECIFIED
F3111	BIPOLAR DISORDER, CURRENT EPISODE MANIC WITHOUT PSYCHOTIC FEATURES, MILD
F3112	BIPOLAR DISORDER, CURRENT EPISODE MANIC WITHOUT PSYCHOTIC FEATURES, MODERATE
F3113	BIPOLAR DISORDER, CURRENT EPISODE MANIC WITHOUT PSYCHOTIC FEATURES, SEVERE

F312	BIPOLAR DISORDER, CURRENT EPISODE MANIC SEVERE WITH PSYCHOTIC FEATURES
F3130	BIPOLAR DISORDER, CURRENT EPISODE DEPRESSED, MILD OR MODERATE SEVERITY, UNSPECIFIED
F3131	BIPOLAR DISORDER, CURRENT EPISODE DEPRESSED, MILD
F3132	BIPOLAR DISORDER, CURRENT EPISODE DEPRESSED, MODERATE
F314	BIPOLAR DISORDER, CURRENT EPISODE DEPRESSED, SEVERE, WITHOUT PSYCHOTIC FEATURES
F315	BIPOLAR DISORDER, CURRENT EPISODE DEPRESSED, SEVERE, WITH PSYCHOTIC FEATURES
F3160	BIPOLAR DISORDER, CURRENT EPISODE MIXED, UNSPECIFIED
F3161	BIPOLAR DISORDER, CURRENT EPISODE MIXED, MILD
F3162	BIPOLAR DISORDER, CURRENT EPISODE MIXED, MODERATE
F3163	BIPOLAR DISORDER, CURRENT EPISODE MIXED, SEVERE, WITHOUT PSYCHOTIC FEATURES
F3164	BIPOLAR DISORDER, CURRENT EPISODE MIXED, SEVERE, WITH PSYCHOTIC FEATURES
F3170	BIPOLAR DISORDER, CURRENTLY IN REMISSION, MOST RECENT EPISODE UNSPECIFIED
F3171	BIPOLAR DISORDER, IN PARTIAL REMISSION, MOST RECENT EPISODE HYPOMANIC
F3172	BIPOLAR DISORDER, IN FULL REMISSION, MOST RECENT EPISODE HYPOMANIC
F3173	BIPOLAR DISORDER, IN PARTIAL REMISSION, MOST RECENT EPISODE MANIC
F3174	BIPOLAR DISORDER, IN FULL REMISSION, MOST RECENT EPISODE MANIC
F3175	BIPOLAR DISORDER, IN PARTIAL REMISSION, MOST RECENT EPISODE DEPRESSED
F3176	BIPOLAR DISORDER, IN FULL REMISSION, MOST RECENT EPISODE DEPRESSED
F3177	BIPOLAR DISORDER, IN PARTIAL REMISSION, MOST RECENT EPISODE MIXED
F3178	BIPOLAR DISORDER, IN FULL REMISSION, MOST RECENT EPISODE MIXED
F3181	BIPOLAR II DISORDER
F3189	OTHER BIPOLAR DISORDER
F319	BIPOLAR DISORDER, UNSPECIFIED
F340	CYCLOTHYMIC DISORDER
F0633	MOOD DISORDER DUE TO KNOWN PHYSIOLOGICAL CONDITION WITH MANIC FEATURES
F0634	MOOD DISORDER DUE TO KNOWN PHYSIOLOGICAL CONDITION WITH MIXED FEATURES
F3010	MANIC EPISODE WITHOUT PSYCHOTIC SYMPTOMS, UNSPECIFIED

F3011	MANIC EPISODE WITHOUT PSYCHOTIC SYMPTOMS, MILD
F3012	MANIC EPISODE WITHOUT PSYCHOTIC SYMPTOMS, MODERATE
F3013	MANIC EPISODE, SEVERE, WITHOUT PSYCHOTIC SYMPTOMS
F302	MANIC EPISODE, SEVERE WITH PSYCHOTIC SYMPTOMS
F303	MANIC EPISODE IN PARTIAL REMISSION
F304	MANIC EPISODE IN FULL REMISSION
F308	OTHER MANIC EPISODES
F309	MANIC EPISODE, UNSPECIFIED
	Depressive Disorders
F320	MAJOR DEPRESSIVE DISORDER, SINGLE EPISODE, MILD
F321	MAJOR DEPRESSIVE DISORDER, SINGLE EPISODE, MODERATE
F322	MAJOR DEPRESSIVE DISORDER, SINGLE EPISODE, SEVERE WITHOUT PSYCHOTIC FEATURES
F323	MAJOR DEPRESSIVE DISORDER, SINGLE EPISODE, SEVERE WITH PSYCHOTIC FEATURES
F324	MAJOR DEPRESSIVE DISORDER, SINGLE EPISODE, IN PARTIAL REMISSION
F325	MAJOR DEPRESSIVE DISORDER, SINGLE EPISODE, IN FULL REMISSION
F3281	PREMENSTRUAL DYSPHORIC DISORDER
F3289	OTHER SPECIFIED DEPRESSIVE EPISODES
F329	MAJOR DEPRESSIVE DISORDER, SINGLE EPISODE, UNSPECIFIED
F32A	DEPRESSION, UNSPECIFIED
F341	DYSTHYMIC DISORDER
F348	OTHER PERSISTENT MOOD [AFFECTIVE] DISORDERS
F3481	DISRUPTIVE MOOD DYSREGULATION DISORDER
F3489	OTHER SPECIFIED PERSISTENT MOOD DISORDERS
F349	PERSISTENT MOOD [AFFECTIVE] DISORDER, UNSPECIFIED
F330	MAJOR DEPRESSIVE DISORDER, RECURRENT, MILD
F331	MAJOR DEPRESSIVE DISORDER, RECURRENT, MODERATE
F332	MAJOR DEPRESSIVE DISORDER, RECURRENT SEVERE WITHOUT PSYCHOTIC FEATURES

F333	MAJOR DEPRESSIVE DISORDER, RECURRENT, SEVERE WITH PSYCHOTIC SYMPTOMS
F3340	MAJOR DEPRESSIVE DISORDER, RECURRENT, IN REMISSION, UNSPECIFIED
F3341	MAJOR DEPRESSIVE DISORDER, RECURRENT, IN PARTIAL REMISSION
F3342	MAJOR DEPRESSIVE DISORDER, RECURRENT, IN FULL REMISSION
F338	OTHER RECURRENT DEPRESSIVE DISORDERS
F339	MAJOR DEPRESSIVE DISORDER, RECURRENT, UNSPECIFIED
	Anxiety Disorder
F930	SEPARATION ANXIETY DISORDER OF CHILDHOOD
F938	OTHER CHILDHOOD EMOTIONAL DISORDERS
F939	CHILDHOOD EMOTIONAL DISORDER, UNSPECIFIED
F940	SELECTIVE MUTISM
F941	REACTIVE ATTACHMENT DISORDER OF CHILDHOOD
F942	DISINHIBITED ATTACHMENT DISORDER OF CHILDHOOD
F948	OTHER CHILDHOOD DISORDERS OF SOCIAL FUNCTIONING
F949	CHILDHOOD DISORDER OF SOCIAL FUNCTIONING, UNSPECIFIED
F4000	AGORAPHOBIA, UNSPECIFIED
F4001	AGORAPHOBIA WITH PANIC DISORDER
F4002	AGORAPHOBIA WITHOUT PANIC DISORDER
F4010	SOCIAL PHOBIA, UNSPECIFIED
F4011	SOCIAL PHOBIA, GENERALIZED
F40210	ARACHNOPHOBIA
F40218	OTHER ANIMAL TYPE PHOBIA
F40220	FEAR OF THUNDERSTORMS
F40228	OTHER NATURAL ENVIRONMENT TYPE PHOBIA
F40230	FEAR OF BLOOD
F40231	FEAR OF INJECTIONS AND TRANSFUSIONS
F40232	FEAR OF OTHER MEDICAL CARE

F40233	FEAR OF INJURY
F40240	CLAUSTROPHOBIA
F40241	ACROPHOBIA
F40242	FEAR OF BRIDGES
F40243	FEAR OF FLYING
F40248	OTHER SITUATIONAL TYPE PHOBIA
F40290	ANDROPHOBIA
F40291	GYNEPHOBIA
F40298	OTHER SPECIFIED PHOBIA
F408	OTHER PHOBIC ANXIETY DISORDERS
F409	PHOBIC ANXIETY DISORDER, UNSPECIFIED
F410	PANIC DISORDER [EPISODIC PAROXYSMAL ANXIETY]
F411	GENERALIZED ANXIETY DISORDER
F413	OTHER MIXED ANXIETY DISORDERS
F418	OTHER SPECIFIED ANXIETY DISORDERS
F419	ANXIETY DISORDER, UNSPECIFIED
	Obsessive-Compulsive Disorder
F422	MIXED OBSESSIONAL THOUGHTS AND ACTS
F423	HOARDING DISORDER
F424	EXCORIATION (SKIN-PICKING) DISORDER
F428	OTHER OBSESSIVE-COMPULSIVE DISORDER
F429	OBSESSIVE-COMPULSIVE DISORDER, UNSPECIFIED
F63	IMPULSE DISORDERS
F630	PATHOLOGICAL GAMBLING
F631	PYROMANIA
F632	KLEPTOMANIA
F633	TRICHOTILLOMANIA

F638	OTHER IMPULSE DISORDERS
F6381	INTERMITTENT EXPLOSIVE DISORDER
F6389	OTHER IMPULSE DISORDERS
F639	IMPULSE DISORDER, UNSPECIFIED
	Trauma Stressor related disorders
F430	ACUTE STRESS REACTION
F4310	POST-TRAUMATIC STRESS DISORDER, UNSPECIFIED
F4311	POST-TRAUMATIC STRESS DISORDER, ACUTE
F4312	POST-TRAUMATIC STRESS DISORDER, CHRONIC
F438	OTHER REACTIONS TO SEVERE STRESS
F439	REACTION TO SEVERE STRESS, UNSPECIFIED
	Dissociative Disorders
F440	DISSOCIATIVE AMNESIA
F441	DISSOCIATIVE FUGUE
F442	DISSOCIATIVE STUPOR
F4481	DISSOCIATIVE IDENTITY DISORDER
F4489	OTHER DISSOCIATIVE AND CONVERSION DISORDERS
F449	DISSOCIATIVE AND CONVERSION DISORDER, UNSPECIFIED
F481	DEPERSONALIZATION-DEREALIZATION SYNDROME
	Somatic Symptom and Related Disorders
F444	CONVERSION DISORDER WITH MOTOR SYMPTOM OR DEFICIT
F445	CONVERSION DISORDER WITH SEIZURES OR CONVULSIONS
F446	CONVERSION DISORDER WITH SENSORY SYMPTOM OR DEFICIT
F447	CONVERSION DISORDER WITH MIXED SYMPTOM PRESENTATION
F450	SOMATIZATION DISORDER
F451	UNDIFFERENTIATED SOMATOFORM DISORDER
F4520	HYPOCHONDRIACAL DISORDER, UNSPECIFIED

F4521	HYPOCHONDRIASIS
F4522	BODY DYSMORPHIC DISORDER
F4529	OTHER HYPOCHONDRIACAL DISORDERS
F4541	PAIN DISORDER EXCLUSIVELY RELATED TO PSYCHOLOGICAL FACTORS
F4542	PAIN DISORDER WITH RELATED PSYCHOLOGICAL FACTORS
F458	OTHER SOMATOFORM DISORDERS
F459	SOMATOFORM DISORDER, UNSPECIFIED
F54	PSYCHOLOGICAL AND BEHAVIORAL FACTORS ASSOCIATED WITH DISORDERS OR DISEASES CLASSIFIED ELSEWHERE
F6810	FACTITIOUS DISORDER IMPOSED ON SELF, UNSPECIFIED
F6811	FACTITIOUS DISORDER IMPOSED ON SELF, WITH PREDOMINANTLY PSYCHOLOGICAL SIGNS AND SYMPTOMS
F6812	FACTITIOUS DISORDER IMPOSED ON SELF, WITH PREDOMINANTLY PHYSICAL SIGNS AND SYMPTOMS
F6813	FACTITIOUS DISORDER IMPOSED ON SELF, WITH COMBINED PSYCHOLOGICAL AND PHYSICAL SIGNS AND SYMPTOMS
F688	OTHER SPECIFIED DISORDERS OF ADULT PERSONALITY AND BEHAVIOR
F68A	FACTITIOUS DISORDER IMPOSED ON ANOTHER
	Feeding and Eating Disorders
F5000	ANOREXIA NERVOSA, UNSPECIFIED
F5001	ANOREXIA NERVOSA, RESTRICTING TYPE
F5002	ANOREXIA NERVOSA, BINGE EATING/PURGING TYPE
F502	BULIMIA NERVOSA
F508	OTHER EATING DISORDERS
F5081	BINGE EATING DISORDER
F5082	AVOIDANT/RESTRICTIVE FOOD INTAKE DISORDER
F5089	OTHER SPECIFIED EATING DISORDER

F509	EATING DISORDER, UNSPECIFIED
	Personality Disorders
F600	PARANOID PERSONALITY DISORDER
F601	SCHIZOID PERSONALITY DISORDER
F602	ANTISOCIAL PERSONALITY DISORDER
F603	BORDERLINE PERSONALITY DISORDER
F604	HISTRIONIC PERSONALITY DISORDER
F605	OBSESSIVE-COMPULSIVE PERSONALITY DISORDER
F606	AVOIDANT PERSONALITY DISORDER
F607	DEPENDENT PERSONALITY DISORDER
F6081	NARCISSISTIC PERSONALITY DISORDER
F6089	OTHER SPECIFIC PERSONALITY DISORDERS
F609	PERSONALITY DISORDER, UNSPECIFIED
	Attention Deficit Hyperactivity Disorders
F900	ATTENTION-DEFICIT HYPERACTIVITY DISORDER, PREDOMINANTLY INATTENTIVE TYPE
F901	ATTENTION-DEFICIT HYPERACTIVITY DISORDER, PREDOMINANTLY HYPERACTIVE TYPE
F902	ATTENTION-DEFICIT HYPERACTIVITY DISORDER, COMBINED TYPE
F908	ATTENTION-DEFICIT HYPERACTIVITY DISORDER, OTHER TYPE
F909	ATTENTION-DEFICIT HYPERACTIVITY DISORDER, UNSPECIFIED TYPE

Attachment J
CENTERS FOR MEDICARE & MEDICAID SERVICES
Amendments to Expenditure Authorities and Special Terms and Conditions
Effective December 27, 2024

NUMBER: **11-W-00379/6**

TITLE: **Arkansas Health and Opportunity for Me Section 1115 Demonstration**

AWARDEE: **Arkansas Department of Human Services**

This Attachment J is appended to the STCs effective December 27, 2024.

This Attachment J amends this demonstration, as approved on December 21, 2021 and as amended and restated on November 1, 2022, by adding the following language to the expenditure authorities and STCs, as further specified herein, for the remaining period of this demonstration from December 27, 2024 through December 31, 2026. Except to extent amended herein, existing expenditure and waiver authorities and Special Terms and Conditions (STCs) currently approved and set forth in this demonstration remain in full force and effect.

Amendment to Expenditure Authorities

This Attachment J hereby amends the expenditure authorities, as approved on December 21, 2021 and as amended and restated on November 1, 2022, to add the following authority. The following expenditure authority must only be implemented consistent with the approved STCs and shall enable Arkansas to implement the section 1115 demonstration amendment.

5. **Expenditures for Non-Medical Transportation.** Expenditures for non-medical transportation (NMT) not otherwise covered under title XIX of the Act for qualifying individuals, as described in STC 41 as well as other applicable STCs.

AMENDMENTS TO SPECIAL TERMS AND CONDITIONS

This Attachment J hereby amends the STCs, as approved on December 21, 2021 and as amended and restated on November 1, 2022, as follows.

1. This Attachment J amends STC 41, entitled "Allowable HRSN Services," by adding the following language as STC 41.d.

d. Non-medical transportation (NMT) services may be provided to Medicaid beneficiaries who qualify for HRSN services under this demonstration. The NMT services transport the qualifying beneficiary to and from HRSN services which they are authorized to receive under this demonstration. Both the NMT services and the HRSN services for which NMT services are authorized must be described in the beneficiary's care plan. All NMT services must be provided in alignment with the technical specifications, and safeguards applicable to NMT authorized under 1915(c) waiver or under 1915(i) state plan authorities.

2. This Attachment J amends STC 78, entitled "Medicaid Expenditure Groups," by adding a row to Table 3 as specified below. The remainder of STC 78 and Table 3 remains in full force and effect.

Table 3: Master MEG Chart

MEG	Which BN Test Does Applies?	WOW Per Capita	WOW Aggregate	WW	Brief Description
NMT	Hypo 1	X		X	Non-medical transportation for Medicaid beneficiaries eligible for HRSN services authorized under ARHOME whose care plan includes HRSN services.

BN – budget neutrality; MEG – Medicaid expenditure group; WOW – without waiver; WW – with waiver

3. This Attachment J amends STC 79, entitled "Reporting Expenditures and Member Months," by adding a row to Table 4 as specified below. The remainder of STC 79 and Table 4 remains in full force and effect.

Table 4. MEG Detail for Expenditure and Member Month Reporting								
MEG (Waiver Name)	**Detailed Description**	**Exclusions**	**CMS-64.9 or 64.10 Line(s) To Use**	**How Expend. Are Assigned to DY**	**MAP or ADM**	**Report Member Months (Y/N)**	**MEG Start Date**	**MEG End Date**
NMT	Report all expenditures for approved HRSN related transportation	See STC #41.d	Follow standard CMS 64.9 or CMS 64.10 Category of Service Definitions	Date of Service	MAP	Y	12/27/24	12/31/26

4. This Attachment J amends STC 90, entitled "Hypothetical Budget Neutrality Test 1," by adding a row to Table 6 as specified below. The remainder of STC 90 and Table 6 remains in full force and effect.

Table 6. Hypothetical Budget Neutrality Test 1									
MEG	**PC or Agg**	**WOW Only, WW Only, or Both**	**Base Year**	**Trend Rate**	**DY 01**	**DY 02**	**DY 03**	**DY 04**	**DY 05**
NMT	PC	Both	2025	5.0%	-	-	-	$35.30	$37.07

Attachment K

Evaluation Design

Arkansas Health and Opportunity for Me

Section 1115 Demonstration Waiver

Project Number 11-W-00379/6

Evaluation Design

Draft Submittal Date: June 17, 2022

Final Submittal Date: November 4, 2022

Revised Final Submittal Date: February 10, 2023

Revised Final Submittal Date: March 15, 2024

Revised Final Submittal Date: December 18, 2024

Revised Final Submittal Date: January 31, 2025

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1 GENERAL BACKGROUND INFORMATION

In 2014, Arkansas expanded Medicaid for the new adult group under the Affordable Care Act (ACA). The new adult group includes individuals between 19 and 64 years of age with incomes at or below 138 percent of the federal poverty level (FPL). In September 2013, the Centers for Medicare and Medicaid Services (CMS) approved a Medicaid demonstration for the new adult group developed by Arkansas state leadership. This demonstration was entitled "Arkansas Health Care Independence Program" (HCIP). With premium assistance from Medicaid, the HCIP demonstration allowed Arkansas to support healthcare coverage for the new adult group through qualified health plans (QHPs) offered on the Health Insurance Marketplace (Marketplace), effective January 1, 2014, through December 31, 2016. In June 2016, the state requested an extension and amendment application of the HCIP in accordance with Arkansas Works Act of 2016. The request's purpose was intended to build upon the HCIP's success of providing health insurance coverage for over 240,000 Arkansans and accomplish other Waiver goals. The request included adding premiums, job referrals, and training requirements for beneficiaries who met certain criteria and as allowed by Medicaid. CMS approved this request on December 8, 2016, updating the special terms and conditions (STCs) and acknowledging the demonstration project name change as "Arkansas Works."

In anticipation of the Arkansas Works demonstration expiration at the end of 2021, the Department of Health Services (DHS), Arkansas Insurance Department (AID), Governor Hutchinson, and legislators collaborated to make further improvements to the Medicaid program for eligible adults under the authority of the Arkansas Health and Opportunity for Me ("ARHOME") Act 530, enacted in March 2021. On July 19, 2021, Arkansas submitted a proposal to CMS for continued coverage of the new adult group and for the state to implement new health improvement initiatives and performance measurement accountability for the QHPs through a new joint executive-legislative policy committee. CMS approved the coverage and QHP health improvement components on December 21, 2021.

On November 1, 2022, CMS gave approval for the Life360 HOMEs amendment of the ARHOME program. This amendment addresses health-related social needs (HRSN) among targeted populations through coverage of intensive care coordination and other support identified in a person-centered action plan.

Table 1 below provides an overview of key information for the Arkansas Section 1115 Demonstration Project.

Table 1: Arkansas Medicaid Section 1115 Demonstration Project Key Information

Arkansas Medicaid Section 1115 Demonstration Project Key Information	
HCIP Waiver Application Submitted to CMS	August 6, 2013
HCIP Waiver Application Approved by CMS	September 27, 2013
HCIP Waiver Period	October 1, 2013-December 31, 2016
HCIP Evaluation Plan Submitted to CMS	February 20, 2014
HCIP Evaluation Plan Approved by CMS	March 24, 2014
HCIP Summative Evaluation Submitted to CMS	June 30, 2018
Arkansas Works Waiver Application Submitted to CMS	July 7, 2016
Arkansas Works Waiver Application Approved by CMS	December 8, 2016
Arkansas Works Waiver Period	January 1, 2017-December 31, 2021
Arkansas Works Evaluation Plan Submitted to CMS	May 4, 2021
Arkansas Works Evaluation Plan Approved by CMS	June 17, 2021
Arkansas Works Interim Evaluation Submitted to CMS	June 30, 2021
Arkansas Works Summative Evaluation Submitted to CMS	June 30, 2023
ARHOME Waiver Application Submitted to CMS	July 19, 2021
ARHOME Waiver Application Approved by CMS	December 21, 2021
ARHOME Waiver Period	January 1, 2022-December 31, 2026
ARHOME Evaluation Design Submitted to CMS	June 17, 2022, November 4, 2022, February 10, 2023, March 15, 2024, December 18, 2024, and January 31, 2025

Under the new ARHOME program, the state continues with the same new adult group, the same benefit packages, and the same service delivery systems (QHPs and FFS) that were applicable under the Arkansas Works program. Also continuing under ARHOME is the ability to charge monthly premiums up to five percent of household income for beneficiaries with incomes above 100 percent of the federal poverty level (FPL). Although, the premium authority is only valid for calendar year 2022. The ability to limit new enrollees to 30 days retroactive coverage prior to an application was an implemented policy during a portion of the Arkansas Works program and restarted on July 1, 2022.

One of the main goals of the ARHOME program is to improve beneficiaries' health. New program provisions require QHPs to take responsibility for generating that improvement. QHPs must provide at least one health improvement incentive (HII) in 2022 and two HIIs starting in 2023 to encourage the use of preventive care and one health improvement incentive for each of the following populations:

- Pregnant women, particularly those with high-risk pregnancies
- Individuals with mental illness

- Individuals with substance use disorder
- Individuals with two or more chronic conditions

QHPs are also required to submit an annual strategic plan that includes activities to meet quality and performance metrics, as well as activities to improve the health outcomes of people living in rural areas and the populations listed above.

DHS will measure each QHP's performance on the health care quality metrics that DHS selected for each demonstration year. In 2021, DHS established 21 Medicaid Core Measures related to maternal and infant health, chronic disease, and other health indicators. Benchmarks were established on these metrics that require each QHP to meet during the Demonstration Year. DHS may require a corrective action plan for any demonstration year in which any QHP fails to meet performance targets for the previous demonstration year.

QHPs are required to offer one economic independence incentive to encourage advances in beneficiaries' economic status or employment prospects. Additionally, their annual strategic plans must include activities to support the ARHOME economic independence goals. The QHPs cited the following activities in their 2022 strategic plans (submitted in August 2021) as those they are implementing to promote economic independence in 2022:

- Promote beneficiary participation in employment, education, and training programs through website, beneficiary portal, and welcome centers.
- Train beneficiary-facing staff on the economic independence goals of ARHOME and incorporate messaging that promotes participation in employment, education, and training activities in appropriate beneficiary interactions.
- Refer beneficiaries to the Arkansas Division of Workforce Services' (ADWS) website and programming.
- Provide a financial incentive to beneficiaries who provide proof of completion for the ADWS's free Career Readiness Certificate (CRC) at the Platinum, Gold, Silver, or Bronze level.
- Host a dedicated web page to address the DHS Economic Independence Initiative (EII).
- Partner with the Little Rock Workforce System to host career expos and job/health fairs. These fairs will feature community organizations and the use of incentives to encourage attendance.

The Provider-led Arkansas Shared Savings Entity (PASSE) program will be utilized as a service delivery system for individuals in the new adult group with serious mental illness (SMI) and substance use disorder (SUD). Approximately 1,100 ARHOME beneficiaries are expected to be enrolled into the PASSE program beginning on or around July 1, 2022.

Other changes proposed in ARHOME, but still pending CMS approval, relate to addressing SDOHs through community bridge organizations and infrastructure called Life360 HOMEs. The Life 360 HOMEs are not currently included in the Evaluation Design, but the STCs will be

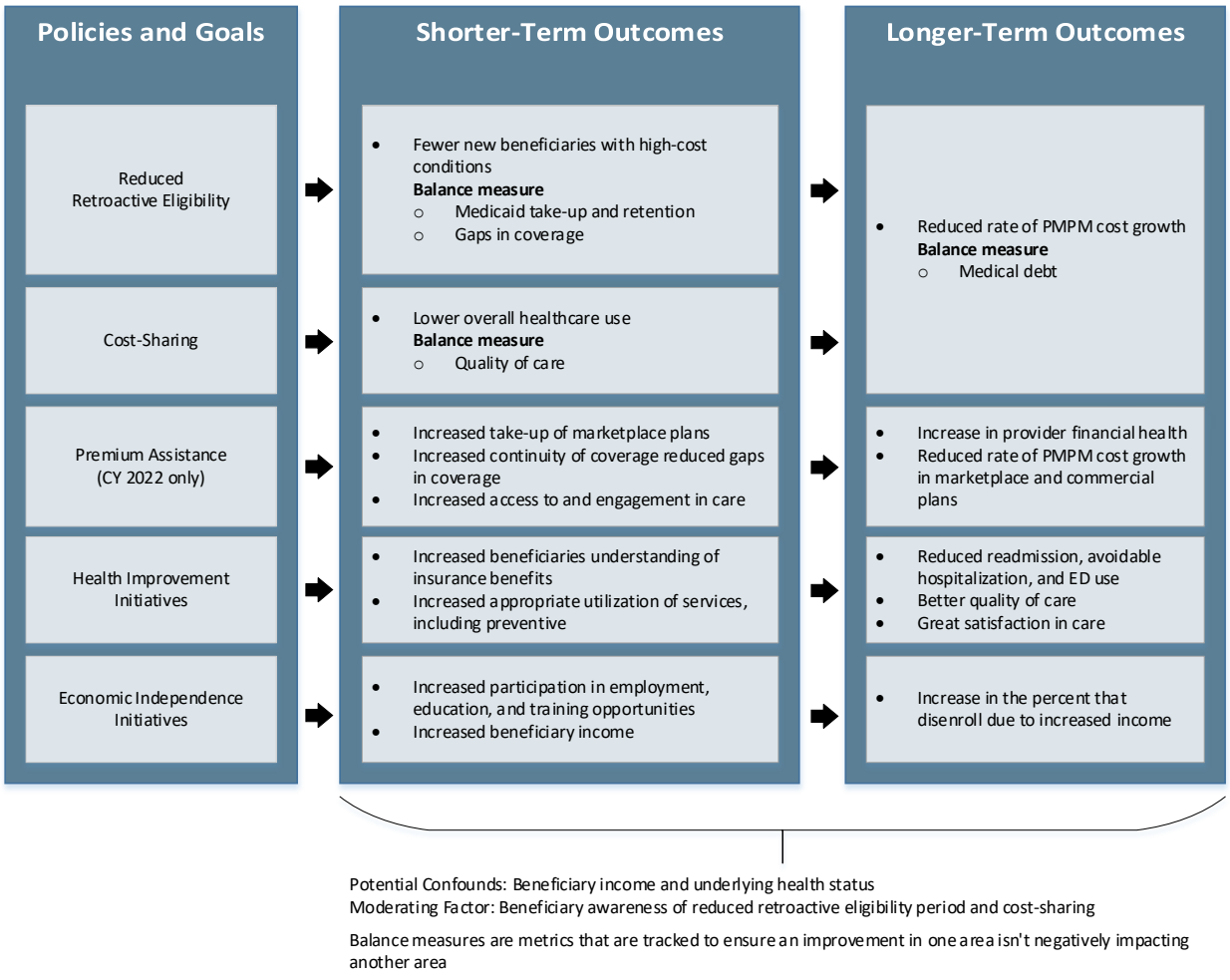
amended to include them and will be incorporated into the evaluation designs and reports upon approval.

The following demonstration goals inform the evaluation design hypotheses:

1. Providing continuity of coverage for individuals
2. Improving access to providers
3. Improving continuity of care across the continuum of coverage
4. Furthering quality improvement and delivery system reform initiatives that are successful across population groups

The figure below is a visual representation of how the program goals support each other in providing healthcare coverage to qualified individuals, 19 through 64 years of age, with incomes at or below 133 percent of the federal poverty level.

Figure 1: Arkansas Demonstration Waiver Evaluation Logic Model



2 Evaluation Questions and Hypotheses

2.1 Implementation Questions

Implementation questions are included to assess the ARHOME program from the perspective of provider focus groups such as the Arkansas Academy of Family Physicians (AAFP), the Arkansas Medical Society (AMS), and the Arkansas Hospital Association (AHA). Additionally, supplemental questions about ARHOME were included in the Beneficiary Engagement Satisfaction Survey (BESS) to further assess the ARHOME program's effectiveness relative to the traditional Medicaid fee-for-service.

