**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 18, 2025

Charissa Fotinos, MD
Medicaid Director
Washington Health Care Authority
626 8th Avenue
P.O. Box 45502
Olympia, WA 98504-5050

Dear Dr. Fotinos:

The Centers for Medicare & Medicaid Services (CMS) completed its review of the state's Evaluation Design, which is required by the Special Terms and Conditions (STCs), specifically, STC #21.3 "Draft Evaluation Design" of the Washington section 1115 demonstration, "Medicaid Transformation Project 2.0" (Project Numbers 11-W-00304/0 and 21-W-00071/0), effective through June 30, 2028. CMS has determined that the Evaluation Design, which was submitted on January 30, 2024 and revised on June 4, 2024 and May 20, 2025, 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 J. A copy of the STCs, which includes the new attachment, is 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 30 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 one year prior to the expiration of the demonstration, or at the time of the extension application, if the state chooses to extend the demonstration. Likewise, a Summative Evaluation Report, consistent with this approved 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 Washington on the Medicaid Transformation Project 2.0 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: 2025.06.18 09:37:17 -04'00'

Danielle Daly
Director
Division of Demonstration Monitoring and Evaluation

cc: Edwin Walaszek, State Monitoring Lead, CMS Medicaid and CHIP Operations Group

Independent Evaluation Design Document
Washington State Medicaid Transformation Project
Section 1115(a) Medicaid Demonstration Extension:

# Medicaid Transformation Project 2.0 Demonstration Evaluation Design

*Prepared by*
Oregon Health & Science University
Center for Health Systems Effectiveness (CHSE)

*Prepared for*
Washington State Health Care Authority

*Submitted to The Centers for Medicare and Medicaid Services*
*February 28, 2025*

# Table of Contents

# Section 1: Overview of the Medicaid Transformation 2.0 Project Demonstration

On June 30, 2023, the Centers for Medicare and Medicaid Services (CMS) approved Washington State's request for a Section 1115 Medicaid demonstration entitled Medicaid Transformation Project 2.0" (MTP 2.0) (Project Number: 11-W-00304/0 and 21-W-00071/0). The MTP 2.0 demonstration builds on the state's five-year Medicaid Transformation Project (MTP 1.0), which was initiated in January 2017. MTP 1.0 empowered local communities to enhance their healthcare systems, integrating physical and behavioral health services and implementing value-based payments. The MTP 1.0 demonstration introduced new benefit packages to aid individuals who require long-term services and supports (LTSS) and their caregivers. It also addressed health-related social needs (HRSN) by providing eligible individuals with supportive housing and employment services. Additionally, the program incorporated initiatives for substance use disorder (SUD) treatments and services for serious mental illness (SMI). The MTP demonstration received a one-year extension in December 2021 and an additional six-month extension until June 30, 2023. In April 2023, the demonstration was revised to include continuous eligibility for children from birth through the age of 6.

MTP 2.0 builds upon the foundations laid by MTP 1.0, extending its scope and introducing new initiatives to further improve Medicaid and CHIP beneficiaries' health outcomes in Washington. It retains a strong focus on integrating care, addresses social determinants of health, and innovates within the Medicaid program, similar to MTP 1.0. MTP 2.0 also introduces several new initiatives, described below. It places a stronger emphasis on addressing HRSN, includes novel approaches to maintaining coverage for children and postpartum individuals, and increases the likelihood of coverage for incarcerated individuals prior to release. The approval is effective July 1, 2023, through June 30, 2028.

Over the next five years, Washington will:

- **Expand Coverage and Access to Care**: Washington aims to broaden healthcare access and coverage. This includes implementing continuous coverage for children and postpartum individuals, offering services to support incarcerated individuals' reintegration into society, and providing services for Medicaid enrollees receiving treatment for substance use disorders and mental health issues in Institutions for Mental Disease (IMDs).

