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 17, 2021

Dawn Stehle
Deputy Director for Health & Medicaid
Arkansas Department of Human Services
112 West 8th Street, Slot S401
Little Rock, AR 72201-4608

Dear Ms. Stehle:

The Centers for Medicare & Medicaid Services (CMS) completed its review of the Evaluation Design, which is required by the Special Terms and Conditions (STCs), specifically, STC #71, of Arkansas's section 1115 demonstration, "Arkansas Works" (Project No: 11- W-00298/1), effective through December 31, 2021. CMS has determined that the evaluation design, dated May 4, 2021, meets the requirements set forth in the STCs and our evaluation design guidance, and therefore, approves the state's evaluation design.

CMS has added the approved evaluation design to the demonstration's STCs as Attachment C. A copy of the STCs, which includes the new attachment, in enclosed with this letter. In accordance with 42 CFR 431.424, the approved evaluation design may now be posted to the state's Medicaid website within thirty days. CMS will also post the approved evaluation design as a standalone document, separate from the STCs, on Medicaid.gov.

Please note that an interim evaluation report, consistent with the approved evaluation design, is due to CMS on June 30, 2021. Likewise, a single summative evaluation report, consistent with this approved evaluation design, is due to CMS within 18 months of the end of the demonstration period. In accordance with 42 CFR 431.428 and the STCs, we look forward to receiving updates on evaluation activities in the demonstration monitoring reports.

We appreciate our continued partnership with Arkansas on the Arkansas Works section 1115 demonstration. If you have any questions, please contact your CMS demonstration team.

Sincerely,

Danielle Daly -S
Digitally signed by Danielle Daly -S
Date: 2021.06.17 14:32:26 -04'00'

Andrea J. Casart -S
Digitally signed by Andrea J. Casart -S
Date: 2021.06.17 14:41:29 -04'00'

Danielle Daly
Director
Division of Demonstration Monitoring and Evaluation

Andrea Casart
Director
Division of Eligibility and Coverage Demonstrations

cc: Michala Walker, State Monitoring Lead, CMS Medicaid and CHIP Operations Group

CENTERS FOR MEDICARE AND MEDICAID SERVICES
EXPENDITURE AUTHORITY

NUMBER: **11-W-00287/6**

TITLE: **Arkansas Works 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 expenditure under section 1903 shall, for the period of this demonstration 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 Works Section 1115 demonstration.

As discussed in the Centers for Medicare & Medicaid Services' (CMS) approval letter, the Secretary of Health and Human Services has determined that the Arkansas Works 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.
The following expenditure authorities shall enable Arkansas to implement the Arkansas Works section 1115 demonstration:

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.

Requirements Not Applicable to the Expenditure Authority:

1. **Cost Effectiveness** **Section 1902(a)(4) and 42 CFR 435.1015(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.

CENTERS FOR MEDICARE & MEDICAID SERVICES
WAIVER LIST

NUMBER: **11-W-00287/6**

TITLE: **Arkansas Works 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 March 5, 2018 through December 31, 2021. 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 Arkansas Works 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.

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-00287/6**

TITLE: **Arkansas Works**

AWARDEE: **Arkansas Department of Human Services**

I. PREFACE

The following are the amended Special Terms and Conditions (STCs) for the Arkansas Works 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. Enrollment into the demonstration is statewide and is approved through December 31, 2021. The STCs have been arranged into the following subject areas:

I. Preface
II. Program Description and Objectives
III. General Program Requirements
IV. Arkansas Works Program Populations Affected
V. Arkansas Works Premium Assistance Enrollment
VI. Premium Assistance Delivery System
VII. Benefits
VIII. Premiums & Cost Sharing
IX. Appeals
X. General Reporting Requirements
XI. General Financial Requirements
XII. Monitoring Budget Neutrality
XIII. Evaluation
XIV. Monitoring

Attachment A: Copayment Amounts
Attachment B: Preparing the Interim and Summative Evaluation Reports
Attachment C: Evaluation Design

II. PROGRAM DESCRIPTION AND OBJECTIVES

Under the Arkansas Works demonstration, the state has been providing premium assistance to support the purchase by beneficiaries eligible under the new 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 new adult population began on October 1, 2013 for QHPs with eligibility effective January 1, 2014. Beginning in 2014, individuals eligible for coverage under the new adult group are described at Section 1902(a)(10)(A)(i)(VIII) of the Social Security Act and are further specified in the state plan (collectively Arkansas Works beneficiaries). Arkansas Works beneficiaries receive a state plan Alternative Benefit Plan ("ABP").

Effective January 1, 2017, Arkansas Works beneficiaries with incomes above 100 percent of the FPL are charged monthly premium payments. The state will eliminate its ESI premium assistance program under the demonstration. All Arkansas Works beneficiaries who were enrolled in ESI premium assistance and who remain eligible for Arkansas Works will transition to QHP coverage.

Over the demonstration period, the state seeks to demonstrate several demonstration goals. The state's goals will inform the state's evaluation design hypotheses, subject to CMS approval, as described in these STCs. The state'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,
- Requiring beneficiaries to pay a monthly premium to promote more efficient use of health care services, and
- Furthering quality improvement and delivery system reform initiatives that are successful across population groups.

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 for Arkansas Works 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/Cost Sharing Reductions (APTC/CSRs).

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. One of the benefits of this demonstration should be to gain a better understanding of how the private sector uses incentives to engage individuals in healthy behaviors.

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, Title VI of the Civil Rights Act of 1964, section 504 of the Rehabilitation Act of 1973, and the Age Discrimination Act of 1975.

2. Compliance with Medicaid and Children's Health Insurance Program (CHIP) Law, Regulation, and Policy. All requirements of the Medicaid program and CHIP, expressed in law, regulation, and policy statement, 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 law, regulation, or policy statement, come into compliance with any changes in federal law, regulation, or policy affecting the Medicaid or CHIP program 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 without requiring the state to submit an amendment to the demonstration under STC 7. CMS will notify the state 30 days in advance of the expected approval date of the amended STCs to provide the state with additional notice of the changes.

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

a. To the extent that a change in federal law, regulation, or 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 as well as a modified allotment neutrality worksheet for the demonstration as necessary to comply with such change. The modified budget neutrality agreement will be effective upon the implementation of the change.

b. If mandated changes in the federal law require state legislation, the changes must 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 law.

5. **State Plan Amendments.** If the eligibility of 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 may be required, except as otherwise noted in these STCs. In all such instances the Medicaid state plan governs.

   Should the state amend the state plan to make any changes to eligibility for this population, upon submission of the state plan amendment, the state must notify CMS demonstration staff in writing of the pending state plan amendment, and request a corresponding technical correction to the demonstration.

6. **Changes Subject to the Amendment Process.** If not otherwise specified in these STCs, changes related to demonstration features including eligibility, enrollment, benefits, beneficiary rights, delivery systems, cost sharing, 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 changes to these elements without prior approval by CMS either through an approved amendment to the Medicaid state plan and/or amendment to the demonstration. Amendments to the demonstration are not retroactive and FFP will not be available for changes to the demonstration that have not been approved through the amendment process set forth in STC 7 below.

7. **Amendment Process.** Requests to amend the demonstration must be submitted to CMS for approval no later than 120 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 reports and other deliverables in a timely fashion according to the deadlines specified herein. Amendment requests must include, but are not limited to, the following:

   a. An explanation of the public process used by the state, consistent with the requirements of STC 15, prior to submission of the requested amendment;

   b. A data analysis worksheet which identifies the specific "with waiver" impact of the proposed amendment on the current budget neutrality agreement. Such analysis shall 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;

   c. An up-to-date CHIP allotment neutrality worksheet, if necessary;

   d. A detailed description of the amendment, including impact on beneficiaries, with sufficient supporting documentation; and

e. A description of how the evaluation design will be modified to incorporate the amendment provisions.

8. Extension of the Demonstration. States that intend to request demonstration extensions under sections 1115(e) or 1115(f) are advised to observe the timelines contained in those statutes. Otherwise, no later than 12 months prior to the expiration date of the demonstration, the governor or chief executive officer of the state must submit to CMS either a demonstration extension request that meets federal requirements at 42 CFR 431.412(c) or a transition and phase-out plan consistent with the requirements of STC 9.

a. Compliance with Transparency Requirements at 42 CFR Section 431.412.

b. As part of the demonstration extension requests the state must provide documentation of compliance with the transparency requirements 42 CFR Section 431.412 and the public notice and tribal consultation requirements outlined in STC 15.

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 transition and phase-out plan. The state must submit its notification letter and a draft plan to CMS no less than six (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 its approved tribal consultation state plan Amendment, if applicable. Once the 30-day public comment period has ended, the state must provide a summary of each public comment received, the state's response to the comment and how the state incorporated the received comment into the revised plan.

b. **Prior CMS Approval**. The state must obtain CMS approval of the transition and phase-out plan prior to the implementation of the phase-out activities. Implementation of activities must be no sooner than 14 calendar days after CMS approval of the plan.

c. **Transition and Phase-out Plan Requirements**. The state must include, at a minimum, in its 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 administrative reviews of Medicaid eligibility prior to the termination of the program for the affected beneficiaries, and ensure ongoing coverage for those beneficiaries determined eligible, as well

as any community outreach activities including community resources that are available.

d. **Phase-out Procedures.** The state must comply with all notice requirements found in 42 CFR Sections 431.206, 431.210, and 431.213. In addition, the state must assure all appeal and hearing rights afforded to demonstration participants as outlined in 42 CFR Sections 431.220 and 431.221. If a demonstration participant is entitled to requests a hearing before the date of action, the state must maintain benefits as required in 42 CFR Section 431.230. In addition, the state must conduct administrative renewals for all affected beneficiaries in order to determine if they qualify for Medicaid eligibility under a different eligibility category. 42 CFR Section 435.916.

e. **Exemption from Public Notice Procedures 42 CFR Section 431.416(g).** CMS may expedite the federal and state public notice requirements in the event it determines that the objectives of title XIX and XXI would be served or under circumstances described in 42 CFR Section 431.416(g).

f. **Federal Financial Participation (FFP).** If the demonstration is terminated or any relevant waivers suspended by the state, FFP shall be limited to normal closeout costs associated with terminating the demonstration including services, continued benefits as a result of participant's appeals and administrative costs of disenrolling participants.

10. Pre-Approved Transition and Phase Out Plan. The state may elect to submit a draft transition and phase-out plan for review and approval at any time, including prior to when a date of termination has been identified. Once the transition and phase-out plan has been approved, implementation of the plan may be delayed indefinitely at the option of the state.

11. Federal Financial Participation (FFP). If the project is terminated or any relevant waivers suspended by the State, FFP shall be limited to normal closeout costs associated with terminating the demonstration including services and administrative costs of disenrolling beneficiaries.

12. Expiring Demonstration Authority. For demonstration authority that expires prior to the demonstration's expiration date, the State must submit a transition plan to CMS no later than six months prior to the applicable demonstration authority's expiration date, consistent with the following requirements:

a. **Expiration Requirements.** The State must include, at a minimum, in its demonstration expiration 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 administrative reviews of Medicaid eligibility for the affected beneficiaries, and

ensure ongoing coverage for eligible individuals, as well as any community outreach activities.

b. **Expiration Procedures**. The State must comply with all notice requirements found in 42 CFR Sections 431.206, 431.210 and 431.213. In addition, the State must assure all appeal and hearing rights afforded to demonstration beneficiaries as outlined in 42 CFR Sections 431.220 and 431.221. If a demonstration beneficiary requests a hearing before the date of action, the State must maintain benefits as required in 42 CFR Section 431.230. In addition, the State must conduct administrative renewals for all affected beneficiaries in order to determine if they qualify for Medicaid eligibility under a different eligibility category as discussed in October 1, 2010, State Health Official Letter #10-008.

c. **Federal Public Notice.** CMS will conduct a 30-day federal public comment period consistent with the process outlined in 42 CFR Section 431.416 in order to solicit public input on the State's demonstration expiration plan. CMS will consider comments received during the 30-day period during its review and approval of the State's demonstration expiration plan. The State must obtain CMS approval of the demonstration expiration plan prior to the implementation of the expiration activities. Implementation of expiration activities must be no sooner than 14 days after CMS approval of the plan. d. Federal Financial Participation (FFP): FFP shall be limited to normal closeout costs associated with the expiration of the demonstration including services and administrative costs of disenrolling beneficiaries.

13. Withdrawal of Demonstration Authority. CMS reserves the right to amend and withdraw waivers or expenditure authorities at any time it determines that continuing the waivers or expenditure authorities would no longer be in the public interest or promote the objectives of Title XIX, including if federal monitoring of data indicates features of this demonstration may not adequately incentivize beneficiary participation or are unlikely to result in improved health outcomes, or that other demonstration features are not operating as intended. CMS will promptly notify the State in writing of the determination and the reasons for the amendment and withdrawal, together with the effective date, and afford the State an opportunity to request a hearing to challenge CMS' determination prior to the effective date. If a waiver or expenditure authority is withdrawn or amended, FFP is limited to normal closeout costs associated with terminating the waiver or expenditure authority, including services and administrative costs of disenrolling beneficiaries.

14. 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.

15. Public Notice, Tribal Consultation, and Consultation with Interested Parties. The State must comply with the State Notice Procedures set forth in 59 Fed. Reg. 49249

(September 27, 1994). The State must also comply with the tribal consultation requirements in section 1902(a)(73) of the Act as amended by section 5006(e) of the American Recovery and Reinvestment Act (ARRA) of 2009, the implementing regulations for the Review and Approval Process for Section 1115 demonstrations at 42 CFR Section 431.408, and the tribal consultation requirements contained in the State's approved state plan, when any program changes to the demonstration are proposed by the State.

a. 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)).

b. In States with federally recognized Indian tribes, Indian health programs, and/or Urban Indian organizations, the State is required to submit evidence to CMS regarding the solicitation of advice from these entities prior to submission of any demonstration proposal, amendment and/or renewal of this demonstration (42 CFR Section 431.408(b)(3)).

c. The State must also comply with the Public Notice Procedures set forth in 42 CFR Section 447.205 for changes in statewide methods and standards for setting payment rates.

16. **Federal Financial Participation (FFP).** No federal matching for administrative or service expenditures for this demonstration will take effect until the effective date identified in the demonstration approval letter.

17. **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 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 benefits or services. The Secretary 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 46.101(b)(5).

IV. ARKANSAS WORKS PROGRAM POPULATIONS AFFECTED

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

18. Populations Affected by the Arkansas Works Demonstration. Except as described in STCs 19 and 20, the Arkansas Works demonstration affects adults aged 19 through 64 eligible under the state plan under 1902(a)(10)(A)(i)(VIII) of the Act, 42 CFR Section 435.119. Eligibility and coverage for Arkansas Works beneficiaries is 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 to this eligibility group, including the conversion to a modified adjusted gross income (MAGI) standard on January 1, 2014, will apply to this demonstration.

Table 1. Eligibility Groups

Medicaid State Plan Mandatory Groups	Federal Poverty Level	Funding Stream	Expenditure and Eligibility Group Reporting
New Adult Group	This group includes 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	Title XIX	MEG - 1

19. 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 Arkansas Works as a result of a determination of medical frailty as that term is defined above 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 fee- for- service (FFS) system.

20. 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 21 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 fee for service (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.

21. Retroactive Eligibility. The state will provide coverage effective 30 days prior to the date of submitting an application for coverage for beneficiaries in table 1.

V. ARKANSAS WORKS PREMIUM ASSISTANCE ENROLLMENT

22. Arkansas Works. For Arkansas Works beneficiaries, except as noted in STCs 19 and 20, enrollment in a QHP is a condition of receiving benefits.

23. Notices. Arkansas Works beneficiaries will receive a notice or notices from Arkansas Medicaid or its designee advising them of the following:

a. QHP Plan Selection. The notice will include information regarding how Arkansas Works beneficiaries can select a QHP and information on the State's auto-assignment process in the event that the beneficiary does not select a plan.

b. State Premiums and Cost-Sharing. The notice will include information about the beneficiary's premium and cost-sharing obligations, if any, as well as the quarterly cap on premiums and cost-sharing.

c. Access to Services until QHP Enrollment is Effective. The notice will include the Medicaid client identification number (CIN) and information on how beneficiaries can use the CIN number to access services until their QHP enrollment is effective.

d. Wrapped Benefits. The notice will also include information on how beneficiaries can access wrapped benefits. The notice will include specific information regarding services that are covered directly through fee-for-service Medicaid and what phone numbers to call or websites to visit to access wrapped services.

e. Appeals. The notice will also include information regarding the grievance and appeals process.

f. Identification of Medically Frail. The notice will include information describing how Arkansas Works beneficiaries who believe they are medically frail can request a determination of whether they are exempt from the ABP. The notice will also include alternative benefit plan options.

g. Timely and adequate notice concerning adverse actions. The notice must give beneficiaries timely and adequate notice of proposed action to terminate, discontinue, or suspend their eligibility or to reduce or discontinue services they may receive under Medicaid in accordance with 42 CFR 435.919.

24. QHP Selection. The QHPs in which Arkansas Works 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.

25. Auto-assignment. In the event that an beneficiary is determined eligible for coverage through the Arkansas Works 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.

26. Distribution of Members Auto-assigned. Arkansas Works 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.

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

28. 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

29. 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;

c. Reporting and data requirements necessary to monitor and evaluate the Arkansas Works including those referenced in STC 74, ensuring beneficiary access to 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' evaluation contractors.

e. Noticing requirements; and

f. Audit rights.

30. Qualified Health Plans. The State will use premium assistance to support the purchase of coverage for Arkansas Works beneficiaries through Marketplace QHPs.

31. Choice of QHPs. Each Arkansas Works beneficiary required to enroll in a QHP will have the option to choose between at least two silver plans covering only Essential Health Benefits that are offered in the individual market through the Marketplace. The State will pay the full cost of QHP premiums.

a. Arkansas Works beneficiaries will be able to choose from at least two silver plans covering only Essential Health Benefits that are in each rating area of the State.

b. Arkansas Works beneficiaries will be permitted to choose among all silver plans covering only Essential Health Benefits that are offered in their geographic area and that meet the purchasing guidelines established by the State in that year, and thus all Arkansas Works 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. Arkansas Works beneficiaries will have access to the same networks as other beneficiaries enrolling in QHPs through the individual Marketplace.

32. Coverage Prior to Enrollment in a QHP. The State will provide coverage through fee-for-service 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).

33. 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 fee-for-service Medicaid program will cover those services.