Table 2: Provider Focus Group Questions

Provider Focus Group Questions	Provider Focus Group Respondents		
ARHOME Program	**AAFP**	**AMS**	**AHA**
Do you accept all ARHOME plans? If you do not accept all ARHOME plans, which do you not accept?	✓	✓	✓
As a rough estimate, what percentage of the patients in your practice are covered by ARHOME health insurance?	✓	✓	✓
Are you more or less willing to accept ARHOME members as patients? What about compared to traditional Medicaid patients? Why?	✓	✓	✓
In your perspective, how does this different reimbursement arrangement for ARHOME patients impact your hospital's likelihood of accepting more ARHOME (Medicaid) patients compared to patients covered by traditional Medicaid? • How would you describe it? Positively, negatively, neutral, little bit of both? What about from a patient perspective? Financial perspective? Outcomes? Physician impact? Overall?			✓
Can you tell any difference between ARHOME and traditional Medicaid? Describe.			✓
Do you think that with ARHOME patients you experience more or less uncompensated care than with traditional Medicaid patients?	✓	✓	
In comparison to traditional Medicaid patients, how would you characterize the effect ARHOME patients have on your uncompensated care?			✓
Do beneficiaries understand the ARHOME program?	✓	✓	
Incentives & Quality of Care	**AAFP**	**AMS**	**AHA**
Are you aware of provider quality incentive programs in Arkansas fee-for-service Medicaid or ARHOME – such as Patient Centered Medical Home or Primary Care First?	✓		
The ARHOME health plans are required to provide information and incentives for patients to improve their health. Are you aware of any of the incentives? What patient incentives are you familiar with?	✓	✓	

What types of resources – for example, training, communication or literature – do you receive from the ARHOME health plans to help you talk to your ARHOME patients about preventive care, screenings and health improvement activities?	✓	✓	
For your patients with mental illness, what are some examples of resources or incentives provided by ARHOME health plans that you might use to improve patient health outcomes? Substance abuse disorder. Two or more chronic conditions. Pregnant patients.	✓	✓	
Overall, how would you describe the impact of ARHOME's health insurance coverage and incentives on your patients' health behaviors? Are they more or less likely to use preventive, screening and immunization services?	✓	✓	
Can you tell any difference in their approach to their participation in their own healthcare? Are they more proactive? Or do you observe behaviors that are the same as traditional Medicaid patients?		✓	
How do you feel ARHOME has impacted quality of care? For example – a reduction of emergency department visits?			✓
From your perspective, has ARHOME facilitated better communication between primary care physicians and patients compared to the communication between primary care physicians and uninsured patients or patients under traditional Medicaid?			✓
Think of physician-patient communication relating to, for example, follow up from acute events… how would you characterize how ARHOME is affecting that?			✓
Implementation	**AAFP**	**AMS**	**AHA**
Describe the impact that ARHOME is having on your practice. Does it affect it positively, negatively, neutral? Can you tell?	✓	✓	
What barriers have you or your organization experienced while providing care to ARHOME beneficiaries? Probe: What strategies have been used to overcome barriers?	✓	✓	
Have you found that any specific partners or processes have been particularly helpful in transitioning to ARHOME? If so, what have they done (or what processes) to help make progress?	✓	✓	
How has the COVID pandemic /unwinding impacted ARHOME?	✓	✓	
Sustainability	**AAFP**	**AMS**	**AHA**
What discussions have you and/or your organization had about sustaining ARHOME program goals following the waiver demonstration period? • Probe: Who is involved in those discussions? • Probe: Have ARHOME goals been applied to other patient populations?	✓	✓	
Other	**AAFP**	**AMS**	**AHA**
Is there anything else you might want to share about your experience as a provider for the ARHOME population?		✓	

Table 3: 2024 BESS Supplemental Questions

2024 BESS Supplemental Questions
In the last 6 months, how many days did you usually have to wait for an appointment for a check-up or routine care?
In the last 6 months, how many days did you usually have to wait for an appointment when you needed care right away?
An interpreter is someone who helps you talk with others who do not speak your language. In the last 6 months, did you need an interpreter at your personal doctor's office?
In the last 6 months, during visits to your personal doctor's office, how often did you get an interpreter when you needed one?
Do you now need or take medicine prescribed by a doctor? Do not include birth control.
Is this medicine to treat a condition that has lasted for at least 3 months? Do not include pregnancy or menopause.
Did someone help you complete this survey?
How did that person help you? Mark one or more.

2.2 Measure Diagrams

An evaluation design was developed with a Measure Diagram to help depict the fundamental relationship between the aims for the demonstration, considered hypotheses, research questions, and identified measures used to analyze the performance. The diagrams below provide a visual display of measurable criteria to verify the achievement of the demonstration goals. Each aim represents how the demonstration will positively affect ARHOME beneficiaries compared to a comparison population. The hypotheses associate specific STCs from CMS to guide the comparison, research questions provide specific objectives for each hypothesis, and the measures stipulate the metrics applied to each hypothesis to assess and validate the performance of the demonstration. Detailed information about each metric can be found in Section 3.4 of this document.

Figure 2: Measure Diagram Goal 1

Goal 1: Providing continuity of coverage for individuals

Hypothesis	Research question	Measure
A. ARHOME beneficiaries will be aware of the premium assistance model	What percentage of ARHOME beneficiaries are aware of the premium assistance model?	1. Beneficiary Premium Assistance Awareness
B. ARHOME beneficiaries and QHP contracted providers will be aware of the Health Improvement Initiative	What percentage of ARHOME beneficiaries and QHP contracted providers are aware of the Health Improvement Initiative?	1. Beneficiary and 2. Provider Health Improvement Initiative Awareness
C. The premium assistance model will lead to less unmet need for healthcare among Arkansas residents ages 19-64 with income up to 138% FPL compared to individuals at the same income levels in states that expanded Medicaid through existing service delivery systems	Do Arkansas residents that are potentially eligible for ARHOME have less unmet needs related to having a personal doctor, medical costs, and routine checkups than similar residents in other comparable states that have expanded Medicaid?	1. Have a Personal Doctor 2. Avoided Care Due to Cost 3. Last Routine Checkup
D. The ARHOME program will lead to QHP beneficiaries having better continuity of coverage that includes fewer and shorter gaps, while Medicaid eligible, compared to Medicaid FFS beneficiaries	Do ARHOME beneficiaries have fewer and shorter coverage gaps than Medicaid FFS beneficiaries?	1. Percent of Beneficiaries with At Least One Month with a Coverage Gap 2. Average Length of Gaps in Coverage
E. The ARHOME program will lead to QHP beneficiaries having better continuity of primary care and specialty providers, while Medicaid-eligible, compared to Medicaid FFS beneficiaries	Do ARHOME beneficiaries have better continuity of primary and specialty care providers then Medicaid FFS beneficiaries?	1. Continuity of PCP Care 2. Continuity of Specialist Care 3. Percent Annual PCP Visits

Figure 3: Measure Diagram Goal 2

GOAL 2: Improving access to providers

HYPOTHESIS	RESEARCH QUESTION	MEASURE
A. The premium assistance model will lead to improved financial health among Arkansas healthcare providers compared to healthcare providers in states that expanded Medicaid through the existing service delivery system	Are Arkansas healthcare providers more satisfied with compensation of QHP beneficiaries during the ARHOME demonstration?	1. Provider Financial Health Improvement
	Are Arkansas healthcare providers less likely to close and have better operating margins during the ARHOME demonstration?	2. Hospital Financial Health Improvement
		3. Provider Closure Rate
B. The ARHOME program will lead to QHP beneficiaries having better perceived access to care over time and compared to Medicaid FFS beneficiaries	Are ARHOME beneficiaries more satisfied with their medical appointments in terms of timeliness, ease of scheduling, receiving appropriate care from the appropriate providers, and having an interpreter available to them when needed than Medicaid FFS beneficiaries?	1 – 10. CAHPS: Perceived Access to Care
C. The ARHOME program will lead to QHP beneficiaries having better perceived access to care compared to similar beneficiaries in states that expanded Medicaid through the existing service delivery system	Do Arkansas residents that are eligible for ARHOME have better perceived access to routine care that includes medical coverage, cost, having a personal doctor, being seen regularly, and receiving the appropriate vaccinations than similar residents in other comparable states that have expanded Medicaid?	1 – 5. BRFSS: Perceived Access to Care
D. The ARHOME program will lead to QHP beneficiaries having better realized access to care over time and compared to Medicaid FFS beneficiaries	Do ARHOME beneficiaries have better access to network providers and in a timely manner?	1. Provider Patient Acceptance and 2. Time to First Appointment
	Do ARHOME beneficiaries have better access to preventive care, recommended screenings, and chronic condition management than Medicaid FFS beneficiaries?	3 – 12. Preventative Visits and Cancer Screenings

	Do ARHOME beneficiaries that were enrolled in Medicaid FFS and eligible for EPSDT services have similar if not more preventive (wellness, dental, vision) visits than when they were in Medicaid FFS?	
	What percentage of ARHOME beneficiaries use non-emergency transportation (NET) assistance and how often do they use this service compared with Medicaid FFS beneficiaries?	**13 – 15. NET Utilizations and Awareness**
	Do ARHOME beneficiaries have a similar, if not better network of primary care providers and specialists to choose from within 30 miles of their residence than Medicaid FFS beneficiaries?	**16 – 19. PCP and Specialist Network Adequacy and Accessibility** **20. ECP Network Adequacy**

Figure 4: Measure Diagram Goal 3

GOAL 3: Improving continuity of care across the continuum of coverage

HYPOTHESIS	RESEARCH QUESTION	MEASURE
A. ARHOME beneficiaries will be aware of the shorter period of retroactive eligibility, and the time-limited premium requirements	**What percentage of ARHOME beneficiaries are aware of the shorter period of retroactive eligibility and premium requirement awareness?**	**1. Beneficiary Retroactive Eligibility Awareness** **2. Beneficiary Premium Requirement Awareness**
B. The shorter period of retroactive eligibility will not lead to a lower rate of Medicaid applications among individuals potentially eligible for ARHOME compared to individuals potentially eligible for other Medicaid programs without a reduced period of retroactive eligibility	**Does the shorter period of retroactive eligibility lower the rate of ARHOME new enrollments?**	**1. New Enrollment**
C. The shorter period of retroactive eligibility will not lead to a greater medical debt among new ARHOME	**Do new ARHOME beneficiaries with a shorter period of retroactive eligibility have a higher rate of medical debt**	**1. New Beneficiary Medical Debt**

beneficiaries compared to individuals newly enrolled in other Medicaid programs without a reduced period of retroactive eligibility	compared with the new Medicaid FFS beneficiaries?	
D. During Year 1 of the demonstration, monthly premiums will not lead to lower take-up and retention rates among Arkansas residents aged 19-64 with income at 101-138% FPL compared to those at or below 100% FPL	In the first year of the ARHOME demonstration, will monthly premiums lower rates of new enrollment and retention among ARHOME applicants or beneficiaries at 101-138% FPL as compared to those at or below 100% FPL?	1. New Enrollment
		2. Retention Rate

Figure 5: Measure Diagram Goal 3 Continued

GOAL 3: Improving continuity of care across the continuum of coverage

HYPOTHESIS	RESEARCH QUESTION	MEASURE
E. During Year 1 of the demonstration, monthly premiums will not lead to more gaps in coverage among Arkansas residents age 19-64 with income at 101-138% FPL compared to those at or below 100% FPL	In the first year of the ARHOME demonstration, will monthly premiums increase the number and length of coverage gaps among ARHOME beneficiaries at 101-138% FPL as compared with ARHOME beneficiaries at or below 100% FPL?	1. Percent of Beneficiaries with at Least One Month with a Coverage Gap
		2. Average Length of Gaps in Coverage
F.QHP beneficiaries will demonstrate they value QHP coverage, and the implementation of monthly premiums will not reduce QHP beneficiary enrollment	Will monthly premiums lower overall health insurance coverage among Arkansas residents between 101-138% FPL?	1. Health Insurance Coverage Status
	During Year 1 of the demonstration, will monthly premiums lower the percentage of ARHOME beneficiaries at 101-138% FPL who pay a premium?	2. Premium Payments
	Will monthly premiums lower the percentage of ARHOME beneficiaries selecting their own QHP at enrollment?	3. QHP Selections

G. During Years 2-5 of the demonstration, the cessation of monthly premiums will not increase take-up and retention rates among QHP beneficiaries with income at 101-138% FPL compared with Year 1	Will the termination of monthly premiums increase the rate of new enrollment or retention among ARHOME applicants or beneficiaries at 101-138% FPL in Years 2-5 of the ARHOME demonstration period as compared to the first year?	1. New Enrollment 2. Retention Rate
H. During Years 2-5 of the demonstration, the cessation of monthly premiums will not increase gaps in coverage among QHP beneficiaries while still eligible for ARHOME than they did during Year 1	Will the termination of monthly premiums increase the number and length of coverage gaps among ARHOME beneficiaries at 101-138% FPL in Years 2-5 of the ARHOME demonstration period as compared to the first year?	1. Percent of Beneficiaries with at Least One Month with a Coverage Gap 2. Average Length of Gaps in Coverage
I. During Years 2-5 of the demonstration, the cessation of monthly premiums will lead to QHP beneficiaries having more gaps in coverage after earnings exceed Medicaid eligibility limits than they did during Year 1	Will the termination of monthly premiums increase the number and length of coverage gaps among ARHOME beneficiaries at 101-138% FPL who disenroll due to high income in Years 2-5 of the ARHOME demonstration period as compared to the first year?	1. Percent of Beneficiaries with at Least One Month with a Coverage Gap 2. Average Length of Gaps in Coverage

Figure 6: Measure Diagram Goal 3 Continued

GOAL 4: Furthering quality improvement and delivery system reform initiatives that are successful across population groups

HYPOTHESIS	RESEARCH QUESTION	MEASURE
A. ARHOME beneficiaries will be aware of the shorter point-of-service copayment requirements and the Economic Independence Initiative	What percentage of ARHOME beneficiaries are aware of point-of-service copayments and the Economic Independence Initiative?	1. Beneficiary Copayment and 2. Ell Awareness
B. The ARHOME program will lead to QHP beneficiaries having greater satisfaction in the care provided over time and compared to Medicaid FFS beneficiaries	Are ARHOME beneficiaries more satisfied with their health plan, health care, as well as primary care providers and specialists?	1. Rating of 1 Health Plan and 2. Health Care 3. PCP and 4. Specialist

C. The ARHOME program will lead to QHP beneficiaries having lower non-emergent use of the emergency department (ED), lower potentially preventable use of the emergency department and hospital admissions, and lower hospital re-admissions over time and compared to Medicaid FFS beneficiaries	**Do ARHOME beneficiaries have lower ED visits, chronic condition hospital admissions, and all-cause readmissions than Medicaid FFS beneficiaries?**	**1. Preventable 2. Non-Emergent and 3. Emergent ED Visits**
		4. Plan All Cause Readmissions
		5 – 8. Preventable Hospital Admissions
	Do ARHOME beneficiaries have a higher rate of follow-up care after hospitalizations and ED visits than Medicaid FFS beneficiaries?	**9. PCP Follow-Up after ED Visit**
		10. PCP Follow-Up after Hospitalization
D. The ARHOME program will lead to QHP beneficiaries having better realized access to care over time and compared to Medicaid FFS beneficiaries	**Do ARHOME beneficiaries with a diagnosis of mental illness or substance use disorder have higher rates of treatment, medication adherence, preventive screenings, as well as follow-up after ED visits and hospitalizations than Medicaid FFS beneficiaries**	**1 – 20. Acute, Behavioral Health, Chronic Condition Care, Maternal and Perinatal Care, and HII Participation**
	Do ARHOME beneficiaries have lower use of opioids and benzodiazepines than Medicaid FFS beneficiaries?	
	Do ARHOME beneficiaries have lower rates of C-sections than Medicaid FFS beneficiaries?	
	Do ARHOME beneficiaries have higher rates of preventive care, contraceptive care, and medical management of chronic conditions than Medicaid FFS beneficiaries?	
	What percentage of ARHOME beneficiaries are participating in a Health Improvement Initiative?	
E. Point-of-service copayments will not lead to QHP beneficiaries subject to copays to have worse quality of care compared to QHP beneficiaries not subject to copays	**Will copayments lower rates of treatment, medication adherence, preventive screenings, as well as follow-up after ED visits and hospitalizations among ARHOME beneficiaries with a diagnosis of mental illness or substance use**	**1 – 11. Acute, Behavioral Health, and Chronic Condition Care**

	disorder compared with rates of Medicaid FFS beneficiaries?	
	Will copayments increase the use of opioids and benzodiazepines among ARHOME beneficiaries compared with Medicaid FFS beneficiaries?	
F. Among QHP beneficiaries with income at or below 20% FPL, the Economic Independence Initiative will lead to an increase in income to above 20% FPL over time	Will the Economic Independence Initiative increase the percentage of ARHOME beneficiaries who had an income below 20% FPL in the prior year to at or above 20% FPL in the current measurement year?	1. Percent of Beneficiaries at or under 20% FPL at Initial Measurement That Are Above 20% FPL at Follow-Up Measurement, Among Those Still Enrolled at the Follow-Up Measurement

Figure 7: Measure Diagram Goal 4

GOAL 4: Furthering quality improvement and delivery system reform initiatives that are successful across population groups

HYPOTHESIS	RESEARCH QUESTION	MEASURE
G. Among QHP beneficiaries with income at or below 100% FPL, the Economic Independence Initiative will lead to an increase in income to about 100% FPL over time	Will the Economic Independence Initiative increase the percentage of ARHOME beneficiaries who had an income below 100% FPL in the prior year to at least 100% FPL in the current measurement year?	1. Percent of Beneficiaries at or under 100% FPL at Initial Measurement that are Above 100% FPL at Follow-Up Measurement, Amont Those Still Enrolled at the Follow-Up Measurement
H. Among QHP beneficiaries who disenroll from ARHOME, the Economic Independent Initiative will lead to an increase in the percent that disenroll due to increased income over time	Will there be increase in the percentage of ARHOME beneficiaries that disenroll due to high income?	1. Percent of Beneficiaries That Disenroll Due to High Income
	Do a higher percentage of ARHOME beneficiaries that disenroll take up private health	2. Percent of Disenrolled Beneficiaries That Take-Up Private Health Insurance

	insurance and will that private health insurance be the same carrier as their ARHOME QHP carrier?	3. Percent of Disenrolled Beneficiaries That Take-Up Private Health Insurance and Maintain the Same Health Insurance Plan they had in ARHOME
I. The Economic Independence Initiative will lead to an increase in the percent of QHP beneficiaries that enroll in education and training programs over time.	Will the Economic Independence Initiative increase the percentage of ARHOME beneficiaries that participate either through the initiative or in other education and training programs?	1. Percent of QHP Beneficiaries that Enroll in Education and Training Programs over time 2. Percent of QHP Beneficiaries Participating in the ELL Program
J. The point-of-service copayments will lead to QHP beneficiaries subject to copays having lower overall healthcare use compared to similar QHP beneficiaries not subject to copays	Will ARHOME beneficiaries subject to copayments have lower healthcare utilization than ARHOME beneficiaries not subject to copayments?	1. Beneficiary Copayment Healthcare Use Impact
K. The shorter period of retroactive eligibility, the premium assistance model, the point-of-service copayments, the Health Improvement Initiative, and the other financial discipline components will lead to the rate of growth in per member per month (PMPM) QHP costs being no higher than the rate of growth in PMPM costs in Arkansas Medicaid FFS	Will the growth rate of PMPM QHP costs for ARHOME beneficiaries remain similar to or be lower than that of Medicaid FFS beneficiaries?	1. PMPM Growth Rate
	Will the growth rate of the ARHOME program's total health expenditures and administrative costs be similar to or lower than that of Medicaid FFS?	2. Total Health Expenditure Growth Rate 3. Administrative Cost Growth Rate

Figure 8: Measure Diagram Goal 4 Continued

GOAL 4: Furthering quality improvement and delivery system reform initiatives that are successful across population groups

HYPOTHESIS	RESEARCH QUESTION	MEASURE
L. QHP beneficiaries with a shorter period of retroactive eligibility will be healthier at enrollment than Medicaid FFS beneficiaries with a longer period of retroactive eligibility	Will ARHOME beneficiaries with a shorter period of retroactive eligibility have fewer comorbidities at enrollment than Medicaid FFS beneficiaries?	1. Average Charlson Comorbidity Index Score

M. The cessation of monthly premium for QHP beneficiaries at 101-138% FPL will lead to a faster rate of growth in PMPM QHP costs in Years 2-5 compared to Year 1	**Will the termination of monthly premiums for QHP beneficiaries at 101-138% FPL in Years 2-5 lead to a faster rate of growth in PMPM QHP costs as compared to costs incurred by similar beneficiaries in Year1?**	**1. QHP PMPM Growth Rate**
N. The premium assistance model will lead to a lower rate of increase of PMPM premiums in the Arkansas Marketplace compared to states that expanded Medicaid and provide coverage through means other than premium assistance	**Will ARHOME's premium assistance model result in a lower rate of increase in PMPM premiums in the Arkansas marketplace compared to similar states that expanded Medicaid?**	**1. Arkansas Program Characteristics** **2. Arkansas Regional Average Program Characteristics** **3. Contiguous States' Program Characteristics** **4. Arkansas Marketplace PMPM Growth Rate**
O. The premium assistance model will lead to a lower rate of increase in average commercial insurance premiums in Arkansas compared to states that expanded Medicaid and provide coverage through means other than premium assistance	**Will ARHOME's premium assistance model result in a lower rate of increase in average commercial insurance premiums in Arkansas compared to similar states that expanded Medicaid?**	**1. Arkansas Commercial Insurance Premium Rates**

3 METHODOLOGY

3.1 METHODOLOGICAL DESIGN

The evaluation will test hypotheses of coverage, access, care, quality, outcomes, and cost-effectiveness using data from eligibility, claims, surveys, interviews, focus groups, commercial insurance, and cost reporting. All measures will be evaluated for each calendar year of the demonstration, as applicable.

Survey data will be used to analyze Goals 1-4. To assess beneficiary experiences of health care, a Beneficiary Engagement Satisfaction Survey (BESS) will be administered to beneficiaries in ARHOME and fee-for-service Medicaid. The Behavioral Risk Factor Surveillance System (BRFSS) survey data will be used to compare Arkansas with states that expanded traditional Medicaid on health care access, immunization, and are similar to Arkansas on socioeconomic indicators (such as Kentucky and West Virginia). The American Community Survey (ACS) data will be used to compare Arkansas with states that didn't expand Medicaid on health insurance coverage, which includes the following: Alabama, Mississippi, and South Carolina. Provider focus groups,

surveys, and/or interviews may be administered to better understand impacts to certain provider populations.

Eligibility and claims data will be utilized when analyzing gaps in care, access to providers, and quality of care throughout Goals 1-4. Goal 4 further examines quality of care metrics through beneficiaries who are subject to copays in contrast to beneficiaries who are not subject to copays.

Additionally, regarding Goal 2, provider networks for ARHOME plans will be compared with Arkansas Medicaid provider networks to assess network adequacy and accessibility. A pre-post comparison will be performed for beneficiaries eligible for Medicaid Early and Periodic Screening Diagnostic and Treatment (EPSDT) services. Access to non-emergency transportation will be assessed as well. Goal 2 will also compare Arkansas to other expansion states while examining providers' sustainability with the premium assistance model.

To assess cost-effectiveness for Goal 4, program characteristics will be compared at the regional and state levels in relation to Arkansas Medicaid fee-for-service costs and the budget neutrality cap. Pre-post comparisons will be performed on per-member per-month (PMPM) (metric 4.K.1), total health expenditures (THEs) (metric 4.K.2), and administrative costs (ACs) (metric 4.K.3). The PMPM, THEs, and ACs metrics will provide a snapshot to analyze program fiscal health versus the comparison population.

Measures of access to health care will also be used to evaluate ARHOME's policy of required premium contributions for beneficiaries with an income at 101-138% FPL for the demonstration year 2022. The effect of premium contributions will be evaluated for claims-based measures of primary care (AAP_CNT), emergency department visits/utilization (EDV), and three continuity of coverage measures: Average length of coverage gaps (CONT_1A1), percent of beneficiaries with less than two coverage gaps (CONT_1A2), and continuous health plan enrollment (i.e., average number of consecutive months enrolled in a health plan) (CONT_1B1). For these measures, years 2022–2026 will be analyzed using an interrupted time series (ITS) design to compare trends in measure outcomes between the baseline period (2017-2021) and time periods after policy implementation.

In a regression discontinuity design (RDD) pre-post comparison analysis, logistic regression (for binary measures) or Poisson/negative binomial regression (for integral/count measures) will be conducted separately on the "before" (baseline period) and "after" (demonstration period) datasets. The regression coefficients will be compared and tested for significant differences between the two periods in order to assess impacts of the premium requirement on the outcome variables. Where applicable and permitted by sample size requirements, eligible beneficiary populations with incomes just below and above the 100% FPL threshold (e.g., 98-102%) will be included in the RDD analysis to isolate the sole effect of the premium implementation on the outcome variables (while minimizing the potential confounding effects of the income covariates).

A 30-day retroactive eligibility period will begin July 1, 2022 and last through the end of the demonstration, unless otherwise updated. The evaluation design will examine beneficiary

awareness concerning the retroactive eligibility period, impact to medical debt, new enrollment, and measures of continuity compared to the Medicaid FFS comparison population.

The ARHOME evaluation will utilize beneficiary-level weighting for the eligibility and claims-based measures in order to achieve comparable target and comparison populations for analyses. For each measure, the eligible beneficiaries will be weighted to achieve balance across groups on baseline covariates. Measure results at the aggregate level will be compared using weighted group means, as well as with beneficiary-level models that additionally adjust for previous experience in the program and/or risk scores.

Since ARHOME is a multi-year program scheduled to run through 2026, longitudinal analysis for a core set of metrics following each calendar-year cohort across multiple years will be performed. Beneficiaries identified in the target and comparison populations at the beginning of the program can be followed over time while accounting for serial autocorrelation and attrition. This type of analysis can leverage each beneficiary's calendar-year metric results to provide a better understanding of potential changes and improvements in health outcomes for a given beneficiary over the course of ARHOME.

To further evaluate Goals 1-4, analyses will be stratified by key subpopulations of interest to inform a fuller understanding of existing disparities in access and health outcomes. This will also provide an understanding of how the demonstration's various policies may support bridging any such inequities. Variables such as race and ethnicity, gender, rurality, and language will be utilized. For the quality-of-care metrics in Goals 2 and 4, analyses will be stratified by the key QHP HII components to contrast quality-of-care outcomes by QHP participation.

Descriptive research will be performed on beneficiary outreach materials as well as any provider communications during the demonstration's time period. Special attention will be paid to the period leading up to and after the premium policy phase out process.

3.2 Target and Comparison Populations

Below is a conceptual diagram of the in-state populations addressed in the ARHOME evaluation (Figure 9) along with key demographic characteristics for both MY21 target and comparison populations in **Table 4**. The in-state comparison population was determined to be non-disabled adults who would have been eligible for Arkansas Medicaid pre-expansion. It is composed of beneficiaries in the parent/caretaker relative (<17% FPL) and former foster care (no income limit) aid categories. These two aid categories offer the most comparable population to our target population in terms of key demographic characteristics. Beneficiaries in other aid categories were considered for inclusion. However, these other categories included children and adults outside of our age range and beneficiaries with disabilities that may confound results due to higher utilization of healthcare services and lower quality of health and/or comorbidities related to their disabilities.

The target population is composed of beneficiaries in the Medicaid expansion population (aid category 06, ≤133% FPL, 138% FPL with 5% disregard) with a QHP from a private insurance

carrier (benefit plan HCIP). Two other benefit plans within the 06-aid category identify the medically frail. The remaining benefit plan in the 06-aid category, IABP (interim alternative benefit plan), defines an interim period in which beneficiaries enrolled in ARHOME have services paid by Medicaid fee-for-service before a QHP is chosen or assigned.

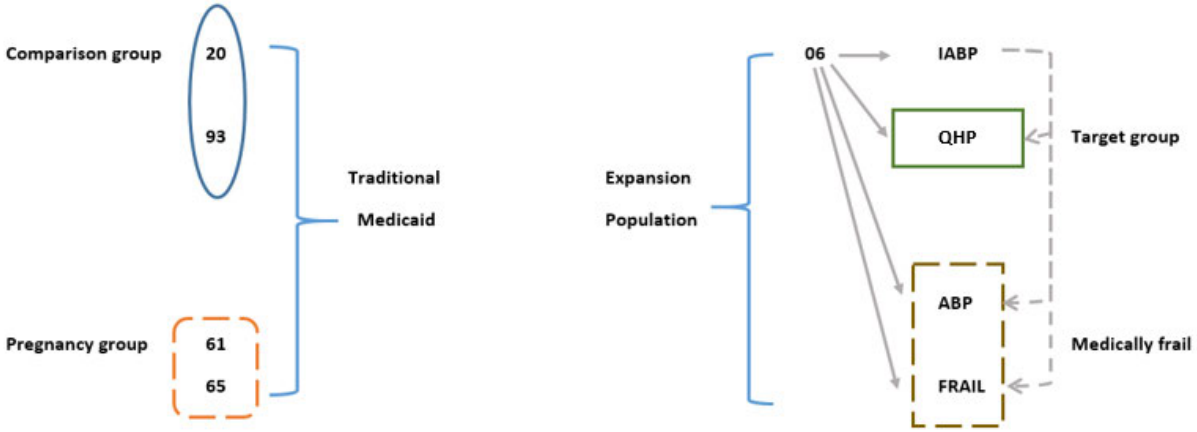
Table 4: Arkansas Group Demographic Comparison

	In-State Comparison Population (62,949)	Target Population (265,971)
Age Groups (%)		
19-29	37.6	31.7
30-49	58.3	46.2
50-64	4.1	22.1
Average Income		
100% FPL or Lower	99.5	75.0
Greater than 100% FPL	0.6	25.0
Gender (%)		
Male	18.7	42.9
Female	81.3	57.1
Race (%)		
Non-Hispanic White	54.7	55.0
Non-Hispanic Black	24.6	18.3
Hispanic	3.5	3.6
Other*	5.2	4.4
Total (Race)	100.0	100.2

*Other includes American Indian, Alaska Native, Asian, Native Hawaiian, other Pacific Islander, and more than one race

In Figure 9, dashed lines around pregnancy and medically frail denote that other eligibility categories in the diagram will also be allowed. Identifying the pregnancy and medically frail groups will allow continuity of coverage to be evaluated in these subpopulations, even though comparison populations are not available for them.