- **Advance Whole-Person Care**: The state will continue the Medicaid Alternative Care (MAC) and Tailored Supports for Older Adults (TSOA) programs, which offer enhanced benefits to eligible individuals not currently receiving Medicaid-funded LTSS and those at risk of needing LTSS in the future. The initiative also includes innovative LTSS programs like extending presumptive eligibility to those applying for LTSS services.

- **Accelerate Innovation in Care Delivery and Payment**: The project is committed to promoting programs and policies that address the HRSN of Apple Health enrollees. By continuing the Foundational Community Supports (FCS) and introducing targeted HRSN services, Washington aims to develop a comprehensive suite of HRSN services. This approach enhances community-based care coordination, service delivery, and payment models.

Over the next five years, Washington will extend existing programs:

- Medicaid Alternative Care (MAC) & Tailored Supports for Older Adults (TSOA)
- Foundational Community Supports (FCS)
- Services for enrollees with SUD, including those who are short-term residents in residential and inpatient treatment facilities that meet the definition of an IMD
- Services for enrollees with Serious Mental Illness (SMI) and children and adolescents with serious emotional disturbances (SED), including those who are who are short-term residents in IMDs
- Accountable Communities of Health (ACHs) and Indian Health Care Providers (ICHPs) transition to hub service

Washington will also introduce several new initiatives:

- Continuous Medicaid and S-CHIP enrollment for children ages 0-5
- Continuous eligibility up to 12 months after pregnancy to postpartum individuals who were not enrolled in Medicaid or the Children's Health Insurance Program (CHIP) while pregnant (previously state-funded since June 2022)
- Re-entry coverage for individuals leaving a prison, jail, or youth correctional facility
- Long-term Supports and Services Presumptive eligibility (LTSS PE) to support timely access to in-home and community-based long-term services and supports
- Contingency management (CM) for SUD treatment
- HRSN services to address unmet social needs, like housing and nutrition, to improve health outcomes and reduce health disparities
- Community Hubs to provide community-based care coordination, including screening patients, determining patient needs, and connecting patients to community organizations that can provide services to meet HRSN
- A statewide Native Hub of Indian health care providers, tribal social service divisions, and Native-led, Native-serving organizations focused on whole-person care coordination, including services to meet HRSN

MTP 2.0 represents a comprehensive effort to enhance Medicaid services in Washington, building on the achievements of MTP 1.0 and introducing new initiatives to address emerging needs and challenges. It aims to promote better health outcomes, particularly for vulnerable populations, by integrating medical and social services, thereby advancing the overall goals of the Medicaid program.

## Section 2: Evaluation Goals and Objectives

Evaluation activities will be led by an independent external evaluator (IEE) and supported by state agency teams with complementary data management and analytic subject matter expertise. The evaluation will encompass both an assessment of the impact of the Demonstration on the entire delivery system and an evaluation of specific initiatives. Evaluation goals will include:

**Assessment of overall Medicaid system performance under the Demonstration**. This assessment will be based on longitudinal changes in statewide performance levels from January 1, 2017, through June 30, 2028, spanning MTP 1.0 and MTP 2.0. The evaluation will assess changes in MTP 2.0 relative to an MTP 1.0 baseline. The assessment will include the following measurement domains:

- Access to primary care, behavioral health care, and other preventive health care services
- Quality of care
- Reduction in use of costly emergency department (ED), inpatient, or institutional care
- Social outcomes, including housing stability and employment, were measured using beneficiary-level administrative data drawn from Washington's rich integrated data environment (described further below)
- Overall Medicaid expenditures on a per beneficiary per month basis

**Measurement of program-level impacts.** MTP 2.0 includes twelve programs (four program extensions and eight new initiatives). Outcomes will be assessed for each program. Evaluations will leverage Washington's nation-leading integrated data environment to provide a rich set of outcomes, national Medicaid claims data, and qualitative data and analysis. The sections below provide general background information for each program, evaluation questions and hypotheses, methodology, and considerations of limitations and alternative approaches.