34. NEMT. Non-emergency medical transport services will be provided through the State's fee-for-service Medicaid program. See STC 41 for further discussion of non-emergency medical transport services.

VII. BENEFITS

35. Arkansas Works 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.

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

37. Medicaid Wrap Benefits. The State will provide through its fee-for-service system wrap-around benefits that are required for the ABP but not covered by QHPs. These benefits include non-emergency transportation and Early Periodic Screening Diagnosis and Treatment (EPSDT) services for beneficiaries participating in the demonstration who are under age 21.

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

39. Early and Periodic Screening, Diagnosis, and Treatment (EPSDT). 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).

40. Access to Federally Qualified Health Centers and Rural Health Centers. Arkansas Works beneficiaries will have access to at least one QHP in each service area that contracts with at least one FQHC and RHC.

41. 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.

42. Incentive Benefits. To the extent an amendment is approved by CMS, Arkansas will offer an additional benefit not otherwise provided under the Alternative Benefit Plan for Arkansas Works beneficiaries who make timely premium payments (if above 100 percent FPL) and engage with a primary care provider (PCP). Arkansas Works beneficiaries with incomes at or below 100 percent FPL and others who are exempt from premiums will be eligible for an incentive benefit at the time the amendment is approved.

VIII. PREMIUMS & COST SHARING

43. Premiums & Cost Sharing. Cost sharing for Arkansas Works beneficiaries must be in compliance with federal requirements that are set forth in statute, regulation and policies, including exemptions from cost-sharing set forth in 42 CFR Section 447.56(a).

44. Premiums & Cost Sharing Parameters for the Arkansas Works Program. With the approval of this demonstration:

a. Beneficiaries up to and including 100 percent of the FPL will have no cost sharing.

b. Beneficiaries above 100 percent of the FPL will have cost sharing consistent with Medicaid requirements.

c. Beneficiaries above 100 percent of the FPL will be required to pay monthly premiums of up to 2 percent of household income.

d. Premiums and cost-sharing will be subject to an aggregate cap of no more than 5 percent of family monthly or quarterly income.

e. Cost sharing limitations described in 42 CFR 447.56(a) 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; premium, copayment, and coinsurance amounts are listed in Attachment A.

45. 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 Arkansas Works 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.

46. Grace Period/Debt Collection. Arkansas Works 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.

IX. APPEALS

47. Beneficiary safeguards of appeal rights will be provided by the State, including fair hearing rights. No waiver will be granted related to appeals. The State must ensure compliance with all federal and State requirements related to beneficiary appeal rights. Pursuant to the Intergovernmental Cooperation Act of 1968, the State has submitted a state plan amendment delegating certain responsibilities to the Arkansas Insurance Department.

X. GENERAL REPORTING REQUIREMENTS

48. Deferral for Failure to Submit Timely Demonstration Deliverables. The state agrees that CMS may issue deferrals in the amount of $5,000,000 (federal share) per deliverable 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 are found to not be consistent with the requirements approved by CMS.

a. Thirty (30) days after the deliverable was due, 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 a written request for an extension in which to submit the required deliverable. Extension requests that extend beyond the fiscal quarter in which the deliverable was due must include a Corrective Action Plan (CAP).

   i. CMS may decline the extension request.

   ii. Should CMS agree in writing to the state's request, a corresponding extension of the deferral process described below can be provided.

   iii. If the state's request for an extension includes a CAP, CMS may agree to or further negotiate the CAP as an interim step before applying the deferral.

c. The deferral would be issued against the next quarterly expenditure report following the written deferral notification.

d. When the state submits the overdue deliverable(s) that are accepted by CMS, the deferral(s) will be released.

e. 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 may preclude a state from renewing a demonstration or obtaining a new demonstration.

f. CMS will consider with the state an alternative set of operational steps for implementing the intended deferral to align the process with the state's existing deferral process, for example the structure of the state request for an extension, what quarter the deferral applies to, and how the deferral is released.

49. Post Award Forum. Pursuant to 42 CFR 431.420(c), within six months of the demonstration's implementation, and annually thereafter, the state shall afford the public with an opportunity to provide meaningful comment on the progress of the demonstration. At least 30 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. Pursuant to 42 CFR 431.420(c),the state must include a summary of the comments in the Quarterly Report associated with the quarter in which the forum was held, as well as in its compiled Annual Report.

50. Electronic Submission of Reports. The state shall submit all required plans and reports using the process stipulated by CMS, if applicable.

51. Compliance with Federal Systems Innovation. As federal systems continue to evolve and incorporate 1115 demonstration reporting and analytics, 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 1115, T-MSIS, and other data elements that have been agreed to are provided; and

c. Submit the monitoring reports and evaluation reports to the appropriate system as directed by CMS.

XI. GENERAL FINANCIAL REQUIREMENTS

This project is approved for Title XIX expenditures applicable to services rendered during the demonstration period. This section describes the general financial requirements for these expenditures.

52. Quarterly Expenditure Reports. The State must provide quarterly Title XIX expenditure reports using Form CMS-64, to separately report total Title XIX expenditures for services provided through this demonstration under section 1115 authority. CMS shall provide Title XIX FFP for allowable demonstration expenditures, only as long as they do not exceed the pre-defined limits on the costs incurred, as specified in section XII of the STCs.

53. Reporting Expenditures under the Demonstration. The following describes the reporting of expenditures subject to the budget neutrality agreement:

a. **Tracking Expenditures.** In order to track expenditures under this demonstration, the State will report demonstration expenditures through the Medicaid and State Children's Health Insurance Program Budget and Expenditure System (MBES/CBES), following routine CMS-64 reporting instructions outlined in section 2500 and Section 2115 of the SMM. All demonstration expenditures subject to the budget neutrality limit must be reported each quarter on separate forms CMS-64.9 Waiver and/or 64.9P Waiver, identified by the demonstration project number assigned by CMS (including the project number extension, which indicates the DY in which services were rendered or for which capitation payments were made). For monitoring purposes, and consistent with annual CSR reconciliation, cost settlements must be recorded on the appropriate prior period adjustment schedules (forms CMS-64.9 Waiver) for the summary line 10B, in lieu of lines 9 or l0C. For any other cost settlements (i.e., those not attributable to this demonstration), the adjustments should be reported on lines 9 or 10C, as instructed in the SMM. The term, "expenditures subject to the budget neutrality limit," is defined below in STC 67.

b. **Cost Settlements.** For monitoring purposes, and consistent with annual CSR reconciliation, cost settlements attributable to the demonstration must be recorded on the appropriate prior period adjustment schedules (forms CMS-64.9P Waiver) for the summary sheet sine 10B, in lieu of lines 9 or 10C. For any cost settlement not attributable to this demonstration, the adjustments should be reported as otherwise instructed in the SMM.

c. **Premium and Cost Sharing Contributions.** Premiums and other applicable cost sharing contributions from beneficiaries that are collected by the state from beneficiaries under the demonstration must be reported to CMS each quarter on 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, premium and cost-sharing collections (both total computable and federal share) should also be reported separately by DY on the form CMS-64 narrative. In the calculation of expenditures subject to the budget neutrality expenditure limit, premium collections applicable to demonstration populations will be offset against expenditures. These section 1115 premium collections will be included as a manual adjustment (decrease) to the demonstration's actual expenditures on a quarterly basis.

d. **Pharmacy Rebates.** Pharmacy rebates are not considered here as this program is not eligible.

e. **Use of Waiver Forms for Medicaid.** For each DY, separate Forms CMS-64.9 Waiver and/or 64.9P Waiver shall be submitted reporting expenditures for individuals enrolled in the demonstration, subject to the budget neutrality limit (Section XII of these STCs). The State must complete separate waiver forms for the following eligibility groups/waiver names:

i. MEG 1 - "New Adult Group"

f. The first Demonstration Year (DY1) will begin on January 1, 2014. Subsequent DYs will be defined as follows:

Table 2Demonstration Populations

Demonstration Year 1 (DY1)	January 1, 2014	12 months
Demonstration Year 2 (DY2)	January 1, 2015	12 months
Demonstration Year 3 (DY3)	January 1, 2016	12 months
Demonstration Year 4 (DY4)	January 1, 2017	12 months
Demonstration Year 5 (DY5)	January 1, 2018	12 months
Demonstration Year 6 (DY6)	January 1, 2019	12 months
Demonstration Year 7 (DY7)	January 1, 2020	12 months
Demonstration Year 8 (DY8)	January 1, 2021	12 months

54. Administrative Costs. Administrative costs will not be included in the budget neutrality limit, but the State must separately track and report additional administrative costs that are directly attributable to the demonstration, using Forms CMS-64.10 Waiver and/or 64.10P Waiver, with waiver name Local Administration Costs ("ADM").

55. Claiming Period. All claims for expenditures subject to the budget neutrality limit (including any cost settlements resulting from annual reconciliation) must be made within 2 years after the calendar quarter in which the State made the expenditures. Furthermore, all claims for services during the demonstration period (including any cost settlements) must be made within 2 years after the conclusion or termination of the demonstration. During the latter 2-year period, the State must continue to identify separately net expenditures related to dates of service during the operation of the section 1115 demonstration on the Form CMS-64 and Form CMS-21 in order to properly account for these expenditures in determining budget neutrality.

56. Reporting Member Months. The following describes the reporting of member months for demonstration populations:

a. For the purpose of calculating the budget neutrality expenditure cap and for other purposes, the State must provide to CMS, as part of the quarterly report required under STC 82, the actual number of eligible member months for the

demonstration populations defined in STC 18. The State must submit a statement accompanying the quarterly report, which certifies the accuracy of this information. To permit full recognition of "in-process" eligibility, reported counts of member months may be subject to revisions after the end of each quarter. Member month counts may be revised retrospectively as needed.

b. The term "eligible member months" refers to the number of months in which persons 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 to the total, for a total of four eligible member months.

57. Standard Medicaid Funding Process. The standard Medicaid funding process must be used during the demonstration. The State must estimate matchable demonstration expenditures (total computable and federal share) subject to the budget neutrality expenditure cap 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 will 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 must submit the Form CMS-64 quarterly Medicaid expenditure report, showing Medicaid expenditures made in the quarter just ended. The CMS will reconcile expenditures reported on the Form CMS-64 quarterly with federal funding previously made available to the State, and include the reconciling adjustment in the finalization of the grant award to the State.

58. Extent of FFP 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 demonstration as a whole as outlined below, subject to the limits described in STC 59:

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 State plan.

c. Medical Assistance expenditures made under section 1115 demonstration authority, including those made in conjunction with the demonstration, net of enrollment fees, cost sharing, pharmacy rebates, and all other types of third party liability or CMS payment adjustments.

59. Sources of Non-Federal Share. The State must certify that the matching non-federal share of funds for the demonstration is state/local monies. The State further certifies that such funds shall not be used as the match for any other federal grant or contract, except as permitted by law. All sources of non-federal funding must be compliant with section

1903(w) of the Act and applicable regulations. In addition, all sources of the non-federal share of funding are subject to CMS approval.

a. CMS may review the sources of the non-federal share of funding for the demonstration at any time. The State agrees that all funding sources deemed unacceptable by CMS shall be addressed within the time frames set by CMS.

b. Any amendments that impact the financial status of the program shall require the State to provide information to CMS regarding all sources of the non-federal share of funding.

c. The State assures that all health care-related taxes comport with section 1903(w) of the Act and all other applicable federal statutory and regulatory provisions, as well as the approved Medicaid State plan.

60. State Certification of Funding Conditions. The State must certify that the following conditions for non-federal share of demonstration expenditures are met:

a. Units of government, including governmentally operated health care providers, may certify that State or local tax dollars have been expended as the non-federal share of funds under the demonstration.

b. To the extent the State utilizes certified public expenditures (CPEs) as the funding mechanism for Title XIX (or under section 1115 authority) payments, CMS must approve a cost reimbursement methodology. This methodology must include a detailed explanation of the process by which the State would identify those costs eligible under Title XIX (or under section 1115 authority) for purposes of certifying public expenditures.

c. To the extent the State utilizes CPEs as the funding mechanism to claim federal match for payments under the demonstration, governmental entities to which general revenue funds are appropriated must certify to the State the amount of such tax revenue (State or local) used to satisfy demonstration expenditures. The entities that incurred the cost must also provide cost documentation to support the State's claim for federal match.

d. The State may use intergovernmental transfers to the extent that such funds are derived from State or local tax revenues and are transferred by units of government within the State. Any transfers from governmentally operated health care providers must be made in an amount not to exceed the non-federal share of Title XIX payments.

e. Under all circumstances, health care providers must retain 100 percent of the reimbursement amounts claimed by the State as demonstration expenditures. Moreover, no pre-arranged agreements (contractual or otherwise) may exist between the health care providers and the State and/or local government to return

and/or redirect any portion of the Medicaid payments. 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, and 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.

XII. MONITORING BUDGET NEUTRALITY FOR THE DEMONSTRATION

61. Limit on Title XIX Funding. The State shall be subject to a limit on the amount of federal Title XIX funding that the State may receive on selected Medicaid expenditures during the period of approval of the demonstration. The limit is determined by using the per capita cost method described in STC 62, and budget neutrality expenditure limits are set on a yearly basis with a cumulative budget neutrality expenditure limit for the length of the entire demonstration. The data supplied by the State to CMS to set the annual caps is subject to review and audit, and if found to be inaccurate, will result in a modified budget neutrality expenditure limit. CMS' assessment of the State's compliance with these annual limits will be done using the Schedule C report from the CMS-64.

62. Risk. The State will be at risk for the per capita cost (as determined by the method described below) for demonstration populations as defined in STC 64, but not at risk for the number of beneficiaries in the demonstration population. By providing FFP without regard to enrollment in the demonstration populations, CMS will not place the State at risk for changing economic conditions that impact enrollment levels. However, by placing the State at risk for the per capita costs of current eligibles, CMS assures that the demonstration expenditures do not exceed the levels that would have been realized had there been no demonstration.

63. Calculation of the Budget Neutrality Limit. For the purpose of calculating the overall budget neutrality limit for the demonstration, separate annual budget limits will be calculated for each DY on a total computable basis, as described in STC 64 below. The annual limits will then be 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 limit by the Composite Federal Share, which is defined in STC 65 below.

64. Demonstration Populations Used to Calculate the Budget Neutrality Limit. For each DY, separate annual budget limits of demonstration service expenditures will be calculated as the product of the trended monthly per person cost times the actual number of eligible/member months as reported to CMS by the State under the guidelines set forth in STC 73. The trend rates and per capita cost estimates for each Mandatory Enrollment Group (MEG) for each year of the demonstration are listed in the table below.

Table 3 Per Capita Cost Estimate

MEG	TREND	DY 4 - PMPM	DY 5 - PMPM	DY 6 - PMPM	DY 7 - PMPM	DY 8 - PMPM
New Adult Group	4.7%	$570.50	$597.32	$625.39	$654.79	$685.56

a. If the State's experience of the take up rate for the new adult group and other factors that affect the costs of this population indicates that the PMPM limit described above in paragraph (a) may underestimate the actual costs of medical assistance for the new adult group, the State may submit an adjustment to paragraph (a), along with detailed expenditure data to justify this, for CMS review without submitting an amendment pursuant to STC 7. Adjustments to the PMPM limit for a demonstration year must be submitted to CMS by no later than October 1 of the demonstration year for which the adjustment would take effect.

b. The budget neutrality cap is calculated by taking the PMPM cost projection for the above group in each DY, times the number of eligible member months for that group and DY, and adding the products together across DYs. The federal share of the budget neutrality cap is obtained by multiplying total computable budget neutrality cap by the federal share.

c. The State will not be allowed to obtain budget neutrality "savings" from this population.

65. Composite Federal Share Ratio. The Composite Federal Share is the ratio calculated by dividing the sum total of federal financial participation (FFP) received by the State on actual demonstration expenditures during the approval period, as reported through the MBES/CBES and summarized on Schedule C (with consideration of additional allowable demonstration offsets such as, but not limited to, premium collections) by total computable demonstration expenditures for the same period as reported on the same forms. Should the demonstration be terminated prior to the end of the extension approval period (see STC 9), the Composite Federal Share will be determined based on actual expenditures for the period in which the demonstration was active. 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 upon method.

66. Future Adjustments to the Budget Neutrality Expenditure Limit. CMS reserves the right to adjust the budget neutrality expenditure limit to be consistent with enforcement of impermissible provider payments, health care related taxes, new federal statutes, or policy interpretations implemented through letters, memoranda, or regulations with respect to the provision of services covered under the demonstration.

67. Enforcement of Budget Neutrality. CMS shall enforce budget neutrality over the life of the demonstration rather than on an annual basis. However, if the State's expenditures

exceed the calculated cumulative budget neutrality expenditure cap by the percentage identified below for any of the demonstration years, the State must submit a corrective action plan to CMS for approval. The State will subsequently implement the approved corrective action plan.

Table 4 Cap Thresholds

Year	Cumulative target definition	Percentage
DY 4	Cumulative budget neutrality limit plus:	0%
DY 5	Cumulative budget neutrality limit plus:	0%
DY 6	Cumulative budget neutrality limit plus:	0%
DY 7	Cumulative budget neutrality limit plus:	0%
DY 8	Cumulative budget neutrality limit plus:	0%

68. Exceeding Budget Neutrality. If at the end of the demonstration period the cumulative budget neutrality limit 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, an evaluation of this provision will be based on the time elapsed through the termination date.

69. Impermissible DSH, Taxes or Donations. The CMS reserves the right to adjust the budget neutrality expenditure limit in order to be consistent with enforcement of impermissible provider payments, health care related taxes, new federal statutes, or with policy interpretations implemented through letters, memoranda, or regulations. CMS reserves the right to make adjustments to the budget neutrality expenditure limit if CMS determines that any health care-related tax that was in effect during the base year, or provider-related donation that occurred during the base year, is in violation of the provider donation and health care related tax provisions of Section 1903(w) of the Act. Adjustments to the budget neutrality agreement will reflect the phase-out of impermissible provider payments by law or regulation, where applicable.

XIII. EVALUATION

70. Evaluation Design and Implementation. The State shall submit a draft evaluation design for Arkansas Works to CMS no later than 120 days after the award of the demonstration amendment. Such revisions to the evaluation design and the STCs shall not affect previously established timelines for report submission for the Health Care Independence Program. The state must submit a final evaluation design within 60 days after receipt of CMS' comments. Upon CMS approval of the evaluation design, the state must implement the evaluation design and submit their evaluation implementation progress in each of the quarterly and annual progress reports, including the rapid cycle

assessments as outlined in the Monitoring Section of these STCs. The final evaluation design will be included as an attachment to the STCs. Per 42 CFR 431.424(c), the state will publish the approved evaluation design within 30 days of CMS approval.