Figure 9: Conceptual Diagram of Evaluation Populations



Operationally, beneficiaries will be assigned to the target or comparison population in each analysis year based on at least 6 months (180 days) of eligibility in segments qualifying for the target or comparison population **(Table 5**). Beneficiaries in the target population cannot have any segments qualifying for the comparison population, and vice versa (no "switchers"). The pregnant and medically frail will be defined as beneficiaries having one or more days of coverage in qualifying segments and at least 180 days of total coverage in the measurement year. In all populations except the comparison population, the interim alternative benefit plan (IABP) will be allowed but will not contribute towards the 180-day minimum.

Table 5: Combinations of Aid Category and Benefit Plans

Study Population	Aid Category	Benefit Plan
Target[1]	06 - adult expansion	HCIP, IABP[3]
Comparison[1]	20 - parent/caretaker relative	N/A
	93 - former foster care	
Pregnancy[2]	61 – pregnant women, limited benefit plans	LPW, PWUCH
	65 – pregnant women, full coverage	MCAID

[1] Exclusive of other combinations of aid category and benefit plan.

[2] Inclusive of other combinations of aid category and benefit plan.

[3] The interim, fee-for-service plan IABP (Interim Alternative Benefit Plan) is not included in the minimum eligibility period.

The following beneficiary exclusions will apply to each measurement year:

- Less than 19 years of age on January 1
- 65 years of age or older on December 31
- Medicare or third-party liability claims
- Participation in a Provider-led Arkansas Shared Savings Entity (PASSE), an Arkansas created Medicaid managed care program, on or after the implementation date of March 1, 2019
- Death during the measurement year
- Overlapping eligibility segments

Another subpopulation of interest is composed of beneficiaries who were eligible for Medicaid Early and Periodic Screening Diagnostic and Treatment (EPSDT) services as 17- or 18-year-olds and then became eligible for a QHP as 19- or 20-year-olds. These beneficiaries will be defined as the EPSDT population in order to test the hypothesis that QHP beneficiaries will have at least as satisfactory access to EPSDT benefits as the Medicaid fee-for-service group. These

beneficiaries could also be included in the target population in the year(s) that they were in a QHP.
The target and comparison populations in each measurement year are expected to have approximately a 5:1 or 6:1 ratio, necessitating weighting to construct comparably sized groups for each measure.

Because the IABP is considered part of the ARHOME program as a separate health plan from the QHPs, it was necessary to specify how to address IABP segments at several levels: populations, measures for gaps in coverage, measure of health plan continuity, and claims-based measures.

Table 6: IABP Measurement Details

Analysis Level	IABP Segment Treatment
Populations	Exclude beneficiaries with IABP from the comparison population
Gaps in insurance coverage	Include IABP segments as insurance coverage
Claims-based measures, measurement period	Include claims during IABP segments
Claims-based measures, prior year diagnoses	Include claims during IABP segments, all populations

The proposed methods of addressing IABP segments are consistent with the rationale that IABP segments occur during a beneficiary's eligibility for ARHOME but are separate from enrollment into a QHP. Hence, beneficiaries with eligibility segments qualifying for the comparison population, and who also have an IABP segment, should be excluded from the comparison population. In the other populations (target, pregnancy, and medically frail), IABP segments will be considered insurance coverage and not as gaps in coverage, and IABP will be considered a separate health plan from traditional Medicaid and QHP segments.

For claims-based measures, the evaluation will include claims from IABP segments in the measurement year(s). This ensures that diagnoses and medical services from the interim period contribute to a complete picture of beneficiary experience in ARHOME. Similarly, the evaluation will include claims from IABP segments prior to the measurement year(s) if a claims-based measure specifies a lookback period for prior diagnoses. Prior-year IABP segments will be included for all populations.

3.2.1 Behavioral Risk Factor Surveillance System

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual survey fielded by states with assistance from the Centers for Disease Control and Prevention (CDC). The core survey includes questions on health care access and immunization. These surveys will be assessed to compare Arkansas with states that expanded traditional Medicaid and perform similarly to Arkansas on socioeconomic indicators, such as Kentucky and West Virginia. These two states are similar to Arkansas on the Human Development Index (HDI), unemployment rate, and percentage of population in poverty. The HDI is a composite measure developed by the United Nations to measure countries' levels of social and economic development; it is also available at

the state level and provides insight into well-being indicators across states.[1] The HDI takes three key factors for human development into account: access to education, goods, and health.[1] Furthermore, HDI has been used as an alternative economic indicator vs. using a state's per capita income and combines component indices for life expectancy, school enrollment, and income into a single index.[1]

[1] Stanton, Elizabeth. The Human Development Index, a History. February 2007. UMASS Scholar Works. https://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1101&context=peri_workingpapers

Table 7: BRFSS States Comparison

	AR	KY	WV
HDI (2015)[2]	0.878	0.880	0.874
Unemployment rate (2022)[3]	3.3	3.7	3.9
% of pop in poverty (2020)[4]	15.2	14.9	15.8
Age Groups (%) (2021)[5]			
19-25	8.7	8.7	8.3
26-34	11.5	11.6	10.1
35-54	24.7	25.2	25.2
55-64	13.0	13.6	14.3
Average Life Expectancy at Birth (years)[6]	75.7	75.5	74.5
Median Income[3]	$52,123	$55,454	$50,884
Bachelor's Degree or Higher (2021)[7]	25.3%	27.0%	24.1%
Gender (%)[8]			
Male	49.0%	49.1%	49.4%
Female	51.0%	50.9%	50.6%
Race (%)[9]			
White	68.3%	83.0%	90.6%
Black	14.4%	6.8%	2.5%
Other	17.3%	10.2%	6.9%

The evaluator will create an analytic sample that represents adults ages 19–64 who were likely to have been eligible for Medicaid after expansion. Each respondent's income will be imputed

[2] Institute for Management Research, Radbound University. (2023). *Subnational HDI (v5.0)*. Global Data Lab. Retrieved January 30, 2023, from https://globaldatalab.org/shdi/table/shdi/USA/?levels=1%2B4&years=2015&interpolation=0&extrapolation=0

[3] U.S. Bureau of Labor Statistics. (2022, July). *Unemployment rates for states*. U.S. Bureau of Labor Statistics. Retrieved January 30, 2023, from https://www.bls.gov/web/laus/laumstrk.htm

[4] U*.S. Census Bureau Quickfacts: United States*. United States Census Bureau. (2023). Retrieved January 30, 2023, from https://www.census.gov/quickfacts/US

[5] Kaiser Family Foundation. (2022, October 28). *Population Distribution by Age*. KFF. Retrieved January 30, 2023, from https://www.kff.org/other/state-indicator/distribution-by-age/

[6] Kaiser Family Foundation. (2022, April 18). Life expectancy at birth (in years). KFF. Retrieved January 30, 2023, from https://www.kff.org/other/state-indicator/life-expectancy/?currentTimeframe=0&selectedRows=%7B%22states%22%3A%7B%22arkansas%22%3A%7B%7D%2C%22kentucky%22%3A%7B%7D%2C%22west-virginia%22%3A%7B%7D%7D%7D&sortModel=%7B%22colId%22%3A%22Location%22%2C%22sort%22%3A%22asc%22%7D

[7] U.S. Census Bureau. (2022). American Community Survey 1-year Estimates Educational Attainment. Retrieved January 31, 2023, from https://data.census.gov/table?q=educational+attainment&g=0400000US05,21,54&y=2021&tid=ACSST1Y2021.S1501

[8] Kaiser Family Foundation. (2022, October 28). Population distribution by sex. KFF. Retrieved January 30, 2023, from https://www.kff.org/other/state-indicator/distribution-by-sex/

[9] Kaiser Family Foundation. (2022, October 28). Population distribution by race/ethnicity. KFF. Retrieved January 30, 2023, from https://www.kff.org/other/state-indicator/distribution-by-raceethnicity/

as the midpoint of their income category in BRFSS. In combination with household size and annual federal poverty guidelines, respondents with income ≤138% of FPL in each year will be identified.[10]

Current BRFSS weighting methodology provides state-level weights that allow for cross-year comparisons since 2011.[11] The weights incorporate design weighting to adjust for nonresponse and noncoverage, as well as raking to adjust for demographic differences between the persons sampled within each state. A comparative interrupted time series method will be used for the analysis.

3.2.2 Beneficiary Engagement Satisfaction Survey

The evaluator will administer a Beneficiary Engagement Satisfaction Survey (BESS) using the Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey Adult Medicaid 5.1 core questions with the addition of supplemental items and questions specific to the ARHOME evaluation. The populations will be as follows:

1. ARHOME (Target Population Survey)
    A. Target population in the six-month timeframe prior to the survey starting. Based on monthly premium payments, a beneficiary to be included in the survey population must be enrolled in at least five of the last six months, including the sixth month.
    B. Complete information on race, gender, and address
    C. Stratified random sample of 1 beneficiary per household, with the sampling rate based on the carrier's proportion of the market share (e.g., if insurance company A insures 40% of the eligible ARHOME survey population, their sampling rate will be 40%).
2. Medicaid (Comparison Population Survey)
    A. Fee-for-service Medicaid population with aid categories qualifying for the comparison and pregnancy populations, in the six-month timeframe prior to the survey.
    B. Complete information on race, gender, and address
    C. Simple random sample of 1 beneficiary per household

3.2.3 Provider Focus Groups and/or Surveys

The evaluator plans to engage specific provider groups to gather their feedback for awareness, acceptance, and satisfaction with the ARHOME program. Methods of engagement will include periodic provider focus groups and/or surveys. Target populations include but are not limited to

[10] Hest, R. Four Methods for Calculating Income as a Percent of the Federal Poverty Guideline (FPG) in the Behavioral Risk Factor Surveillance System (BRFSS). May 2019. State Health Access Data Assistance Center (SHADAC). Accessed at https://www.shadac.org/sites/default/files/publications/Calculating_Income_as_PercentFPG_BRFSS.pdf

[11] BRFSS Complex Sampling Weights and Preparing 2019 BRFSS Module Data for Analysis. July 2020. Accessed at https://www.cdc.gov/brfss/annual_data/2019/pdf/Complex-Smple-Weights-Prep-Module-Data-Analysis-2019-508.pdf

provider members from the Arkansas Medical Society (AMS), Arkansas Academy of Family Physicians (AAFP), and the Arkansas Hospital Association (AHA).

3.2.4 American Community Survey

The American Community Survey (ACS), sponsored jointly by the U.S. Census Bureau and the U.S. Department of Commerce, is a nationwide survey that collects and produces information on demographic, social, economic, and health insurance coverage characteristics for a representative sample of the U.S. population each year. Information from the survey generates data that helps determine how more than $400 billion in federal and state funds are distributed each year. Health Insurance Coverage Status will be analyzed for Arkansas compared to non-expansion states that perform similarly to Arkansas on socioeconomic indicators, such as Alabama, Mississippi, and South Carolina. These three states are similar to Arkansas on the HDI, unemployment rate, and percentage of population in poverty.

Table 8: ACS States Comparison

State	HDI (2015)[3]	Unemployment rate (2022)[5]	% of pop in poverty (2020)[2]
AR	0.878	3.3	15.2
AL	0.888	2.6	16.1
MS	0.866	3.6	19.4
SC	0.888	3.1	14.6

3.3 Evaluation Period

The evaluation period is January 1, 2022 through December 31, 2026. The specific reports associated with this evaluation are outlined below:

1. **Draft Interim Evaluation**
   It is intended this report will be submitted by December 31, 2025 and will comply with Attachment C of the STCs. The time period of data included in this report will be January 1, 2022 through December 31, 2023.
2. **Final Interim Evaluation**
   Per STC 102.d., the final version of Item 1 above will be submitted within 60 days after receipt of CMS's comments and will comply with Attachment C of the STCs. The time period of data included in this report will remain as stipulated in Item 1 above.
3. **Draft Summative Evaluation**
   It is intended that this report be submitted by June 30, 2028 and comply with Attachment C of the STCs. The time period of data included in this report will be January 1, 2022 through December 31, 2026.
4. **Final Summative Evaluation**

Per STC 103.a., the final version of Item 1 above will be submitted within 60 days after receipt of CMS's comments and will comply with Attachment C of the STCs. The time period of data included in this report will remain as stipulated in Item 1 above.

3.4 Evaluation Measures by Measure Type

To ensure the evaluation is robust, the evaluator has grouped metrics by type in the table below to identify the categorical intent of each measure. Women's health especially maternal health and behavioral and mental health are target areas for DHS and the ARHOME program. Appendix 5.4 provides full measure descriptions for the metrics by goals and hypotheses.

Table 9: Evaluation Measures by Special Populations

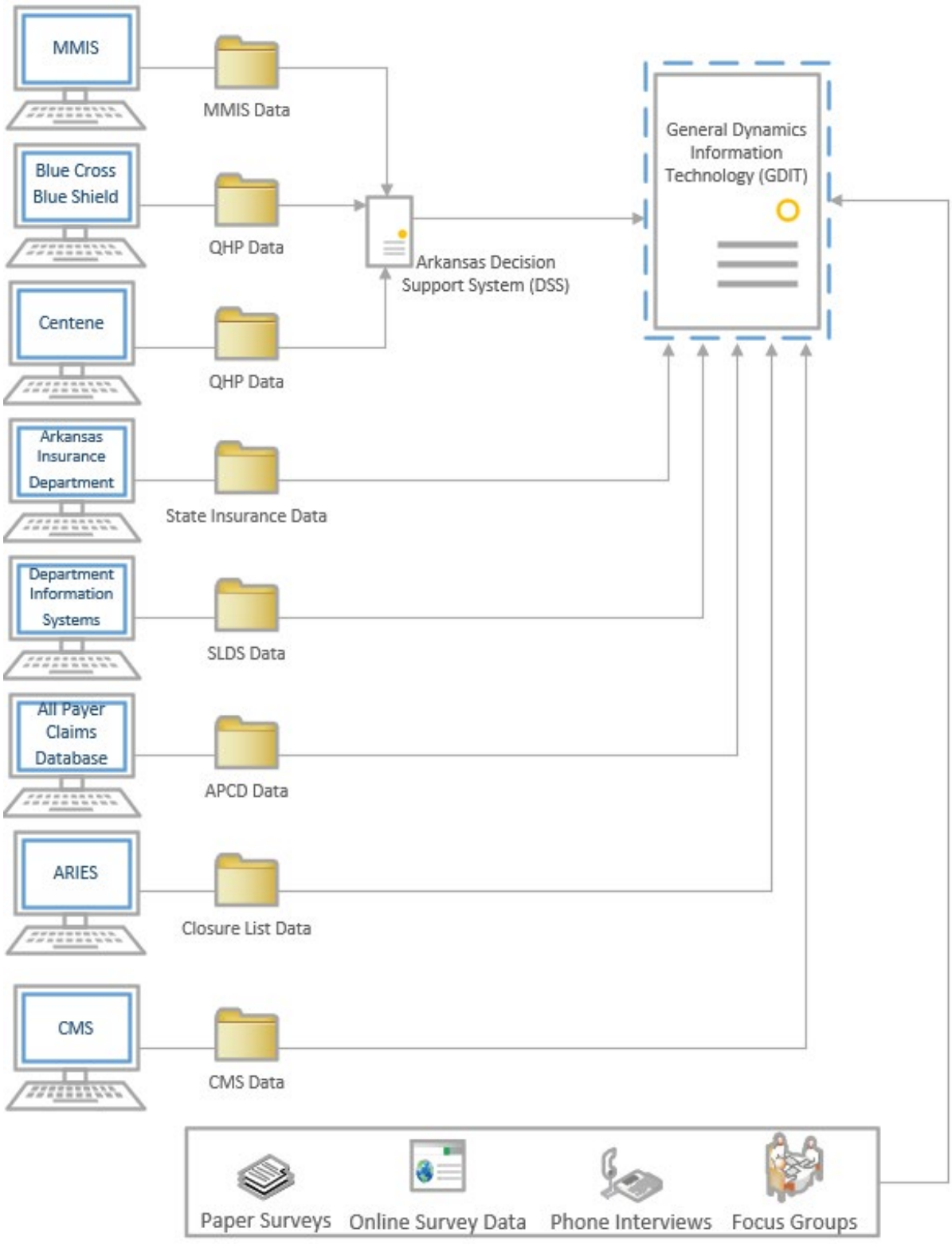
Acute/Chronic Condition Care		
Measure #	**Measure Name**	**Measure Data Source(s)**
2.D.6, 4.D.17, 4.E.11	Statin Therapy for Patients with Diabetes	Claims Data
2.D.7, 4.D.18	Comprehensive Diabetes Care: Hemoglobin A1c Testing	Claims Data
2.D.8	Adults' Access to Preventive/Ambulatory Health Services	Claims Data
2.D.9	AMR-AD Asthma Medication Ratio: Ages 19–64	Claims Data
4.C.4	Plan All-Cause Readmissions (PCR)	Claims Data
4.C.5	Diabetes Short-Term Complications Admission Rate	Claims Data
4.C.6	Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate	Claims Data
4.C.7	Heart Failure Admission Rate	Claims Data
4.C.8	Asthma in Younger Adults Admission Rate	Claims Data
4.D.11, 4.E.8	Persistence of Beta-Blocker Treatment After a Heart Attack	Claims Data
4.D.12, 4.E.9	Annual Monitoring for Patients on Persistent Medications	Claims Data
4.D.13, 4.E.10	Annual HIV/AIDS Viral Load Test	Claims Data
Behavioral/Mental Health Care		
Measure #	**Measure Name**	**Measure Data Source(s)**
1.E.2	Continuity of Specialist Care	Claims Data
4.D.2, 4.E.1	AMM-AD Antidepressant Medication Management	Claims Data
4.D.3, 4.E.2	Follow-Up After Hospitalization for Mental Illness	Claims Data
4.D.4, 4.E.3	SAA-AD Adherence to Antipsychotics for Individuals with Schizophrenia	Claims Data
4.D.5	SSD-AD Diabetes Screening for People with Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications	Claims Data
4.D.10, 4.E.7	FUM-AD Follow-Up After Emergency Department Visit for Mental Illness	Claims Data
Maternal/Perinatal Care		
Measure #	**Measure Name**	**Measure Data Source(s)**
4.D.14	C-Section Rate	Claims Data

4.D.15	CCP-AD Contraceptive Care – Postpartum Women Ages 21–44	Claims Data
4.D.16	CCW-AD Contraceptive Care – All Women Ages 21–44	Claims Data
Substance Use Disorder Care		
Measure #	**Measure Name**	**Measure Data Source(s)**
4.D.1	IET-AD Initiation and Engagement of Substance Use Disorder Treatment	Claims Data
4.D.6, 4.E.4	OHD-AD Use of Opioids at High Dosage in Persons Without Cancer	Claims Data
4.D.7, 4.E.5	COB-AD Concurrent Use of Opioids and Benzodiazepines	Claims Data
4.D.8	OUD-AD Use of Pharmacotherapy for Opioid Use Disorder	Claims Data
4.D.9, 4.E.6	FUA-AD Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence	Claims Data

3.5 Data Sources

The Arkansas Division of Medical Services (DMS) and its contractor will use multiple sources of data to assess the research hypotheses. The evaluation design will leverage claims-based administrative data, enrollment data, and survey-based scores, as applicable. Administrative data sources include information extracted from DMS' Medicaid Management Information System (MMIS). Whenever possible, the contractor will use its own Arkansas Medicaid Data Warehouse, which is a DMS approved priority warehouse system for the Medicaid comparison population. Data analytics will be performed without direct engagement from the State, as to avoid biased opinion or skewed results. The data evaluator will run the analytics and provide data as necessary for the analysis. Data from administrative claims will be used and will not alter input data or results output. The administrative QHP data to evaluate the target population will be transmitted quarterly to DMS from the carriers to the Arkansas Decision Support System (DSS). On a quarterly basis, the Arkansas DSS will provide the evaluation contractor with a uniform file of the QHP data. The following figure depicts the data source flow for the evaluation.

Figure 10: Data Source Flow



3.5.1 Administrative and Claims Data

The MMIS data source is used to collect, manage, and maintain Medicaid beneficiary files (i.e., eligibility, enrollment, and demographics) and fee-for-service (FFS) claims. Use of FFS claims will be limited to final, paid status claims. The contractor will use raw, full sets of Medicaid data, which is provided on a weekly basis, consisting of claims, provider, beneficiary, and pharmacy data subject areas. To ensure accurate and complete data, the contractor's Arkansas Medicaid Data Warehouse will utilize a snapshot process that identifies claims using a specific beneficiary finder file for maximum efficiency. It will also require a minimum three-month lag to allow time for most claims to be processed through the MMIS. The contractor will use fee-for-service claims and follow Healthcare Effectiveness Data and Information Set (HEDIS®) or CMS Core Set national specifications for national metrics. Applicable claim types, such as institutional, professional, and pharmacy claims, will be used to calculate the various evaluation design metrics while beneficiary demographic files will be used to assess beneficiary age, gender, and other demographic information. Eligibility files will be used to verify a beneficiary's enrollment in the State's Medicaid programs.

3.5.2 State Insurance Data

The Arkansas Insurance Department sends QHP information directly to the evaluator which is used to calculate the network accessibility and adequacy measures.

3.5.3 Statewide Longitudinal Data System

The Statewide Longitudinal Data System is maintained by the Arkansas Department of Transformation and Shared Services, Division of Information Systems. The Statewide Longitudinal Data System includes wage growth index and unemployment insurance wage data for approximately 91% of all Arkansans. The data includes all covered Arkansas employment, but does not include the following:

- Self-employed workers
- Unpaid family workers
- Federal and military employees
- Railroad employees covered by the Railroad Unemployment Insurance Act
- Employees of small agricultural establishments
- Some domestic service workers
- Insurance and real estate agents paid only on a commission basis
- Employees of churches and religious organizations, except separately incorporated schools
- People employed by other states

3.5.4 Arkansas All Payer Claims Database (APCD)

Arkansas' all-payer claims database (APCD) is a large-scale database that contains medical, pharmacy, and dental claims, enrollment data and provider files, as well as vital record, disease registry, hospital discharge, emergency department, and medical marijuana data from the

Arkansas Department of Health. As of April 2022, the Arkansas APCD had 9.4 million Commercial covered lives and 1.5 million Medicaid covered lives from 2013 to June 2021.

Beneficiary Enrollment data is the only data source needed for specific health insurance coverage metrics being evaluated. These records will represent when an individual became a beneficiary, made a change to an existing plan, changed plans, or disenrolled from any or all plans. Records represent beneficiaries by plan and coverage segment (plan dates of enrollment and disenrollment) for the purpose of understanding plan participation, identifying coverage terms, and tracking coverage gaps.

3.5.5 Closure List Data

The contractor for the Arkansas Integrated Eligibility System (ARIES) sends monthly QHP closure lists directly to the evaluator. It is anticipated this will be used for certain disenrollment measures.

3.5.6 Centers for Medicare & Medicaid Services (CMS) Data

With the robust data available through the CMS system, the evaluator will access necessary data sets, including Provider of Service and Healthcare Cost Report Information System (HCRIS) Cost reporting files.

3.5.7 Survey Data – ARHOME Beneficiary Engagement Satisfaction Surveys

The ARHOME Beneficiary Engagement Satisfaction Survey (BESS) is based on the CAHPS® Adult Medicaid Health Plan Survey 5.1 and covers topics such as getting care quickly, how well doctors communicate, and access to care, among others. The evaluation contractor will field the survey and follow the NCQA CAHPS protocol. The ARHOME beneficiary survey will follow a traditional NCQA sampling strategy with 1,700 to 3,000 beneficiaries randomly selected from the MMIS. To be eligible for the study, beneficiaries must be enrolled in the program for at least six months with no more than one 30-day gap in enrollment and must be enrolled in the last month prior to the survey.

The survey will be administered during calendar years 2022, 2024, and 2026 with questions to beneficiaries about their experiences over the prior six months. The evaluation contractor will mail an explanatory letter, initial survey, reminder postcard, and a second survey for non-responses. If no response is received after the second mailing, a third survey may be mailed. A unique survey identification number will be generated to track bad addresses and responses.

3.5.8 Survey Data – Comparison Population Medicaid Beneficiary Engagement Satisfaction Surveys

The evaluation contractor will also field a Medicaid Beneficiary Engagement Satisfaction Survey (BESS) to survey fee-for-service Medicaid beneficiaries. The evaluation contractor will follow the same time frames and survey protocols as outlined for the ARHOME survey. The aid categories for this sampling frame will be 20 (parent/caretaker/relative), 61 (limited pregnant women), 65 (pregnant women no grant), and 93 (former foster care).

3.5.9 Survey Data – Behavioral Risk Factor Surveillance System

The Behavioral Risk Factor Surveillance System (BRFSS) is a system of health-related telephone surveys fielded at the state level with guidance from the CDC. The core questions are fielded annually and include topics on health-related risk behaviors, chronic health conditions, and preventive services. The current BRFSS weighting methodology allows for comparisons since 2011 and uses survey weights provided with the data. The weights incorporate design weighting to adjust for non-response, non-coverage, and ranking to address demographic differences between the persons sampled within each state.[12]

BRFSS questions on health care access and immunization will be used from 2011–2026 public files in order to evaluate the population of adults likely to have been eligible for Medicaid expansion in Arkansas. Demographic data, including household size and income, will be used to identify the analytic sample, i.e., adults under age 65 with household income ≤138% of federal poverty level. A comparative interrupted time-series will be utilized.

3.5.10 Survey Data – American Community Survey

The ACS is an ongoing national survey conducted with over 3.5 million US households. The ACS is conducted by the US Census Bureau and data is released every year through a variety of data tables. For the purposes of the ARHOME evaluation, the Selected Economic Characteristics data will be utilized. This data covers health insurance coverage by a variety of factors, such as FPL and State.

3.5.11 Survey Data – Provider Survey(s) and Focus Group(s)

The evaluator will collect data through provider focus groups and provider surveys in order to obtain fundamental perceptions and participation concerning the ARHOME program. This includes the HII program, financial health, and uncompensated provider care. Focus groups will be conducted to assist with the survey development. The provider focus group surveys will be conducted in 2023 and 2025 (Demonstration Years 2 and 4).

3.6 Analytic Methods

As noted in Section 3.3, this document references time periods specific to the Interim Evaluation. However, for the Summative Evaluation, all analyses will incorporate the entire demonstration approval period (2022 through 2026).

The statistical analysis will ensure that the comparison and target populations in each measure are comparable and will adjust each measure's results for relevant pre- and post-treatment effects. For example, the survey measures will compare randomly sampled beneficiaries from the Medicaid FFS and ARHOME populations, and the analysis will include case-mix adjustment for gender, age, race/ethnicity, and education.

[12] Weighting the BRFSS Data. 2020. Center for Disease Control and Prevention. Accessed at https://www.cdc.gov/brfss/annual_data/2019/pdf/weighting-2019-508.pdf

Most claims-based measures have a continuous enrollment requirement during the measurement year that is stricter than that used to identify the populations. This ensures that there is enough time for events, diagnoses, or procedures to appear in the claims record. All eligibility and claims-based measures will weight beneficiaries so that the target and comparison populations are comparable in their baseline sociodemographic characteristics. The weighted beneficiary-level results can then be adjusted for post-treatment variables, including prior experience in the program. Risk score will be considered a post-treatment effect because the information will come from claims during the measurement year.

The EPSDT population will serve as their own control group, pre- and post-enrollment in ARHOME, and it will not require further adjustment. Measures addressing provider networks, program characteristics, or cost will not require adjustment to compare plans and programs.

The steps of the analytic process are listed below. These will apply in general to the claims-based measures. Please refer to Section 3.7 to verify whether each step will apply to a specific measure.

3.6.1 Determine Beneficiaries Eligible for Each Measure

Each metric's specifications will be followed to determine which beneficiaries are eligible for the denominator. These will be considered a subset of the target and comparison populations that meet additional metric requirements, such as a longer period of continuous enrollment.

3.6.2 Adjust for Beneficiary Selection

Beneficiaries in the treatment and comparison populations, who are eligible for each metric, will be weighted with the goal of creating two groups that do not differ in the distribution of their baseline characteristics. This method avoids potential bias in the selection and assignment of eligible beneficiaries to these two groups. To maintain statistical unbiased robustness, the underlying baseline covariates describing the eligible beneficiaries should not be statistically different between the two groups.

Baseline covariates will include age, gender, race/ethnicity, county of residence or enrollment region, and income category. Covariates at the zip-code tabulation area (ZCTA) will also be considered. These covariates include the following: demographics, education, income, and poverty from the American Community Survey (ACS); health status and access to care from the Behavioral Risk Factor Surveillance System (BRFSS); and urban-rural classification from the Federal Office of Rural Health Policy (FORHP). The use of weights will be explored from 1) Propensity-Score Modeling (PSM) and 2) Coarsened Exact Matching (CEM).

1) A propensity score is the predicted probability of a beneficiary being assigned to the treatment group, given their observed baseline characteristics. Usually, a logistic regression is performed to arrive at each beneficiary's predicted probability. Nonparametric machine-learning models could also be explored as a sensitivity analysis.

The propensity score can be used to calculate the inverse probability of treatment weight (IPTW).[13]

2) Coarsened Exact Matching (CEM) is a nonparametric method that creates strata using pre-specified variables and their binned values.[14] All beneficiaries within the treatment or comparison population in each unique stratum are assigned the same weight. The advantages of CEM are n-to-n matching, transparency, and ease of explanation.[15]

Either the PSM or CEM model (but not both in sequence) will be applied to the population of eligible beneficiaries prior to the subsequent outcome modeling analysis with IPWS and IPWREG. Outcome modeling will include the null model (Inverse Probability Weighted Score, IPWS), full-covariate model (Inverse Probability Weighted Regression adjustment, IPWREG), and/or the REGADJ model (Regression Adjustment without adjusting for selection).

3.6.3 Check for Covariate Balance Across Groups

The goal of adjusting for selection using PSM or CEM is to make the beneficiaries in the treatment and comparison populations comparable, at least for the variables that can be observed. After reweighting, the covariate balance will be assessed by examining the standardized difference and variance ratio of each variable across the groups. The standardized difference is the difference in group means (between treatment and comparison), expressed in units of standard deviation. This accounts for differences in sample size between the two groups (which typically exhibit a 5:1 or 6:1 ratio in favor of the treatment group). Standardized differences of less than or equal to 0.10 and ratios of group variances between 0.5 and 2.0 for all baseline covariates will be established as the criteria for covariate balance. Usually this is conducted for group means and variances, and prevalence for binary covariates.[16] Graphical methods include comparing side-by-side boxplots and empirical cumulative distribution functions (CDFs).[17] For weights constructed using CEM, a global balance assessment based on multivariate histograms can also be conducted.[18] If covariate balance cannot be achieved, the

[13] Austin, P.C., and E.A. Stuart. 2015. Moving towards best practice when using inverse probability of treatment weighting (IPTW) using the propensity score to estimate causal treatment effects in observational studies. *Statistics in Medicine* 34(28):3661–79. DOI: 10.1002/sim.6607
[14] King, G., and R. Nielsen. 2019. Why propensity scores should not be used for matching. *Political Analysis* 27(4). Copy at http://j.mp/2ovYGsW
[15] Canes, A. 2017. Two roads diverged in a narrow dataset... when coarsened exact matching is more appropriate than propensity score matching. PharmaSUG paper HA-04.
[16] Austin, P.C. 2009. Using the standardized difference to compare the prevalence of a binary variable between two groups in observational research. Communications in Statistics - Simulation and Computation 38(6):1228–1234. DOI: 10.1080/03610910902859574DOI: 10.1080/03610910902859574
[17] Austin, P.C., and E.A. Stuart. 2015. Moving towards best practice when using inverse probability of treatment weighting (IPTW) using the propensity score to estimate causal treatment effects in observational studies. *Statistics in Medicine* 34(28):3661–79. DOI: 10.1002/sim.6607
[18] Berta, P., M. Bossi and S. Verzillo. 2017. %CEM: a SAS macro to perform coarsened exact matching. *Journal of Statistical Computation and Simulation* 87(2): 227–238. DOI: 10.1080/00949655.2016.1203433DOI: 10.1080/00949655.2016.1203433

PSM or CEM models may need to be adjusted by varying the bin widths or adding additional variables and their interactions to the model.

3.6.4 Report Measure Outcomes, Adjusted for Selection

Each metric will be calculated to determine the outcome (numerator) for each eligible beneficiary. Most metrics at the beneficiary level have a binary outcome or a count for utilization measures; weights will be applied to the to the beneficiary-level outcomes. Metrics with a binary outcome will be modeled using logistic regression, whereas Poisson or negative binomial regression will be used to model those metrics with a count outcome. If the outcomes are reweighted using IPTW, the average treatment effect (ATE) can be directly calculated.[19] That is, the ATE is the average effect of being in a QHP for beneficiaries in ARHOME as compared to if they were on Medicaid fee-for-service (FFS). The ATE is simply the difference in weighted means of the outcome between the treatment and comparison populations. For measures with a beneficiary-level outcome of 0 or 1, the weighted group mean is equal to the effective percentage of the group meeting the measure.[20] If CEM weights are used, a beneficiary-level model for the measure results with treatment as the explanatory variable will be performed. The coefficient of the treatment variable will be tested for statistical significance.

3.6.5 Adjust Measures for Post-Treatment Effects

Because the waiver evaluation period begins in the fourth year of Arkansas's 1115 waiver implementation, measure results may need to be adjusted for each beneficiary's time in the program prior to 2022, which includes ARWORKS (2017-2021) and the HCIP evaluation period (2014-2016). The timing of post-treatment variables will be considered since most beneficiaries in ARHOME were not eligible for Medicaid prior to 2014.

For outcome measures, adjustment for clinical severity may also be necessary if it is expected to affect measure results. Since QHP claims are only available after assignment to the treatment group, diagnosis information is considered post-treatment. Beneficiary-level risk scores will be calculated from claims diagnosis fields using the Department of Health and Human Services Hierarchical Condition Category (HHS-HCC) risk adjustment models.

A weighted regression on the beneficiary-level measure outcomes using post-treatment covariates will be run. The outcome variable will depend on the measure being analyzed. For example, whether a screening test was performed would be modeled using logistic regression, and the number of visits could be modeled with Poisson or negative binomial regression. Post-treatment covariates for consideration include the following:

- Total time enrolled in ARHOME or HCIP (up to 3 years prior to analysis year)

[19] Austin, P.C. 2011. An introduction to propensity score methods for reducing the effects of confounding in observational studies. *Multivariate Behavioral Research* 46(3):399-424, DOI: 10.1080/00273171.2011.56878610.1080/00273171.2011.568786

[20] Austin, P.C. 2010. The performance of different propensity-score methods for estimating differences in proportions (risk differences or absolute risk reductions) in observational studies. *Statistics in Medicine* 29(20):2137–2148. DOI:10.1002/sim.3854

- Total time enrolled in Medicaid FFS (up to 3 years prior to analysis year)
- Risk score calculated from HHS-HCC risk adjustment models

The post-treatment model may include baseline covariates that are confounders. That is, variables that affect both treatment assignment and the measure outcome.

A sensitivity analysis will be conducted to determine whether the results change when different sets of covariates are included in the outcome model. Comparisons of outcome models with different subsets of covariates (confounders, post-treatment covariates), in addition to none (IPWS) and all (IPWREG, REGADJ) covariates, will be performed. Additionally, doubly robust estimators will be calculated to determine the sensitivity of results to misspecification of either the treatment model or the outcome model.

Using a selection-adjustment treatment model (PSM or CEM) coupled with an outcome model (e.g., IPWS, IPWREG), doubly robust estimators are calculated which are robust to misspecification of either of these two coupled models. Misspecification of the treatment model can arise from invalid assumptions associated with randomly assigning eligible beneficiaries to the treatment or comparison population to eliminate bias associated with confounding covariate (e.g., demographic) factors. Misspecification of the outcome model can arise from omitting important covariates (IPWS) or including insignificant covariates (IPWREG) impacting the outcome variable. Coupling the treatment and outcome models facilitates a doubly robust approach to estimating the measure outcome results (treatment vs. control effects, or average treatment effect ATE) and conducting sensitivity analysis of impacts of the various covariates on the measure outcomes to assess their significance.

Both the IPWS and IPWREG outcome models are coupled with a selection-adjustment treatment model (PSM or CEM). Unlike the null IPWS model, the IPWREG model includes confounder covariates and post-treatment covariates. Examples of confounder covariates (which potentially affect both the treatment-vs.-control assignment and the measure outcome) include age, gender, age-gender interaction, race/ethnicity, minority, and rural variables. Depending on sample size adequacy, additional confounders include income category and income-age interaction. Weighted regression can be conducted on the outcomes using post-treatment covariates, such as time enrolled in a health care plan (up to 3 years prior to the measurement year), enrollment region during the measurement year, and risk score calculated from HHS-HCC risk-adjustment models.

3.6.6 Adjustments for Multi-Year Analysis

A longer timeframe may be more relevant for evaluating the entirety of the ARHOME program, which is scheduled to run for five years (2022-2026). If a longitudinal or time-series analysis is performed, a baseline sample using beneficiary information from 2017 through 2021 will be created prior to demonstration year 1 (2022) and followed each subsequent year, thus generating a 5-year pre-period (2017-2021) and a 5-year demonstration period (2022-2026). Propensity score weighting and/or coarsened exact matching (CEM) weights for each calendar year for each measure will aid in achieving similar distributions in measured characteristics between target vs. comparison populations; and the longitudinal design will consider serial

correlation over the program period. This will allow intermediate and longer-term measure outcomes to be analyzed.

The 5-year pre-period (2017-2021) and 5-year demonstration period (2022-2026) are each sufficiently long to generate adequate statistically robust sample sizes for Interrupted Time Series (ITS) analysis and to identify detectable time-series baseline trends, while short enough as to avoid longer-term temporal variability, thus ensuring stability in the baseline time-series trend.

3.6.7 Multi-Year Analyses

Multi-year analyses will consider Interrupted Time Series (ITS) analysis, pre-post analysis, Difference-in-Difference (DiD) analysis, and Regression Discontinuity Design (RDD) analysis.[21, 22] Each of these time-series longitudinal analysis methods will be examined and applied where appropriate and if the sample sizes allow for valid statistical conclusions. All longitudinal analyses will be performed at the conclusion of the ARHOME program in 2026.

Claims-based measures of primary care adult access to preventive/ambulatory health services (1.a.1, 2.a.6, 3.a.5), total (emergent+non-emergent) emergency department visits/utilization (1.b.1+1.b.2, 2.c.1+2.c.2, 3.c.1+3.c.2), and continuity of coverage measures (average length of coverage gaps (1.d.2, 3.e.2, 3.h.2, 3.i.2), percent of beneficiaries with less than two coverage gaps (1.d.1, 3.e.1, 3.h.1, 3.i.1) will be analyzed using these various multi-year analysis methods, in order to assess the effects of ARHOME retroactive eligibility waiver on continuity.[23]

A single and multiple/robust Interrupted Time Series (ITS) will be explored for analysis of beneficiaries enrolled and receiving services during the ARHOME demonstration period. The ITS design will estimate the impact of a temporal interruption (ARHOME implementation) on a select group of outcomes based on multiple measures taken before (i.e., baseline period) and after (i.e., demonstration period) the ARHOME implementation, to compare trends before and after policy implementation. The regression coefficients will be compared and tested for significant differences between the two time periods, in order to assess impacts of the policy implementation on the outcome variables.

An advantage of the ITS is that it allows an estimate of differences in pre- and post- interruption outcomes for just the target population (single group ITS) or both the target and comparison population (multiple/robust ITS), for a more robust comparison analysis. The pre-implementation (baseline) period will cover 2017-2021 (5 years), which includes the Arkansas Works demonstration period (2017-2021), while the post-implementation (demonstration)

[21] Contreary K, Bradley K, and Chao S. 2018; Best Practices in Causal Inference for Evaluations of Section 1115 Eligibility and Coverage Demonstrations. Mathematica Policy Research. Accessed January 13, 2025: https://www.medicaid.gov/medicaid/section-1115-demo/downloads/evaluation-reports/causal-inference.pdf

[22] Bradley K, Heeringa JR, Pohl RV, et al. Selecting the Best Comparison Group and Evaluation Design: A Guidance Document for State Section 1115 Demonstration Evaluations. Centers for Medicare & Medicaid Services. Accessed January 13, 2025: https://www.medicaid.gov/medicaid/section-1115-demo/downloads/evaluation-reports/comparison-grp-eval-dsgn.pdf

[23] Baicker, K., and T. Svoronos. 2019. Testing the Validity of the Single Interrupted Time Series Design. National Bureau of Economic Research working paper 26080.

period will cover 2022-2026 (5 years). While a potential limitation of the ITS analysis is the requirement of a sufficient sample size or number of data points to establish a statistically robust regression line, both the 5-year pre-period (2017-2021) and 5-year demonstration period (2022-2026) should provide an adequate temporal sample size (n=5). In addition, limitations of ITS may occur in datasets where the treatment is introduced gradually, where pre-implementation trends are seasonal or non-linear, or where the baseline population changes over time, because it's important to isolate the impacts of the implementation event itself on the temporal trend after the implementation period.

In lieu of the limitations of ITS, a pre-post analysis will be conducted in which the beneficiary data is lumped into one temporal category (instead of separated into individual years) for each of the 2 coarse time periods surrounding a temporal discontinuity (pre-period and demonstration period). Pre-post analysis measures the change in the metric outcome between the 2 periods without requiring multiple (i.e., annual) measurements within both periods. The two periods are directly compared by calculating the difference (slope) in the outcome (dependent) variable's POM estimates between these 2 periods, for each of the 2 populations (target and comparison).

Regression discontinuity design (RDD) enables assessment of differences in outcome metric based on differences in a covariate on either side of a threshold discontinuity level, in the presence of a policy implementation at the threshold level (e.g., treated = premium requirements for benes >=100%FPL; untreated = no premium requirements for benes < 100%FPL). The resulting impact estimate of RDD applies to only a small subset of the overall population (i.e., those just above and just below the eligibility threshold 100%FPL) because it is important to capture very similar population characteristics on both sides of the discontinuity. Consequently, sample size could be restrictive; and inadequate sample size could lead to reductions in confidence level and power of the analysis. Regression Discontinuity Design (RDD) generalizes the ITS case to define a discontinuity in any covariate (such as treated versus untreated), not just time.

While ITS, RDD, and pre-post analyses are all 1-dimensional, Difference-in-Difference (DiD) analysis is 2-dimensional and is an extension of the pre-post analysis. The DiD analysis is most commonly used when both pre-implementation data and comparison data are available. While sample size requirements may limit the applicability of ITS and RDD, pre-post and DiD analysis are adequate substitution methods since the discrete points are combined into 2 bulk sections on either side of the discontinuity for each covariate. The 2-dimensional DiD analysis measures the change in the metric outcome between the 2 periods and between the 2 levels of the second covariate (e.g., treated versus untreated) without requiring multiple measurements within both levels of each covariate. The DiD analysis involves incorporation of interaction terms (products of two covariates) in a given regression model, which quantifies the impact of the variation of one covariate on the outcome metric on the second covariate (such as time period and 1 additional treatment covariate, county or age). Thus, incorporation of the time*treatment interaction into the outcome model provides a DiD estimate of the demonstration period's effects on the outcome metric. In addition, age interaction terms are incorporated in the outcome models as controls.

While pre-post analysis will be conducted to assess temporal effects across years between the pre-period and demonstration period, DiD analysis will be conducted to assess interaction effects between 2 covariates on the least squares means (LSM) POM estimates of the outcome variable (i.e., various metrics evaluating program performance) across the ranges of both covariates. Slopes will be calculated as the difference in bulk-mean POM estimates between the 2 sections of the first covariate and will be evaluated in each of the 2 sections of the second covariate (and vice versa). The DiD interaction will be calculated as the difference in these slopes as a quantitative assessment of the interaction effect between these 2 covariates on the POM estimate of the outcome variable.

An example of the applicability of RDD include a treatment impact analysis of income cutoffs (e.g., copay requirement starting at 20% FPL, premium requirement starting at 100% FPL), in order to assess treatment impacts of the ARHOME policy of required copays for beneficiaries with incomes greater than 20% FPL and required premium contributions for beneficiaries with income at 101-138% FPL. An RDD design will be conducted to assess impacts of income eligibility cutoffs on the selected metrics. Given the availability of FPL status on a relatively fine scale for eligible beneficiaries (e.g., 20% increments of FPL: 0-20%FPL, 20-40%FPL, ..., 120-140%FPL, 140 150%FPL, >150%FPL), an income eligibility cutoff will be defined. Beneficiaries will be divided into categories of every 20% increment of FPL, and LSM POM estimates will be calculated for each metric via regression analysis versus demographic and other significant covariates for each year, population, and beneficiary income level (%FPL) within each year and population. POM estimates will be plotted and regressed versus beneficiary income level (%FPL) on either side of the specified income discontinuity; and the regression slopes, intercepts, and vertical gap between the 2 regression lines at the income discontinuity will be calculated and compared, in order to assess impacts of the copay and premium requirements on the outcome variables. Where applicable and permitted by sample size requirements, eligible beneficiary populations with incomes just below and above the 20% FPL threshold (e.g., 18-22% FPL) and just below and above the 100% FPL threshold (e.g., 98-102%) will be included in the RDD analysis to isolate the treatment effect while minimizing the potential confounding effects of the income covariate on the outcome variables.

An unbiased estimate of the local treatment effect (i.e., copay implementation at 20% FPL, premium implementation at 100% FPL) requires accurate, robust RDD modeling between the treatment and outcome variables, which can be potentially confounded by inherent non-linearity in the data. To address such non-linearities, regression analysis can be conducted not only on the two separate sections on either side of the discontinuity, but also on the combined (total) sections. Any variations in the regression slope in the vicinity of the discontinuity region (20% FPL, 100% FPL) will be noted, to distinguish between the discontinuity and any inherent non-linearities in the data.

For these measures, years 2022–2026 will be analyzed in an interrupted time series (ITS) design to compare trends before and after policy implementation. In a regression discontinuity design (RDD) pre-post comparison analysis, logistic regression (for binary measures) or

Poisson/negative binomial regression (for integral/count measures) will be conducted separately on the "before" (baseline period) and "after" (demonstration period) datasets. The regression coefficients will be compared and tested for significant differences between the two periods, in order to assess impacts of the premium requirement on the outcome variables.

Core questions from the BRFSS on Health Care Access (any coverage, personal doctor, routine checkup, medical cost) and Immunization (flu shot/spray) for Arkansas will be analyzed for 2021-2026 using a comparative, interrupted time series model.

3.6.8 Dichotomized and Analyzed with Weights

To compare access to non-emergency transportation (NEMT) services in the target and comparison populations during the measurement year, any NEMT service utilization and counts of NEMT service utilization will be assessed with descriptive analysis, cross-sectional logistic, and count regression models.[24] The descriptive analyses will present the percent of beneficiaries with any NEMT utilization and the mean and standard deviation of NEMT services, stratified by age, gender, risk score, and NEMT service region. Regression analyses will estimate the average marginal effect of treatment, controlling for age, gender, risk score, and NEMT service region.

3.6.9 Beneficiary Engagement Satisfaction Survey

The evaluator will administer a Beneficiary Engagement Satisfaction Survey using the Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Adult Medicaid 5.1, core questions with the addition of supplemental items and questions specific to the ARHOME evaluation. The evaluator will follow survey guidelines from the Agency for Healthcare Research and Quality (AHRQ) using the National Committee for Quality Assurance (NCQA) CAHPS survey.

There are several components to successfully setting up, implementing, and analyzing a survey. Those components include the following:

1. Survey tool (English with Marshallese and Spanish versions available)
2. Process
3. Population
4. Sample size
5. Analytic method(s)
6. Administration dates
7. Participation incentives

The detailed description of the plan components are as follows:

1. Survey material packet: A packet will be mailed to each selected individual. The packet will include a letter, the survey, and a prepaid envelope.

[24] Modeled on NEMT measures in Tables G.1., G.2., G.6 of the National Cross-State Evaluation Appendix. January 17, 2020. Downloaded from https://www.medicaid.gov/medicaid/section-1115-demonstrations/downloads/alt-medicaid-exp-summ-eval-append.pdf

A. Informational box: All survey tools and the introductory letter will contain specific information to assist and ensure the survey respondent in answering their survey:
    i. ARHOME (target population) and Arkansas Medicaid (comparison population)
    ii. Survey respondent's name
    iii. Qualified health plan's name for the target survey and Arkansas Medicaid for the comparison survey
B. The survey tool utilized will be the CAHPS Health Plan Survey version 5.1 CORE questionnaire with supplemental questions and questions specific to the ARHOME evaluation.
C. Introductory letter. The letter will explain the importance of completing the survey and display a toll-free number for questions and information or to request a Marshallese or Spanish version survey.
D. Survey letter
E. Post cards
F. Envelopes

2. The process of a mail survey consists of multiple steps that must be in place for successful execution:
    A. Confidentiality. The evaluator will create a random number that will be on all survey materials which can only be cross walked within the evaluator's system. This process ensures their anonymity.
    B. Establishment of a toll-free number. A toll-free number will be on all documents to answer any questions about the survey. The evaluator will also contract with a translation service for Marshallese and Spanish-speaking recipients or to request a Marshallese or Spanish version survey.
    C. Tracking incorrect addresses. All survey materials (introduction letter, survey packets or reminder postcards) will have the ability to track bad addresses. The evaluator will establish a system to correct and re-mail the survey materials.
    D. Tracking returned surveys. Each returned survey will be entered into the evaluator's system so that a recipient that has returned a survey will not receive another survey.
    E. Mailing protocol. The evaluator will follow AHRQ's mail survey guidelines.
        i. Introduction letter explaining to the recipients why they have been selected for this survey (Day 0)
        ii. Initial survey: The initial survey will be sent to recipients with a correct address (Day 14)
        iii. Initial reminder card (Day 28)
        iv. Second survey: A second survey will be mailed to any recipient that has not returned a survey and has a valid address (Day 42)
        v. Second reminder card (Day 56)
        vi. Additional surveys may be sent only if the response is low

3. The definition of the survey population is a key element to a proper analysis. The populations to be surveyed will meet the below requirements:
    A. ARHOME (Target Population Survey)
        i. Target population in the six-month timeframe prior to the survey starting. Based on monthly premium payments, a beneficiary to be included in the survey population must be enrolled in at least five of the last six months, including the sixth month.
        ii. Complete information on race, gender, and address
        iii. Stratified random sample of 1 beneficiary per household, with the sampling rate based on the carrier's proportion of the market share (e.g., if insurance company A insures 40% of the eligible ARHOME survey population, their sampling rate will be 40%).
    B. Medicaid (Comparison Population Survey)
        i. Fee-for-service Medicaid population with aid categories qualifying for the comparison and pregnancy populations, in the six-month timeframe prior to the survey.
        ii. Complete information on race, gender, and address
        iii. Simple random sample of 1 beneficiary per household

4. The evaluator will follow the NCQA guidelines for sample size calculations using historical response rates and acknowledging potential issues with bad addresses for some of the eligible beneficiaries. AHRQ states that at least 411 completed surveys are needed to complete a statistically robust analysis, based on a preliminary power analysis assessment of tradeoffs among power, precision, and confidence level (**Table 10**). With a historical response rate (from the 2022 CESS survey) of approximately 11% for the target population and 7% for the comparison population and with the expected 17-18% rate of bad addresses, the evaluator will complete a random target sample of 5,220 ARHOME (QHP) recipients and a random comparison sample of 6,270 fee-for-service (FFS) Medicaid recipients, in order to obtain the required number of completed surveys for each population.

    A Two-Independent-Proportions Power analysis was conducted (using G*Power software) to assess relationships among sample sizes, power (=1-beta), confidence level (=1-alpha), and precision (or minimum detectable difference (MDD)), where alpha and beta are the probabilities of committing a Type I error (rejection of a true null hypothesis Ho) and Type II error (acceptance of a false Ho), respectively. Results indicated that, at the 95% confidence level (alpha=0.05), within the range of potential sample sizes (n=350-450) of the two completed surveys (target QHP, comparison FFS populations), the MDD in proportions ranged from 0.0929 (n1=n2=n=450) to 0.1051 (n=350) for 80% power, and from 0.1072 (n=450) to 0.1213 (n=350) for 90% power. Similarly, at the 90% confidence level (alpha=0.10), MDD ranged from 0.0825 to 0.0934 for 80% power, and 0.0969 to 0.1096 for 90% power (**Table 10**).

*Table 10: Precision or Minimum Detectable Differences (MDD) Between Two Independent Proportions: Two-Tailed z-Test (G*Power 3.1.9.7)*

Complete surveys from Target (QHP) Group	Complete surveys from Comparison (FFS) Group	alpha = 0.05		alpha = 0.10	
		Power=0.8	Power=0.9	Power=0.8	Power=0.9
350	350	0.1051	0.1213	0.0934	0.1096
350	375	0.1034	0.1192	0.0919	0.1078
350	400	0.1018	0.1175	0.0905	0.1062
350	425	0.1004	0.1159	0.0892	0.1048
350	450	0.0991	0.1144	0.0881	0.1035
375	375	0.1016	0.1172	0.0903	0.1060
375	400	0.1000	0.1154	0.0889	0.1043
375	425	0.0986	0.1138	0.0876	0.1029
375	450	0.0973	0.1123	0.0865	0.1015
400	400	0.0984	0.1136	0.0875	0.1027
400	425	0.0970	0.1119	0.0862	0.1012
400	450	0.0957	0.1104	0.0850	0.0998
425	425	0.0955	0.1102	0.0849	0.0997
425	450	0.0942	0.1087	0.0837	0.0983
450	450	0.0929	0.1072	0.0825	0.0969

5. Complete surveys will be analyzed according to the AHRQ guidelines: "A questionnaire is considered complete if responses are available for at least half of the key survey items and at least one reportable item." Key items include questions confirming survey eligibility, questions about demographic and background information, screener questions for core composite measures, and the primary rating question.
6. To track beneficiary experience through the life of the full demonstration, these surveys will be administered once during demonstration Year 1, once during demonstration Year 3, and once during demonstration Year 5.
7. To increase response rates, all introduction letters, survey cover letters, and reminder cards will inform recipients that respondents will be offered a chance to win one of eight $50 gift cards. An option for the survey recipient to add their phone number at the end of the survey will also be included for address verification purposes if needed. Of returned surveys determined to be complete, four winners in the ARHOME population and four winners in the fee-for-service population will be selected via SAS procedure "Surveyselect" using simple random selection, and gift cards will be mailed to those selected.

3.6.10 Impacts of COVID-19

Arkansas understands the value in analyzing the impacts of COVID-19 during the ARHOME implementation and will utilize CMS's COVID-19 implications to 1115 evaluations guidance at

https://www.medicaid.gov/medicaid/section-1115-demo/downloads/evaluation-reports/1115-covid19-implications.pdf to assess potential impacts to the evaluation. It is anticipated that the public health emergency (PHE), while in effect until April 2023, will impact service utilization, especially telehealth, as individuals are more likely to avoid in-person visits and unnecessary exposure to COVID-19.

The State will account for the unwinding of the public health emergency (PHE) and the end of the maintenance of effort (MOE) by adding in robustness checks using data only from the time period after the maintenance of effort (MOE) ends, for analyses of Hypothesis 1.D: The ARHOME program will lead to QHP beneficiaries having better continuity of coverage - fewer and shorter gaps - while Medicaid-eligible compared to Medicaid FFS beneficiaries.

Several analyses will be conducted to minimize differential effects of COVID-19 on our target and comparison population outcomes, such as sensitivity analysis with results from prior years, adjustment for COVID-19 incidence/deaths/hospitalizations, and pre-post analysis.

The baseline or pre-implementation period (2017-2021) will overlap with the peak of the COVID-19 PHE where potential effects may need to be adjusted for the longitudinal analyses. To assess impacts of the COVID-19 pandemic (2020-2021) on results for each metric, county-level data on daily COVID confirmed cases, daily COVID deaths, and populations will be obtained for the 75 Arkansas counties from the USA Facts database[25] along with matching zip code-by-county data from the US Zip Codes database[26].

A composite COVID metric will be calculated for each year and county by integrating the daily COVID cases and deaths over each year and 1) dividing by the county population to obtain per-capita cases and deaths, 2) dividing the per-capita deaths by cases to obtain deaths-per-case, and 3) averaging these three beneficiary metrics (per-capita cases, per-capita deaths, and deaths-per-case) into a composite metric. For each year of the COVID-19 PHE, all 75 Arkansas counties will be ranked from highest to lowest values of this composite metric and divided into 15-county quintiles based on these ranks. They will be assigned one of 6 COVID-19 status levels and associated numeric value (0=ZERO for non-COVID-19 years; or 1=Low, 2=Medium-Low, 3=Medium, 4-Medium-High, 5=High relative risk for COVID-19 years based on the quintile that each county falls in). County-level COVID-19 data will then be matched to the list of eligible beneficiaries based on their zip-code residence address to identify the Arkansas county of residence to assign a composite COVID-19 metric value (as a covariate) to each beneficiary, thus translating the COVID-19 information from the county-level to the bene-level.

While omitted from the group-selection adjustment model (PSM, CEM), this COVID-19 covariate can be incorporated as an additional covariate in the inverse probability weighted regression adjustment (IPWREG) model, which adjusts for selection and includes confounder covariates (such as age, gender, age-gender interaction, race/ethnicity, minority, and rural

[25] USA FACTS: Coronavirus Cases and Deaths. Data available from: https://usafacts.org/visualizations/coronavirus-covid-19-spread-map/state/arkansas/
[26] United States Zip Codes: Zip Code Database. Data available from: https://www.unitedstateszipcodes.org/zip-code-database/

variables) and post-treatment covariates. Confounder covariates potentially affect both the treatment-vs.-control assignment and the measure outcome. Pending sample size adequacy, additional confounders may include income category and income-age interaction. This COVID-19 covariate will also be incorporated as the sole covariate in the (previously null) inverse probability weighted score (IPWS) model. For each year and metric, if the selection-adjustment model (PSM or CEM) achieves balance, then the IPWREG model can be used if adjusting for measurement-year effects results in convergence. If non-convergence occurs, then the IPWS model is used instead.

To assess impacts of the COVID-19 covariate (for the pandemic years 2020 and 2022), a sensitivity analysis will be conducted in which the IPWREG or IPWS model are run both with and without the incorporated composite COVID-19 covariate. Output from these two model runs will be compared for each year and each relevant metric.