71. Evaluation Budget. A budget for the evaluation shall be provided with the 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 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 design or if CMS finds that the design is not sufficiently developed.

72. Cost-effectiveness. While not the only purpose of the evaluation, the core purpose of the evaluation is to support a determination as to whether the preponderance of the evidence about the costs and effectiveness of the Arkansas Works Demonstration using premium assistance when considered in its totality demonstrates cost effectiveness taking into account both initial and longer term costs and other impacts such as improvements in service delivery and health outcomes.

a. The evaluation will explore and explain through developed evidence the effectiveness of the demonstration for each hypothesis, including total costs in accordance with the evaluation design as approved by CMS.

b. Included in the evaluation will be examinations using a robust set of measures of provider access and clinical quality measures under the Arkansas Works demonstration compared to what would have happened for a comparable population in Medicaid fee-for-service.

c. The State will compare total costs under the Arkansas Works demonstration to costs of what would have happened under a traditional Medicaid expansion. This will include an evaluation of provider rates, healthcare utilization and associated costs, and administrative expenses over time.

d. The State will compare changes in access and quality to associated changes in costs within the Arkansas Works. To the extent possible, component contributions to changes in access and quality and their associated levels of investment in Arkansas will be determined and compared to improvement efforts undertaken in other delivery systems.

73. Evaluation Requirements. The demonstration evaluation will meet the prevailing standards of scientific and academic rigor, as appropriate and feasible for each aspect of the evaluation, including standards for the evaluation design, conduct, and interpretation and reporting of findings. The demonstration evaluation will use the best available data; use controls and adjustments for and reporting of the limitations of data and their effects on results; and discuss the generalizability of results.

The State shall acquire an independent entity to conduct the evaluation. The evaluation design shall discuss the State's process for obtaining an independent entity to conduct the evaluation, including a description of the qualifications the entity must possess, how the State will assure no conflict of interest, and a budget for evaluation activities.

74. Evaluation Design. The Evaluation Design shall include the following core components to be approved by CMS:

a. **Research questions and hypotheses:** This includes a statement of the specific research questions and testable hypotheses that address the goals of the demonstration. At a minimum, the research questions shall address the goals of improving access, reducing churning, improving quality of care thereby leading to enhanced health outcomes, and lowering costs. The research questions will have appropriate comparison groups and may be studied in a time series. The analyses of these research questions will provide the basis for a robust assessment of cost effectiveness.

The following are among the hypotheses to be considered in development of the evaluation design and will be included in the design as appropriate. Additional hypotheses relative to the new and revised components of the demonstration will also be included in the state's evaluation design.

i. Premium Assistance beneficiaries will have equal or better access to care, including primary care and specialty physician networks and services.
ii. Premium Assistance beneficiaries will have equal or better access to preventive care services.
iii. Premium Assistance beneficiaries will have lower non-emergent use of emergency room services.
iv. Premium Assistance beneficiaries will have fewer gaps in insurance coverage.
v. Premium Assistance beneficiaries will maintain continuous access to the same health plans, and will maintain continuous access to providers.
vi. Premium Assistance beneficiaries, including those who become eligible for Exchange Marketplace coverage, will have fewer gaps in plan enrollment, improved continuity of care, and resultant lower administrative costs.
vii. Premium Assistance beneficiaries will have lower rates of potentially preventable emergency department and hospital admissions.
viii. Premium assistance beneficiaries will report equal or better satisfaction in the care provided.
ix. Premium Assistance beneficiaries who are young adults eligible for EPSDT benefits will have at least as satisfactory and appropriate access to these benefits.

x. Premium Assistance beneficiaries will have appropriate access to non-emergency transportation.
xi. Premium Assistance will reduce overall premium costs in the Exchange Marketplace and will increase quality of care.
xii. The cost for covering Premium Assistance beneficiaries will be comparable to what the costs would have been for covering the same expansion group in Arkansas Medicaid fee-for-service in accordance with STC 72 on determining cost effectiveness and other requirements in the evaluation design as approved by CMS.
xiii. Incentive benefits offered to Arkansas Works beneficiaries will increase primary care utilization.

These hypotheses should be addressed in the demonstration reporting described in STC 82 and 83 with regard to progress towards the expected outcomes.

b. Data: This discussion shall include:

i. A description of the data, including a definition/description of the sources and the baseline values for metrics/measures;
ii. Method of data collection;
iii. Frequency and timing of data collection.

The following shall be considered and included as appropriate:

i. Medicaid encounters and claims data;
ii. Enrollment data; and
iii. Consumer and provider surveys

c. **Study Design**: The design will include a description of the quantitative and qualitative study design, including a rationale for the methodologies selected. The discussion will include a proposed baseline and approach to comparison; examples to be considered as appropriate include the definition of control and/or comparison groups or within-subjects design, use of propensity score matching and difference in differences design to adjust for differences in comparison populations over time. To the extent possible, the former will address how the effects of the demonstration will be isolated from those other changes occurring in the state at the same time through the use of comparison or control groups to identify the impact of significant aspects of the demonstration. The discussion will include approach to benchmarking, and should consider applicability of national and state standards. The application of sensitivity analyses as appropriate shall be considered

d. **Study Population**: This includes a clear description of the populations impacted by each hypothesis, as well as the comparison population, if applicable. The discussion may include the sampling methodology for the selected population, as well as support that a statistically reliable sample size is available.

e. **Access, Service Delivery Improvement, Health Outcome, Satisfaction and Cost Measures**: This includes identification, for each hypothesis, of quantitative and/or qualitative process and/or outcome measures that adequately assess the effectiveness of the demonstration. Nationally recognized measures may be used where appropriate. Measures will be clearly stated and described, with the numerator and dominator clearly defined. To the extent possible, the State may incorporate comparisons to national data and/or measure sets. A broad set of performance metrics may be selected from nationally recognized metrics, for example from sets developed by the Center for Medicare and Medicaid Innovation, for meaningful use under HIT, and from the Medicaid Core Adult sets. Among considerations in selecting the metrics shall be opportunities identified by the State for improving quality of care and health outcomes, and controlling cost of care.

f. **Assurances Needed to Obtain Data**: The design report will discuss the State's arrangements to assure needed data to support the evaluation design are available.

g. **Data Analysis**: This includes a detailed discussion of the method of data evaluation, including appropriate statistical methods that will allow for the effects of the demonstration to be isolated from other initiatives occurring in the State. The level of analysis may be at the beneficiary, provider, and program level, as appropriate, and shall include population stratifications, for further depth. Sensitivity analyses may be used when appropriate. Qualitative analysis methods may also be described, if applicable.

h. **Timeline**: This includes a timeline for evaluation-related milestones, including those related to procurement of an outside contractor, and the deliverables outlined in this section. Pursuant to 42 CFR 431.424(c)(v), this timeline should also include the date by which the final summative evaluation report is due.

i. **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; how the state will assure no conflict of interest, and a budget for evaluation activities.

j. **State additions**: The state may provide to CMS any other information pertinent to the state's research on the policy operations of the demonstration operations. The state and CMS may discuss the scope of information necessary to clarify what is pertinent to the state's research.

75. Interim Evaluation Report. The state must submit a draft Interim Evaluation Report one year prior to this renewal period ending December 31, 2021. The Interim Evaluation Report shall include the same core components as identified in STC 74 for the Summative Evaluation Report and should be in accordance with the CMS approved evaluation design. The State shall submit the final Interim Evaluation Report within 30

days after receipt of CMS' comments. The state will submit an Interim Evaluation Report for the completed years of the demonstration, and for each subsequent renewal or extension of the demonstration, as outlined in 42 CFR 431.412(c)(2)(vi). When submitting an application for renewal, the Interim Evaluation Report should be posted to the state's website with the application for public comment. Also refer to Attachment B for additional information on the Interim Evaluation Report.

a. The Interim Evaluation Report will discuss evaluation progress and present findings to date as per the approved Evaluation Design.

b. For demonstration authority that expires prior to the overall demonstration's expiration date, the Interim Evaluation Report must include an evaluation of the authority as approved by CMS.

c. If the state is seeking to renew or extend the demonstration, the draft Interim Evaluation Report is due when the application for renewal is submitted. If the state made changes to the demonstration, the research questions, hypotheses and how the design was adapted should be included. If the state is not requesting a renewal for a demonstration, an Interim Evaluation report is due one (1) year prior to the end of the demonstration. For demonstration phase outs prior to the expiration of the approval period, the draft Interim Evaluation Report is due to CMS on the date that will be specified in the notice of termination or suspension.

d. The state will submit the final Interim Evaluation Report sixty (60) days after receiving CMS comments on the draft Interim Evaluation Report and post the document to the state's website.

e. The Interim Evaluation Report must comply with Attachment B of these STCs.

76. Summative Evaluation Reports.

a. The state shall provide the summative evaluation reports described below to capture the different demonstration periods.

i. The state shall provide a Summative Evaluation Report for the Arkansas Private Option demonstration period September 27, 2013 through December 31, 2016. This Summative Evaluation Report is due July 1, 2018, i.e., eighteen months following the date by which the demonstration would have ended except for this extension.

ii. The state shall submit a draft summative evaluation report for the Arkansas Works demonstration period starting January 1, 2017 through December 31, 2021. The draft summative evaluation report must be submitted within 18 months of the end of the approved period (December 31, 2021). The summative evaluation report must include the information in the approved evaluation design.

a. Unless otherwise agreed upon in writing by CMS, the state shall submit the final summative evaluation report within 60 days of receiving comments from CMS on the draft.
b. The final summative evaluation report must be posted to the state's Medicaid website within 30 days of approval by CMS.

b. The Summative Evaluation Report shall include the following core components:

i. **Executive Summary**. This includes a concise summary of the goals of the demonstration; the evaluation questions and hypotheses tested; and key findings including whether the evaluators find the demonstration to be budget neutral and cost effective, and policy implications.

ii. **Demonstration Description**. This includes a description of the demonstration programmatic goals and strategies, particularly how they relate to budget neutrality and cost effectiveness.

iii. **Study Design**. This includes a discussion of the evaluation design employed including research questions and hypotheses; type of study design; impacted populations and stakeholders; data sources; and data collection; analysis techniques, including controls or adjustments for differences in comparison groups, controls for other interventions in the State and any sensitivity analyses, and limitations of the study.

iv. **Discussion of Findings and Conclusions.** This includes a summary of the key findings and outcomes, particularly a discussion of cost effectiveness, as well as implementation successes, challenges, and lessons learned.

v. **Policy Implications**. This includes an interpretation of the conclusions; the impact of the demonstration within the health delivery system in the State; the implications for State and Federal health policy; and the potential for successful demonstration strategies to be replicated in other State Medicaid programs.

vi. **Interactions with Other State Initiatives**. This includes a discussion of this demonstration within an overall Medicaid context and long range planning, and includes interrelations of the demonstration with other aspects of the State's Medicaid program, and interactions with other Medicaid waivers, the SIM award and other federal awards affecting service delivery, health outcomes and the cost of care under Medicaid.

77. State Presentations for CMS. The State will present to and participate in a discussion with CMS on the final design plan, post approval, in conjunction with STC 74. The State will present on its interim evaluation in conjunction with STC 75. The State will present on its summative evaluation in conjunction with STC 76.

78. Public Access. The State shall post the final documents (e.g. Quarterly Reports, Annual Reports, Final Report, approved Evaluation Design, Interim Evaluation Report, and Summative Evaluation Report) on the State Medicaid website within 30 days of approval by CMS.

79. Additional Publications and Presentations. For a period of 24 months following CMS approval of the Summative Evaluation Report, CMS will be notified prior to the public release or presentation of these reports and related journal articles, by the State, contractor or any other third party. Prior to release of these reports, articles and other documents, CMS will be provided a copy including press materials. CMS will be given 30 days to review and comment on journal articles before they are released. CMS may choose to decline to comment or review some or all of these notifications and reviews.

80. Cooperation with Federal Evaluators. Should CMS undertake an evaluation of the demonstration or any component of the demonstration, the state shall cooperate timely and fully with CMS and its contractors. This includes, but is not limited to, submitting any required data to CMS or the contractor in a timely manner. Failure to cooperate with federal evaluators in a timely manner, including but not limited to entering into data use agreements covering data that the state is legally permitted to share, providing a technical point of contact, providing data dictionaries and record layouts of any data under control of the state that the state is legally permitted to share, and/or disclosing data may result in CMS requiring the state to cease drawing down federal funds until satisfactory cooperation, until the amount of federal funds not drawn down would exceed $5,000,000.

XIV. MONITORING

81. Monitoring Calls. CMS will convene periodic conference calls with the state. The purpose of these calls is to discuss any significant actual or anticipated developments affecting the demonstration. CMS will provide updates on any amendments or concept papers under review, as well as federal policies and issues that may affect any aspect of the demonstration. The state and CMS will jointly develop the agenda for the calls. Areas to be addressed include, but are not limited to:

a. Transition and implementation activities;
b. Stakeholder concerns;
c. QHP operations and performance;
d. Enrollment;
e. Cost sharing;
f. Quality of care;
g. Beneficiary access,

h. Benefit package and wrap around benefits;
i. Audits;
j. Lawsuits;
k. Financial reporting and budget neutrality issues;
l. Progress on evaluation activities and contracts;
m. Related legislative developments in the state; and
n. Any demonstration changes or amendments the state is considering.

82. Quarterly Reports. The state must submit three Quarterly Reports and one compiled Annual Report each DY.

a. The state will submit the reports following the format established by CMS. All Quarterly Reports and associated data must be submitted through the designated electronic system(s). The Quarterly Reports are due no later than 60 days following the end of each demonstration quarter, and the compiled Annual Report is due no later than 90 days following the end of the DY.

b. The reports shall provide sufficient information for CMS to understand implementation progress of the demonstration, including the reports documenting key operational and other challenges, underlying causes of challenges, how challenges are being addressed, as well as key achievements and to what conditions and efforts successes can be attributed.

c. Monitoring and performance metric reporting templates are subject to review and approval by CMS. Where possible, information will be provided in a structured manner that can support federal tracking and analysis.

d. The Quarterly Report must include all required elements and should not direct readers to links outside the report, except if listed in a Reference/Bibliography section. The reports shall provide sufficient information for CMS to understand implementation progress and operational issues associated with the demonstration and whether there has been progress toward the goals of the demonstration.

i. **Operational Updates** - The reports shall provide sufficient information to document key operational and other challenges, underlying causes of challenges, how challenges are being addressed, as well as key achievements and to what conditions and efforts successes can be attributed. The discussion should also include any lawsuits or legal actions; unusual or unanticipated trends; legislative updates; and descriptions of any public forums held.

ii. **Performance Metrics** - Progress on any required monitoring and performance metrics must be included in writing in the Quarterly and Annual Reports. Information in the reports will follow the

framework provided by CMS and be provided in a structured manner that supports federal tracking and analysis.

iii. **Budget Neutrality and Financial Reporting Requirements** - The state must provide an updated budget neutrality workbook with every Quarterly and Annual 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 expenditures associated with the populations affected by this demonstration on the Form CMS-64.

iv. **Evaluation Activities and Interim Findings**. 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. The state shall specify for CMS approval a set of performance and outcome metrics and network adequacy, including their specifications, reporting cycles, level of reporting (e.g., the state, health plan and provider level, and segmentation by population) to support rapid cycle assessment in trends for monitoring and evaluation of the demonstration.

e. The Annual Report must include all items included in the preceding three quarterly reports, which must be summarized to reflect the operation/activities throughout the whole DY. All items included in the quarterly report pursuant to STC 86 must be summarized to reflect the operation/activities throughout the DY. In addition, the annual report must, at should include the requirements outlined below.

i. Total annual expenditures for the demonstration population for each DY, with administrative costs reported separately;
ii. Total contributions, withdrawals, balances, and credits; and,
iii. Yearly unduplicated enrollment reports for demonstration beneficiaries for each DY (beneficiaries include all individuals enrolled in the demonstration) that include the member months, as required to evaluate compliance with the budget neutrality agreement.

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

a. The draft report must comply with the most current guidance from CMS.

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

c. The state must take into consideration CMS' comments for incorporation into the final Close Out Report.

d. The final Close Out Report is due to CMS no later than thirty (30) days after receipt of CMS' comments.

e. A delay in submitting the draft or final version of the Close Out Report may subject the state to penalties described in STC 6.

ATTACHMENT A

Copayment Amounts[1]

General Service Description	Cost Sharing for Beneficiaries with Incomes >100% FPL
Behavioral Health - Inpatient	$60
Behavioral Health - Outpatient	$4
Behavioral Health - Professional	$4
Durable Medical Equipment	$4
Emergency Room Services	-
FQHC	$8
Inpatient	$60
Lab and Radiology	-
Skilled Nursing Facility	$20
Other	$4
Other Medical Professionals	$4
Outpatient Facility	-
Primary Care Physician	$8
Specialty Physician	$10
Pharmacy - Generics	$4
Pharmacy - Preferred Brand Drugs	$4
Pharmacy - Non-Preferred Brand Drugs, including specialty drugs	$8

No copayments for individuals at or below 100% FPL.

[1] Beneficiaries with incomes above 100% FPL will also be required to pay monthly premiums of up to 2 percent of household income.

ATTACHMENT B
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 including 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 target population), and impacts of the demonstration (e.g., whether the outcomes observed in the targeted population differ from outcomes in similar populations not affected by the demonstration).

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.

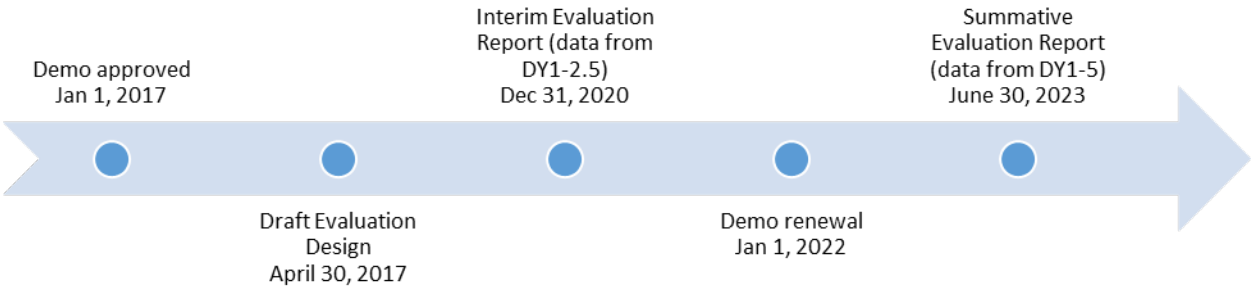
CMS expects Interim and Summative Evaluation Reports to be rigorous, incorporate baseline and comparison group assessments, as well as statistical significance testing. Technical assistance resources for constructing comparison groups and identifying causal inferences are available on Medicaid.gov: https://www.medicaid.gov/medicaid/section-1115-demonstrations/1115-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.