3.7 Summary Information by Measure

Table 11: Summary of Analysis Methods by Measure

Measure #	Measure Name	Comparison Population	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-Treatment Effects
1.A.1	Beneficiary Premium Assistance Awareness	N/A	N/A	N/A	N/A	N/A
1.B.1	Beneficiary Health Improvement Initiative Awareness	N/A	N/A	N/A	N/A	N/A
1.B.2	Provider Health Improvement Initiative Awareness	N/A	N/A	N/A	N/A	N/A
1.C.1	Have a Personal Doctor	Adults 19-64 w/income ≤138% FPL in comparison states	Subset of states, age, income	Comparative ITS	Difference-in-difference	N/A
1.C.2	Avoided Care Due to Cost	Adults 19-64 w/income ≤138% FPL in comparison states	Subset of states, age, income	Comparative ITS	Difference-in-difference	N/A
1.C.3	Last Routine Checkup	Adults 19-64 w/income ≤138% FPL in comparison states	Subset of states, age, income	Comparative ITS	Difference-in-difference	N/A
1.D.1	Percent of Beneficiaries with at Least One Month with a Coverage Gap	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group percentages	Beneficiary-level model with prior experience
1.D.2	Average Length of Gaps in Coverage, in Months	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
1.E.1	Continuity of PCP Care	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group percentages	Beneficiary-level model with prior experience
1.E.2	Continuity of Specialist Care	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group percentages	Beneficiary-level model with prior experience
1.E.3	Percent of QHP beneficiaries Seeing a PCP on an Annual Basis	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group percentages	Beneficiary-level model with prior experience

Measure #	Measure Name	Comparison Population	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-Treatment Effects
2.A.1	Provider Financial Health Improvement	N/A	N/A	Annual Tables	N/A	N/A
2.A.2	Hospital Financial Health Improvement	Medicaid Expansion States	N/A	Annual Tables	N/A	N/A
2.A.3	Provider Closure Rate	Medicaid Expansion States	N/A	Annual Tables	N/A	N/A
2.B.1	Got Care for Illness/Injury as Soon as Needed	In-State FFS Comparison Population	Survey sampling	Comparison of answer frequencies, case-mix adjustment	F-Test Type III	N/A
2.B.2	Got Non-Urgent Appointment as Soon as Needed	In-State FFS Comparison Population	Survey sampling	Comparison of answer frequencies, case-mix adjustment	F-Test Type III	N/A
2.B.3	How Often It Was Easy to Get Necessary Care, Tests, or Treatment	In-State FFS Comparison Population	Survey sampling	Comparison of answer frequencies, case-mix adjustment	F-Test Type III	N/A
2.B.4	Have a Personal Doctor	In-State FFS Comparison Population	Survey sampling	Comparison of answer frequencies, case-mix adjustment	F-Test Type III	N/A
2.B.5	Got Appointment with Specialists as Soon as Needed	In-State FFS Comparison Population	Survey sampling	Comparison of answer frequencies, case-mix adjustment	F-Test Type III	N/A
2.B.6	Days Wait Time Between Making Appointment and Seeing Provider	In-State FFS Comparison Population	Survey sampling	Comparison of answer frequencies, case-mix adjustment	F-Test Type III	N/A
2.B.7	How Often Had to Wait for Appointment Because of Provider's Lack of Hours/Availability	In-State FFS Comparison Population	Survey sampling	Comparison of answer frequencies, case-mix adjustment	F-Test Type III	N/A
2.B.8	Ease to Get a Referral to a Specialist	In-State FFS Comparison Population	Survey sampling	Comparison of answer frequencies, case-mix adjustment	F-Test Type III	N/A
2.B.9	Needed Interpreter to Help Speak with Doctors or Other Health Providers	In-State FFS Comparison Population	Survey sampling	Comparison of answer frequencies, case-mix adjustment	F-Test Type III	N/A

Measure #	Measure Name	Comparison Population	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-Treatment Effects
2.B.10	How Often Got an Interpreter When Needed One	In-State FFS Comparison Population	Survey sampling	Comparison of answer frequencies, case-mix adjustment	F-Test Type III	N/A
2.C.1	Have Health Care Coverage	Adults 19-64 w/income ≤138% FPL in comparison states	Subset of states, age, income	Comparative ITS	Difference-in-difference	N/A
2.C.2	Have a Personal Doctor	Adults 19-64 w/income ≤138% FPL in comparison states	Subset of states, age, income	Comparative ITS	Difference-in-difference	N/A
2.C.3	Last Routine Checkup	Adults 19-64 w/income ≤138% FPL in comparison states	Subset of states, age, income	Comparative ITS	Difference-in-difference	N/A
2.C.4	Avoided Care Due to Cost	Adults 19-64 w/income ≤138% FPL in comparison states	Subset of states, age, income	Comparative ITS	Difference-in-difference	N/A
2.C.5	Flu Vaccine	Adults 19-64 w/income ≤138% FPL in comparison states	Subset of states, age, income	Comparative ITS	Difference-in-difference	N/A
2.D.1	Provider Patient Acceptance	In-State FFS Comparison Population	Survey sampling	Comparison of answer frequencies, case-mix adjustment	F-Test Type III	N/A
2.D.2	Time to First Appointment	In-State FFS Comparison Population	Survey sampling	Comparison of answer frequencies, case-mix adjustment	F-Test Type III	N/A
2.D.3	Breast Cancer Screening	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.D.4	Cervical Cancer Screening	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience

2.D.5	CHL-AD Chlamydia Screening in Women Ages 21-24	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
Measure #	**Measure Name**	**Comparison Population**	**Analytic Method to Construct Comparable Groups**	**Comparison Method**	**Statistical Test**	**Comparison Method Adjusting for Post-Treatment Effects**
2.D.6	Statin Therapy for Patients with Diabetes	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.D.7	Comprehensive Diabetes Care: Hemoglobin A1c Testing	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.D.8	Adults' Access to Preventive/Ambulatory Health Services	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.D.9	AMR-AD Asthma Medication Ratio: Ages 19–64	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
2.D.10	Adolescent Well-Care Visits	Beneficiaries in treatment group 1-2 years prior to ARHOME enrollment	N/A	Repeated measures ANOVA	Coefficient of year variable	N/A
2.D.11	EPSDT screening - Preventive Dental Visits	Beneficiaries in treatment group 1-2 years prior to ARHOME enrollment	N/A	Repeated measures ANOVA	Coefficient of year variable	N/A
2.D.12	EPSDT screening - Preventive Vision	Beneficiaries in treatment group 1-2 years prior to ARHOME enrollment	N/A	Repeated measures ANOVA	Coefficient of year variable	N/A
2.D.13	Any Utilization of Non-Emergency Transportation Services	In-State FFS Comparison Population	Adjust for demographics, risk score, service region	Logistic regression	Average marginal effect	N/A

2.D.14	Utilization Counts of Non-Emergency Transportation Services	In-State FFS Comparison Population	Adjust for demographics, risk score, service region	Count model regression	Average marginal effect	N/A
2.D.15	Non-Emergency Transportation Program Awareness	In-State FFS Comparison Population	Survey sampling	Comparison of answer frequencies, case-mix adjustment	F-Test Type III	N/A
Measure #	**Measure Name**	**Comparison Population**	**Analytic Method to Construct Comparable Groups**	**Comparison Method**	**Statistical Test**	**Comparison Method Adjusting for Post-Treatment Effects**
2.D.16	PCP Network Adequacy	In-State FFS Comparison Population	N/A	Geospatial analysis	N/A	N/A
2.D.17	PCP Network Accessibility	In-State FFS Comparison Population	N/A	Geospatial analysis	N/A	N/A
2.D.18	Specialist Network Adequacy	In-State FFS Comparison Population	N/A	Geospatial analysis	N/A	N/A
2.D.19	Specialist Network Accessibility	In-State FFS Comparison Population	N/A	Geospatial analysis	N/A	N/A
2.D.20	ECP Network Adequacy	In-State FFS Comparison Population	N/A	Proportion contracted	N/A	N/A
3.A.1	Beneficiary Retroactive Eligibility Awareness	N/A	N/A	N/A	N/A	N/A
3.A.2	Beneficiary Premium Requirement Awareness	N/A	N/A	N/A	N/A	N/A
3.B.1	New Enrollment	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.C.1	New Beneficiary Medical Debt	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience

3.D.1	New Enrollment	ARHOME beneficiaries at or below 100% FPL	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.D.2	Retention Rate	ARHOME beneficiaries at or below 100% FPL	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.E.1	Percent of Beneficiaries with at Least One Month with a Coverage Gap	ARHOME beneficiaries at or below 100% FPL	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.E.2	Average Length of Gaps	ARHOME beneficiaries at or below 100% FPL	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
3.F.1	Health Insurance Coverage Status	Non-expansion states	N/A	Annual Tables	N/A	N/A
3.F.2	Beneficiaries Who Paid a Premium During Measurement Period (PR_3)	N/A	N/A	Annual Tables	N/A	N/A

Measure #	Measure Name	Comparison Population	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-Treatment Effects
3.F.5	Percent of QHP Beneficiaries Selecting Their Own QHP	N/A	N/A	Annual Tables	N/A	N/A
3.G.1	New Enrollment	ARHOME DY22 beneficiaries with income at 101-138% FPL	IPTW/CEM	Beneficiary-level model	Difference in group percentages	N/A
3.G.2	Retention Rate	ARHOME DY22 beneficiaries with income at 101-138% FPL	IPTW/CEM	Beneficiary-level model	Difference in group percentages	N/A
3.H.1	Percent of Beneficiaries with at Least One Month with a Coverage Gap	ARHOME DY22 beneficiaries with income at 101-138% FPL	IPTW/CEM	Beneficiary-level model	Difference in group percentages	N/A
3.H.2	Average Length of Gaps in Coverage	ARHOME DY22 beneficiaries with income at 101-138% FPL	IPTW/CEM	Beneficiary-level model	Difference in group percentages	N/A

3.I.1	Percent of Beneficiaries with at Least One Month with a Coverage Gap	ARHOME DY22 beneficiaries with income at 101-138% FPL that disenrolled due to income	IPTW/CEM	Beneficiary-level model	Difference in group percentages	N/A
3.I.2	Average Length of Gaps in Coverage	ARHOME DY22 beneficiaries with income at 101-138% FPL that disenrolled due to income	IPTW/CEM	Beneficiary-level model	Difference in group percentages	N/A
4.A.1	Beneficiary Copayment Awareness	N/A	N/A	N/A	N/A	N/A
4.A.2	Beneficiary EII Awareness	N/A	N/A	N/A	N/A	N/A
4.B.1	Rating of Health Plan	In-State FFS Comparison Population	Survey sampling	Comparison of answer frequencies, case-mix adjustment	F-Test Type III	N/A
4.B.2	Rating of Health Care	In-State FFS Comparison Population	Survey sampling	Comparison of answer frequencies, case-mix adjustment	F-Test Type III	N/A
Measure #	**Measure Name**	**Comparison Population**	**Analytic Method to Construct Comparable Groups**	**Comparison Method**	**Statistical Test**	**Comparison Method Adjusting for Post-Treatment Effects**
4.B.3	Rating of PCP	In-State FFS Comparison Population	Survey sampling	Comparison of answer frequencies, case-mix adjustment	F-Test Type III	N/A
4.B.4	Rating of Specialist	In-State FFS Comparison Population	Survey sampling	Comparison of answer frequencies, case-mix adjustment	F-Test Type III	N/A
4.B.5	Percent of QHP Beneficiaries Participating in the HII Program	N/A	N/A	Annual Tables	N/A	N/A
4.C.1	Preventable ED Visits	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	N/A
4.C.2	Non-emergent ED Visits	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	N/A

4.C.3	Emergent ED Visits	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	N/A
4.C.4	Plan All-Cause Readmissions (PCR)	In-State FFS Comparison Population	IPTW/CEM	N/A	Group-level ratios of observed-to-expected (O/E) readmissions	Risk adjustment at beneficiary level for diagnosis groups
4.C.5	Diabetes Short-Term Complications Admission Rate	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group rates	Beneficiary-level model with prior experience
4.C.6	Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group rates	Beneficiary-level model with prior experience
4.C.7	Heart Failure Admission Rate	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group rates	Beneficiary-level model with prior experience
4.C.8	Asthma in Younger Adults Admission Rate	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group rates	Beneficiary-level model with prior experience
4.C.9	PCP Follow-Up after ED Visit	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group percentages	Beneficiary-level model with prior experience
4.C.10	PCP Follow-Up after Hospitalization	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group percentages	Beneficiary-level model with prior experience
Measure #	**Measure Name**	**Comparison Population**	**Analytic Method to Construct Comparable Groups**	**Comparison Method**	**Statistical Test**	**Comparison Method Adjusting for Post-Treatment Effects**
4.D.1	IET-AD Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.D.2	AMM-AD Antidepressant Medication Management	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience

4.D.3	Follow-Up After Hospitalization for Mental Illness	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.D.4	SAA-AD Adherence to Antipsychotics for Individuals with Schizophrenia	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.D.5	SSD-AD Diabetes Screening for People with Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.D.6	OHD-AD Use of Opioids at High Dosage in Persons Without Cancer	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.D.7	COB-AD Concurrent Use of Opioids and Benzodiazepines	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.D.8	OUD-AD Use of Pharmacotherapy for Opioid Use Disorder	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.D.9	FUA-AD Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.D.10	FUM-AD Follow-Up After Emergency Department Visit for Mental Illness	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.D.11	Persistence of Beta-Blocker Treatment After a Heart Attack	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.D.12	Annual Monitoring for Patients on Persistent Medications	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
Measure #	**Measure Name**	**Comparison Population**	**Analytic Method to Construct Comparable Groups**	**Comparison Method**	**Statistical Test**	**Comparison Method Adjusting for Post-Treatment Effects**

4.D.13	Annual HIV/AIDS Viral Load Test	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.D.14	C-Section Rate	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.D.15	CCP-AD Contraceptive Care – Postpartum Women Ages 21–44	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.D.16	CCW-AD Contraceptive Care – All Women Ages 21–44	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.D.17	Statin Therapy for Patients with Diabetes	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.D.18	Comprehensive Diabetes Care: Hemoglobin A1c Testing	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.D.19	Adults' Access to Preventive/Ambulatory Health Services	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.D.20	Percent of QHP Beneficiaries Participating in the HII Program	N/A	N/A	Annual Tables	N/A	N/A
4.E.1	AMM-AD Antidepressant Medication Management	ARHOME beneficiaries with copays to those without	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.E.2	Follow-Up After Hospitalization for Mental Illness	ARHOME beneficiaries with copays to those without	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.E.3	SAA-AD Adherence to Antipsychotics for Individuals with Schizophrenia	ARHOME beneficiaries with copays to those without	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience

Measure #	Measure Name	Comparison Population	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-Treatment Effects
4.E.4	OHD-AD Use of Opioids at High Dosage in Persons Without Cancer	ARHOME beneficiaries with copays to those without	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.E.5	COB-AD Concurrent Use of Opioids and Benzodiazepines	ARHOME beneficiaries with copays to those without	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.E.6	FUA-AD Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence	ARHOME beneficiaries with copays to those without	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.E.7	FUM-AD Follow-Up After Emergency Department Visit for Mental Illness	ARHOME beneficiaries with copays to those without	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.E.8	Persistence of Beta-Blocker Treatment After a Heart Attack	ARHOME beneficiaries with copays to those without	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.E.9	Annual Monitoring for Patients on Persistent Medications	ARHOME beneficiaries with copays to those without	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.E.10	Annual HIV/AIDS Viral Load Test	ARHOME beneficiaries with copays to those without	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.E.11	Statin Therapy for Patients with Diabetes	ARHOME beneficiaries with copays to those without	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience

Measure #	Measure Name	Comparison Population	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-Treatment Effects
4.F.1	Percent of Beneficiaries at or under 20% FPL at Initial Measurement That Are Above 20% FPL at Follow-Up Measurement, Among Those Still Enrolled at the Follow-Up Measurement	N/A	N/A	Pre-post comparison	Paired t-test	N/A
4.G.1	Percent of Beneficiaries at or under 100% FPL at Initial Measurement That Are above 100% FPL at Follow-Up Measurement, Among Those Still Enrolled at the Follow-Up Measurement	N/A	N/A	Pre-post comparison	Paired t-test	N/A
4.H.1	Percent of Beneficiaries That Disenroll Due to High Income	N/A	N/A	N/A	N/A	N/A
4.H.2	Percent of Disenrolled Beneficiaries That Take-Up Private Health Insurance	N/A	N/A	N/A	N/A	N/A
4.H.3	Percent of Disenrolled Beneficiaries That Take-Up Private Health Insurance and Maintain the Same Health Insurance Plan They Had in ARHOME	N/A	N/A	N/A	N/A	N/A
4.I.1	Percent of QHP Beneficiaries That Enroll in Education and Training Programs over Time	N/A	N/A	N/A	N/A	N/A
4.I.2	Percent of QHP Beneficiaries Participating in the EII Program	N/A	N/A	Annual Tables	N/A	N/A
4.J.1	Beneficiary Copayment Healthcare Use Impact	ARHOME beneficiaries with copays to those without	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.K.1	PMPM Growth Rate	Arkansas Medicaid FFS	N/A	Annual Tables	N/A	N/A
4.K.2	Total Health Expenditure Growth Rate	Arkansas Medicaid FFS	T-test	Pre-post comparison	Difference in group means	N/A
4.K.3	Administrative Cost Growth Rate	Arkansas Medicaid FFS	T-test	Pre-post comparison	Difference in group means	N/A

4.L.1	Average Charlson Comorbidity Index Score	In-State FFS Comparison Population	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience

Measure #	Measure Name	Comparison Population	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-Treatment Effects
4.M.1	QHP PMPM Growth Rate	ARHOME DY22 beneficiaries with income from 101-138% FPL	IPTW/CEM	Beneficiary-level model	Difference in group means	Beneficiary-level model with prior experience
4.N.1	Arkansas Program Characteristics	N/A	N/A	Annual Tables	N/A	N/A
4.N.2	Arkansas Regional Average Program Characteristics	N/A	N/A	Annual Tables	N/A	N/A
4.N.3	Other Medicaid Expansion States' Program Characteristics	N/A	N/A	Annual Tables	N/A	N/A
4.N.4	Arkansas Marketplace PMPM Growth Rate	Other Medicaid expansion states	N/A	Annual Tables	N/A	N/A
4.O.1	Arkansas Commercial Insurance Premium Rates	Other Medicaid expansion states	N/A	N/A	N/A	N/A

4 METHODOLOGICAL LIMITATIONS

As with other evaluations of this nature, there are limits in several areas. First, the main limitation of this evaluation is that, before Arkansas' 1115 waiver period began in 2014, there were very few ways in which adults were eligible for traditional Medicaid. Therefore, a large majority of the population enrolled in ARHOME or its predecessors, the Healthcare Independence Program and Arkansas Works, do not have a truly comparable population in traditional Medicaid. Our current in-state comparison population includes a smaller proportion of beneficiaries relative to the target population and to the traditional Medicaid population. However, it is important to ensure as much comparability in underlying demographic, socioeconomic, and health-related characteristics between the target and comparison populations as possible to ensure that results are not adversely affected by other factors that could influence our measure outcomes, To account for limitations in both numbers and comparability, models evaluating the target and comparison populations will be adjusted for differences in sociodemographic factors by using propensity score matching and/or coarsened exact matching (CEM) to balance and make both groups more comparable. It is possible that differences may persist and further adjustments to the model will be made to account for other factors depending on the measure. Baseline metrics for the ARHOME demonstration could be impacted since very similar programs were in place years before ARHOME began.

Second, information used for beneficiary weights will come from the eligibility determination process. Causal analysis requires that the baseline variables are known before assignment to the treatment or comparison population, and that they are not affected by the assignment. Therefore, it can be assumed the baseline covariates for each beneficiary did not change during the calendar year.

Third, due to ongoing COVID-19 impacts and the public health emergency, certain measures, such as those related to enrollment, will need special considerations. It is acknowledged that healthcare utilization has changed as a result of the pandemic, so the aim is to contextualize the findings within the time period within which they occurred.

Fourth, ARHOME includes a temporary 90-day retroactive eligibility period from January 1, 2022 through June 30, 2022. A 30-day retroactive eligibility period will begin July 1, 2022 and last through the end of the demonstration, unless otherwise updated. This may impact certain measures pertaining to retroactive eligibility. These trends will be examined, and sensitivity analyses will be performed on the results where applicable.

Fifth, since only paid claims will be available from QHPs, the claims-based measures will be restricted to paid claims only for both the target and comparison populations. Services billed on claims that were suspended or denied will not be included.

Sixth, some exceptions and exemptions allowed in the APCD submissions may necessitate review of additional data sources for certain measures pertaining to continuity of coverage and disenrollment.

Seventh, survey data (BRFSS and ACS) is used for some measures of access and for health insurance coverage. Limitations to relying on self-report survey data include self-selection bias, and social-desirability bias. In addition, literacy levels may impact survey participation and responses.

Lastly, like most other Medicaid program evaluations, out-of-state comparators are limited in use in the claims-based analyses for several reasons including cost, state context, program design, issues obtaining pre- and post-intervention data from other states, etc. Given this, all in-state comparators that may be suitable for the specific evaluation question being investigated will be explored.

5 APPENDICES

5.1 INDEPENDENT EVALUATOR

Based on established protocols, the state did follow established policies and procedures to acquire an independent evaluator to conduct the ARHOME demonstration evaluation. An assessment of Medicaid waiver program evaluation experience, knowledge of State programs and populations, and resource requirements were determined during the selection of the final candidate, including steps to identify and/or mitigate any conflicts of interest.

The evaluator will maintain separation throughout the demonstration evaluation as to conduct a fair and impartial evaluation. This evaluation design includes a "No Conflict of Interest" signed confirmation statement from the independent evaluator, located below.

GDIT

Conflict of Interest/Independence.

General Dynamics Information Technology Inc. ("GDIT") hereby certifies that, without limitation or qualification, has no actual, apparent, or potential conflicts of interest with, and is independent from:

1. DHS and Arkansas Medicaid.
2. Qualified Health Providers (QHP) under the ARHOME program, including the following:
    a. Ambetter from Arkansas Health & Wellness (Centene Corporation).
    b. QualChoice (QCA Health Plan, Inc./QualChoice Life and Health Insurance Company, Inc.)
    c. Arkansas Blue Cross & Blue Shield.
    d. Health Advantage
3. Providers serving Medicaid and ARHOME beneficiaries under any Arkansas Medicaid or ARHome program.

Independent Evaluator Name:	General Dynamics Information Technology Inc. ("GDIT")	Date:	April 14, 2022
Signature:	Dorothy E. Piroha	Title:	Contracts Administrator Advisor
Printed Name:	Dorothy E. Piroha		

5.2 Evaluation Budget

An estimated total cost for the development and production of this evaluation design and the resulting evaluation reports are hereby included as an annual budget. This includes the total estimated costs, as well as a breakdown of estimated staff, administrative, and other costs for all aspects of the evaluation. Cost includes quantitative and qualitative data collection, development and administration of survey instruments, data cleaning and analyses, and the actual production of the evaluation design and evaluation report deliverables. For the complete evaluation time frame, the total estimated cost is $9,701,328.

GDIT Labor Category	Hours	Rate
Admin Support	350	$30,621
Database Infrastructure	480	$66,816
Health Economist	975	$100,101
Program Management	1,760	$352,509
Statistical Analysis	3,000	$288,884
Subject Matter Expert	1,020	$219,147
GDIT Labor	7,585	$1,058,079

Other direct costs		Cost
Consulting		$286,094
Surveys		$51,025
		$337,119
Data Hosting/Licenses		$33,569
Total	7,585	$1,428,767
3% DBITS Discount		$42,863
Total Annual Budget	7,585	$1,385,904

5.3 Timeline and Major Milestones

Appropriately scheduling evaluation activities will be crucial to acquiring accurate data which informs the evaluation reports and any needed policy or procedure updates. The evaluator, started April 2022, will continually monitor monthly and quarterly delivered claims, beneficiary, and provider data ensuring when reports are run, the included data is as expected.

The data sets will be supplemented with focus groups and/or surveys as appropriate. These will be conducted throughout the life of the ARHOME demonstration in order to capture the progression in access, awareness, coverage, health outcomes, participation, quality of care, program, and plan satisfaction, understanding, and utilization.

The BESS will be administered in 2022, 2024, and 2026 (Demonstration Years 1, 3, and 5). Provider focus groups will be conducted in 2023 and 2025 (Demonstration Years 2 and 4).

Submission Timelines

There is a specified timeline for the state's submission of Evaluation Designs and Evaluation Reports. These dates are specified in the demonstration Special Terms and Conditions (STCs) and/or otherwise negotiated for best practices. To assure the dissemination of the evaluation findings, lessons learned, and recommendations, the state will publish the Interim and Summative Evaluation Reports to the state's website within thirty (30) calendar days of CMS' approval, as per 42 CFR 431.424(d). CMS will also publish a copy to the Medicaid.gov website. The graphic below depicts the deliverables timeline for the ARHOME demonstration.

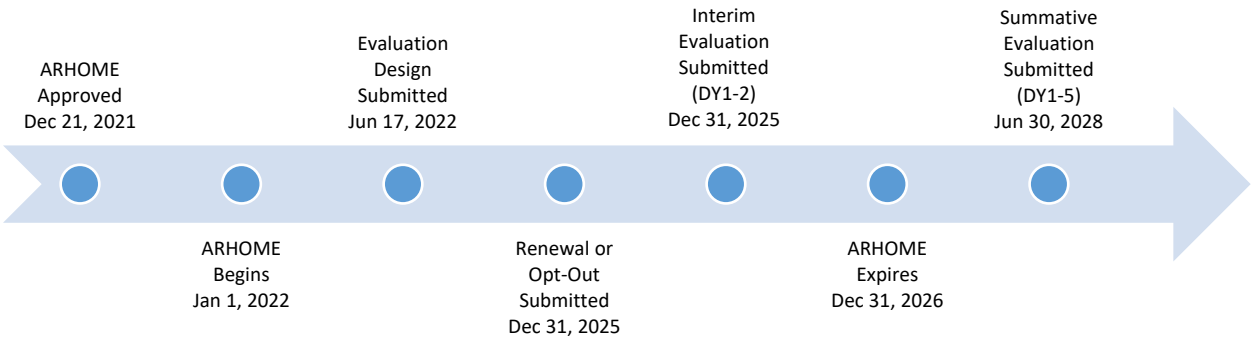


Figure 11: Submission Timelines

5.4 Metric Descriptions by Goal and Hypothesis

This section describes the metrics by which the evaluation will measure the goals and hypotheses.

Goal 1. Providing Continuity of Coverage for Individuals

Hypothesis 1.A. ARHOME beneficiaries will be aware of the premium assistance model.

Measure 1.A.1	Beneficiary Premium Assistance Awareness
Definition:	QHP beneficiaries who are aware of the premium assistance model
Numerator:	N/A
Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary awareness/experience
Measure Steward(s):	CAHPS Supplemental Item
Comparison Population:	N/A
Comparison Method(s):	Annual Tables (years 1, 3, and 5)
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A

Hypothesis 1.B. ARHOME beneficiaries and QHP contracted providers will be aware of the Health Improvement Initiative.

Measure 1.B.1	Beneficiary Health Improvement Initiative Awareness
Definition:	QHP beneficiaries who are aware of the Health Improvement Initiative
Numerator:	N/A

Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary awareness/experience
Measure Steward(s):	CAHPS Supplemental Item
Comparison Population:	N/A
Comparison Method(s):	Annual Tables (Years 1, 3 and 5)
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A

Measure 1.B.2	**QHP Contracted Provider Health Improvement Initiative Awareness**
Definition:	QHP contracted providers who are aware of the Health Improvement Initiative
Numerator:	N/A
Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Survey-based assessment of provider awareness/experience and provider communications/materials
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	Annual Tables (Years 2 and 4)

Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A

Hypothesis 1.C. The premium assistance model will lead to less unmet need for healthcare among Arkansas residents aged 19-64 with income up to 138% FPL compared to individuals at the same income levels in states that expanded Medicaid through existing service delivery systems.

Measure 1.C.1	Have a Personal Doctor
Definition:	Have a personal doctor or health care provider
Numerator:	Survey respondents with one or more personal health care providers
Denominator:	Survey respondents to PERSDOC2 question
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Behavioral Risk Factor Surveillance System (BRFSS)
Measure Steward(s):	Centers for Disease Control and Prevention (CDC), BRFSS
Comparison Population:	Adults aged 19-64 with income ≤138% FPL in KY, WV
Comparison Method(s):	Comparative interrupted time-series
Statistic to Be Tested:	Difference-in-difference (DiD) estimator
National Benchmark:	N/A

Measure 1.C.2	Avoided Care Due to Cost
Definition:	Avoided care in the last 12 months due to cost
Numerator:	Survey respondents who needed but could not see a doctor because of cost within the past 12 months
Denominator:	Survey respondents to MEDCOST question
Exclusion Criteria:	N/A

Continuous Enrollment:	N/A
Data Source(s):	BRFSS
Measure Steward(s):	CDC-BRFSS
Comparison Population:	Adults aged 19-64 with income ≤138% FPL in KY, WV
Comparison Method(s):	Comparative interrupted time-series
Statistic to Be Tested:	Difference-in-difference (DiD) estimator
National Benchmark:	N/A

Measure 1.C.3	**Last Routine Checkup**
Definition:	Last routine checkup within 12 months
Numerator:	Survey respondents who had their last routine checkup within the past 12 months
Denominator:	Survey respondents to CHECKUP1 question
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	BRFSS
Measure Steward(s):	CDC-BRFSS
Comparison Population:	Adults aged 19-64 with income ≤138% FPL in KY, WV
Comparison Method(s):	Comparative interrupted time-series
Statistic to Be Tested:	Difference-in-difference (DiD) estimator
National Benchmark:	N/A

Hypothesis 1.D. The ARHOME program will lead to QHP beneficiaries having better continuity of coverage that includes fewer and shorter gaps, while Medicaid-eligible, compared to Medicaid FFS beneficiaries.

Measure 1.D.1	Percent of Beneficiaries with at Least One Month with a Coverage Gap
Description:	Percent of beneficiaries with at least one month with a coverage gap during the measurement year
Numerator:	Number of beneficiaries with at least one month with a coverage gap
Denominator:	Number of beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	MMIS eligibility and enrollment files
Measure Steward(s):	DMS Homegrown
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• Inverse probability of treatment weight (IPTW)/coarsened exact matching (CEM) weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group percentages
National Benchmark:	N/A
Note(s):	May be impacted by COVID-19 and Public Health Emergency changes

Measure 1.D.2	Average Length of Gaps in Coverage
Description:	The average length of gaps in coverage, in months, during the measurement period
Numerator:	Duration of gaps of coverage, in months
Denominator:	Number of person gaps

Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Medicaid Management Information System (MMIS) eligibility and enrollment files
Measure Steward(s):	Division of Medical Services (DMS) Homegrown
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Note(s):	May be impacted by COVID-19 and Public Health Emergency changes

Hypothesis 1.E. The ARHOME program will lead to QHP beneficiaries having better continuity of primary care and specialty providers, while Medicaid-eligible, compared to Medicaid FFS beneficiaries.

Measure 1.E.1	Continuity of Primary Care Provider (PCP) Care
Definition:	Consistent use of the same primary care provider over time -- proportion of primary care visits with the same PCP
Numerator:	Primary care provider visits with the same primary care provider during the measurement period
Denominator:	Primary care provider visits during the measurement period
Exclusion Criteria:	N/A
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year
Data Source(s):	MMIS eligibility and demographic files linked to MMIS and QHP claims
Measure Steward(s):	DMS Homegrown
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model

Statistic to Be Tested:	Difference in group percentages
National Benchmark:	N/A

Measure 1.E.2	Continuity of Specialist Care
Definition:	Consistent use of the same specialist provider over time—proportion of type-specific, same-specialist visits over time
Numerator:	Specialty care provider visits with the same specialty provider, within specialty type during the measurement period
Denominator:	Specialty care provider visits during the measurement period
Exclusion Criteria:	N/A
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year
Data Source(s):	MMIS eligibility and demographic files linked to MMIS and QHP claims
Measure Steward(s):	DMS Homegrown
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group percentages
National Benchmark:	N/A

Measure 1.E.3	Percent of QHP Beneficiaries Seeing a PCP on an Annual Basis
Definition:	Percentage of QHP beneficiaries with a PCP visit during the measurement year
Numerator:	QHP beneficiaries with a PCP visit during the measurement year
Denominator:	Total QHP beneficiaries
Exclusion Criteria:	N/A

Continuous Enrollment:	Refer to population definition
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	DMS Homegrown
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group percentages
National Benchmark:	N/A
Deviation(s):	N/A

Goal 2. Improving Access to Providers

Hypothesis 2.A. The premium assistance model will lead to improved financial health among Arkansas healthcare providers compared to healthcare providers in states that expanded Medicaid through the existing service delivery system.