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 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.



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, renewal, or expansion of, the demonstration.
5. For renewals, 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 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. *Target and Comparison Populations* – Describe the target 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.

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?

Arkansas Works Program Evaluation for Section 1115 Demonstration Waiver Project Number 11-W-00287/6

Evaluation Design

May 4, 2021

ARKANSAS DEPARTMENT OF HUMAN SERVICES

TABLE OF CONTENTS

1 General Background Information

Arkansas was the first state to expand Medicaid using a Section 1115 demonstration funded by the Affordable Care Act (ACA) for Premium Assistance. In September 2013, the Centers for Medicare and Medicaid Services (CMS) approved Arkansas' request for a three-year Medicaid premium assistance demonstration entitled "Arkansas Health Care Independence Program (HCIP)," commonly referred to as the "Private Option." The demonstration allowed Arkansas to support healthcare coverage for individuals between 19 and 64 years of age with incomes at or below 138 percent of the federal poverty level through qualified health plans (QHPs) offered on the Health Insurance Marketplace (Marketplace) with premium assistance from Medicaid, effective January 1, 2014 through December 31, 2016.

On June 28, 2016, Governor Asa Hutchinson requested, via his letter to Secretary Burwell at the Department of Health and Human Services (DHHS), an extension and amendment application of the HCIP in accordance with legislation authorized by the Arkansas State Legislature with his concurrence entitled the *Arkansas Works Act of 2016*. The intent of the extension request was to build upon the HCIP's success of providing health insurance coverage for over 240,000 Arkansans having, as stated by Governor Hutchinson in his letter, "…*fulfilled its goals of promoting continuity of care, improving access to providers, smoothing the 'seams' across the continuum of coverage and furthering quality improvement and delivery system reform initiatives.*" CMS's approval letter for this request, dated December 8, 2016, updated the special terms and conditions (STCs) and acknowledged the demonstration project name change to "Arkansas Works."

Although additional Arkansas Works program revision requests from the State of Arkansas and approvals from CMS have been formalized since, the STCs dated December 8, 2016 prevail per CMS guidance letter dated May 14, 2019, and this updated Waiver Evaluation Design has been prepared in compliance with such. The employer sponsored insurance (ESI) premium assistance program is excluded from this evaluation. Although it is included in the prevailing STCs and had authorization to begin on January 1, 2017, the ESI program was eliminated by state law on May 4, 2017. CMS addressed ending the program in an amendment approval letter dated March 5, 2018, found at https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ar/ar-works-ca.pdf, and was never reinstated. The minimal participation during the program's few active months would render any analysis invalid.

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	
Waiver Proposal Submitted to CMS	August 6, 2013
Waiver Proposal Approved by CMS	September 27, 2013
HCIP Implemented	October 1, 2013
HCIP Expiration	December 31, 2016
Proposed Evaluation Plan Submitted to CMS	February 20, 2014
Evaluation Plan Approved by CMS	March 24, 2014
Extension Application Submitted to CMS	July 7, 2016
Extension Application Approved by CMS	December 8, 2016
Arkansas Works Implemented	January 1, 2017
Arkansas Works Expiration	December 31, 2021
Proposed Evaluation Plan Submitted to CMS	February 6, 2017
Evaluation Plan Approved by CMS	May 2021
Amendment Request Submitted to CMS	June 30, 2017
Amendment Request Approved by CMS	To be inserted by DHS or CMS
CMS Letter Reverting to December 8, 2016 STCs	May 14, 2019

Under the current Arkansas Works program, the state is determined to build on HCIP's achievements and continue its goals of:

- Improving continuity of care
- Improving access to care
- Improving quality of care
- Providing cost-effective healthcare

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 138 percent of the federal poverty level.

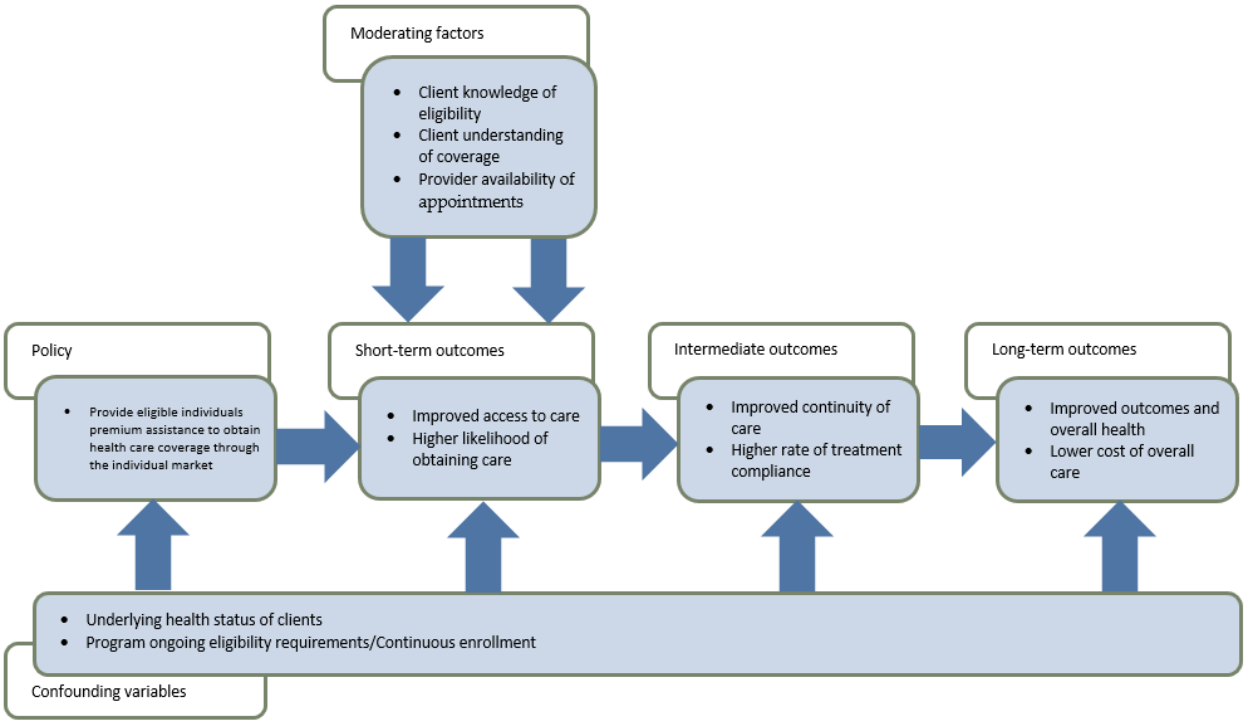


Figure 1: Arkansas Demonstration Waiver Evaluation Logic Model

The following details of the evaluation design respond to the requirements for the waiver evaluation as stipulated in Section XIII of the STCs dated December 8, 2016.

2 Evaluation Questions and Hypotheses

An effective evaluation design was developed with a Measure Diagram to help clearly depict the fundamental relationship between the aims for the demonstration, hypotheses to consider, and the measures identified 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 its clients as compared with the traditional Medicaid fee-for-service (FFS) program. The hypotheses associate specific STCs from CMS to guide the comparison, and the measures stipulate the metrics applied to each hypothesis that will be analyzed to measure and validate the performance of the demonstration. Detailed information about each metric can be found in Section 3.4 of this document.

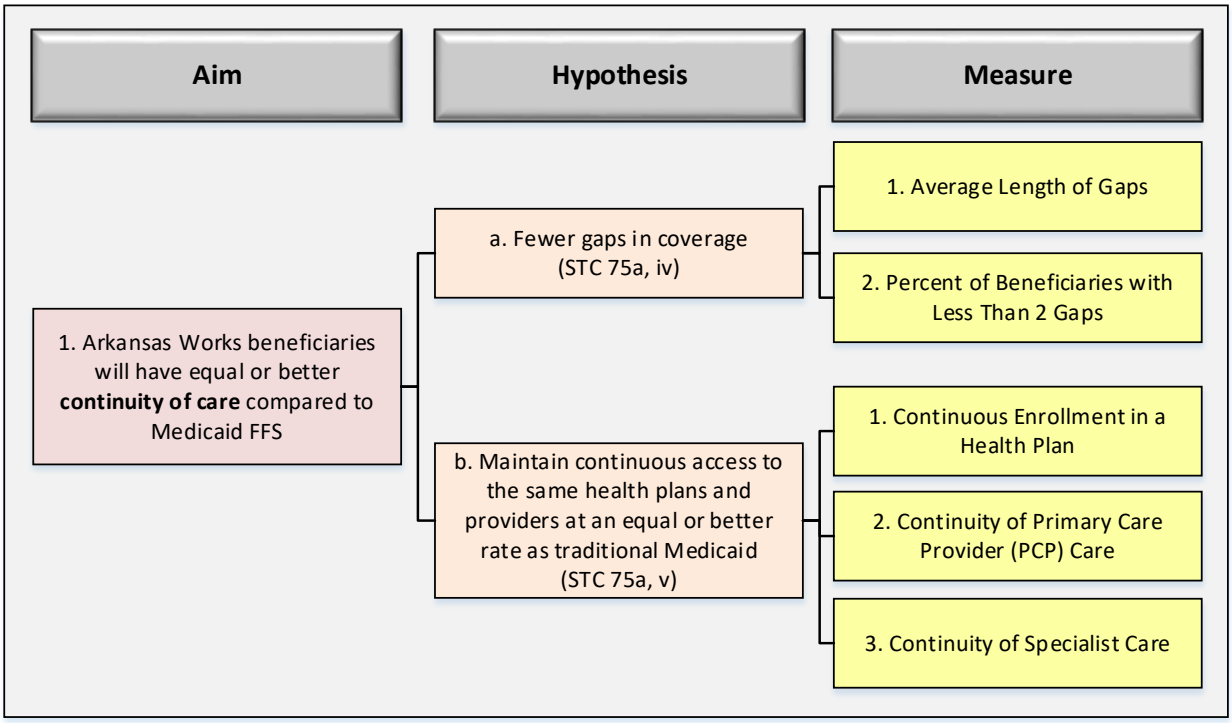


Figure 2: Measure Diagram Aim 1

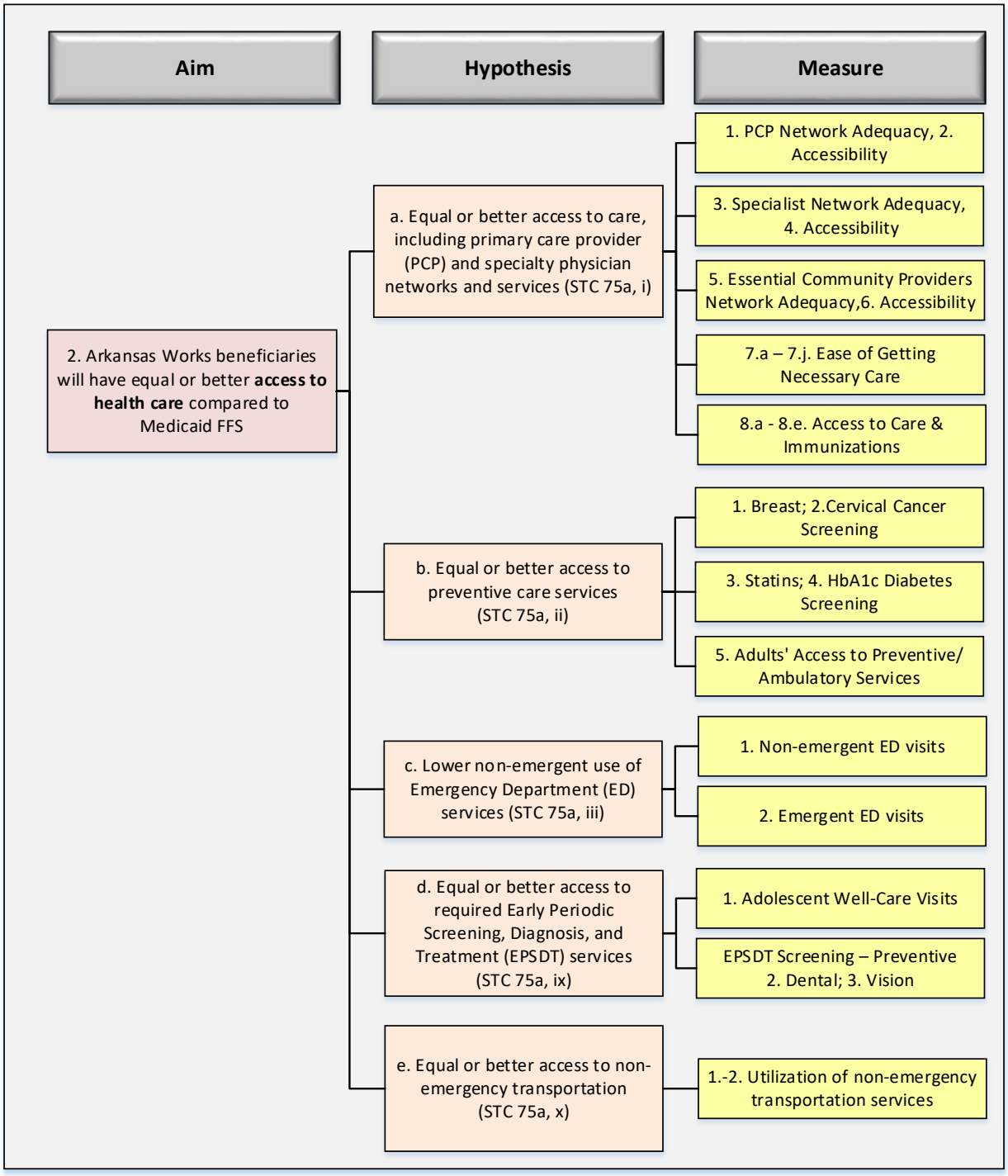


Figure 3: Measure Diagram Aim 2

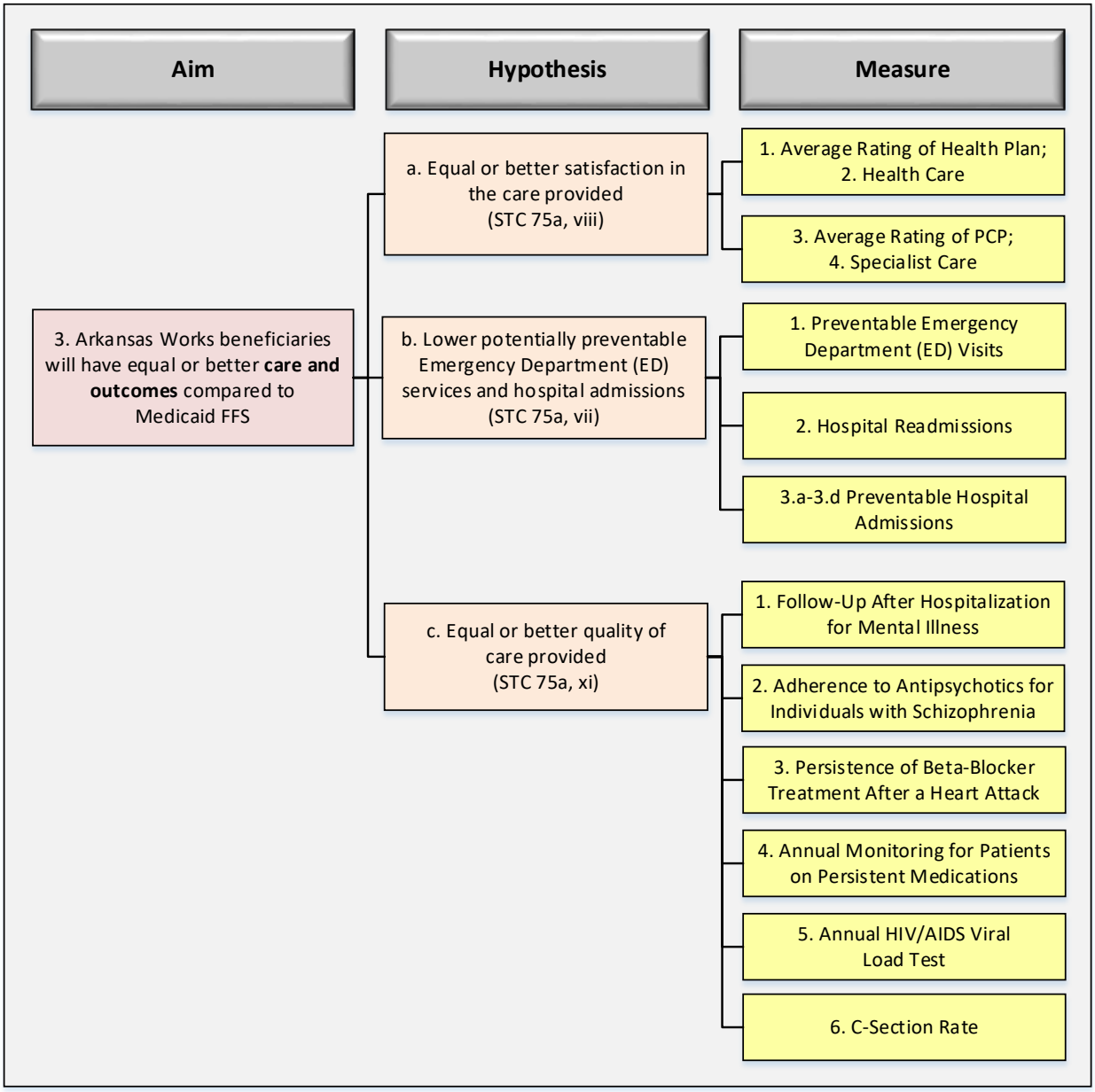


Figure 4: Measure Diagram Aim 3

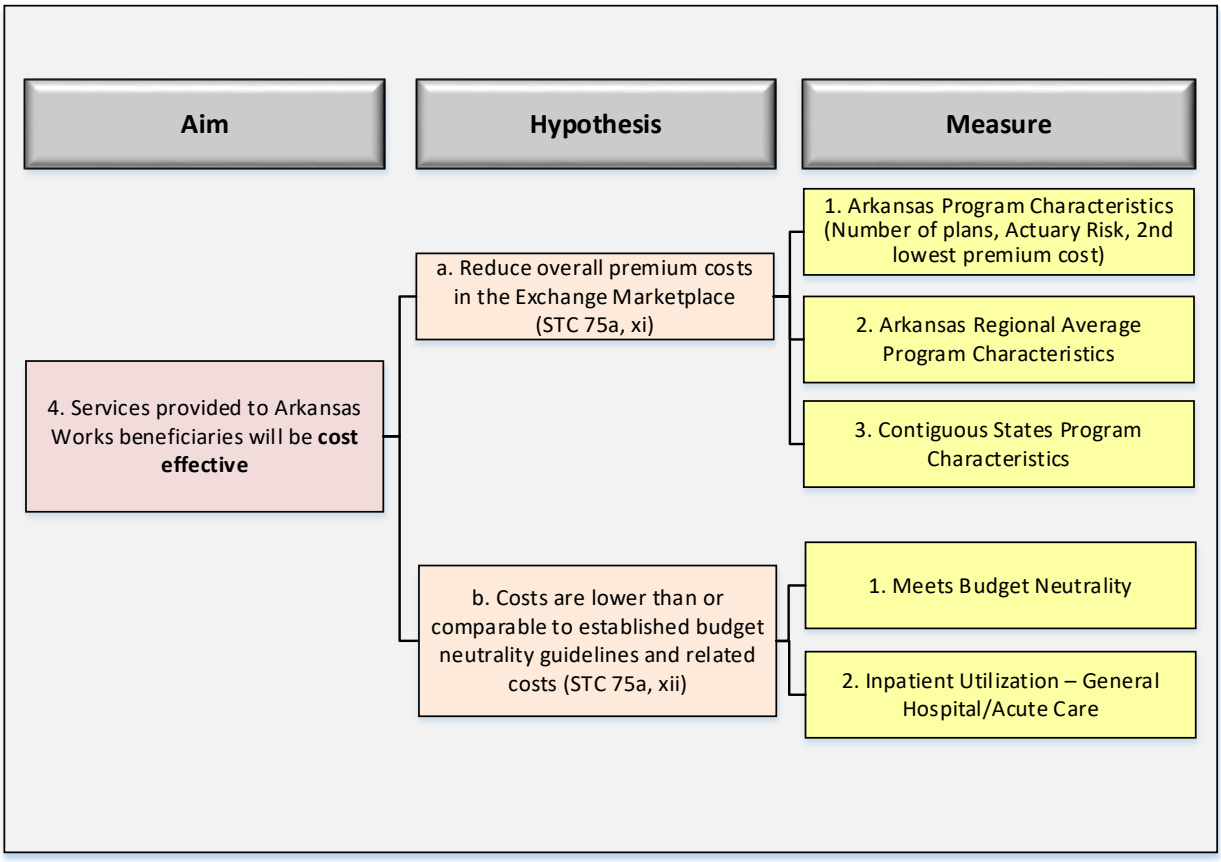


Figure 5: Measure Diagram Aim 4

3 METHODOLOGY

3.1 EVALUATION DESIGN

The evaluation will test hypotheses of continuity, access, care and outcomes, and cost-effectiveness using data from eligibility, claims, surveys, commercial insurance, and cost reporting. Eligibility data will address continuity of care in Aim 1, and claims-based measures will address Aims 1–4. All measures will be evaluated for each calendar year of the demonstration.

Survey data will be used in Aims 2 and 3. To assess client experiences of health care, a Client Engagement Satisfaction survey will be administered to clients in Arkansas Works and fee-for-service Medicaid. The Behavioral Risk Factor Surveillance System (BRFSS) survey data will be used to compare Arkansas with out-of-state comparison groups on health care access and immunization.

Additionally for Aim 2, provider networks for Arkansas Works plans will be compared with Arkansas Medicaid provider networks to assess network adequacy and accessibility, a pre-post comparison will be performed for clients eligible for Medicaid Early and Periodic Screening, Diagnostic and Treatment (EPSDT) services, and access to non-emergency transportation will be assessed. To assess cost-effectiveness for Aim 4, program characteristics will be compared at the regional and state levels and with the budget neutrality cap.

Two measures of access to health care (Aim 2) will also be used to evaluate Arkansas Works' policy of required premium contributions for clients with income >100% FPL. Two measures of continuity (Aim 1) will be used to evaluate the effect of premium contributions as well as Arkansas Works' waiver of retroactive eligibility (see Sections 3.6.7, 3.7). For these measures, years 2014–2019 will be analyzed in an interrupted time series design to compare trends before and after policy implementation. When available, expansion population adults in Arkansas who were subject to the policies will be compared with those who were not.
The Arkansas Works evaluation will utilize client-level weighting for the eligibility and claims-based measures to achieve comparable target and comparison groups for analyses. For each measure, the eligible clients 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 client-level models that additionally adjust for previous experience in the program and/or risk scores.

Since Arkansas Works is a multi-year program scheduled to run through 2021, there is a possibility of following each calendar-year cohort across years. For example, clients identified in the target and comparison populations for 2017 could be followed in 2018, 2019, 2020, and 2021 in a longitudinal analysis that accounts for serial autocorrelation and attrition. This type of analysis can leverage each client's calendar-year metric results to provide statistically sound longer-term results.

3.2 Target and Comparison Populations

Below is a conceptual diagram of the populations addressed in the Arkansas Works evaluation (Figure 6). The comparison group was determined to be non-disabled adults who would have been eligible for Arkansas Medicaid, pre-expansion. It is composed of clients in the parent/caretaker relative (<17% FPL) and former foster care (no income limit) aid categories.

The target group is composed of clients 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 clients enrolled in Arkansas Works have services paid by Medicaid fee-for-service before a QHP is chosen or assigned.

In Figure 6, 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 groups are not available for them.

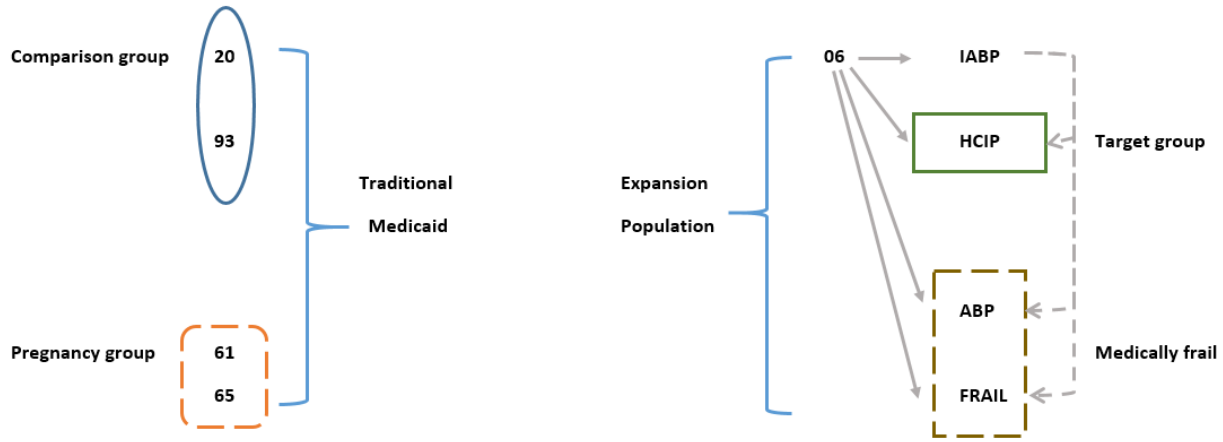


Figure 6: Conceptual Diagram of Evaluation Populations

Operationally, clients will be assigned to the target or comparison population in each analysis year based on having at least 6 months (180 days) of eligibility in segments qualifying for the target or comparison population (Table 2). Clients 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 clients 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 2: Combinations of aid category, Federal Medical Assistance Percentage (FMAP) code and benefit plan qualifying for study populations.

Study Population	Aid Category	FMAP Code	Benefit Plan
Target[1]	06 - adult expansion	Y - newly eligible	HCIP, IABP[3]
		N - oldly eligible	
		P - oldly eligible, parent/caretaker	
Comparison[1]	20 - parent/caretaker relative	N/A	N/A
	93 - former foster care		
Pregnancy[2]	61 – pregnant women, limited benefit plans	N/A	LPW, PWUCH
	65 – pregnant women, full coverage		MCAID
Medically Frail[2]	06 - adult expansion	Y - newly eligible	ABP, FRAIL, IABP[3]
		N - oldly eligible	
		P - oldly eligible, parent/caretaker	

[1] Exclusive of other combinations of aid category, FMAP code, and benefit plan.

[2] Inclusive of other combinations of aid category, FMAP code, 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 client exclusions will apply to each measurement year:

- less than 18 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 clients who were eligible for Medicaid Early and Periodic Screening, Diagnostic and Treatment (EPSDT) services as 17- or 18-year-olds who became eligible for a QHP as 19- or 20-year olds. We will define these clients as the EPSDT population to test the hypothesis that QHP clients had at least as satisfactory access to EPSDT benefits. These clients could also be included in the target population in the year(s) that they were in a QHP.

The target and comparison groups 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.

Table 3: Preliminary sample sizes for each measurement year to be included in the interim report.

Study Population	2017	2018	2019	2020	2021
Target	219,498	202,812	181,243	TBD	TBD
Comparison	35,534	32,658	34,724	TBD	TBD
Pregnancy	9,219	8,773	9,407	TBD	TBD
Medically frail	19,038	19,962	20,250	TBD	TBD

Because the IABP is considered part of the Arkansas Works 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 4: IABP Measurement Details

Analysis Level	IABP Segment Treatment
Populations	Exclude clients with IABP from the comparison population
Gaps in insurance coverage	Include IABP segments as insurance coverage
Continuous Enrollment in a Health Plan	IABP as a separate health plan from target and pregnancy, included with medically frail
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 client's eligibility for Arkansas Works but are separate from enrollment into a QHP. Hence, clients with eligibility segments qualifying for the comparison population 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 will ensure that diagnoses and medical services from the interim period contribute to a complete picture of client experience in Arkansas Works. 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 will be assessed to compare Arkansas with comparison states that expanded traditional Medicaid.

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 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.[1]

Current BRFSS weighting methodology provides state-level weights that allow for cross-year comparisons since 2011.[2] The comparison states of Kentucky, Ohio, Pennsylvania, and West Virginia will be used, provided that the demographics of each state in the pre-expansion period were similar to those of Arkansas.

3.2.2 Client Engagement Satisfaction Survey

The evaluator will administer a Client Engagement Satisfaction survey using the Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, Adult Medicaid 5.0, core questions with the addition of three supplemental items and two questions specific to the Arkansas Works 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 are

1. The survey tool (English and Spanish version)
2. The process of a survey administered by mail
3. Survey population defined to be sampled
4. Sample size

[1] 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

[2] 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

The detailed description of the plan components:

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.
    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. Arkansas Works (target group) and Arkansas Medicaid (comparison group)
        ii. Survey respondent's name
        iii. Private insurance company'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 5.0 CORE questionnaire with supplemental questions. There are 5 additional questions:
        i. In the last 6 months, how many days did you usually have to wait for an appointment for a check-up or routine care?
        ii. In the last 6 months, how often did you have to wait for an appointment because of a provider's lack of hours/availability?
        iii. 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 this provider's office?
        iv. In the last 6 months, during visits to this provider's office, how often did you get an interpreter when you needed one?
        v. In the last 6 months, how easy was it to get a referral to a specialist?
    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 Spanish version survey.
    D. Survey letter
    E. Post cards
    F. Envelopes

2. The process of a mail survey has multiple steps that will need to be in place for successful execution:
    A. Confidentiality. The evaluator will create a random number that will be on all of the survey materials which can only be cross-walked within our 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 Spanish-speaking recipients or to request a 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 21)
    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 49)
    vi. Third survey: A third survey may be sent only if the response rate 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. Arkansas Works (Target Group Survey)
        i. Target population in the six-month timeframe prior to the survey starting. Based on monthly premium payments, a client 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 client per household, with the sampling rate based on the carrier's proportion of the market share (eg., if insurance company A insures 40% of the eligible Arkansas Works survey population, their sampling rate will be 40%).
    B. Medicaid (Comparison Group 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 client per household

4. The evaluator will follow the AHRQ guidelines for sample size calculations using historical response rates and the knowledge that there are issues with bad addresses. AHRQ states that 300 completed surveys are needed to complete an analysis. With the historical response rate of 25% and expected rate of bad addresses, the evaluator will complete a random sample of 1,700 Arkansas Works adult recipients and 1,700–2,900 fee-for-service Medicaid adult recipients.

    A power analysis indicated that at a power of 0.8, the minimum detectable difference in proportions is 0.11, within the range of potential sample sizes of completed surveys (Table 5).

*Table 5: Minimum detectable differences between two independent proportions: two-sided z-test (G*Power 3.1.9.7).*

Inputs					Outputs	
Complete surveys from sample 1	Complete surveys from sample 2	Power (1 - beta)	alpha (type 1 error)	p1 proportion	p2 proportion	Critical z
275	300	0.8	0.05	0.5	0.612	1.96
300	300	0.8	0.05	0.5	0.613	1.96
300	325	0.8	0.05	0.5	0.611	1.96
325	325	0.8	0.05	0.5	0.609	1.96
300	350	0.8	0.05	0.5	0.609	1.96
325	350	0.8	0.05	0.5	0.607	1.96
350	350	0.8	0.05	0.5	0.605	1.96

Complete surveys will be analyzed according to the AHRQ guidelines[3]: "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.

To increase response rate, 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 Arkansas Works 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.

The estimated survey budget follows in Table 6.

[3] Preparing Data from CAHPS Surveys for Analysis. Updated May 15, 2017. Accessed at https://www.ahrq.gov/cahps/surveys-guidance/helpful-resources/analysis/index.html

Table 6: Survey Budget

Client Engagement Satisfaction Survey Budget		
Type	**Description**	**Cost**
Printing	* Advance Letters * Advance Letter Envelopes * Surveys * Survey Envelopes * Survey Return Envelopes * Reminder Cards	$ 24,409.42
Postage	* Advance Letters * Surveys * Survey Return Envelopes * Reminder Cards	$ 9,114.58
Statistical Analysis		$ 7,540.00
Gift Card Raffle	* Four $50 for FFS population * Four $50 for ARWorks population	$400
Total		**$ 41,464.00**

3.3 Evaluation Period

The evaluation period is January 1, 2017 through December 31, 2021. Specific reports associated with this evaluation are outlined below:

1. **Draft Interim Evaluation**
   Per CMS acceptance, this report will be submitted by June 30, 2021 and adhere to all STC inclusion requirements. The time period of data included in this report will be January 1, 2017 through December 31, 2019.
2. **Final Interim Evaluation**
   Per STC 76, this final version of Item 1 above will be submitted within 30 days after receipt of CMS's comments and adhere to all STC inclusion requirements. The time period of data included in this report will remain as stipulated in Item 1 above.
3. **Summative Evaluation**
   Per CMS recommendation, this single summative report will replace all summative reports stipulated in the STCs and will be submitted by June 30, 2023. The time period of data included in this report will be January 1, 2017 through December 31, 2021, and any outstanding assessments due to data lags will be documented. As noted above, this document references time periods specific to the Interim Evaluation. However, for the Summative Evaluation, all data collection and analyses will incorporate the entire demonstration approval period (2017 through 2021).

3.4 Evaluation Measures

Aim 1. Continuity of Coverage and Care

Hypothesis 1.a. Arkansas Works clients will have fewer or the same gaps in coverage compared to Medicaid FFS. (STC 75a, iv)

Measure 1.a.1	Average Length of Gaps in Coverage
Description:	The average length of gaps in coverage, in months, during the measurement period
Numerator:	Duration of gaps in all coverage, in months
Denominator:	Number of gaps in all coverage
Exclusion Criteria:	None
Continuous Enrollment:	Refer to population definition
Data Source(s):	Medicaid Management Information System (MMIS) eligibility and enrollment files
Measure Steward(s):	Division of Medical Services (DMS) Homegrown
Comparison Group:	Medicaid FFS comparison group
Comparison Method(s):	• Inverse probability of treatment weight (IPTW)/coarsened exact matching (CEM) weighting • Client-level weighted model • Interrupted time series
Statistic to Be Tested:	• Difference in group means • Coefficient of treatment variable
National Benchmark:	None

Measure 1.a.2	Percent of Clients with Less Than 2 Gaps in Coverage
Description:	Percent of clients with less than 2 gaps in coverage during the measurement period
Numerator:	Clients with 0 or 1 gaps in all coverage

Denominator:	Number of clients
Exclusion Criteria:	None
Continuous Enrollment:	Refer to population definition
Data Source(s):	MMIS eligibility and enrollment files
Measure Steward(s):	DMS Homegrown
Comparison Group:	Medicaid FFS comparison group
Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model • Interrupted time series
Statistic to Be Tested:	• Difference in group percentages • Coefficient of treatment variable
National Benchmark:	None

Hypothesis 1.b. Maintain continuous access to the same health plans and providers at an equal or better rate as traditional Medicaid (STC 75a, v)

Measure 1.b.1	**Continuous Enrollment in a Health Plan**
Definition:	Average number of months in a row enrolled in a health plan
Numerator:	Number of months enrolled in each health plan by segment
Denominator:	Number of segments per health plan
Exclusion Criteria:	None
Continuous Enrollment:	Refer to population definition
Data Source(s):	MMIS eligibility and QHP enrollment files
Measure Steward(s):	DMS Homegrown

Comparison Group:	Medicaid FFS comparison group
Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model
Statistic to Be Tested:	• Difference in group means • Coefficient of treatment variable
National Benchmark:	None

Measure 1.b.2	**Continuity of Primary Care Provider (PCP) Care**
Definition:	Consistent use of the same primary care provider over time -- proportion of primary care visits with 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:	None
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 Group:	Medicaid FFS comparison group
Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model
Statistic to Be Tested:	• Difference in group percentages • Coefficient of treatment variable
National Benchmark:	None

Measure 1.b.3	**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:	None
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 Group:	Medicaid FFS comparison group
Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model
Statistic to Be Tested:	• Difference in group percentages • Coefficient of treatment variable
National Benchmark:	None