Measure 2.A.1	Provider Financial Health Improvement
Definition:	QHP beneficiaries' contribution to providers' uncompensated care
Numerator:	N/A
Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Provider survey/focus groups
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A

Comparison Method(s):	Annual Tables (Years 2 and 4)
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A

Measure 2.A.2	Hospital Financial Health Improvement
Definition:	Percent of hospitals with a positive operating margin
Numerator:	Number of hospitals with a positive operating margin
Denominator:	Total number of hospitals
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	CMS Healthcare Cost Report Information System (HCRIS) (report update frequency may impact ability to use as data source)
Measure Steward(s):	CMS
Comparison Population:	Other Medicaid Expansion States
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A

Measure 2.A.3	Provider Closure Rate
Definition:	Percentage of providers that closed
Numerator:	Number of providers that closed

Denominator:	Total number of providers in the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	CMS Provider of Services File
Measure Steward(s):	CMS
Comparison Population:	Other Medicaid Expansion States
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive analysis
National Benchmark:	N/A

Hypothesis 2.B. The ARHOME program will lead to QHP beneficiaries having better perceived access to care over time and compared to Medicaid FFS beneficiaries.

Measure 2.B.1	Received Care for Illness/Injury as Soon as Needed
Definition:	Received care for illness/injury as soon as needed
Numerator:	Survey respondents who usually or always received the needed care right away in the last 6 months
Denominator:	Survey respondents who had an illness, injury, or condition that needed care right away in a clinic, emergency department or doctor's office in the last 6 months
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Arkansas Medicaid beneficiary survey respondents who completed the survey

Comparison Method(s):	Beneficiary-level weighted model, case-mix adjustment
Statistic to Be Tested:	Difference in answer frequencies
National Benchmark:	CAHPS Health Plan Survey Database Chartbook

Measure 2.B.2	Received Non-Urgent Appointment as Soon as Needed
Definition:	Received non-urgent appointment as soon as needed
Numerator:	Survey respondents who usually or always received an appointment for a check-up or routine care at a doctor's office or clinic, as soon as needed in the last 6 months
Denominator:	Survey respondents who made an appointment for a check-up or routine care at a doctor's office or clinic in the last 6 months
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Arkansas Medicaid beneficiary survey respondents who completed the survey
Comparison Method(s):	Beneficiary-level weighted model, case-mix adjustment
Statistic to Be Tested:	Difference in answer frequencies
National Benchmark:	CAHPS Health Plan Survey Database Chartbook

Measure 2.B.3	How Often it Was Easy to Get Necessary Care, Tests, or Treatment
Definition:	How often it was easy to get necessary care, tests, or treatment
Numerator:	Survey respondents who usually or always received care, tests, or treatment needed in the last 6 months

Denominator:	Survey respondents who visited a doctor's office or clinic at least once in the last 6 months
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Arkansas Medicaid beneficiary survey respondents who completed the survey
Comparison Method(s):	Beneficiary-level weighted model, case-mix adjustment
Statistic to Be Tested:	Difference in answer frequencies
National Benchmark:	CAHPS Health Plan Survey Database Chartbook

Measure 2.B.4	Have a Personal Doctor
Definition:	Have a personal doctor
Numerator:	Survey respondents who indicated they have a personal doctor
Denominator:	Survey respondents who completed the survey
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Arkansas Medicaid beneficiary survey respondents who completed the survey
Comparison Method(s):	Beneficiary-level weighted model, case-mix adjustment
Statistic to Be Tested:	Difference in answer frequencies

National Benchmark:	N/A

Measure 2.B.5	Received Appointment with Specialists as Soon as Needed
Definition:	Received appointment with specialists as soon as needed
Numerator:	Survey respondents who usually or always received an appointment to see a specialist as soon as needed in the last 6 months
Denominator:	Survey respondents who made an appointment to see a specialist in the last 6 months
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Arkansas Medicaid beneficiary survey respondents who completed the survey
Comparison Method(s):	Beneficiary-level weighted model, case-mix adjustment
Statistic to Be Tested:	Difference in answer frequencies
National Benchmark:	CAHPS Health Plan Survey Database Chartbook

Measure 2.B.6	Wait Time Between Making Appointment and Seeing Provider
Definition:	Days between making appointment and seeing provider
Numerator:	Survey respondents who received an appointment as soon as you needed

Denominator:	Survey respondents who made an appointment for a checkup or routine care at a doctor's office or clinic in the last 6 months
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Arkansas Medicaid beneficiary survey respondents who completed the survey
Comparison Method(s):	Beneficiary-level weighted model, case-mix adjustment
Statistic to Be Tested:	Difference in answer frequencies
National Benchmark:	N/A

Measure 2.B.7	**How Often Had to Wait for Appointment Because of Provider's Lack of Hours/Availability**
Definition:	How often had to wait for appointment because of provider's lack of hours/availability
Numerator:	Survey respondents who never or sometimes had to wait for an appointment for a checkup or routine care in the last 6 months
Denominator:	Survey respondents who made an appointment for a checkup or routine care at a doctor's office or clinic in the last 6 months
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1

Comparison Population:	Arkansas Medicaid beneficiary survey respondents who completed the survey
Comparison Method(s):	Beneficiary-level weighted model, case-mix adjustment
Statistic to Be Tested:	Difference in answer frequencies
National Benchmark:	N/A

Measure 2.B.8	Easy to Get a Referral to a Specialist
Definition:	Easy to get a referral to a specialist
Numerator:	Survey respondents who usually or always easily got a referral in the last 6 months to see a specialist
Denominator:	Survey respondents who made an appointment to see a specialist in the last 6 months
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Arkansas Medicaid beneficiary survey respondents who completed the survey
Comparison Method(s):	Beneficiary-level weighted model, case-mix adjustment
Statistic to Be Tested:	Difference in answer frequencies
National Benchmark:	N/A

Measure 2.B.9	Needed Interpreter to Help Speak with Doctors or Other Health Providers
Definition:	Needed interpreter to help speak with doctors or other health providers

Numerator:	Survey respondents who needed an interpreter at a provider's office in the last 6 months
Denominator:	Survey respondents who completed the survey
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Supplemental Item
Comparison Population:	Arkansas Medicaid beneficiary survey respondents who completed the survey
Comparison Method(s):	Beneficiary-level weighted model, case-mix adjustment
Statistic to Be Tested:	Difference in answer frequencies
National Benchmark:	N/A

Measure 2.B.10	How Often Got an Interpreter When Needed One
Definition:	How often got an interpreter when needed one
Numerator:	Survey respondents who usually or always received an interpreter at a provider's office in the last 6 months
Denominator:	Survey respondents who needed an interpreter at a provider's office in the last 6 months
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Supplemental Item

Comparison Population:	Arkansas Medicaid beneficiary survey respondents who completed the survey
Comparison Method(s):	Beneficiary-level weighted model, case-mix adjustment
Statistic to Be Tested:	Difference in answer frequencies
National Benchmark:	N/A

Hypothesis 2.C. The ARHOME program will lead to QHP beneficiaries having better perceived access to care compared to similar beneficiaries in states that expanded Medicaid through the existing service delivery system.

Measure 2.C.1	**Have Health Care Coverage**
Definition:	Have any kind of health care coverage
Numerator:	Survey respondents who responded yes to any kind of health care coverage
Denominator:	Survey respondents to HLTHPLN1 question
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	BRFSS
Measure Steward(s):	CDC, BRFSS
Comparison Population:	Adults aged 19-64 with income ≤138% FPL in KY, WV
Comparison Method(s):	Comparative interrupted time-series
Statistic to Be Tested:	Difference-in-difference (DiD) estimator
National Benchmark:	N/A

Measure 2.C.2	**Have a Personal Doctor**

Definition:	Have a personal doctor or health care provider
Numerator:	Survey respondents with one or more personal health care providers
Denominator:	Survey respondents to PERSDOC2 question
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	BRFSS
Measure Steward(s):	CDC-BRFSS
Comparison Population:	Adults aged 19-64 with income ≤138% FPL in KY, WV
Comparison Method(s):	Comparative interrupted time-series
Statistic to Be Tested:	Difference-in-difference (DiD) estimator
National Benchmark:	N/A

Measure 2.C.3	Last Routine Checkup
Definition:	Last routine checkup within 12 months
Numerator:	Survey respondents who had their last routine checkup within the past 12 months
Denominator:	Survey respondents to CHECKUP1 question
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	BRFSS
Measure Steward(s):	CDC-BRFSS

Comparison Population:	Adults aged 19-64 with income ≤138% FPL in KY, WV
Comparison Method(s):	Comparative interrupted time-series
Statistic to Be Tested:	Difference-in-difference (DiD) estimator
National Benchmark:	N/A

Measure 2.C.4	**Avoided Care Due to Cost**
Definition:	Avoided care in the last 12 months due to cost
Numerator:	Survey respondents who needed but could not see a doctor because of cost within the past 12 months
Denominator:	Survey respondents to MEDCOST question
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	BRFSS
Measure Steward(s):	CDC-BRFSS
Comparison Population:	Adults aged 19-64 with income ≤138% FPL in KY, WV
Comparison Method(s):	Comparative interrupted time-series
Statistic to Be Tested:	Difference-in-difference (DiD) estimator
National Benchmark:	N/A

Measure 2.C.5	**Flu Vaccine**
Definition:	Received a flu vaccine in the past 12 months

Numerator:	Survey respondents who received a flu vaccine within the past 12 months
Denominator:	Survey respondents to question FLUSHOT7 or the comparable version in earlier years.
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	BRFSS
Measure Steward(s):	CDC-BRFSS
Comparison Population:	Adults aged 19-64 with income ≤138% FPL in KY, WV
Comparison Method(s):	Comparative interrupted time-series
Statistic to Be Tested:	Difference-in-difference (DiD) estimator
National Benchmark:	N/A

Hypothesis 2.D. The ARHOME program will lead to QHP beneficiaries having better realized access to care over time and compared to Medicaid FFS beneficiaries.

Measure 2.D.1	Provider Patient Acceptance
Definition:	Acceptance of beneficiaries among network providers – were beneficiaries able to make an appointment with the provider of their choice
Numerator:	Survey respondents to denominator and answered “always”
Denominator:	Survey respondents who responded to " In the last 6 months, when you needed care right away, how often were you able to choose the provider you wanted for your care?”
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary awareness/experience
Measure Steward(s):	CAHPS Supplemental Item

Comparison Population:	Arkansas Medicaid beneficiary survey respondents who completed the survey
Comparison Method(s):	Beneficiary-level weighted model, case-mix adjustment
Statistic to Be Tested:	Difference in answer frequencies
National Benchmark:	N/A

Measure 2.D.2	**Time to First Appointment**
Definition:	Wait time between making a first appointment and seeing the provider
Numerator:	Survey respondents to denominator and answered “never” or “sometimes”
Denominator:	Survey respondents who responded to "In the last 6 months, how often did you have to wait for an appointment because of a provider’s lack of hours/availability?”
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary awareness/experience
Measure Steward(s):	CAHPS Supplemental Item
Comparison Population:	Arkansas Medicaid beneficiary survey respondents who completed the survey
Comparison Method(s):	Beneficiary-level weighted model, case-mix adjustment
Statistic to Be Tested:	Difference in answer frequencies
National Benchmark:	N/A

Measure 2.D.3	**Breast Cancer Screening (BCS)**

Definition:	The percentage of women 50–64 years of age who had a mammogram to screen for breast cancer
Numerator:	Numerator includes number of women with one or more mammograms during the measurement year or the 15 months prior to the measurement year
Denominator:	Denominator includes number of women 50–64 years of age on the anchor (last) date of the measurement year
Exclusion Criteria:	Beneficiaries with hospice care
Continuous Enrollment:	October 1 two years prior to the measurement year through December 31 of the measurement year. No more than 45 days or a 1-month gap of coverage during each full calendar year of continuous enrollment. No gaps in enrollment are allowed from October 1 through December 31, two years prior to the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – BCS-AD (Adult) in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set
Deviation(s):	Maximum age truncated from 75 to 64. Paid claims only

Measure 2.D.4	Cervical Cancer Screening (CCS)
Definition:	The percentage of women ages 21–64 who were screened for cervical cancer
Numerator:	The number of women who were screened for cervical cancer, as defined by • Cervical cytology performed during the measurement year or the two years prior to the measurement year • Or cervical cytology/human papillomavirus (HPV) co-testing performed during the measurement year or the four years prior to the measurement year, for women who were at least 30 years old on the date of both tests

Denominator:	Women ages 24–64 as of December 31 of the measurement year
Exclusion Criteria:	Beneficiaries with hospice care. Implement optional exclusion: Hysterectomy with no residual cervix, cervical agenesis, or acquired absence of cervix any time during the beneficiary's history through December 31 of the measurement year
Continuous Enrollment:	No more than one gap in enrollment of up to 45 days or 1 month during each year of continuous enrollment. Anchor date: December 31 of the measurement year.
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – CCS-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set
Deviation(s):	Paid claims only

Measure 2.D.5	**Chlamydia Screening in Women Ages 21-24 (CHL)**
Definition:	The percentage of women ages 21 to 24 who were identified as sexually active and who had at least one test for chlamydia during the measurement year
Numerator:	At least one chlamydia test during the measurement year
Denominator:	Women ages 21 to 24 as of December 31 of the measurement year who are sexually active
Exclusion Criteria:	Women who qualified for the denominator based on a pregnancy test alone and who meet either of the following: • A pregnancy test during the measurement year and a prescription for isotretinoin on the date of the pregnancy test or within the 6 days after the pregnancy test • A pregnancy test during the measurement year and an x-ray on the date of the pregnancy test or within the 6 days after the pregnancy test
Continuous Enrollment:	No more than one gap in enrollment of up to 45 days or 1 month during each year of continuous enrollment. Anchor date: December 31 of the measurement year.

Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – CHL-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set
Deviation(s):	Paid claims only

Measure 2.D.6	Statin Therapy for Patients with Diabetes (SPD)
Definition:	The percentage of beneficiaries 40–64 years of age during the measurement year with diabetes who do not have clinical atherosclerotic cardiovascular disease (ASCVD) who were dispensed at least one statin medication of any intensity during the measurement year.
Numerator:	Beneficiaries who were dispensed at least one statin medication of any intensity during the measurement year
Denominator:	Beneficiaries 40–64 years of age during the measurement year with diabetes who do not have clinical atherosclerotic cardiovascular disease (ASCVD)
Exclusion Criteria:	Beneficiaries with hospice care. Beneficiaries with cardiovascular disease identified by event or diagnosis; diagnosis of pregnancy; in vitro fertilization; dispensed clomiphene; ESRD without telehealth; cirrhosis; or myalgia, myositis, myopathy, or rhabdomyolysis
Continuous Enrollment:	The measurement year and the year prior to the measurement year. No more than one gap in enrollment of up to 45 days or 1 month during each year of continuous enrollment. Anchor date: December 31 of the measurement year.
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – Healthcare Effectiveness Data and Information Set (HEDIS) SPD
Comparison Population:	Medicaid FFS comparison population

Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	HEDIS Medicaid national rates
Deviation(s):	Upper end of age range truncated from 75 to 64. Paid claims only

Measure 2.D.7	Comprehensive Diabetes Care: Hemoglobin A1c Testing (HA1C)
Definition:	The percentage of beneficiaries 19–64 years of age with diabetes (type 1 and type 2) who had Hemoglobin A1c (HbA1c) testing performed
Numerator:	Beneficiaries with an HbA1c test performed during the measurement year
Denominator:	Beneficiaries identified as having diabetes during the measurement year or the year prior to the measurement year
Exclusion Criteria:	Beneficiaries with hospice care
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – HA1C-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rate
Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only

Measure 2.D.8	Adults' Access to Preventive/Ambulatory Services (AAP)
Definition:	The percentage of beneficiaries 20 years and older who had an ambulatory or preventive care visit during the measurement year
Numerator:	One or more ambulatory or preventive care visits during the measurement year
Denominator:	The eligible population: age 20 years and older as of December 31 of the measurement year
Exclusion Criteria:	Beneficiaries with hospice care
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA - HEDIS AAP
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rate
Deviation(s):	Upper end of age range truncated to 64. Paid claims only

Measure 2.D.9	Asthma Medication Ratio Ages 19-64 (AMR)
Definition:	The percentage of beneficiaries ages 19 to 64 who were identified as having persistent asthma and had a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year
Numerator:	The number of beneficiaries who had a medication ratio of 0.50 or greater during the measurement year
Denominator:	Beneficiaries aged 19-64 as of December 31 of the measurement year

Exclusion Criteria:	N/A
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year and the year prior to the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA –AMR-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	• Difference in group means • Results reported by age stratifications: 19-50, 51-64, and 19-64
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rate
Deviation(s):	Paid claims only

Measure 2.D.10	**Adolescent Well-Care Visits (AWC)**
Definition:	Beneficiaries 19–20 years of age who had at least one comprehensive well-care visit with a PCP or an obstetrician/gynecologist practitioner during the measurement year
Numerator:	Beneficiaries who received a well-care visit during the measurement year
Denominator:	Beneficiaries enrolled in Medicaid FFS and eligible for EPSDT services at ages 17–18 who enrolled in ARHOME at ages 19–20
Exclusion Criteria:	Beneficiaries with hospice care
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	DMS Homegrown based on NCQA – HEDIS AWC
Comparison Population:	Beneficiaries in the treatment group, during the 1–2 years prior to enrolling in ARHOME
Comparison Method(s):	Repeated measures ANOVA (Pre-post comparison)

Statistic to Be Tested:	Differences in means
National Benchmark:	N/A
Deviation(s):	Ages limited to 19–20 on December 31 of the measurement year, to 18–19 on December 31 in the year prior to the measurement year, and to 17–18 on December 31 two years prior to the measurement year. Beneficiaries not eligible for EPSDT services during their Medicaid FFS eligibility are not eligible for the denominator. Paid claims only. Measure calculations will be run on multiple years for the same eligible beneficiaries.

Measure 2.D.11	**EPSDT Screening – Preventive Dental Visits**
Definition:	Percent of eligible beneficiaries who received at least one preventive dental service
Numerator:	Beneficiaries who received a preventive dental service
Denominator:	Beneficiaries enrolled in Medicaid FFS and eligible for EPSDT services at ages 17–18 who enrolled in ARHOME at ages 19–20
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to EPSDT population definition
Data Source(s):	MMIS claims and dental encounter data
Measure Steward(s):	DMS Homegrown based on Medicaid Child Core Set CMS Pediatric Dental -Child, Form CMS-416 (EPSDT)
Comparison Population:	Beneficiaries in the treatment group, during the 1–2 years prior to enrolling in ARHOME
Comparison Method(s):	Repeated measures ANOVA (Pre-post comparison)
Statistic to Be Tested:	Differences in means
National Benchmark:	N/A
Deviation(s):	Minimum age on January 1 of the previous year increased from 1 to 17. Measure calculations will be run on multiple years for eligible beneficiaries.

Measure 2.D.12	**EPSDT Screening – Preventive Vision**

Definition:	Percent of eligible beneficiaries who received at least one preventive vision screen
Numerator:	Beneficiaries who received a preventive vision screen
Denominator:	Beneficiaries enrolled in Medicaid FFS and eligible for EPSDT services at ages 17–18 who enrolled in ARHOME at ages 19–20
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to EPSDT population definition
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	DMS Homegrown based on Medicaid Child Core Set CMS PDENT-CH with vision codes
Comparison Population:	Beneficiaries in the treatment group, during the 1–2 years prior to enrolling in ARHOME
Comparison Method(s):	Repeated measures ANOVA (Pre-post comparison)
Statistic to Be Tested:	Differences in means
National Benchmark:	N/A
Deviation(s):	Minimum age on January 1 of the previous year increased from 1 to 17. Measure calculations will be run on multiple years for eligible beneficiaries.

Measure 2.D.13	**Any Utilization of Non-Emergency Transportation Services**
Definition:	The percentage of beneficiaries with 1 or more NEMT claims during the measurement year
Numerator:	Beneficiaries with an NEMT claim during the measurement year
Denominator:	The eligible population
Exclusion Criteria:	N/A
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	NEMT encounter claims

Measure Steward(s):	DMS Homegrown
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	Descriptive analysis of percentages with stratification; logistic regression controlling for demographics, risk score, and service region
Statistic to Be Tested:	Average marginal effect
National Benchmark:	N/A

Measure 2.D.14	**Utilization Counts of Non-Emergency Transportation Services**
Definition:	The count of NEMT service utilization during the measurement year
Numerator:	NEMT service counts per beneficiary during the measurement year
Denominator:	Eligible population
Exclusion Criteria:	N/A
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	NEMT encounter claims
Measure Steward(s):	DMS Homegrown
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	Descriptive analysis of means and standard deviations with stratification; count model regression controlling for demographics, risk score, and service region
Statistic to Be Tested:	Average marginal effect
National Benchmark:	N/A

Measure 2.D.15	Non-Emergency Transportation Awareness
Definition:	Beneficiaries who are aware of the non-emergency transportation program
Numerator:	N/A
Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary awareness/experience
Measure Steward(s):	CAHPS Supplemental Item
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	Annual Tables (Years 1, 3 and 5)
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A

Measure 2.D.16	PCP Network Adequacy
Definition:	Adequacy of primary care provider network for enrolled populations—proportion of service area without primary care coverage within 30 miles
Numerator:	Number of square miles in Arkansas with a primary care provider within 30 miles.
Denominator:	Total number of square miles in the state of Arkansas
Continuous Enrollment:	N/A

Data Source(s):	Carrier/QHP Templates
Measure Steward(s):	DMS Homegrown
Comparison Population:	Arkansas Medicaid PCP provider network
Comparison Method(s):	Geospatial analysis
Statistic to Be Tested:	N/A
National Benchmark:	N/A

Measure 2.D.17	**PCP Network Accessibility**
Definition:	Accessibility of primary care provider network for enrolled populations—proportion of beneficiaries with primary care accessible within 30 miles
Numerator:	Number of beneficiaries with a primary care provider within 30 miles.
Denominator:	Total number of beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Carrier/QHP Templates
Measure Steward(s):	DMS Homegrown
Comparison Population:	Arkansas Medicaid PCP provider network
Comparison Method(s):	Geospatial analysis
Statistic to Be Tested:	N/A
National Benchmark:	N/A

Measure 2.D.18	Specialist Network Adequacy
Definition:	Adequacy of specialist provider network for enrolled populations—proportion of service area without specialist coverage within 60 miles
Numerator:	Number of square miles in Arkansas with a specialty provider within 60 miles
Denominator:	Total number of square miles in Arkansas
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Carrier/QHP Templates
Measure Steward(s):	DMS Homegrown
Comparison Population:	Arkansas Medicaid specialist provider network
Comparison Method(s):	Geospatial analysis
Statistic to Be Tested:	N/A
National Benchmark:	N/A

Measure 2.D.19	Specialist Network Accessibility
Definition:	Accessibility of specialist network for enrolled populations—proportion of beneficiaries with specialist accessible within 60 miles
Numerator:	Number of beneficiaries with a specialist accessible within 60 miles
Denominator:	Total number of beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A

Data Source(s):	Carrier/QHP Templates
Measure Steward(s):	DMS Homegrown
Comparison Population:	Arkansas Medicaid specialist provider network
Comparison Method(s):	Geospatial analysis
Statistic to Be Tested:	N/A
National Benchmark:	N/A

Measure 2.D.20	**Essential Community Providers (ECP) Network Adequacy (NA)**
Definition:	Adequacy of essential community providers
Numerator:	Number of contracted ECPs
Denominator:	Total ECPs available
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Carrier/QHP Templates
Measure Steward(s):	DMS Homegrown
Comparison Population:	Arkansas Medicaid ECP provider network
Comparison Method(s):	Proportion
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A

Goal 3. Improving Continuity of Care Across the Continuum of Coverage

Hypothesis 3.A. ARHOME beneficiaries will be aware of the shorter period of retroactive eligibility, and the time-limited premium requirements.

Measure 3.A.1	Beneficiary Retroactive Eligibility Awareness
Definition:	QHP beneficiaries who are aware of the shorter period of retroactive eligibility
Numerator:	N/A
Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary awareness/experience and beneficiary communications/materials
Measure Steward(s):	CAHPS Supplemental Item
Comparison Population:	N/A
Comparison Method(s):	Annual Tables (years 1, 3, and 5)
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A

Measure 3.A.2	Beneficiary Premium Requirement Awareness
Definition:	QHP beneficiaries who are aware of the premium requirements
Numerator:	N/A
Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary awareness/experience and beneficiary communications/materials

Measure Steward(s):	CAHPS Supplemental Item
Comparison Population:	N/A
Comparison Method(s):	Annual Tables (years 1, 3, and 5)
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A

Hypothesis 3.B. The shorter period of retroactive eligibility will not lead to a lower rate of Medicaid applications among individuals potentially eligible for ARHOME compared to individuals potentially eligible for other Medicaid programs without a reduced period of retroactive eligibility.

Measure 3.B.1	**Shorter Period of Retroactive Eligibility Affecting New Enrollment**
Definition:	Shorter period of retroactive eligibility will not discourage ARHOME eligible beneficiaries from enrolling
Numerator:	N/A
Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Survey-based assessment of beneficiary awareness/experience and beneficiary communications/materials
Measure Steward(s):	CAHPS Supplemental Item
Comparison Population:	N/A
Comparison Method(s):	Annual Tables (years 1, 3, and 5)
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A
Deviation(s):	N/A
Note(s):	Difference in retroactive eligibility periods in 2022 may impact results

Hypothesis 3.C. The shorter period of retroactive eligibility will not lead to greater medical debt among new ARHOME beneficiaries compared to individuals newly enrolled in other Medicaid programs without a reduced period of retroactive eligibility.

Measure 3.C.1	New Beneficiary Medical Debt (RW_1)
Definition:	Percentage of new beneficiaries that have unpaid medical bills within the last 3 months at the time of application.
Numerator:	Number of new beneficiaries with >$0 medical bills
Denominator:	Number of all new beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	MMIS eligibility and enrollment files
Measure Steward(s):	DMS Homegrown
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviation(s):	N/A

Hypothesis 3.D. During Year 1 of the demonstration, monthly premiums will not lead to lower take-up and retention rates among Arkansas residents aged 19-64 with income at 101-138% FPL compared to those at or below 100% FPL.

Measure 3.D.1	New Enrollment
Definition:	Monthly premiums will not lead to a lower rate of Medicaid applications among individuals potentially eligible for ARHOME – percentage of new beneficiaries.
Numerator:	Number of new beneficiaries

Denominator:	QHP beneficiaries at 101-138% FPL
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	MMIS eligibility and enrollment files
Measure Steward(s):	DMS Homegrown
Comparison Population:	QHP beneficiaries at or below 100% FPL
Comparison Method(s):	• regression discontinuity design pre-post comparison analysis • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Note(s):	May be impacted by COVID-19 and Public Health Emergency changes

Measure 3.D.2	Retention Rate (AD_21)
Definition:	Percentage of beneficiaries who retained eligibility for the demonstration after completing renewal forms
Numerator:	Number of beneficiaries enrolled in the demonstration and due for renewal during the measurement period who remained enrolled in the demonstration after responding to renewal notices
Denominator:	Number of beneficiaries at 101-138% FPL enrolled in the demonstration and due for renewal during the measurement period
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	MMIS eligibility and enrollment files
Measure Steward(s):	DMS Homegrown
Comparison Population:	QHP beneficiaries at or below 100% FPL
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model

Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Note(s):	May be impacted by COVID-19 and Public Health Emergency changes

Hypothesis 3.E. During Year 1 of the demonstration, monthly premiums will not lead to more gaps in coverage among Arkansas residents age 19-64 with income at 101-138% FPL compared to those at or below 100% FPL.

Measure 3.E.1	**Percent of Beneficiaries with at Least One Month with a Coverage Gap**
Description:	Percent of beneficiaries at 101-138% FPL with at least one month with a coverage gap during the measurement year
Numerator:	Number of beneficiaries at 101-138% FPL with at least one month with a coverage gap
Denominator:	Number of beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	MMIS eligibility and enrollment files
Measure Steward(s):	DMS Homegrown
Comparison Population:	QHP beneficiaries at or below 100% FPL
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group percentages
National Benchmark:	N/A
Note(s):	May be impacted by COVID-19 and Public Health Emergency changes

Measure 3.E.2	Average Length of Gaps in Coverage
Description:	The average length of gaps in coverage, in months, during the measurement period
Numerator:	Duration of gaps of coverage, in months
Denominator:	Number of person gaps
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	MMIS eligibility and enrollment files
Measure Steward(s):	DMS Homegrown
Comparison Population:	QHP beneficiaries at or below 100% FPL
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group percentages
National Benchmark:	N/A
Note(s):	May be impacted by COVID-19 and Public Health Emergency changes

Hypothesis 3.F. QHP beneficiaries will demonstrate they value QHP coverage, and the implementation of monthly premiums will not reduce QHP member enrollment.

Measure 3.F.1	Health Insurance Coverage Status
Definition:	Percent of the population with health insurance coverage
Numerator:	Number of insured at 101-138% FPL
Denominator:	Total population
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	American Community Survey (ACS)

Measure Steward(s):	United States Census Bureau, ACS
Comparison Population:	Non-expansion states: AL, MS, and SC
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A
Deviation(s):	N/A

Measure 3.F.2	**Beneficiaries Who Paid a Premium During Measurement Period (PR_3)**
Definition:	Beneficiaries enrolled in the demonstration whose income and eligibility group were subject to the premium (or account contribution) policy – percentage of beneficiaries who paid in 2022
Numerator:	QHP beneficiaries who paid a monthly premium in 2022
Denominator:	QHP beneficiaries at 101-138% FPL in 2022
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A
Deviation(s):	N/A

Measure 3.F.3	Percent of QHP Beneficiaries selecting their own QHP
Definition:	Percentage of QHP beneficiaries who selected their QHP who were not MMIS auto enrolled
Numerator:	Number of QHP beneficiaries selecting a QHP at enrollment
Denominator:	QHP newly enrolled beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	MMIS eligibility and enrollment files
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A
Deviation(s):	N/A

Hypothesis 3.G. During Years 2-5 of the demonstration, the cessation of monthly premiums will not increase take-up and retention rates among QHP beneficiaries with income at 101-138% FPL compared with Year 1.