Aim 2. Access to Health Care

Hypothesis 2.a. Arkansas Works clients will have equal or better access to care including primary care provider (PCP) and specialty physician networks and services (STC 75a, i)

Measure 2.a.1	**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:	Outputs from issuers in geomaps will show ability to meet this standard for sample enrollee population per service area
Denominator:	Outputs from issuers from geomaps will show ability to meet this standard for sample enrollee population per service area
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A

Data Source(s):	Carrier/Medicaid Geomaps/QHP Templates
Measure Steward(s):	DMS Homegrown
Comparison Group:	Arkansas Medicaid PCP provider network
Comparison Method(s):	Geospatial analysis
Statistic to Be Tested:	N/A
National Benchmark:	None

Measure 2.a.2	**PCP Network Accessibility**
Definition:	Accessibility of primary care provider network for enrolled populations—proportion of clients with primary care accessible within 30 miles
Numerator:	Outputs from issuers in geomaps will show ability to meet this standard for sample enrollee population per service area
Denominator:	Outputs from issuers in geomaps will show ability to meet this standard for sample enrollee population per service area
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Carrier/Medicaid Geomaps/QHP Templates
Measure Steward(s):	DMS Homegrown
Comparison Group:	Arkansas Medicaid PCP provider network
Comparison Method(s):	Geospatial analysis
Statistic to Be Tested:	N/A
National Benchmark:	None

Measure 2.a.3	Specialist Network Adequacy
Definition:	Adequacy of specialist provider network for enrolled populations—proportion of service area without specialist coverage within 60 miles
Numerator:	Outputs from Arkansas Specialty Access Template and AR Provider/Enrollee Ratio Template
Denominator:	Outputs from AR Specialty Access Template and Arkansas Provider/Enrollee Ratio Template
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Carrier/Medicaid Geomaps/QHP Templates
Measure Steward(s):	DMS Homegrown
Comparison Group:	Arkansas Medicaid specialist provider network
Comparison Method(s):	Geospatial analysis
Statistic to Be Tested:	N/A
National Benchmark:	None

Measure 2.a.4	Specialist Network Accessibility
Definition:	Accessibility of specialist network for enrolled populations—proportion of clients with specialist accessible within 60 miles
Numerator:	Outputs from AR Specialty Access Template and Provider/Enrollee Ratio Template
Denominator:	Outputs from AR Specialty Access Template and Provider/Enrollee Ratio Template

Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Carrier/Medicaid Geomaps/QHP Templates
Measure Steward(s):	DMS Homegrown
Comparison Group:	Arkansas Medicaid specialist provider network
Comparison Method(s):	Geospatial analysis
Statistic to Be Tested:	N/A
National Benchmark:	None

Measure 2.a.5	**Essential Community Providers (ECP) Network Adequacy (NA)**
Definition:	Adequacy of essential community providers
Numerator:	Outputs from federal NA/ECP template
Denominator:	Outputs from federal NA/ECP template
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	Carrier/Medicaid Geomaps/QHP Templates
Measure Steward(s):	DMS Homegrown
Comparison Group:	Arkansas Medicaid ECP provider network
Comparison Method(s):	Geospatial analysis

Statistic to Be Tested:	N/A
National Benchmark:	None

Measure 2.a.6	**Essential Community Providers Network Accessibility**
Definition:	Accessibility of ECPs
Numerator:	Outputs from federal NA/ECP template
Denominator:	Outputs from federal NA/ECP template
Exclusion Criteria:	None
Continuous Enrollment:	N/A
Data Source(s):	Carrier/Medicaid Geomaps/QHP Templates
Measure Steward(s):	DMS Homegrown
Comparison Group:	Arkansas Medicaid ECP provider network
Comparison Method(s):	Geospatial analysis
Statistic to Be Tested:	N/A
National Benchmark:	None

Measure 2.a.7.a	**Ease of Getting Necessary Care: Got care for illness/injury as soon as needed**
Definition:	Got 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:	None
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of client experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.0, Q4; Arkansas Works survey Q4
Comparison Group:	Arkansas Medicaid client survey respondents who completed the survey
Comparison Method(s):	Comparison of answer frequencies, case-mix adjustment
Statistic to Be Tested:	Chi-squared test
National Benchmark:	CAHPS Health Plan Survey Database Chartbook: Adult Medicaid 2020

Measure 2.a.7.b	**Ease of Getting Necessary Care: Got non-urgent appointment as soon as needed**
Definition:	Got 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:	None
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of client experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.0, Q6; Arkansas Works survey Q6
Comparison Group:	Arkansas Medicaid client survey respondents who completed the survey

Comparison Method(s):	Comparison of answer frequencies, case-mix adjustment
Statistic to Be Tested:	Chi-squared test
National Benchmark:	CAHPS Health Plan Survey Database Chartbook: Adult Medicaid 2020

Measure 2.a.7.c	**Ease of Getting Necessary Care: 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:	None
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of enrollee experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.0, Q9; Arkansas Works survey Q11
Comparison Group:	Arkansas Medicaid client survey respondents who completed the survey
Comparison Method(s):	Comparison of answer frequencies, case-mix adjustment
Statistic to Be Tested:	Chi-squared test
National Benchmark:	CAHPS Health Plan Survey Database Chartbook: Adult Medicaid 2020

Measure 2.a.7.d	**Ease of Getting Necessary Care: 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:	None
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of client experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.0, Q10; AR Works survey Q12
Comparison Group:	Arkansas Medicaid client survey respondents who completed the survey
Comparison Method(s):	Comparison of answer frequencies, case-mix adjustment
Statistic to Be Tested:	Chi-squared test
National Benchmark:	None

Measure 2.a.7.e	**Ease of Getting Necessary Care: Got appointment with specialists as soon as needed**
Definition:	Got 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:	None
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of client experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.0, Q18; Arkansas Works survey Q22

Comparison Group:	Arkansas Medicaid client survey respondents who completed the survey
Comparison Method(s):	Comparison of answer frequencies, case-mix adjustment
Statistic to Be Tested:	Chi-squared test
National Benchmark:	CAHPS Health Plan Survey Database Chartbook: Adult Medicaid 2020

Measure 2.a.7.f	**Ease of Getting Necessary Care: 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:	None
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of client experiences
Measure Steward(s):	CAHPS Supplemental Item P-IN1; Arkansas Works survey Q18
Comparison Group:	Arkansas Medicaid client survey respondents who completed the survey
Comparison Method(s):	Comparison of answer frequencies
Statistic to Be Tested:	Chi-squared test
National Benchmark:	None

Measure 2.a.7.g	**Ease of Getting Necessary Care: 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:	None
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of client experiences
Measure Steward(s):	CAHPS Supplemental Item P-IN2; Arkansas Works survey Q19
Comparison Group:	Arkansas Medicaid client survey respondents who completed the survey
Comparison Method(s):	Comparison of answer frequencies
Statistic to Be Tested:	Chi-squared test
National Benchmark:	None

Measure 2.a.7.h	**Ease of Getting Necessary Care: Days wait time between making appointment and seeing provider**
Definition:	Days wait time between making appointment and seeing provider
Numerator:	Survey respondents who received an appointment within 7 days
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:	None
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of client experiences
Measure Steward(s):	CAHPS Clinician and Group Survey 3.0 Supplemental Item AC2; Arkansas Works survey Q7

Comparison Group:	Arkansas Medicaid client survey respondents who completed the survey
Comparison Method(s):	Comparison of answer frequencies, case-mix adjustment
Statistic to Be Tested:	Chi-squared test
National Benchmark:	None

Measure 2.a.7.i	**Ease of Getting Necessary Care: 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:	None
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of client experiences
Measure Steward(s):	Arkansas Works survey Q8
Comparison Group:	Arkansas Medicaid client survey respondents who completed the survey
Comparison Method(s):	Comparison of answer frequencies, case-mix adjustment
Statistic to Be Tested:	Chi-squared test
National Benchmark:	None

Measure 2.a.7.j	Ease of Getting Necessary Care: 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:	None
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of client experiences
Measure Steward(s):	Arkansas Works survey Q21
Comparison Group:	Arkansas Medicaid client survey respondents who completed the survey
Comparison Method(s):	Comparison of answer frequencies, case-mix adjustment
Statistic to Be Tested:	Chi-squared test
National Benchmark:	None

Measure 2.a.8.a	Access to Care and Immunizations: 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):	Behavioral Risk Factor Surveillance System (BRFSS)

Measure Steward(s):	Centers for Disease Control and Prevention (CDC), BRFSS
Comparison Group:	Adults age 19-64 with income <138% FPL in comparison states
Comparison Method(s):	Differences-in-differences (DiD)
Statistic to Be Tested:	DiD estimator
National Benchmark:	N/A

Measure 2.a.8.b	**Access to Care and Immunizations: 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 Group:	Adults age 19-64 with income <138% FPL in comparison states
Comparison Method(s):	Differences-in-differences
Statistic to Be Tested:	DiD estimator
National Benchmark:	N/A

Measure 2.a.8.c	Access to Care and Immunizations: 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 Group:	Adults age 19-64 with income <138% FPL in comparison states
Comparison Method(s):	Differences-in-differences
Statistic to Be Tested:	DiD estimator
National Benchmark:	N/A

Measure 2.a.8.d	Access to Care and Immunizations: 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 Group:	Adults age 19-64 with income <138% FPL in comparison states
Comparison Method(s):	Differences-in-differences
Statistic to Be Tested:	DiD estimator
National Benchmark:	N/A

Measure 2.a.8.e	**Access to Care and Immunizations: 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 questions FLUSHOT6 (2013-2018) and FLUSHOT5 (2011-2012)
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	BRFSS
Measure Steward(s):	CDC-BRFSS
Comparison Group:	Adults age 19-64 with income <138% FPL in comparison states
Comparison Method(s):	Differences-in-differences
Statistic to Be Tested:	DiD estimators
National Benchmark:	N/A

Hypothesis 2.b. Arkansas Works clients will have equal or better access to preventive care services (STC 75a, ii)

Measure 2.b.1	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:	Clients 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 Group:	Medicaid FFS comparison group
Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model
Statistic to Be Tested:	• Difference in group means • Coefficient of treatment variable
National Benchmark:	Medicaid Adult Core Set FFY 2018–2020, measurement years 2017–2019
Deviation(s):	Maximum age truncated from 75 to 64. Paid claims only

Measure 2.b.2	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:	Clients with hospice care. Implement optional exclusion: Hysterectomy with no residual cervix, cervical agenesis, or acquired absence of cervix any time during the client'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 Group:	Medicaid FFS comparison group
Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model
Statistic to Be Tested:	• Difference in group means • Coefficient of treatment variable
National Benchmark:	Medicaid Adult Core Set FFY 2018–2020, measurement years 2017–2019
Deviation(s):	Paid claims only

Measure 2.b.3	**Statin Therapy for Patients With Diabetes (SPD)**
Definition:	The percentage of clients 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:	Clients who were dispensed at least one statin medication of any intensity during the measurement year
Denominator:	Clients 40–64 years of age during the measurement year with diabetes who do not have clinical atherosclerotic cardiovascular disease (ASCVD)
Exclusion Criteria:	Clients with hospice care. Clients 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 Group:	Medicaid FFS comparison group
Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model
Statistic to Be Tested:	• Difference in group means • Coefficient of treatment variable
National Benchmark:	HEDIS Medicaid 2017–2019 national rates
Deviation(s):	Upper end of age range truncated from 75 to 64. Paid claims only

Measure 2.b.4	**Comprehensive Diabetes Care: Hemoglobin A1c Testing**
Definition:	The percentage of clients 18–64 years of age with diabetes (type 1 and type 2) who had Hemoglobin A1c (HbA1c) testing performed
Numerator:	Clients with an HbA1c test performed during the measurement year
Denominator:	Clients identified as having diabetes during the measurement year or the year prior to the measurement year

Exclusion Criteria:	Clients 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 Group:	Medicaid FFS comparison group
Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model
Statistic to Be Tested:	• Difference in group means • Coefficient of treatment variable
National Benchmark:	Medicaid Adult Core Set FFY 2018–2019, measurement years 2017–2018. HEDIS Medicaid 2019 national rate
Deviation(s):	Upper end of age range truncated from 75 to 64. Paid claims only

Measure 2.b.5	**Adults' Access to Preventive/Ambulatory Services (AAP)**
Definition:	The percentage of clients 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:	Clients 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 Group:	Medicaid FFS comparison group
Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model • Interrupted time series
Statistic to Be Tested:	• Difference in group means • Coefficient of treatment variable
National Benchmark:	None
Deviation(s):	Upper end of age range truncated to 64. Paid claims only

Hypothesis 2.c. Arkansas Works clients will have equal or lower use of non-emergent services (STC 75a, iii)

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
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 Group:	Medicaid FFS comparison group
Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model • Interrupted time series
Statistic to Be Tested:	Difference in group means
National Benchmark:	None

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
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 Group:	Medicaid FFS comparison group
Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model • Interrupted time series
Statistic to Be Tested:	Difference in group means
National Benchmark:	None

Hypothesis 2.d. Arkansas Works clients will have equal or better access to required Early Periodic Screening, Diagnosis, and Treatment (EPSDT) services (STC 75a, ix)

Measure 2.d.1	Adolescent Well-Care Visits (AWC)
Definition:	Clients 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:	Clients who received a well-care visit during the measurement year
Denominator:	Clients enrolled in Medicaid FFS and eligible for EPSDT services at ages 17–18 who enrolled in Arkansas Works at ages 19–20
Exclusion Criteria:	Clients 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 Group:	Clients in the treatment group, during the 1–2 years prior to enrolling in Arkansas Works
Comparison Method(s):	Pre-post comparison
Statistic to Be Tested:	Paired t-test
National Benchmark:	None
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. Clients 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 clients

Measure 2.d.2	**EPSDT Screening – Preventive Dental Visits**
Definition:	Percent of eligible clients who received at least one preventive dental service
Numerator:	Clients who received a preventive dental service
Denominator:	Clients enrolled in Medicaid FFS and eligible for EPSDT services at ages 17–18 who enrolled in Arkansas Works at ages 19–20
Exclusion Criteria:	None
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 Group:	Clients in the treatment group, during the 1–2 years prior to enrolling in Arkansas Works

Comparison Method(s):	Pre-post comparison
Statistic to Be Tested:	Paired t-test
National Benchmark:	None
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 clients

Measure 2.d.3	**EPSDT Screening – Preventive Vision**
Definition:	Percent of eligible clients who received at least one preventive vision screen
Numerator:	Clients who received a preventive vision screen
Denominator:	Clients enrolled in Medicaid FFS and eligible for EPSDT services at ages 17–18 who enrolled in Arkansas Works at ages 19–20
Exclusion Criteria:	None
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 Group:	Clients in the treatment group, during the 1–2 years prior to enrolling in Arkansas Works
Comparison Method(s):	Pre-post comparison
Statistic to Be Tested:	Paired t-test
National Benchmark:	None
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 clients

Measure 2.e.1	Any Utilization of Non-Emergency Transportation Services
Definition:	The percentage of clients with 1 or more NEMT claims during the measurement year
Numerator:	Clients with an NEMT claim during the measurement year
Denominator:	The eligible population
Exclusion Criteria:	None
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 Group:	Medicaid FFS comparison group
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:	None

Measure 2.e.2	Utilization Counts of Non-Emergency Transportation Services
Definition:	The count of NEMT service utilization during the measurement year
Numerator:	NEMT service counts per client during the measurement year
Denominator:	The eligible population
Exclusion Criteria:	None
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 Group:	Medicaid FFS comparison group
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:	None

Aim 3. Care and Outcomes

Hypothesis 3.a. Arkansas Works clients will have equal or better satisfaction in the care provided (*STC 75a, viii)*

Measure 3.a.1	**Average Rating of Health Plan**
Definition:	Average Rating of Health Plan
Numerator:	The percentage of 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:	None
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of client experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.0, Q26; Arkansas Works survey Q30
Comparison Group:	Arkansas Medicaid client 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: Adult Medicaid 2020

Measure 3.a.2	**Average Rating of Health Care**
Definition:	Average Rating of Health Care
Numerator:	The percentage of 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:	None
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of client experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.0, Q8; Arkansas Works survey Q10
Comparison Group:	Arkansas Medicaid client 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: Adult Medicaid 2020

Measure 3.a.3	**Average Rating of Primary Care Provider (PCP)**
Definition:	Average Rating of Primary Care Provider (PCP)
Numerator:	The percentage 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:	None
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of client experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.0, Q16; Arkansas Works survey Q17
Comparison Group:	Arkansas Medicaid client 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: Adult Medicaid 2020

Measure 3.a.4	**Average Rating of Specialist**
Definition:	Average Rating of Specialist
Numerator:	The percentage of survey responses marked ratings of 8, 9, or 10 (i.e. favorably) for best specialist in the last 6 months the client saw the most
Denominator:	Survey respondents who answered the survey question and indicated they have seen at least one specialist
Exclusion Criteria:	None
Continuous Enrollment:	Refer to survey population definition
Data Source(s):	Survey-based assessment of client experiences
Measure Steward(s):	CAHPS Health Plan Survey v5.0, Q20; Arkansas Works survey Q24
Comparison Group:	Arkansas Medicaid client 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: Adult Medicaid 2020

Hypothesis 3.b. Arkansas Works clients will have lower potentially preventable emergency department services and hospital admissions (STC 75a, vii)

Measure 3.b.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 Group:	Medicaid FFS comparison group
Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model
Statistic to Be Tested:	Difference in group means
National Benchmark:	None

Measure 3.b.2	Plan All-Cause Readmissions (PCR)
Definition:	For clients 18 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 principle diagnosis of pregnancy, a condition originating in the perinatal period, or planned admissions
Denominator:	All acute inpatient discharges for clients 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 client died during the stay, or with a principle 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 Group:	Medicaid FFS comparison group
Comparison Method(s):	• IPTW/CEM weighting • Risk adjustment at client level
Statistic to Be Tested:	Group-level ratios of observed-to-expected (O/E) readmissions
National Benchmark:	Medicaid Adult Core Set FFY 2018–2020 for measurement years 2017–2019
Deviation(s):	Paid claims only

Measure 3.b.3.a	Diabetes Short-Term Complications Admission Rate

Definition:	Number of inpatient hospital admissions for diabetes short-term complications (ketoacidosis, hyperosmolarity, or coma) per 100,000 client months for clients age 18 and older
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 clients age 18 and older 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 Group:	Medicaid FFS comparison group
Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model
Statistic to Be Tested:	• Difference in group rates • Coefficient of treatment variable
National Benchmark:	Medicaid Adult Core Set 2018–2020 for measurement years 2017–2019
Deviation(s):	Upper end of age range truncated to 64. Paid claims only

Measure 3.b.3.b	**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 client months for clients age 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 clients age 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 Group:	Medicaid FFS comparison group
Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model
Statistic to Be Tested:	• Difference in group rates • Coefficient of treatment variable
National Benchmark:	Medicaid Adult Core Set FFY 2018–2020 for measurement years 2017–2019
Deviation(s):	Upper age limit truncated to 64. Paid claims only.

Measure 3.b.3.c	**Heart Failure Admission Rate**
Definition:	Number of inpatient hospital admissions for heart failure per 100,000 client months for clients age 18 and older
Numerator:	All inpatient hospital admissions with ICD-10-CM principal diagnosis code for heart failure
Denominator:	Total number of months of Medicaid enrollment for clients age 18 and older 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 Group:	Medicaid FFS comparison group
Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model
Statistic to Be Tested:	• Difference in group rates • Coefficient of treatment variable
National Benchmark:	Medicaid Adult Core Set FFY 2018–2020 for measurement years 2017–2019
Deviations(s):	Upper age limit truncated to 64. Paid claims only.

Measure 3.b.3.d	**Asthma in Younger Adults Admission Rate**
Definition:	Number of inpatient hospital admissions for asthma per 100,000 client months for clients ages 18 to 39
Numerator:	All inpatient hospital admissions for clients ages 18 to 39 with an ICD-10-CM principal diagnosis code of asthma
Denominator:	Total number of months of Medicaid enrollment for clients ages 18 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 Group:	Medicaid FFS comparison group

Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model
Statistic to Be Tested:	• Difference in group rates • Coefficient of treatment variable
National Benchmark:	Medicaid Adult Core Set FFY 2018–2020 for measurement years 2017–2019
Deviations(s):	Paid claims only

Hypothesis 3.c. Arkansas Works clients will have equal or better quality of care provided (STC 75a, xi)

Measure 3.c.1	**Follow-Up After Hospitalization (FUH) for Mental Illness**
Definition:	The percentage of discharges for clients 18 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 client received follow-up within 30 days of discharge • Percentage of discharges for which the client 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:	Clients 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
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – FUH-AD in Medicaid Adult Core Set
Comparison Group:	Medicaid FFS comparison group

Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model
Statistic to Be Tested:	• Difference in group means • Coefficient of treatment variable
National Benchmark:	Medicaid Adult Core Set FFY 2018–2020 for measurement years 2017–2019
Deviation(s):	Age range upper limit truncated to 64. Paid claims only.

Measure 3.c.2	**Adherence to Antipsychotic Medications for Individuals With Schizophrenia (SAA)**
Definition:	The percentage of clients 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 clients who achieved a proportion of days covered (PDC) of at least 80% for their antipsychotic medications during the measurement year
Denominator:	Clients 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:	Clients with hospice care. Clients 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 Group:	Medicaid FFS comparison group
Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model
Statistic to Be Tested:	• Difference in group means • Coefficient of treatment variable

National Benchmark:	Medicaid Adult Core Set FFY 2018–2019 for measurement years 2017–2018. HEDIS Medicaid 2019 national rate
Deviation(s):	Paid claims only

Measure 3.c.3	**Persistence of Beta-Blocker Treatment After a Heart Attack (PBH)**
Definition:	The percentage of clients 18 years of age and older 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:	Clients 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 client has more than one episode of AMI that meets the event/ diagnosis criteria, include only the first discharge
Exclusion Criteria:	Clients with hospice care. Hospitalizations in which the client 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 Group:	Medicaid FFS comparison group
Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model
Statistic to Be Tested:	• Difference in group means • Coefficient of treatment variable
National Benchmark:	HEDIS Medicaid 2017–2019 national rates

Deviation(s):	Age range upper limit truncated to 64. Paid claims only

Measure 3.c.4	**Annual Monitoring for Patients on Persistent Medications (MPM)**
Definition:	The percentage of clients 18 years of age and older 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 clients on angiotensin converting enzyme (ACE) inhibitors or angiotensin receptor blockers (ARB) • Annual monitoring for clients on diuretics • Total rate
Numerator:	Clients with at least one serum potassium and a serum creatinine therapeutic monitoring test in the measurement year
Denominator:	Clients on persistent medications (i.e., clients who received at least 180 treatment days of ambulatory medication in the measurement year)
Exclusion Criteria:	Clients 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 Group:	Medicaid FFS comparison group
Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model
Statistic to Be Tested:	• Difference in group means • Coefficient of treatment variable
National Benchmark:	Medicaid Adult Core Set FFY 2018–2019 for measurement years 2017–2018. HEDIS Medicaid 2019 national rate
Deviation(s):	Age range upper limit truncated to 64. Paid claims only.

Measure 3.c.5	Annual HIV/AIDS Viral Load Test
Definition:	Percentage of clients with a diagnosis of HIV with at least one HIV viral load test during the measurement year
Numerator:	The number of clients in the denominator with an HIV viral load test during the measurement year
Denominator:	Clients who had a primary or secondary diagnosis of HIV during the measurement year
Exclusion Criteria:	Clients 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 Group:	Medicaid FFS comparison group
Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model
Statistic to Be Tested:	• Difference in group means • Coefficient of treatment variable
National Benchmark:	None

Measure 3.c.6	C-Section Rate
Definition:	Percentage of clients with a delivery who delivered via C-section
Numerator:	Clients who delivered via C-section
Denominator:	Clients with a single live delivery
Exclusion Criteria:	None

Continuous Enrollment:	None
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	DMS Homegrown
Comparison Group:	Medicaid FFS pregnancy group
Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model
Statistic to Be Tested:	• Difference in group means • Coefficient of treatment variable
National Benchmark:	None

Aim 4. Cost Effectiveness

Hypothesis 4.a. Reduce overall premium costs in the Exchange Marketplace (STC 75a, xi)

Measure 4.a.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 Group:	N/A
Comparison Method(s):	Annual tables
Statistic to Be Tested:	Descriptive analyses

National Benchmark:	None

Measure 4.a.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 Group:	N/A
Comparison Method(s):	Annual tables
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	None

Measure 4.a.3	**Contiguous States' Program Characteristics**
Definition:	Contiguous states' health insurance exchange program characteristics: number of plans, actuary risk, 2nd lowest premium cost by contiguous 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 Group:	N/A
Comparison Method(s):	Annual tables
Statistic to Be Tested:	Descriptive analyses
National Benchmark:	None

Hypothesis 4.b. Costs are lower than or comparable to established budget neutrality guidelines and related costs (STC 75a, xii)

Measure 4.b.1	**Meets Budget Neutrality**
Definition:	Arkansas Works program coverage costs through QHPs remained below the budget neutrality cap
Numerator:	Total payments per individual with a paid premium
Denominator:	Budget Neutrality Cap
Exclusion Criteria:	N/A
Continuous Enrollment:	N/A
Data Source(s):	DMS Financial Data, Form CMS-64, Program Annual Reports
Measure Steward(s):	CMS
Comparison Group:	N/A
Comparison Method(s):	N/A
Statistic to Be Tested:	N/A

National Benchmark:	None

Measure 4.b.2	**Inpatient Utilization (IPU) – General Hospital/Acute Care**
Definition:	Discharges per 1,000 client months. This measure summarizes utilization of acute inpatient care and services in the following categories: • Maternity • Surgery • Medicine • Total inpatient (the sum of Maternity, Surgery and Medicine)
Numerator:	Total inpatient discharges identified after exclusions
Denominator:	All client months for the measurement year
Exclusion Criteria:	Clients with hospice care. Discharges with a principal diagnosis of mental health or chemical dependency. Newborn care rendered from birth to discharge home from delivery
Continuous Enrollment:	None
Data Source(s):	MMIS and QHP claims data
Measure Steward(s):	NCQA – HEDIS IPU
Comparison Group:	Medicaid FFS comparison group
Comparison Method(s):	• IPTW/CEM weighting • Client-level weighted model
Statistic to Be Tested:	• Difference in group means • Coefficient of treatment variable
National Benchmark:	None
Deviation(s):	Age range limited to 18–64. Paid claims only.

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, DMS approved priority warehouse system for the Medicaid comparison groups. 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 the output of results. The administrative QHP claims data to evaluate the Arkansas Works clients will be transmitted quarterly to DMS from the carriers to the Arkansas Decision Support System (DSS). The Arkansas DSS will provide the evaluation contractor with a uniform file quarterly of the QHP claims data. The figure below depicts the data source flow for the evaluation.

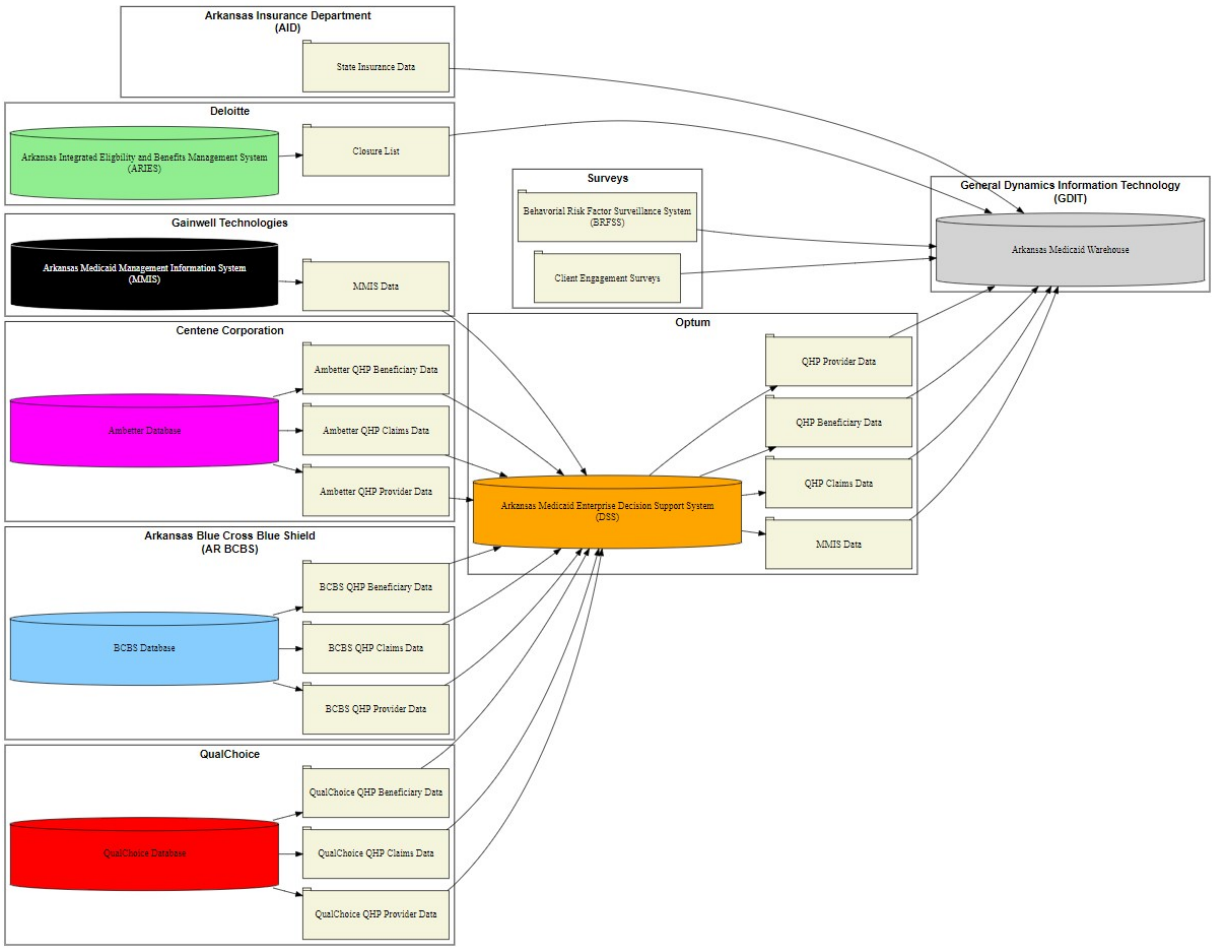


Figure 7: Data Source Flow

3.5.1 Administrative and Claims Data

The MMIS data source is used to collect, manage, and maintain Medicaid client 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, client, and pharmacy data subject areas. To ensure accurate and complete data, the contractor's Arkansas Medicaid Data Warehouse will utilize the pre-snapshot data claims process and will require a minimum three-month lag to allow time for the majority of 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 client demographic files will be used to assess client age, gender, and other demographic information. Eligibility files will be used to verify a client's enrollment in the State's Medicaid programs.

3.5.2 Survey Data – Arkansas Works Client Engagement Satisfaction Survey

The Arkansas Works Client Engagement Satisfaction Survey is based on the CAHPS® Adult Medicaid Health Plan Survey 5.0 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 Arkansas Works client survey will follow a traditional NCQA sampling strategy (1,500 plus oversampling for bad addresses or nonresponse)—1,700 to 2,900 clients will be randomly selected from the MMIS. To be eligible for the study, clients must be enrolled in the program for at least six months, with no more than one 30-day gap in enrollment and enrolled in the last month prior to the survey.

The survey will be administered during the calendar 2020 and questions clients 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 will be mailed. A unique survey identification number will be generated to track bad addresses and responses.

3.5.3 Survey Data – Arkansas Medicaid Client Engagement Satisfaction Survey

The evaluation contractor will also field a Medicaid Client Engagement Satisfaction Survey to survey fee-for-service Medicaid clients. The evaluation contractor will follow the same time frame and survey protocols as outlined for the Arkansas Works 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).

3.5.4 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 using survey weights provided with the data. The weights incorporate design weighting to adjust for non-response and non-coverage, and raking to adjust for demographic differences between the persons sampled within each state.[4]

BRFSS questions on health care access and immunization will be used from 2011–2019 public files to evaluate the population of adults likely to have been eligible for Medicaid expansion in Arkansas, compared to states with traditional Medicaid expansions. 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.

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 (2017 through 2021).

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 clients from the Medicaid FFS and Arkansas Works populations as well as the analysis will include case-mix adjustment for gender, age, race/ethnicity, and education.

Most claims-based measures have a continuous enrollment requirement during the measurement year that is stricter than that used to identify the populations, ensuring that there is enough time for events, diagnoses, or procedures to appear in the claims record. All eligibility and claims-based measures will weight clients so that the target and comparison groups are comparable in their baseline sociodemographic characteristics. The weighted client-level results can then be adjusted for post-treatment variables including prior experience in the program. We will consider risk score 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 Arkansas Works, 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.

[4] 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

3.6.1 Determine clients eligible for each measure

We will follow each metric's specifications to determine which clients are eligible for the denominator. These will be 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 selection

We will weight clients in the treatment and comparison groups who are eligible for each metric, with the goal of creating two groups that do not differ in the distribution of their baseline characteristics. 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: 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). We will explore the use of weights from 1) propensity-score modeling and 2) Coarsened Exact Matching.

1) A propensity score is the predicted probability of a client being assigned to the treatment group, given their observed baseline characteristics. Usually a logistic regression is performed to arrive at each client'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).[5]

2) Coarsened Exact Matching (CEM) is a nonparametric method that creates strata using pre-specified variables and their binned values.[6] All clients within the treatment or comparison group in each unique stratum are assigned the same weight. The advantages of CEM are n-to-n matching, transparency, and ease of explanation.[7]

3.6.3 Check for covariate balance across groups

The goal of adjusting for selection is to make the clients in the treatment and comparison groups comparable at least for the variables we can observe. After reweighting, we will assess covariate balance by looking at the standardized difference of each variable across the groups. The standardized difference is the difference in group means, expressed in units of standard deviation so that group size doesn't matter. We will be looking for standardized differences of less than or equal to 0.10 for all baseline covariates. Usually this is done for group means and

[5] 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

[6] 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

[7] 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.

variances, and prevalence for binary covariates.[8] Graphical methods include comparing side-by-side boxplots and empirical CDFs.[9] For weights constructed using CEM, a global balance assessment based on multivariate histograms can also be done.[10] If covariate balance cannot be achieved, the propensity model may need to be revisited, the bin widths varied, and more variables or their interactions added.

3.6.4 Report measure outcomes, adjusted for selection

Each metric will be calculated to determine the outcome (numerator) for each eligible client. Most metrics at the client level have a binary outcome or a count for utilization measures; weights will be applied to the to the client-level outcomes. If the outcomes are reweighted using IPTW, the average treatment effect on the treated (ATT) can be directly calculated.[11] That is, the average effect of being in a QHP for clients in Arkansas Works, compared with if they had been on Medicaid fee-for-service. The ATT is simply the difference in weighted means of the outcome between the treatment and comparison groups. For measures with a client-level outcome of 0 or 1, the weighted group mean is equal to the effective percentage of the group meeting the measure.[12] If CEM weights are used, a client-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.

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 enrollee's time in the program since 2014. We will consider this a post-treatment variable, since most clients in Arkansas Works were not eligible for Medicaid prior to 2014.

For outcome measures, adjustment for clinical severity may also be needed 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.

[8] 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: 10.1080/03610910902859574

[9] 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

[10] 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: 10.1080/00949655.2016.1203433

[11] 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: 10.1080/00273171.2011.568786

[12] 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

We will run a weighted regression on the client-level measure outcomes using post-treatment covariates. 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:
Total time enrolled in Arkansas Works or HCIP (up to 3 years prior to analysis year)
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.

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 and all 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.

3.6.6 Adjustments for multi-year analysis

If a longitudinal analysis is performed, the sample size will be expected to change from year to year. Existing weights from each measure's yearly results could be adjusted for attrition and new enrollees. In this way, mixed models that take into account serial correlation within clients can be used to analyze intermediate and longer-term measure outcomes. A longer timeframe may be more relevant for evaluating the entirety of the Arkansas Works program, which is scheduled to run for five years after the original three-year implementation of Arkansas's 1115 waiver demonstration.

3.6.7 Interrupted time series analyses

To assess the Arkansas Works' policy of required premium contributions for clients with income >100% FPL, multiple/comparative interrupted time series will be analyzed for clients above and below the income threshold. Claims-based measures of primary care and emergency department utilization, along with two continuity of coverage measures, will be analyzed from 2014 through 2019. To assess the effects of Arkansas Works' retroactive eligibility waiver on continuity, the above two continuity of coverage measures will be analyzed using a single interrupted time series from 2014 through 2019. [13]

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

3.6.8 Differences-in-differences analyses

Core questions from the BRFSS on Health Care Access (any coverage, personal doctor, routine checkup, medical cost) and Immunization (flu shot/spray) will be analyzed for Arkansas and comparison states pre- and post- Medicaid expansion, from 2011 to 2019.[14] Differences-in-differences estimators will be the interactions of time period with target group.