Measure 3.G.1	New Enrollment
Definition:	Annual new enrollment in CY23-26
Numerator:	Newly enrolled QHP beneficiaries in CY23-26
Denominator:	QHP beneficiaries at 101-138% FPL
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	MMIS and QHP claims data

Measure Steward(s):	N/A
Comparison Population:	ARHOME DY22 beneficiaries with income at 101-138% FPL
Comparison Method(s):	• regression discontinuity design (RDD) pre-post comparison analysis • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group percentages
National Benchmark:	N/A
Deviation(s):	N/A
Note(s):	May be impacted by COVID-19 and Public Health Emergency changes

Measure 3.G.2	**Retention Rate**
Definition:	Percentage of beneficiaries who retained eligibility for the demonstration
Numerator:	Number of beneficiaries enrolled in the demonstration and due for renewal during the measurement period who remained enrolled in the demonstration after responding to renewal notices
Denominator:	Number of beneficiaries at 101-138% FPL enrolled in the demonstration and due for renewal during the measurement period
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	DMS Homegrown
Comparison Population:	ARHOME DY22 beneficiaries with income at 101-138% FPL
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group percentages
National Benchmark:	N/A
Note(s):	May be impacted by COVID-19 and Public Health Emergency changes

Hypothesis 3.H. During Years 2-5 of the demonstration, the cessation of monthly premiums will not increase gaps in coverage among QHP beneficiaries while still eligible for ARHOME than they did during Year 1.

Measure 3.H.1	Percent of Beneficiaries with at Least One Month with a Coverage Gap
Description:	During demonstration years 2-5, percent of beneficiaries with at least one month with a coverage gap among QHP beneficiaries aged 19-64 with income at 101-138% FPL while still eligible during the measurement period
Numerator:	Number of beneficiaries with income at 101-138% FPL with at least one month with a coverage gap
Denominator:	QHP beneficiaries at 101-138% FPL
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	MMIS eligibility and enrollment files
Measure Steward(s):	DMS Homegrown
Comparison Population:	ARHOME DY22 beneficiaries with income at 101-138% FPL
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group percentages
National Benchmark:	N/A
Note(s):	May be impacted by COVID-19 and Public Health Emergency changes

Measure 3.H.2	Average Length of Gaps in Coverage
Description:	During demonstration years 2-5, the average length of gaps in coverage, in months, among QHP beneficiaries aged 19-64 with income at 101-138% FPL while still eligible during the measurement period
Numerator:	Duration of gaps of coverage, in months

Denominator:	Number of person gaps
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	MMIS eligibility and enrollment files
Measure Steward(s):	DMS Homegrown
Comparison Population:	ARHOME DY22 beneficiaries with income at 101-138% FPL
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group percentages
National Benchmark:	N/A
Note(s):	May be impacted by COVID-19 and Public Health Emergency changes

Hypothesis 3.I. During Years 2-5 of the demonstration, the cessation of monthly premiums will lead to QHP beneficiaries having more gaps in coverage after earnings exceed Medicaid eligibility limits than they did during Year 1.

Measure 3.I.1	Percent of Beneficiaries with at Least One Month with a Coverage Gap
Description:	During demonstration years 2-5, percent of beneficiaries with at least one month with a coverage gap with income at 101-138% FPL after earnings exceed Medicaid eligibility limits during the measurement period
Numerator:	Number of beneficiaries during demonstration years 2-5, with at least one month with a coverage gap
Denominator:	Number of beneficiaries with income at 101-138% FPL who disenroll due to higher income in years 2-5
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	APCD, MMIS eligibility, and enrollment files

Measure Steward(s):	DMS Homegrown
Comparison Population:	ARHOME DY22 beneficiaries with income at 101-138% FPL that disenrolled due to income limits
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group percentages
National Benchmark:	N/A
Note(s):	May be impacted by COVID-19 and Public Health Emergency changes

Measure 3.I.2	Average Length of Gaps in Coverage
Description:	The average length of gaps in coverage, in months, during the measurement period during demonstration years 2-5, with income at 101-138% FPL after earnings exceed Medicaid eligibility limits during the measurement period
Numerator:	Duration of gaps of coverage, in months
Denominator:	Number of person gaps for beneficiaries with 101-138% FPL who disenroll due to higher income in years 2-5
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	MMIS eligibility and enrollment files
Measure Steward(s):	DMS Homegrown
Comparison Population:	ARHOME DY22 beneficiaries with income at 101-138% FPL that disenrolled due to income limits
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group percentages
National Benchmark:	N/A
Note(s):	May be impacted by COVID-19 and Public Health Emergency changes

Goal 4. Furthering Quality Improvement and Delivery System Reform Initiatives that are Successful Across Population Groups

Hypothesis 4.A. ARHOME beneficiaries will be aware of the point-of-service copayment requirements and the Economic Independence Initiative.

Measure 4.A.1	Beneficiary Copayment Awareness
Definition:	Percent of QHP beneficiaries who are aware of the point-of-service copayments
Numerator:	Survey respondents who answered "Yes" to the survey question regarding knowledge/awareness of beneficiary copayments
Denominator:	Survey respondents who answered the survey question
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary awareness/experience and beneficiary communications/materials
Measure Steward(s):	CAHPS Supplemental Item
Comparison Population:	N/A
Comparison Method(s):	Annual Tables (years 1, 3, and 5)
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A

Measure 4.A.2	Beneficiary Economic Independence Initiative Awareness
Definition:	Percent of QHP beneficiaries who are aware of the Economic Independence Initiative
Numerator:	Survey respondents who answered "Yes" to at least 1 of 3 surveys questions regarding job programs
Denominator:	Survey respondents who answered the survey question
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition

Data Source(s):	Survey-based assessment of beneficiary awareness/experience and beneficiary communications/materials
Measure Steward(s):	CAHPS Supplemental Item
Comparison Population:	N/A
Comparison Method(s):	Annual Tables (Years 1, 3 and 5)
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A

Hypothesis 4.B. The ARHOME program will lead to QHP beneficiaries having greater satisfaction in the care provided over time and compared to Medicaid FFS beneficiaries.

Measure 4.B.1	**Average Rating of Health Plan**
Definition:	Average Rating of Health Plan
Numerator:	The number of survey responses with ratings of 8, 9, or 10 (i.e., favorably) for best health plan
Denominator:	Survey respondents who answered the survey question
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Arkansas Medicaid beneficiary survey respondents who completed the survey
Comparison Method(s):	Comparison of answer frequency categories (low is a response of 0–7 and high is a response of 8–10), case-mix adjustment
Statistic to Be Tested:	Chi-squared test
National Benchmark:	CAHPS Health Plan Survey Database Chartbook

Measure 4.B.2	Average Rating of Health Care
Definition:	Average Rating of Health Care
Numerator:	The number of survey responses with ratings of 8, 9, or 10 (i.e., favorably) for overall health care received in the last 6 months
Denominator:	Survey respondents who answered the survey question
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Arkansas Medicaid beneficiary survey respondents who completed the survey
Comparison Method(s):	Comparison of answer frequency categories (low is a response of 0–7 and high is a response of 8–10), case-mix adjustment
Statistic to Be Tested:	Chi-squared test
National Benchmark:	CAHPS Health Plan Survey Database Chartbook

Measure 4.B.3	Average Rating of Primary Care Provider (PCP)
Definition:	Average Rating of Primary Care Provider (PCP)
Numerator:	The number of survey responses marked ratings of 8, 9, or 10 (i.e., favorably) for best personal doctor seen in the last 6 months
Denominator:	Survey respondents who answered the survey question and indicated they have a personal doctor
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition

Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Arkansas Medicaid beneficiary survey respondents who completed the survey
Comparison Method(s):	Comparison of answer frequency categories (low is a response of 0–7 and high is a response of 8–10), case-mix adjustment
Statistic to Be Tested:	Chi-squared test
National Benchmark:	CAHPS Health Plan Survey Database Chartbook

Measure 4.B.4	**Average Rating of Specialist**
Definition:	Average Rating of Specialist
Numerator:	The number of survey responses marked ratings of 8, 9, or 10 (i.e., favorably) for best specialist in the last 6 months the beneficiary saw the most
Denominator:	Survey respondents who answered the survey question and indicated they have seen at least one specialist
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of beneficiary experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.1
Comparison Population:	Arkansas Medicaid beneficiary survey respondents who completed the survey
Comparison Method(s):	Comparison of answer frequency categories (low is a response of 0–7 and high is a response of 8–10), case-mix adjustment
Statistic to Be Tested:	Chi-squared test
National Benchmark:	CAHPS Health Plan Survey Database Chartbook

Hypothesis 4.C. The ARHOME program will lead to QHP beneficiaries having lower non-emergent use of the emergency department (ED), lower potentially preventable use of the emergency department and hospital admissions, and lower hospital re-admissions over time and compared to Medicaid FFS beneficiaries.

Measure 4.C.1	Preventable Emergency Department (ED) Visits
Definition:	Percentage of emergency visits classified as preventable by the NYU ED algorithm
Numerator:	Emergency department visits classified as preventable/avoidable
Denominator:	Sum of emergency department visits classified as preventable/avoidable and not preventable/avoidable (equals all visits that are emergent, ED care needed)
Exclusion Criteria:	Injury, mental health, alcohol, and drug-related diagnoses
Continuous Enrollment:	Refer to population definition
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NYU ED algorithm
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A

Measure 4.C.2	Non-Emergent Emergency Department (ED) Visits
Definition:	Non-Emergent ED visits as a percentage of all classified ED visits using the New York University (NYU) ED algorithm
Numerator:	Non-emergent ED visits
Denominator:	Total ED visits classified by the NYU algorithm
Exclusion Criteria:	Injury, mental health, alcohol, and drug-related diagnoses

Continuous Enrollment:	Refer to population definition
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NYU ED algorithm
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Measure 4.C.3	**Emergent Emergency Department (ED) Visits**
Definition:	Emergent ED Visits as a percentage of all classified ED visits using the NYU ED algorithm
Numerator:	Emergent ED visits
Denominator:	Total ED visits classified by the NYU algorithm
Exclusion Criteria:	Injury, mental health, alcohol, and drug-related diagnoses
Continuous Enrollment:	Refer to population definition
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NYU ED algorithm
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A

Measure 4.C.4	**Plan All-Cause Readmissions (PCR)**

Definition:	For beneficiaries 19 to 64, the number of acute inpatient stays during the measurement year that were followed by an unplanned acute readmission for any diagnosis within 30 days and the predicted probability of an acute readmission. The PCR measure is risk adjusted and reported as a ratio of observed-to-expected (O/E) hospital readmissions.
Numerator:	Acute readmissions for any diagnosis within 30 days of the Index Discharge Date. Exclude admissions with a principal diagnosis of pregnancy, a condition originating in the perinatal period, or planned admissions
Denominator:	All acute inpatient discharges for beneficiaries who had one or more discharges on or between January 1 and December 1 of the measurement year
Exclusion Criteria:	Hospital stays where the Index Admission Date is the same as the Index Discharge Date, where the beneficiary died during the stay, or with a principal diagnosis of pregnancy or a condition originating in the perinatal period
Continuous Enrollment:	365 days prior to the Index Discharge Date through 30 days after the Index Discharge Date. No more than 1 gap of 45 days or 1 month
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – PCR-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Risk adjustment at beneficiary level
Statistic to Be Tested:	Group-level ratios of observed-to-expected (O/E) readmissions
National Benchmark:	Medicaid Adult Core Set
Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only

Measure 4.C.5	**Diabetes Short-Term Complications Admission Rate**
Definition:	Number of inpatient hospital admissions for diabetes short-term complications (ketoacidosis, hyperosmolarity, or coma) per 100,000 beneficiary months for beneficiaries aged 19-64

Numerator:	All inpatient hospital admissions with ICD-10-CM principal diagnosis code for short-term complications of diabetes (ketoacidosis, hyperosmolarity, or coma)
Denominator:	Total number of months of enrollment for beneficiaries aged 19-64 during the measurement period
Exclusion Criteria:	Transfers; admissions with missing age, year, or principal diagnosis; obstetric admissions
Continuous Enrollment:	Refer to population definition
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	AHRQ – Prevention Quality Indicators (PQI)01-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group rates
National Benchmark:	Medicaid Adult Core Set
Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only

Measure 4.C.6	**Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate**
Definition:	Number of inpatient hospital admissions for chronic obstructive pulmonary disease (COPD) or asthma per 100,000 beneficiary months for beneficiaries aged 40 and older
Numerator:	All inpatient hospital admissions with an ICD-10-CM principal diagnosis code for COPD or asthma
Denominator:	Total number of months of enrollment for beneficiaries aged 40 and older during the measurement period
Exclusion Criteria:	Transfers; admissions with missing age, year, or principal diagnosis; obstetric admissions; diagnosis codes for cystic fibrosis and anomalies of the respiratory system
Continuous Enrollment:	Refer to population definition

Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	AHRQ – PQI05-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group rates
National Benchmark:	Medicaid Adult Core Set
Deviation(s):	Upper age limit truncated to 64. Paid claims only.

Measure 4.C.7	Heart Failure Admission Rate
Definition:	Number of inpatient hospital admissions for heart failure per 100,000 beneficiary months for beneficiaries aged 19-64
Numerator:	All inpatient hospital admissions with ICD-10-CM principal diagnosis code for heart failure
Denominator:	Total number of months of Medicaid enrollment for beneficiaries aged 19-64 during the measurement period
Exclusion Criteria:	Transfers; admissions with missing age, year, or principal diagnosis; obstetric admissions; admissions with any listed ICD-10-PCS procedure codes for cardiac procedure
Continuous Enrollment:	Refer to population definition
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	AHRQ – PQI08-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model

Statistic to Be Tested:	Difference in group rates
National Benchmark:	Medicaid Adult Core Set
Deviations(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only.

Measure 4.C.8	Asthma in Younger Adults Admission Rate
Definition:	Number of inpatient hospital admissions for asthma per 100,000 beneficiary months for beneficiaries ages 19 to 39
Numerator:	All inpatient hospital admissions for beneficiaries ages 19 to 39 with an ICD-10-CM principal diagnosis code of asthma
Denominator:	Total number of months of Medicaid enrollment for beneficiaries ages 19 to 39 during the measurement period
Exclusion Criteria:	Transfers; admissions with missing age, year, or principal diagnosis; obstetric admissions; diagnosis codes for cystic fibrosis and anomalies of the respiratory system
Continuous Enrollment:	Refer to population definition
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	AHRQ – PQI15-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group rates
National Benchmark:	Medicaid Adult Core Set
Deviations(s):	Age range lower limit increased to 19. Paid claims only

Measure 4.C.9	Rate of Follow-Up with a PCP after an ED Visit
Definition:	Rate of QHP beneficiaries per 1,000 with a PCP visit after an ED visit
Numerator:	ED visits that had a PCP visit within 7 days after an ED visit
Denominator:	Total Number of ED Visits

Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	DMS Homegrown
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group percentages
National Benchmark:	N/A
Deviation(s):	N/A

Measure 4.C.10	**Rate of Follow-Up with a PCP after a Hospitalization**
Definition:	Rate of QHP beneficiaries per 1,000 with a PCP visit after a hospitalization
Numerator:	Hospitalizations that had a PCP visit within 7 days after the hospitalization
Denominator:	Total Number of Hospitalizations
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	DMS Homegrown
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group percentages
National Benchmark:	N/A
Deviation(s):	N/A

Hypothesis 4.D. The ARHOME program will lead to QHP beneficiaries having better realized access to care over time and compared to Medicaid FFS beneficiaries.

Measure 4.D.1	Initiation and Engagement of Substance Use Disorder Treatment (IET)
Definition:	Percentage of beneficiaries aged 19 and older with a new episode of substance use disorder: • Total rate of Initiation of SUD treatment • Total rate of Engagement of SUD treatment
Numerator:	• Initiation of SUD treatment within 14 days of the SUD Episode Date – definition depends on whether the SUD Episode was an inpatient discharge or not. • Engagement of SUD treatment within 34 days after initiation: Identify all beneficiaries compliant for the initiation of SUD treatment numerator that have evidence of treatment– definition depends on whether the treatment was initiated via an inpatient admission.
Denominator:	Beneficiaries with an SUD episode aged 19 and older as of Dec 31 of the measurement year with continuous enrollment 194 days prior to the SUD Episode Date through 47 days after the SUD Episode Date (242 total days).
Exclusion Criteria:	• Exclude the beneficiary from the denominator for both indicators (Initiation of SUD Treatment and Engagement of SUD Treatment) if the initiation of treatment event is an inpatient stay with a discharge date after November 27 of the measurement year. • Beneficiaries in hospice or using hospice services anytime during the measurement year. • Beneficiaries with any SUD diagnosis history or SUD medication history in the 194-day period before the index date.
Continuous Enrollment:	No allowable gaps in continuous enrollment
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA –IET-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	• Difference in group means • Results by diagnosis cohorts for each age stratification
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates
Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only

Measure 4.D.2	Antidepressant Medication Management (AMM)
Definition:	Percentage of beneficiaries aged 19 and older who were treated with antidepressant medication, had a diagnosis of major depression, and who remained on an antidepressant medication treatment
Numerator:	Two rates: • Effective Acute Phase Treatment – at least 84 days of treatment with antidepressant medication beginning on the Index Prescription Start Date (IPSD) through 114 days after the IPSD. Allowable gaps total up to 31 days. • Effective continuation phase treatment – at least 180 days of treatment with antidepressant medication beginning on the IPSD through 231 days after IPSD. Allowable gaps total up to 52 days
Denominator:	Beneficiaries aged 19 and older as of April 30 of the measurement year with continuous enrollment of 105 days prior to the IPSD through 231 days after the IPSD
Exclusion Criteria:	N/A
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year and the year prior to the measurement year. Anchor date: IPSD
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA –AMM-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	• Difference in group means • Results reported at two rates
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates
Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only

Measure 4.D.3	Follow-Up After Hospitalization for Mental Illness (FUH)

Definition:	The percentage of discharges for beneficiaries 19 years of age and older who were hospitalized for treatment of selected mental illness diagnoses or intentional self-harm and who had a follow-up visit with a mental health practitioner. Two rates are reported: • Percentage of discharges for which the beneficiary received follow-up within 30 days of discharge • Percentage of discharges for which the beneficiary received follow-up within 7 days of discharge
Numerator:	A follow-up visit with a mental health practitioner within (30 or 7) days after discharge. Do not include visits that occur on the date of discharge.
Denominator:	An acute inpatient discharge with a principal diagnosis of mental illness or intentional self-harm on or between January 1 and December 1 of the measurement year
Exclusion Criteria:	Beneficiaries with hospice care. Discharges followed by readmission or direct transfer to a non-acute inpatient care setting within the 30-day follow-up period, regardless of principal diagnosis for the readmission.
Continuous Enrollment:	Date of discharge through 30 days after discharge. No allowable gaps in continuous enrollment
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – FUH-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set
Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only.

Measure 4.D.4	**Adherence to Antipsychotic Medications for Individuals with Schizophrenia (SAA)**

Definition:	The percentage of beneficiaries ages 19–64 with schizophrenia or schizoaffective disorder who were dispensed and remained on an antipsychotic medication for at least 80% of their treatment period during the measurement year
Numerator:	The number of beneficiaries who achieved a proportion of days covered (PDC) of at least 80% for their antipsychotic medications during the measurement year
Denominator:	Beneficiaries with at least one acute inpatient encounter with any diagnosis of schizophrenia or schizoaffective disorder, or at least two visits in an outpatient, intensive outpatient, partial hospitalization, ED or non-acute inpatient setting, on different dates of service, with any diagnosis of schizophrenia or schizoaffective disorder
Exclusion Criteria:	Beneficiaries with hospice care. Beneficiaries with a diagnosis of dementia, or who did not have at least two antipsychotic medication dispensing events, during the measurement year
Continuous Enrollment:	The measurement year. No more than one gap in enrollment of up to 45 days or 1 month during each year of continuous enrollment. Anchor date: December 31 of the measurement year
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – SAA-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates
Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only

Measure 4.D.5	**Diabetes Screening for People with Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)**
Definition:	Percentage of beneficiaries aged 19-64 with schizophrenia, schizoaffective disorder, or bipolar disorder who were dispensed an antipsychotic medication and had a diabetes screening test during the measurement year

Numerator:	A glucose test or an HbA1c test performed during the measurement year, as defined by claim/encounter or automated laboratory data
Denominator:	Beneficiaries aged 19-64 as of Dec 31 of the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year and the year prior to the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – SSD-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates
Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only

Measure 4.D.6	**Use of Opioids at High Dosage in Persons Without Cancer (OHD)**
Definition:	The percentage of beneficiaries aged 19-64 who received prescriptions for opioids with an average daily dosage greater than or equal to 90 milligram equivalents (MME) over a period of 90 days or more
Numerator:	Any beneficiary in the denominator with an average daily dosage >= 90 MMEs during the opioid episode
Denominator:	Beneficiaries aged 19-64 in the measurement year
Exclusion Criteria:	Beneficiaries with a cancer diagnosis or in hospice
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 31 days or 1 month during the measurement year and the year prior to the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	MMIS and QHP claims data

Measure Steward(s):	NCQA – OHD-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	• Difference in group means • Rate (num/den)*100
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates
Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only.

Measure 4.D.7	**Concurrent Use of Opioids and Benzodiazepines (COB)**
Definition:	Percentage of beneficiaries aged 19-64 with concurrent use of prescription opioids and benzodiazepines
Numerator:	The number of beneficiaries in the denominator with • Two or more prescription claims for any benzodiazepine with different dates of service, AND • Concurrent use of opioids and benzodiazepines for 30 or more cumulative days
Denominator:	Beneficiaries aged 19-64 as of Jan 1 of the measurement year
Exclusion Criteria:	Beneficiaries with a cancer diagnosis or in hospice
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 31 days or 1 month during the measurement year and the year prior to the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – COB-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	• Difference in group means • Rate (num/den)*100
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates

Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only.

Measure 4.D.8	Use of Pharmacotherapy for Opioid Use Disorder (OUD)
Definition:	Percentage of beneficiaries aged 19 to 64 with an opioid disorder (OUD) who filled a prescription for or were administered or dispensed an FDA-approved medication for the disorder during the measurement year
Numerator:	• Total beneficiaries with at least one prescription filled or who were administered or dispensed an FDA-approved medication for OUD during the measurement year through use of pharmacy claims or through HCPCS codes • Beneficiaries with at least one prescription for buprenorphine at any point during the measurement year • Beneficiaries with at least one prescription for oral naltrexone at any point during the measurement year • Beneficiaries with at least one prescription for long-acting, injectable naltrexone at any point during the measurement year • Beneficiaries with at least one prescription for Methadone at any point during the measurement year
Denominator:	Beneficiaries aged 19 to 64 in the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	No allowable gap in coverage during continuous enrollment period
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – OUD-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	• Difference in group means • Report five rates – rates are calculated by dividing the number of beneficiaries with at least one prescription by the number of beneficiaries with at least one encounter associated with a diagnosis of opioid abuse, dependence, or remission
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates
Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only

Measure 4.D.9	Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence (FUA)
Definition:	Percentage of emergency department (ED) visits for beneficiaries aged 19-64 with a principal diagnosis of alcohol or other drug (AOD) abuse or dependence who had a follow-up visit for AOD abuse or dependence
Numerator:	• 30-day follow-up – a follow-up visit with any practitioner, with a principal diagnosis of AOD abuse or dependence within 30 days after the ED visit. Include visits that occur on the date of the ED visit • 7-day follow-up - a follow-up visit with any practitioner, with a principal diagnosis of AOD abuse or dependence within 7 days after the ED visit. Include visits that occur on the date of the ED visit
Denominator:	Beneficiaries Aged 19-64 as of the ED visit with continuous enrollment from the date of ED visit through 30 days after the ED visit
Exclusion Criteria:	N/A
Continuous Enrollment:	No allowable gap in coverage during continuous enrollment period
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – FUA-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	• Difference in group means • Report two rates
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates
Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only.

Measure 4.D.10	Follow-Up After Emergency Department Visit for Mental Illness (FUM)
Definition:	Percentage of emergency department (ED) visits for beneficiaries aged 19-64 with a principal diagnosis of mental illness or intentional self-harm and who had a follow-up visit for mental illness

Numerator:	• 30-day follow-up – a follow-up visit a principal diagnosis of mental health disorder or with a principal diagnosis of intentional self-harm and any diagnosis of mental health disorder within 30 days after the ED visit. Include visits that occur on the date of the ED visit • 7-day follow-up - a follow-up visit with a principal diagnosis of a mental health disorder or with a principal diagnosis of intentional self-harm and any diagnosis of a mental health disorder within 7 days after the ED visit. Include visits that occur on the date of the ED visit
Denominator:	Beneficiaries aged 19-64 as of the date of ED visit with continuous enrollment from date of the ED visit through 30 days after the ED visit
Exclusion Criteria:	N/A
Continuous Enrollment:	No allowable gap in coverage during continuous enrollment period
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – FUM-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	• Difference in group means • Report two rates
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates
Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only.

Measure 4.D.11	**Persistence of Beta-Blocker Treatment After a Heart Attack (PBH)**
Definition:	The percentage of beneficiaries aged 19-64 during the measurement year who were hospitalized and discharged from July 1 of the year prior to the measurement year to June 30 of the measurement year with a diagnosis of acute myocardial infarction (AMI) and who received persistent beta-blocker treatment for six months after discharge
Numerator:	At least 135 days of treatment with beta-blockers during the 180-day measurement interval. This allows gaps in medication treatment of up to a total of 45 days during the 180-day measurement interval

Denominator:	Beneficiaries with an acute inpatient discharge with any diagnosis of AMI from July 1 of the year prior to the measurement year through June 30 of the measurement year. If a beneficiary has more than one episode of AMI that meets the event/ diagnosis criteria, include only the first discharge
Exclusion Criteria:	Beneficiaries with hospice care. Hospitalizations in which the beneficiary had a direct transfer to a non-acute inpatient care setting for any diagnosis
Continuous Enrollment:	Discharge date through 179 days after discharge. No more than one gap in enrollment of up to 45 days or 1 month within the 180 days of the event. Anchor date is discharge date
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – HEDIS PBH
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	HEDIS Medicaid national rates
Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only

Measure 4.D.12	Annual Monitoring for Patients on Persistent Medications (MPM)
Definition:	The percentage of beneficiaries aged 19-64 who received at least 180 treatment days of ambulatory medication therapy for a select therapeutic agent during the measurement year and at least one therapeutic monitoring event for the therapeutic agent in the measurement year. Each of the two rates reported separately and as a total rate. • Annual monitoring for beneficiaries on angiotensin converting enzyme (ACE) inhibitors or angiotensin receptor blockers (ARB) • Annual monitoring for beneficiaries on diuretics • Total rate
Numerator:	Beneficiaries with at least one serum potassium and a serum creatinine therapeutic monitoring test in the measurement year
Denominator:	Beneficiaries on persistent medications (i.e., beneficiaries who received at least 180 treatment days of ambulatory medication in the measurement year)

Exclusion Criteria:	Beneficiaries with hospice care
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during each measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – MPM-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates
Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only.

Measure 4.D.13	**Annual HIV/AIDS Viral Load Test**
Definition:	Percentage of beneficiaries with a diagnosis of HIV with at least one HIV viral load test during the measurement year
Numerator:	The number of beneficiaries in the denominator with an HIV viral load test during the measurement year
Denominator:	Beneficiaries who had a primary or secondary diagnosis of HIV during the measurement year
Exclusion Criteria:	Beneficiaries with hospice care
Continuous Enrollment:	No more than one gap in enrollment of up to 45 days or 1 month during the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	DMS Homegrown

Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A

Measure 4.D.14	**C-Section Rate**
Definition:	Percentage of beneficiaries with a delivery who delivered via C-section
Numerator:	Beneficiaries who delivered via C-section
Denominator:	Beneficiaries with a single live delivery
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	DMS Homegrown
Comparison Population:	Medicaid FFS pregnancy group
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A

Measure 4.D.15	**Contraceptive Care – Postpartum Women Ages 21–44 (CCP)**
Definition:	Among women aged 21 to 44 who had a live birth, the percentage that: • Were provided a most effective or moderately effective method of contraception within 3 and 60 days of delivery • Were provided a long-acting reversible method of contraception (LARC) within 3 and 60 days of delivery

Numerator:	• Rate 1: Among women aged 21 to 44 who had a live birth in the measurement year who was provided a most or moderately effective method of contraception • Rate 2: Among women aged 21 to 44 who had a live birth in the measurement year who was provided a LARC method
Denominator:	Women aged 21 to 44 as of Dec 31 of the measurement year who had a live birth with a continuous enrollment during the measurement year enrolled from the date of delivery to 60 days postpartum
Exclusion Criteria:	Women with a live birth occurring after Oct 31 will be excluded from the denominator because they may not have an opportunity to receive contraception in the postpartum period
Continuous Enrollment:	No allowable gaps in the continuous enrollment period
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – CCP-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	• Difference in group means • Two rates
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates
Deviation(s):	Paid claims only

Measure 4.D.16	**Contraceptive Care – All Women Ages 21–44 (CCW)**
Definition:	Among women aged 21 to 44 at risk of unintended pregnancy, the percentage that: • Were provided a most effective or moderately effective method of contraception • Were provided a long-acting reversible method of contraception (LARC)
Numerator:	• Rate 1: Among women aged 21 to 44 who had a live birth in the measurement year who was provided a most or moderately effective method of contraception • Rate 2: Among women aged 21 to 44 who had a live birth in the measurement year who was provided a LARC method
Denominator:	Women aged 21 to 44 as of Dec 31 of the measurement year
Exclusion Criteria:	N/A

Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year and the year prior to the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – CCW-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	• Difference in group means • Two rates
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates
Deviation(s):	Paid claims only

Measure 4.D.17	Statin Therapy for Patients with Diabetes (SPD)
Definition:	The percentage of beneficiaries 40–64 years of age during the measurement year with diabetes who do not have clinical atherosclerotic cardiovascular disease (ASCVD) who were dispensed at least one statin medication of any intensity during the measurement year.
Numerator:	Beneficiaries who were dispensed at least one statin medication of any intensity during the measurement year
Denominator:	Beneficiaries 40–64 years of age during the measurement year with diabetes who do not have clinical atherosclerotic cardiovascular disease (ASCVD)
Exclusion Criteria:	Beneficiaries with hospice care. Beneficiaries with cardiovascular disease identified by event or diagnosis; diagnosis of pregnancy; in vitro fertilization; dispensed clomiphene; ESRD without telehealth; cirrhosis; or myalgia, myositis, myopathy, or rhabdomyolysis
Continuous Enrollment:	The measurement year and the year prior to the measurement year. No more than one gap in enrollment of up to 45 days or 1 month during each year of continuous enrollment. Anchor date: December 31 of the measurement year.
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – Healthcare Effectiveness Data and Information Set (HEDIS) SPD
Comparison Population:	Medicaid FFS comparison population

Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	HEDIS Medicaid national rates
Deviation(s):	Upper end of age range truncated from 75 to 64. Paid claims only

Measure 4.D.18	**Comprehensive Diabetes Care: Hemoglobin A1c Testing (HA1C)**
Definition:	The percentage of beneficiaries aged 19-64 with diabetes (type 1 and type 2) who had Hemoglobin A1c (HbA1c) testing performed
Numerator:	Beneficiaries with an HbA1c test performed during the measurement year
Denominator:	Beneficiaries identified as having diabetes during the measurement year or the year prior to the measurement year
Exclusion Criteria:	Beneficiaries with hospice care
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – HA1C-AD in Medicaid Adult Core Set
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates
Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only

Measure 4.D.19	**Adults' Access to Preventive/Ambulatory Services (AAP)**

Definition:	The percentage of beneficiaries aged 20-64 who had an ambulatory or preventive care visit during the measurement year
Numerator:	One or more ambulatory or preventive care visits during the measurement year
Denominator:	The eligible population: aged 20-64 as of December 31 of the measurement year
Exclusion Criteria:	Beneficiaries with hospice care
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA - HEDIS AAP
Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviation(s):	Upper end of age range truncated to 64. Paid claims only

Measure 4.D.20	**Percent of QHP Beneficiaries Participating in HII Program**
Definition:	QHP beneficiaries participating in the HII Program
Numerator:	Number of QHP beneficiaries participating in the HII program
Denominator:	Total QHP beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	QHP participation data
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A

Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A
Deviation(s):	N/A

Hypothesis 4.E. Point-of-service copayments will not lead to QHP beneficiaries subject to copays to have worse quality of care compared to QHP beneficiaries who are not subject to copays.

Measure 4.E.1	**Antidepressant Medication Management (AMM)**
Definition:	Percentage of QHP beneficiaries subject to copays aged 19-64 who were treated with antidepressant medication, had a diagnosis of major depression, and who remained on an antidepressant medication treatment
Numerator:	Two rates: • Effective Acute Phase Treatment – at least 84 days of treatment with antidepressant medication beginning on the Index Prescription Start Date (IPSD) through 114 days after the IPSD. Allowable gaps total up to 31 days. • Effective continuation phase treatment – at least 180 days of treatment with antidepressant medication beginning on the IPSD through 231 days after IPSD. Allowable gaps total up to 52 days
Denominator:	Beneficiaries subject to copays aged 19-64 as of April 30 of the measurement year with continuous enrollment of 105 days prior to the IPSD through 231 days after the IPSD
Exclusion Criteria:	N/A
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year and the year prior to the measurement year. Anchor date: IPSD
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA –AMM-AD in Medicaid Adult Core Set
Comparison Population:	QHP beneficiaries not subject to copays
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	• Difference in group means • Results reported at two rates

National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates
Deviation(s):	Age range lower limit increased to 19 and the upper limit truncated to 64. Paid claims only

Measure 4.E.2	**Follow-Up After Hospitalization for Mental Illness (FUH)**
Definition:	The percentage of discharges for QHP beneficiaries aged 19-64 subject to copays who were hospitalized for treatment of selected mental illness diagnoses or intentional self-harm and who had a follow-up visit with a mental health practitioner. Two rates are reported: • Percentage of discharges for which the beneficiary received follow-up within 30 days of discharge • Percentage of discharges for which the beneficiary received follow-up within 7 days of discharge
Numerator:	A follow-up visit with a mental health practitioner within (30 or 7) days after discharge. Do not include visits that occur on the date of discharge.
Denominator:	An acute inpatient discharge for QHP beneficiaries subject to copays with a principal diagnosis of mental illness or intentional self-harm on or between January 1 and December 1 of the measurement year
Exclusion Criteria:	Beneficiaries with hospice care. Discharges followed by readmission or direct transfer to a non-acute inpatient care setting within the 30-day follow-up period, regardless of principal diagnosis for the readmission.
Continuous Enrollment:	Date of discharge through 30 days after discharge. No allowable gaps in continuous enrollment
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – FUH-AD in Medicaid Adult Core Set
Comparison Population:	QHP beneficiaries not subject to copays
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set
Deviation(s):	Age range lower limit increased to 19 and the upper limit truncated to 64. Paid claims only

Measure 4.E.3	Adherence to Antipsychotic Medications for Individuals with Schizophrenia (SAA)
Definition:	The percentage of QHP beneficiaries aged 19–64 subject to copays with schizophrenia or schizoaffective disorder who were dispensed and remained on an antipsychotic medication for at least 80% of their treatment period during the measurement year
Numerator:	The number of beneficiaries who achieved a proportion of days covered (PDC) of at least 80% for their antipsychotic medications during the measurement year
Denominator:	Beneficiaries with at least one acute inpatient encounter with any diagnosis of schizophrenia or schizoaffective disorder, or at least two visits in an outpatient, intensive outpatient, partial hospitalization, ED or non-acute inpatient setting, on different dates of service, with any diagnosis of schizophrenia or schizoaffective disorder who are subject to copays.
Exclusion Criteria:	Beneficiaries with hospice care. Beneficiaries with a diagnosis of dementia, or who did not have at least two antipsychotic medication dispensing events, during the measurement year
Continuous Enrollment:	The measurement year. No more than one gap in enrollment of up to 45 days or 1 month during each year of continuous enrollment. Anchor date: December 31 of the measurement year
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – SAA-AD in Medicaid Adult Core Set
Comparison Population:	QHP beneficiaries not subject to copays
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates
Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only

Measure 4.E.4	Use of Opioids at High Dosage in Persons Without Cancer (OHD)
Definition:	The percentage of QHP beneficiaries subject to copays aged 19-64 who received prescriptions for opioids with an average daily dosage greater than or equal to 90 milligram equivalents (MME) over a period of 90 days or more

Numerator:	Any beneficiary in the denominator with an average daily dosage >= 90 MMEs during the opioid episode
Denominator:	QHP beneficiaries subject to copays aged 19-64 in the measurement year
Exclusion Criteria:	Beneficiaries with a cancer diagnosis or in hospice
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 31 days or 1 month during the measurement year and the year prior to the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – OHD-AD in Medicaid Adult Core Set
Comparison Population:	QHP beneficiaries not subject to copays
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	• Difference in group means • Rate (num/den)*100
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates
Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only.

Measure 4.E.5	Concurrent Use of Opioids and Benzodiazepines (COB)
Definition:	Percentage of QHP beneficiaries subject to copays aged 19-64 concurrent use of prescription opioids and benzodiazepines
Numerator:	The number of beneficiaries in the denominator with • Two or more prescription claims for any benzodiazepine with different dates of service, AND Concurrent use of opioids and benzodiazepines for 30 or more cumulative days
Denominator:	QHP beneficiaries who are subject to copays aged 19-64 in the measurement year
Exclusion Criteria:	Beneficiaries with a cancer diagnosis or in hospice
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 31 days or 1 month during the measurement year and the year prior to the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	MMIS and QHP claims data

Measure Steward(s):	NCQA – COB-AD in Medicaid Adult Core Set
Comparison Population:	QHP beneficiaries not subject to copays
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	• Difference in group means • Rate (num/den)*100
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates
Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only.

Measure 4.E.6	**Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence (FUA)**
Definition:	Percentage of emergency department (ED) visits for QHP beneficiaries subject to copays aged 19-64 with a principal diagnosis of alcohol or other drug (AOD) abuse or dependence who had a follow-up visit for AOD abuse or dependence
Numerator:	• 30-day follow-up – a follow-up visit with any practitioner, with a principal diagnosis of AOD abuse or dependence within 30 days after the ED visit. Include visits that occur on the date of the ED visit • 7-day follow-up - a follow-up visit with any practitioner, with a principal diagnosis of AOD abuse or dependence within 7 days after the ED visit. Include visits that occur on the date of the ED visit
Denominator:	QHP beneficiaries subject to copays aged 19-64 as of the ED visit with continuous enrollment from the date of ED visit through 30 days after the ED visit
Exclusion Criteria:	N/A
Continuous Enrollment:	No allowable gap in coverage during continuous enrollment period
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – FUA-AD in Medicaid Adult Core Set
Comparison Population:	QHP beneficiaries not subject to copays
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	• Difference in group means • Report two rates
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates

Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only.

Measure 4.E.7	**Follow-Up After Emergency Department Visit for Mental Illness (FUM)**
Definition:	Percentage of emergency department (ED) visits for QHP beneficiaries subject to copays aged 19-64 with a principal diagnosis of mental illness or intentional self-harm and who had a follow-up visit for mental illness
Numerator:	• 30-day follow-up – a follow-up visit a principal diagnosis of mental health disorder or with a principal diagnosis of intentional self-harm and any diagnosis of mental health disorder within 30 days after the ED visit. Include visits that occur on the date of the ED visit • 7-day follow-up - a follow-up visit with a principal diagnosis of a mental health disorder or with a principal diagnosis of intentional self-harm and any diagnosis of a mental health disorder within 7 days after the ED visit. Include visits that occur on the date of the ED visit
Denominator:	QHP beneficiaries subject to copays aged 19-64 as of the date of ED visit with continuous enrollment from date of the ED visit through 30 days after the ED visit
Exclusion Criteria:	N/A
Continuous Enrollment:	No allowable gap in coverage during continuous enrollment period
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – FUM-AD in Medicaid Adult Core Set
Comparison Population:	QHP beneficiaries not subject to copays
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	• Difference in group means • Report two rates
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates
Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only.

Measure 4.E.8	**Persistence of Beta-Blocker Treatment After a Heart Attack (PBH)**

Definition:	The percentage of QHP beneficiaries subject to copays, aged 19-64 during the measurement year who were hospitalized and discharged from July 1 of the year prior to the measurement year to June 30 of the measurement year with a diagnosis of acute myocardial infarction (AMI) and who received persistent beta-blocker treatment for six months after discharge
Numerator:	At least 135 days of treatment with beta-blockers during the 180-day measurement interval. This allows gaps in medication treatment of up to a total of 45 days during the 180-day measurement interval
Denominator:	QHP beneficiaries subject to copays with an acute inpatient discharge with any diagnosis of AMI from July 1 of the year prior to the measurement year through June 30 of the measurement year. If a beneficiary has more than one episode of AMI that meets the event/ diagnosis criteria, include only the first discharge
Exclusion Criteria:	Beneficiaries with hospice care. Hospitalizations in which the beneficiary had a direct transfer to a non-acute inpatient care setting for any diagnosis
Continuous Enrollment:	Discharge date through 179 days after discharge. No more than one gap in enrollment of up to 45 days or 1 month within the 180 days of the event. Anchor date is discharge date
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – HEDIS PBH
Comparison Population:	QHP beneficiaries not subject to copays
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	HEDIS Medicaid national rates
Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only

Measure 4.E.9	**Annual Monitoring for Patients on Persistent Medications (MPM)**

Definition:	The percentage of QHP beneficiaries aged 19-64 subject to copays who received at least 180 treatment days of ambulatory medication therapy for a select therapeutic agent during the measurement year and at least one therapeutic monitoring event for the therapeutic agent in the measurement year. Each of the two rates reported separately and as a total rate. • Annual monitoring for beneficiaries on angiotensin converting enzyme (ACE) inhibitors or angiotensin receptor blockers (ARB) • Annual monitoring for beneficiaries on diuretics • Total rate
Numerator:	Beneficiaries with at least one serum potassium and a serum creatinine therapeutic monitoring test in the measurement year
Denominator:	QHP beneficiaries subject to copays on persistent medications (i.e., beneficiaries who received at least 180 treatment days of ambulatory medication in the measurement year)
Exclusion Criteria:	Beneficiaries with hospice care
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during each measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – MPM-AD in Medicaid Adult Core Set
Comparison Population:	QHP beneficiaries not subject to copays
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	Medicaid Adult Core Set and HEDIS Medicaid national rates
Deviation(s):	Age range lower limit increased to 19 and upper limit truncated to 64. Paid claims only.

Measure 4.E.10	**Annual HIV/AIDS Viral Load Test**

Definition:	Percentage of QHP beneficiaries subject to copays with a diagnosis of HIV with at least one HIV viral load test during the measurement year
Numerator:	The number of beneficiaries in the denominator with an HIV viral load test during the measurement year
Denominator:	QHP beneficiaries who are subject to copays who had a primary or secondary diagnosis of HIV during the measurement year
Exclusion Criteria:	Beneficiaries with hospice care
Continuous Enrollment:	No more than one gap in enrollment of up to 45 days or 1 month during the measurement year. Anchor date: December 31 of the measurement year.
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	DMS Homegrown
Comparison Population:	QHP beneficiaries not subject to copays
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A

Measure 4.E.11	**Statin Therapy for Patients with Diabetes (SPD)**
Definition:	The percentage of QHP beneficiaries 40–64 years of age who are subject to copays during the measurement year with diabetes who do not have clinical atherosclerotic cardiovascular disease (ASCVD) who were dispensed at least one statin medication of any intensity during the measurement year.
Numerator:	QHP beneficiaries who were dispensed at least one statin medication of any intensity during the measurement year
Denominator:	QHP beneficiaries who are subject to copays and are 40–64 years of age during the measurement year with diabetes who do not have clinical atherosclerotic cardiovascular disease (ASCVD)

Exclusion Criteria:	Beneficiaries with hospice care. Beneficiaries with cardiovascular disease identified by event or diagnosis; diagnosis of pregnancy; in vitro fertilization; dispensed clomiphene; ESRD without telehealth; cirrhosis; or myalgia, myositis, myopathy, or rhabdomyolysis
Continuous Enrollment:	The measurement year and the year prior to the measurement year. No more than one gap in enrollment of up to 45 days or 1 month during each year of continuous enrollment. Anchor date: December 31 of the measurement year.
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – Healthcare Effectiveness Data and Information Set (HEDIS) SPD
Comparison Population:	QHP beneficiaries not subject to copays
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	HEDIS Medicaid national rates
Deviation(s):	Upper end of age range truncated from 75 to 64. Paid claims only

Hypothesis 4.F. Among QHP beneficiaries with income at or below 20% FPL, the Economic Independence Initiative will lead to an increase in income to above 20% FPL over time.

Measure 4.F.1	**Percent of QHP Beneficiaries at or under 20% FPL at initial measurement that are above 20% FPL at follow up measurement, among those still enrolled at the follow-up measurement**
Definition:	Percentage of beneficiaries initially at 20% FPL who are above 20% FPL at follow-up
Numerator:	Number of beneficiaries above 20% FPL at follow up
Denominator:	All beneficiaries below 20% FPL at initial measurement who participated in the Economic Independence Initiative and who are still enrolled at follow-up
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	DMS Homegrown

Comparison Population:	N/A
Comparison Method(s):	Pre-post comparison
Statistic to Be Tested:	Paired t-test
National Benchmark:	N/A
Deviation(s):	N/A

Hypothesis 4.G. Among QHP beneficiaries with income at or below 100% FPL, the Economic Independence Initiative will lead to an increase in income to about 100% FPL over time.

Measure 4.G.1	**Percent of Beneficiaries at or under 100% FPL at initial measurement that are above 100% FPL at follow up measurement, among those still enrolled at the follow-up measurement**
Definition:	Percentage of beneficiaries initially at or under 100% FPL who are above 100% FPL at follow-up
Numerator:	Number of beneficiaries above 100% FPL at follow up
Denominator:	All beneficiaries at or below 100% FPL at initial measurement who are still enrolled at follow-up
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	Pre-post comparison
Statistic to Be Tested:	Paired t-test
National Benchmark:	N/A
Deviation(s):	N/A

Hypothesis 4.H. Among QHP beneficiaries who disenroll from ARHOME, the Economic Independence Initiative will lead to an increase in the percent that disenroll due to increased income over time.

Measure 4.H.1	**Percent of Beneficiaries that disenroll due to high income**

Definition:	Percentage of beneficiaries initially below 138% FPL who disenroll due to income above 138% FPL
Numerator:	Number of beneficiaries above 138% FPL
Denominator:	All beneficiaries below 138% FPL at initial measurement and who are still enrolled
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Closure list data
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A
Note(s):	May be impacted by COVID-19 and Public Health Emergency changes

Measure 4.H.2	**Percent of disenrolled Beneficiaries that take up private health insurance**
Definition:	Percent of disenrolled beneficiaries due to private health insurance enrollment
Numerator:	Number of QHP beneficiaries who disenroll and have private health insurance
Denominator:	QHP beneficiaries who disenrolled during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	APCD data
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A

Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A
Note(s):	May be impacted by COVID-19 and Public Health Emergency changes

Measure 4.H.3	**Percent of disenrolled Beneficiaries that take up private health insurance and maintain the same health insurance plan they had in ARHOME**
Definition:	Percent of disenrolled beneficiaries due to private health insurance enrollment that remain on the same insurance that they had during ARHOME
Numerator:	Number of QHP beneficiaries who disenroll and remain on the same ARHOME private health insurance
Denominator:	QHP beneficiaries who disenrolled during the measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	APCD data
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A
Note(s):	May be impacted by COVID-19 and Public Health Emergency changes

Hypothesis 4.I. The Economic Independence Initiative will lead to an increase in the percent of QHP beneficiaries that enroll in education and training programs over time.

Measure 4.I.1	**Percent of QHP Beneficiaries that Participated in Education and Training Programs Over Time**

Definition:	Percent of QHP beneficiaries that participated in employment, employment training, or post-secondary education anytime
Numerator:	Number of QHP beneficiaries that participated in employment, employment training, or post-secondary education anytime
Denominator:	Total number of QHP beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	At least 6 months
Data Source(s):	Statewide Longitudinal Data System, MMIS eligibility, and enrollment files
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A
Deviation(s):	N/A

Measure 4.I.2	**Percent of QHP Beneficiaries Participating in the EII Program**
Definition:	QHP beneficiaries participating in the EII Program
Numerator:	Number of QHP beneficiaries participating in the EII Program
Denominator:	Total QHP beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	QHP participation data
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A

Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A
Deviation(s):	N/A

Hypothesis 4.J. The point-of-service copayments will lead to QHP beneficiaries subject to copays having lower overall healthcare use compared to similar QHP beneficiaries not subject to copays.

Measure 4.J.1	Beneficiary Copayment Healthcare Use Impact
Definition:	Total claims paid per beneficiary per measurement year
Numerator:	Total claims paid
Denominator:	Total beneficiaries
Exclusion Criteria:	N/A
Continuous Enrollment:	Refer to population definition
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	DMS Homegrown
Comparison Population:	QHP beneficiaries not subject to copays
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A
Deviation(s):	N/A

Hypothesis 4.K. The shorter period of retroactive eligibility, the premium assistance model, the point-of-service copayments, the Health Improvement Initiative, and the other financial discipline components will lead to the rate of growth in per member per month (PMPM) QHP costs being no higher than the rate of growth in PMPM costs in Arkansas Medicaid FFS.

Measure 4.K.1	PMPM Growth Rate
Definition:	Coverage costs through QHPs remained below the budget neutrality cap and less than the growth rate of Arkansas Medicaid FFS
Numerator:	N/A
Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	DMS Financial Data, Form CMS-64, Program Annual Reports
Measure Steward(s):	DMS Homegrown
Comparison Population:	Arkansas Medicaid FFS
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive analysis
National Benchmark:	N/A

Measure 4.K.2	Total Health Expenditure Growth Rate
Definition:	Total health expenditure (THE) growth rate of QHP was less than the growth rate of Arkansas Medicaid FFS
Numerator:	Total health expenditures at end of measurement year.
Denominator:	Total health expenditures at end of the year prior to the measurement year.
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	DMS Financial Data, Form CMS-64, Program Annual Reports
Measure Steward(s):	DMS Homegrown
Comparison Population:	Arkansas Medicaid FFS
Comparison Method(s):	2-Sample t-test (Pre-post comparison)
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A

Measure 4.K.3	Administrative Cost Growth Rate
Definition:	Administrative cost (AC) growth rate of QHP was less than the growth rate of Arkansas Medicaid FFS.
Numerator:	Administrative costs at end of measurement year.
Denominator:	Administrative costs at end of the year prior to the measurement year.
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	DMS Financial Data, Form CMS-64, Program Annual Reports
Measure Steward(s):	DMS Homegrown
Comparison Population:	Arkansas Medicaid FFS
Comparison Method(s):	2-Sample t-test (Pre-post comparison)
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A

Hypothesis 4.L. QHP beneficiaries with a shorter period of retroactive eligibility will be healthier at enrollment than Medicaid FFS beneficiaries with a longer period of retroactive eligibility.

Measure 4.L.1	Average Charlson Comorbidity Index Score
Definition:	Average Charlson Comorbidity Index Score
Numerator:	Charlson Comorbidity Index Score for newly enrolled QHP beneficiaries
Denominator:	Total new beneficiaries during measurement year
Exclusion Criteria:	N/A
Continuous Enrollment:	No more than 1 gap in continuous enrollment of up to 45 days or 1 month during the measurement year
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	Charlson Comorbidity Index

Comparison Population:	Medicaid FFS comparison population
Comparison Method(s):	• IPTW/CEM weighting • Beneficiary-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	N/A

Hypothesis 4.M. The cessation of monthly premium for QHP beneficiaries at 101-138% FPL will lead to a faster rate of growth in PMPM QHP costs in Years 2-5 compared to Year 1.

Measure 4.M.1	**QHP PMPM Growth Rate**
Definition:	PMPM growth rate for QHP beneficiaries at 101-138% FPL in Years 2-5
Numerator:	Total QHP costs
Denominator:	Total annual PMPM costs
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	DMS Financial Data, Form CMS-64, Program Annual Reports
Measure Steward(s):	DMS Homegrown
Comparison Population:	QHP beneficiaries at 101-138% FPL in Year 1
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A

Hypothesis 4.N. The premium assistance model will lead to a lower rate of increase of PMPM premiums in the Arkansas Marketplace compared to states that expanded Medicaid and provide coverage through means other than premium assistance.

Measure 4.N.1	Arkansas Program Characteristics
Definition:	Arkansas-specific health insurance exchange program characteristics: number of plans, actuarial risk, average 2nd lowest premium cost
Numerator:	N/A
Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Arkansas Insurance Department
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A

Measure 4.N.2	Arkansas Regional Average Program Characteristics
Definition:	Arkansas-specific health insurance exchange program characteristics: number of plans, actuarial risk, average 2nd lowest premium cost by Arkansas region
Numerator:	N/A
Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Arkansas Insurance Department
Measure Steward(s):	DMS Homegrown
Comparison Population:	N/A

Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A

Measure 4.N.3	**Other Medicaid Expansion States' Program Characteristics**
Definition:	Other Medicaid expansion states' health insurance exchange program characteristics: number of plans, actuary risk, 2nd lowest premium cost by expansion state
Numerator:	N/A
Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Arkansas Insurance Department
Measure Steward(s):	DMS Homegrown
Comparison Population:	Other Medicaid expansion states
Comparison Method(s):	Annual Tables
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	N/A

Measure 4.N.4	**Arkansas Marketplace PMPM Growth Rate**
Definition:	Marketplace average benchmark premiums
Numerator:	N/A
Denominator:	N/A

Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	https://www.kff.org/health-reform/state-indicator/marketplace-average-benchmark-premiums/
Measure Steward(s):	Kaiser Family Foundation
Comparison Population:	Other Medicaid expansion states
Comparison Method(s):	Annual chart
Statistic to Be Tested:	Descriptive analysis
National Benchmark:	N/A

Hypothesis 4.O. The premium assistance model will lead to a lower rate of increase in average commercial insurance premiums in Arkansas compared to states that expanded Medicaid and provide coverage through means other than premium assistance.

Measure 4.O.1	**Arkansas Commercial Insurance Premium Rates**
Definition:	Average annual single premium per enrolled employee for employer-based health insurance
Numerator:	N/A
Denominator:	N/A
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	https://www.kff.org/other/state-indicator/single-coverage/
Measure Steward(s):	Kaiser Family Foundation

Comparison Population:	Other Medicaid expansion states
Comparison Method(s):	Annual chart
Statistic to Be Tested:	Descriptive analysis
National Benchmark:	N/A

5.5 ACRONYMS

AAP: Adults' Access to Preventive/Ambulatory Health Services
ABP: Alternative Benefit Plan
ACA: Affordable Care Act
ACE: Angiotensin Converting Enzyme
ACS: American Community Survey
AD: Adult
AHCPII: Arkansas Health Care Payment Improvement Initiative
AHRQ: Agency for Healthcare Research and Quality
AID: Arkansas Insurance Department
AIDS: Acquired Immunodeficiency Syndrome
AMB: Ambulatory
AMI: Acute Myocardial Infarction
APCD: All Payer Claims Database
ARB: Angiotensin Receptor Blockers
ARIES: Arkansas Integrated Eligibility System
ASCVD: Atherosclerotic Cardiovascular Disease
ATE: Average Treatment Effect
ATT: Average Effect on the Treated
AWC: Adolescent Well-Care
BCS: Breast Cancer Screening
BESS: Beneficiary Engagement Satisfaction Survey
BH: Behavioral Health
BIA: Budget Impact Analyses
BRFSS: Behavioral Risk Factor Surveillance System
CABG: Coronary Artery Bypass Graft
CAD: Coronary Artery Disease
CAHPS: Consumer Assessment of Health Plan Survey
CCIIO: Center for Consumer Information and Insurance Oversight
CCS: Cervical Cancer Screening

CDC: Centers for Disease Control and Prevention
CDF: Cumulative Distribution Function
CEA: Cost Effectiveness Analysis
CEM: Coarsened Exact Matching
CDF: Cumulative Distribution Function
CHF: Congestive Heart Failure
CHIP: Children's Health Insurance Program
CMS: Centers for Medicare & Medicaid Services
COPD: Chronic Obstructive Pulmonary Disease
CPT: Current Procedural Technology
CSR: Cost-Sharing Reduction
DHHS: Department of Health and Human Services
DHS: Department of Human Services
DiD: Difference-in-Difference
DIS: Department of Information Systems
DMS: Division of Medical Services
DO: Doctor of Osteopathy
DQTR: Discharge Quarter
DSH: Disproportionate Share Hospitals
DSS: Decision Support System
DY: Demonstration Year
ECP: Essential Community Providers
ED: Emergency Department
EPSDT: Early and Periodic Screening, Diagnosis, and Treatment
ER: Emergency Room
ESI: Employer Sponsored Insurance
ESRD: End Stage Renal Disease
FFM: Federally Facilitated Marketplace
FFS: Fee-for-Service
FMAP: Federal Medical Assistance Percentage
FORHP: Federal Office of Rural Health Policy
FPL: Federal Poverty Level
FQHC: Federal Qualified Health Center
FUH: Follow-Up After Hospitalization
FSP: Frequency of Selected Procedures
GDIT: General Dynamics Information Technology
HbA1c: Hemoglobin A1c
HCIP: Health Care Independence Program
HCPCS: Health Care Common Procedure Coding System
HCRIS: Healthcare Cost Report Information System
HEDIS: Healthcare Effectiveness Data and Information Set

HDI: Human Development Index

HHS-HCC: Department of Health and Human Services Hierarchical Condition Category

HIV: Human Immunodeficiency Virus

HRSN: Health-related Social Needs

IABP: Interim Alternative Benefit Plan

ICER: Incremental Cost-Effectiveness Ratio

ICF: Intermediate Care Facility

IESD: Index Episode Start Date

IHS: Index Hospital Stay

IPSD: Index Prescription Start Date

IPTW: Inverse Probability of Treatment Weight

IPWREG: Inverse Probability Weighted Regression A**djustment**

IPWS: Inverse Probability Weighted Score

IPU: Inpatient Utilization

ITS: Interrupted Time Series

LPW: Limited Pregnant Women

LDL-C: Low Density Lipoprotein Cholesterol

MCAID: Medicaid

MD: Doctor of Medicine

MDD: Minimum Detectable Difference

MH: Mental Health

MMIS: Medicaid Management Information System

MOE: Maintenance of Effort

MPM: Monitoring for Patients on Persistent Medications

NA: Network Adequacy

NAC: National Advisory Committee

NAIC: National Association of Insurance Commissioners

NCQA: The National Committee for Quality Assurance

NDC: Number Days Covered

NEMT: Non-Emergency Transportation

NYU: New York University

OB/GYN: Obstetrics and Gynecology

O/E: Observed-to-Expected

PA: Premium Assistance

PASSE: Provider-led Arkansas Shared Savings Entity

PBH: Persistence of Beta Blocker Treatment after a heart attack

PBM: Pharmacy Benefit Management

PCCM: Primary Care Case Management

PCG: Public Consulting Group

PCI: Percutaneous Coronary Intervention

PCP: Primary Care Physician
PCR: Plan All-Cause Readmission
PDC: Proportion of Days Covered
PHE: Public Health Emergency
PMPM: Per Member per Month
POS: Place of Service
PPACA: Patient Protection and Affordable Care Act
PQI: Prevention Quality Indicators
PSM: Propensity-Score Modeling
PSTCO: Patient County
QC: QualChoice
QHPs: Qualified Health Plans
RD: Regression Discontinuity
RDD: Regression Discontinuity Design
REGADJ: Regression Adjustment without adjusting for selection
RHC: Rural Health Clinic
SA: Substance Abuse
SAA: Schizophrenia
SAD: Stand Alone Dental
SDOH: Social Determinants of Health
SERFF: System for Electronic Rate and Form Filing
SIPTW: Stabilized Inverse Probability of Treatment Weighting
SLDS: Statewide Longitudinal Data System
SMI: Serious Mental Illness
SNF: Skilled Nursing Facility
SSI: Supplemental Security Income
STC: Special terms and conditions
STD: Sexually Transmitted Disease
SUD: Substance Use Disorder
TB: Tuberculosis
THE: Total Health Expenditures
UB revenue: Uniform Billing Revenue Code
USP: U.S. Pharmacopeia Convention
ZCTA: Zip-Code Tabulation Area

5.6 DISCLOSURE

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