In Arkansas, baseline years will be 2011–2013, early expansion 2014–2016, and late expansion 2017–2019. Coding baseline as the reference period will allow comparisons of early expansion with baseline, and late expansion with baseline. Recoding early expansion as the reference period will allow comparison of the late and early expansion periods.

Survey responses will be dichotomized and analyzed with survey weights. Linear probability models will be used for ease of interpretation. Demographic covariates will be included for adjustment across states.

3.6.9 Non-emergency transportation

To compare access to non-emergency transportation (NEMT) services in the target and comparison groups during the measurement year, any NEMT service utilization and counts of NEMT service utilization will be assessed with descriptive analysis and cross-sectional logistic and count regression models.[15] The descriptive analyses will present the percent of clients 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.

3.6.10 Qualitative analysis

To gain further insight into clients' participation and understanding of Arkansas Works, the state will conduct key informant interviews for respondents to the Arkansas Works Client Engagement Satisfaction Survey who provided phone numbers. A semi-structured interview guide will address specific themes, including impacts of the NEMT waiver policy on clients' access to care. Data will be collected and a directed content analysis will be used to identify emergent themes from the data.

3.6.11 Impacts of COVID-19

Arkansas sees value in analyzing the impacts of COVID-19 during the Arkansas Works implementation, especially concerning telehealth. Many HEDIS and Medicaid Adult Core metrics already include telehealth and online assessment value sets (eg., AAP, CDC, FUH, SPD). Arkansas could assess the impact of telehealth and online assessments on measure results in measurement years 2020 and 2021, to estimate the effect of COVID-19 on telehealth uptake in

[14] As shown in https://chronicdata.cdc.gov/Behavioral-Risk-Factors/Behavioral-Risk-Factor-Surveillance-System-BRFSS-H/iuq5-y9ct/data

[15] 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

the target and comparison groups. Other, wider-ranging impacts of COVID-19 could be assessed using longitudinal, multi-year analyses of existing measures.

3.7 Other Additions

Table 7: Summary of proposed analysis methods by hypothesis, driver, and metric.

Goal. Hypothesis	Driver	Indicator	Metric Name	Comparison Group	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-treatment Effects	Statistical Test
1.a.	1	AR Medicaid Eval 1.a.1.	Average length of gaps in coverage, in months*	Medicaid FFS comparison group	IPTW/CEM weighting	Client-level model	Difference in group means	Client-level model with prior experience	Coefficient of treatment variable
	2	AR Medicaid Eval 1.a.2.	Percent of clients with < 2 gaps in coverage*				Difference in group percentages		
1.b.	1	AR Medicaid Eval 1.b.1.	Continuous Enrollment in a Health Plan				Difference in group means		
	2	AR Medicaid Eval 1.b.2.	Continuity of PCP care				Difference in group percentages		
	3	AR Medicaid Eval 1.b.3.	Continuity of specialist care						

* 1.a.1 and 1.a.2 will also be used in interrupted time series analysis to assess effects of the premium contribution requirement and waiver of retroactive eligibility. The comparison groups will be Medicaid expansion adults not affected by the policy because of implementation time or income requirements.

Goal. Hypothesis	Driver	Indicator	Metric Name	Comparison Group	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-treatment Effects	Statistical Test
2.a.	1	AR Medicaid Eval 2.a.1.	PCP Network Adequacy	Medicaid PCP provider network	N/A	Geospatial analysis	N/A	N/A	N/A
	2	AR Medicaid Eval 2.a.2.	PCP Network Accessibility						
	3	AR Medicaid Eval 2.a.3.	Specialist Network Adequacy	Medicaid specialist provider network					
	4	AR Medicaid Eval 2.a.4.	Specialist Network Accessibility						
	5	AR Medicaid Eval 2.a.5.	Essential Community Providers Network Adequacy	Medicaid ECP provider network					
	6	AR Medicaid Eval 2.a.6.	Essential Community Providers Network Accessibility						

Goal. Hypothesis	Driver	Indicator	Metric Name	Comparison Group	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-treatment Effects	Statistical Test
2.a.	7.a.	CAHPS-4, survey Q4	Got care for illness/injury as soon as needed	Arkansas Medicaid client survey respondents	Survey sampling	Comparison of answer frequencies, case-mix adjustment	Chi-squared test	None	N/A
	7.b.	CAHPS-6, survey Q6	Got non-urgent appointment as soon as needed						
	7.c.	CAHPS-9, survey Q11	How often it was easy to get necessary care, tests, or treatment						
	7.d.	CAHPS-10, survey Q12	Have a personal doctor						
	7.e.	CAHPS-18, survey Q22	Got appointment with specialists as soon as needed						
	7.f.	CAHPS P-IN1, survey Q18	Needed interpreter to help speak with doctors or other health providers						
	7.g.	CAHPS P-IN2, survey Q19	How often got an interpreter when needed one						
	7.h.	CAHPS AC2; survey Q7	Days wait time between making appointment and seeing provider						
	7.i.	survey Q8	How often had to wait for appointment because of provider's lack of hours/availability						
	7.j.	survey Q21	Easy to get a referral to a specialist						

Goal. Hypothesis	Driver	Indicator	Metric Name	Comparison Group	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-treatment Effects	Statistical Test
2.a.	8.a.	BRFSS HLTHPLN1	Have Health Care Coverage	BRFSS comparison group	Subset of states, age, income	Differences-in-differences	DiD estimator	N/A	N/A
	8.b.	BRFSS PERSDOC2	Have a Personal Doctor						
	8.c.	BRFSS CHECKUP1	Last Routine Checkup						
	8.d.	BRFSS MEDCOST	Avoided Care Due to Cost						
	8.e.	BRFSS FLUSHOT6, FLUSHOT5	Flu Vaccine						
2.b.	1	NCQA BCS-AD	Breast Cancer Screening	Medicaid FFS comparison group	IPTW/CEM weighting	Client-level model	Difference in group means	Client-level model with prior experience	Coefficient of treatment variable
	2	NCQA CCS-AD	Cervical Cancer Screening						
	3	NCQA HEDIS SPD	Statin Therapy for Patients With Diabetes						
	4	NCQA HA1C-AD	Comprehensive Diabetes Care: Hemoglobin A1c Testing						
	5	NCQA HEDIS AAP	Adults' Access to Preventive/Ambulatory Health Services**						

** AAP and ED visit utilization will also be used for interrupted time series analysis to assess effects of the premium contribution requirement. The comparison group will be Medicaid expansion adults not affected by the policy because of implementation time or income requirements.

Goal. Hypothesis	Driver	Indicator	Metric Name	Comparison Group	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-treatment Effects	Statistical Test
2.c.	1	AR Medicaid Eval 2.c.1.	Non-emergent ED visits**	Medicaid FFS comparison group	IPTW/CEM weighting	Client-level model	Difference in group means	None	N/A
	2	AR Medicaid Eval 2.c.2.	Emergent ED visits**						
2.d.	1	AR Medicaid Eval 2.d.1.	Adolescent Well-Care Visits	1–2 years prior to Arkansas Works enrollment	N/A	Repeated-measures ANOVA	Coefficient of year variable	None	N/A
	2	AR Medicaid Eval 2.d.2.	EPSDT screening - Preventive Dental Visits						
	3	AR Medicaid Eval 2.d.3.	EPSDT screening - Preventive Vision						
2.e.	1	TBD	Any utilization of non-emergency transportation services	Medicaid FFS comparison group	Adjust for demographics, risk score, service region	Logistic regression	Average marginal effect	N/A	N/A
	2	TBD	Utilization counts of non-emergency transportation services	Medicaid FFS comparison group	Adjust for demographics, risk score, service region	Count model regression	Average marginal effect	N/A	N/A

** AAP and ED visit utilization will also be used for interrupted time series analysis to assess effects of the premium contribution requirement. The comparison group will be Medicaid expansion adults not affected by the policy because of implementation time or income requirements.

Goal. Hypothesis	Driver	Indicator	Metric Name	Comparison Group	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-treatment Effects	Statistical Test
3.a.	1	CAHPS-26, survey Q30	Rating of health plan	Arkansas Medicaid client survey respondents	Survey sampling	Comparison of answer frequency categories, case-mix adjustment	Chi-squared test	None	N/A
	2	CAHPS-8, survey Q10	Rating of all health care						
	3	CAHPS-16, survey Q17	Rating of personal doctor						
	4	CAHPS-20, survey Q24	Rating of specialist						
3.b.	1	AR Medicaid Eval 3.b.1.	Preventable ED visits	Medicaid FFS comparison group	IPTW/CEM weighting	Client-level model	Difference in group means	None	N/A
	2	NCQA PCR-AD	Plan All-Cause Readmissions			N/A	N/A	Risk adjustment at client level for diagnosis groups	Group-level ratios of observed-to-expected (O/E) readmissions

Goal. Hypothesis	Driver	Indicator	Metric Name	Comparison Group	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-treatment Effects	Statistical Test
3.b.	3.a.	AHRQ PQI01-AD	Diabetes Short-Term Complications Admission Rate	Medicaid FFS comparison group	IPTW/CEM weighting	Client-level model	Difference in group rates	Client-level model with prior experience	Coefficient of treatment variable
	3.b.	AHRQ PQI05-AD	Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate						
	3.c.	AHRQ PQI08-AD	Heart Failure Admission Rate						
	3.d.	AHRQ PQI15-AD	Asthma in Younger Adults Admission Rate						
3.c.	1	NCQA FUH-AD	Follow-Up After Hospitalization for Mental Illness	Medicaid FFS comparison group	IPTW/CEM weighting	Client-level model	Difference in group means	Client-level model with prior experience	Coefficient of treatment variable
	2	NCQA SAA-AD	Adherence to Antipsychotic Medications for Individuals With Schizophrenia						
	3	NCQA HEDIS PBH	Persistence of Beta-Blocker Treatment After a Heart Attack						
	4	NCQA MPM-AD	Annual Monitoring for Patients on Persistent Medications						
	5	AR Medicaid Eval 3.c.5.	Annual HIV/AIDS Viral Load Test						
	6	AR Medicaid Eval 3.c.6	C-Section Rate	Medicaid FFS pregnancy group					

Goal. Hypothesis	Driver	Indicator	Metric Name	Comparison Group	Analytic Method to Construct Comparable Groups	Comparison Method	Statistical Test	Comparison Method Adjusting for Post-treatment Effects	Statistical Test
4.a.	1	AR Medicaid Eval 4.a.1.	Arkansas Program Characteristics	N/A	N/A	Annual tables	N/A	N/A	N/A
	2	AR Medicaid Eval 4.a.2.	Arkansas Regional Average Program Characteristics						
	3	AR Medicaid Eval 4.a.3.	Contiguous States Program Characteristics						
4.b.	1	AR Medicaid Eval 4.b.1.	Meets Budget Neutrality	N/A	N/A	Budget neutrality cap	N/A	N/A	N/A
	2	NCQA HEDIS IPU	Inpatient Utilization - General Hospital/Acute Care	Medicaid FFS comparison group	IPTW/CEM weighting	Client-level model	Difference in group rates	Client-level models with prior experience, diagnosis groups in analysis year	Coefficient of treatment variable

4 METHODOLOGICAL LIMITATIONS

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 Arkansas Works or its predecessor, the Healthcare Independence Program, does not have a truly comparable population in traditional Medicaid. Our constructed target and comparison groups will be adjusted for differences in sociodemographic factors, but differences in income level may persist.

Information used for client weights will come from the eligibility determination process. Causal analysis requires that the baseline variables are known before assignment to the treatment or comparison group, and that they are not affected by the assignment. Therefore, we assume the baseline covariates for each client did not change during the calendar year.

One exception would be when the work requirement was in effect, June 2018 through March 2019. Income level and coverage for Arkansas Works clients may have changed because of the work requirement. However, this evaluation will not directly address impacts of the community engagement requirements.

Because only paid claims will be available from QHPs, the claims-based measures will be restricted to paid claims only for both target and comparison groups. Services billed on claims that were suspended or denied will not be included.

Prior to implementation of the managed-care program PASSE on March 1, 2019, beneficiaries were assigned to PASSE based on behavioral health assessments. Some of the assignments were made for beneficiaries in the Medicaid expansion population, who never enrolled in the PASSE, and other assignments were made for beneficiaries in traditional Medicaid but were never implemented. Therefore, for the purposes of the Arkansas Works evaluation beneficiaries with a PASSE eligibility segment on or after the implementation date of March 1, 2019 were excluded, but those with a PASSE segment before implementation were included.

5 SPECIAL METHODOLOGICAL CONSIDERATIONS

6 *APPENDIX*

6.1 INDEPENDENT EVALUATOR

Based on State protocols, DMS did follow established policies and procedures to acquire an independent entity or entities to conduct the Arkansas Works demonstration evaluation. The State undertook a competitive procurement for the evaluator. An assessment of potential contractors' experience, knowledge of State programs and populations, and resource requirements was determined during selection of the final candidate, including steps to identify and/or mitigate any conflicts of interest. At the time of proposal submission, every bidder had to certify no conflicts of interest concerning State of Arkansas, Department of Human Services, Division of Medical Services.

The contractor and subcontractor evaluators hired to conduct the analyses and write the evaluation report has ensured to have no actual or potential conflicts of interests. The state hires a contractor independent from DHS and Arkansas Medicaid. The evaluation design includes a "No Conflict of Interest" signed confirmation statement from the independent evaluators signed at the time of the bid submission. The federal approval of the Arkansas Works demonstration is prepared upon compliance with a set of Special Terms and Conditions. Specific to the program evaluation, the Special Terms and Conditions outline four goals that the State must investigate. DMS and the evaluator develop multiple hypotheses and research questions around these terms and conditions. The evaluation design includes a discussion of the goals, objectives, hypotheses, and research questions, including those that focus specifically on target and comparison populations, and more generally on clients and client's experience of services. The evaluator will continue to maintain separation throughout the demonstration evaluation to avoid potential conflicts of interest.

GENERAL DYNAMICS
Information Technology

Section 2 C. Conflict of Interest/Independence.

General Dynamics Information Technology, Inc. (GDIT) hereby certifies that it has read the Organizational or Personal Conflict of Interest Clause (Attachment F), and that, without limitation or qualification, has no actual, apparent, or potential conflicts of interest with, and is independent from:

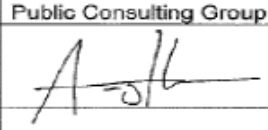
1. DHS and Arkansas Medicaid.
2. Qualified Health Providers (QHP) under the ARWorks program, including the following:
    a. Ambetter from Arkansas Health & Wellness (Centene Corporation).
    b. QualChoice (QCA Health Plan, Inc./QualChoice Life and Health Insurance Company, Inc.
    c. Arkansas Blue Cross & Blue Shield.
3. Providers serving Medicaid and ARWorks beneficiaries under any Arkansas Medicaid or ARWorks program.

[Bidder or Subcontractor] Name:	General Dynamics Information Technology, Inc.	Date:	May 7, 2019
Signature:	Dorothy E. Piroha	Title:	Contracts Administrator, Senior
Printed Name:	Dorothy E. Piroha		

Section 2 C. Conflict of Interest / Independence.

Public Consulting Group (PCG), subcontractor to General Dynamics Information Technology, Inc. (GDIT), hereby certifies that it has read the Organizational or Personal Conflict of Interest Clause (Attachment F), and 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 ARWorks 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.
3. Providers serving Medicaid and ARWorks beneficiaries under any Arkansas Medicaid or ARWorks program.

Subcontractor Name:	Public Consulting Group	Date:	5/7/2019
Signature:		Title:	Associate Manager
Printed Name:	Aaron Holman		

6.2 EVALUATION BUDGET

An estimated total cost for the development and production of the Arkansas Works evaluation design and the resulting Arkansas Works evaluation reports are hereby included for an annual budget. This includes a breakdown of the estimated cost for staff and administration work, an approximation of cost and overall price to complete the Arkansas Works evaluation. Cost includes data cleaning, analyses and the actual production of the evaluation design and evaluation report deliverables. For the complete evaluation time frame reporting time frames the total cost would be $3,547,323.80.

GDIT Labor Category	**Hours**	**Cost**
Program Management	1,048	$207,733.57
Admin Support	472	$49,900.71
Business Requirements/ Data Infrastructure	868	$102,277.86
Statistical Analysis	1,074	$107,934.57
Subject Matter Experts	330	$57,186.29
	3,792	**$525,033.00**

PCG Labor Category	**Hours**	**Cost**
Program Management	832	$268,242.62
Business Requirements	416	$64,589.13
	1,248	**$332,831.75**
Computing Costs		$28,966.20
Total	**5,040**	**$886,830.95**

6.3 Acronym List

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
ASCVD: Atherosclerotic cardiovascular disease
ATT: Average effect on the treat
AWC: Adolescent Well-Care
BCS: Breast Cancer Screening
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
CEA: Cost Effectiveness Analysis
CEM: Coarsened Exact Matching
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
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
HEDIS: Healthcare Effectiveness Data and Information Set
HHS-HCC: Department of Health and Human Services Hierarchical Condition Category
HIV: Human Immunodeficiency Virus
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
IPU: Inpatient Utilization
LPW: Limited Pregnant Women
LDL-C: Low Density Lipoprotein Cholesterol
MCAID: Medicaid
MD: Doctor of Medicine
MH: Mental Health
MMIS: Medicaid Management Information System
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
PMPM: Per Member per Month
POS: Place of service
PPACA: Patient Protection and Affordable Care Act
PQI: Prevention Quality Indicators
PSTCO: Patient county
QC: QualChoice
QHPs: Qualified Health Plans
RD: Regression discontinuity
RHC: Rural Health Clinic
SA: Substance Abuse
SAA: Schizophrenia
SAD: Stand Alone Dental
SERFF: System for Electronic Rate and Form Filing
SIPTW: Stabilized inverse probability of treatment weighting
SNF: Skilled Nursing Facility
SSI: Supplemental Security Income
STC: Special terms and conditions
STD: Sexually Transmitted Disease
TB: Tuberculosis
UB revenue: Uniform Billing Revenue Code
USP: U.S. Pharmacopeia Convention

ZCTA: Zip-Code Tabulation Area