**Quarterly briefings, project implementation support (formative evaluation).** The IEE will provide quarterly presentations to facilitate discussion with Washington Health Care Authority (HCA) staff and other agencies involved in implementing the Demonstration. These presentations will facilitate an exchange of ideas, progress, and opportunities for productive change. This information will be instrumental in the early phases of project implementation, helping identify and address risks or opportunities to enhance project execution. Later briefings will contribute to a more comprehensive analysis of project impacts and outcomes. These exchanges will serve as a formative evaluation of the establishment and initial stages of Demonstration-funded programs.

**The statewide assessment**. Statewide assessment of overall Medicaid system performance will focus on determining the impact of MTP 2.0 on the trends observed before its initiation in several key areas: access to care, care quality, health and social outcomes, and Medicaid cost metrics. The assessment will compare changes during MTP 2.0 performance metrics at the state level against MTP 1.0 benchmarks across various measurement areas outlined earlier. Because the COVID-19 Public Health Emergency (PHE) occurred during MTP 1.0, the evaluation will consider multiple benchmarks when assessing MTP 2.0, including 2017-2019 (pre-PHE), 2020-2022 (PHE), and 2023, a year in the most acute effects of the pandemic had subsided, and many of the MTP 2.0 initiatives had not yet been implemented.

While individual program evaluations target specific populations, the statewide analysis will encompass a wider Medicaid population, capturing the collective effect of all MTP 2.0-related activities. The statewide impact assessment will also concentrate on higher-risk groups anticipated to benefit

substantially from the demonstration. These populations include, but are not limited to, individuals with SMI or concurrent disorders, those with multiple chronic conditions, those requiring LTSS, residents of underserved regions, and enrollees from BIPOC (Black, Indigenous, People of Color) groups.

## Section 3. Overview of Major Evaluation Components and Activities

A mixed methods approach combines the strengths of both qualitative and quantitative research, providing a comprehensive analysis framework. Quantitative research offers statistical rigor and generalizability, allowing for the measurement of trends and patterns across large populations; in contrast, qualitative research provides depth and context, uncovering the underlying reasons, opinions, and motivations behind those trends. By integrating these methods, a mixed methods approach ensures a more holistic understanding of complex issues, capturing the measurable outcomes and the nuanced human experiences and perceptions that drive them.

**Qualitative analysis.** Evaluation activities will include qualitative analysis of program implementation and operations to support both formative evaluation deliverables and quantitative analysis of program impacts. Qualitative analysis will address program implementation questions such as how programs are designed, what components facilitate success and what barriers impede progress, how state agencies can better support providers and organizations to improve care for the Medicaid population, and what types of regulations, policies, or programmatic changes should be prioritized to achieve the goals of MTP 2.0.

The design and execution of qualitative methods supporting the evaluation will be the lead responsibility of the IEE. Their duties will encompass establishing the number of qualitative interviews, selecting appropriate populations or sample frames for participant recruitment, scheduling the timing of focus groups, interviews, and surveys, tailoring data collection tools to align with specific research questions and hypotheses, and crafting these data collection tools. The qualitative analysis will likely involve participants such as beneficiaries, providers, managed care organization (MCO) staff, and state agency employees. Individual Accountable Communities of Health (ACH) projects are anticipated to categorize different groups for qualitative analysis sampling, aiming for inclusive representation from both the targeted beneficiaries and providers.

**Quantitative analyses leveraging integrated administrative data.**

The evaluation will leverage the integrated administrative data maintained in the Department of Social and Health Services Integrated Client Databases (ICDB) to support quantitative evaluation activities. For more information on the ICDB, see https://www.dshs.wa.gov/ffa/rda/research-reports/dshs-integrated-client-databases).

The ICDB was explicitly designed to support the evaluation of health and social service interventions in Washington State, and has been widely used in evaluation studies published in peer-reviewed journals.[1]

The ICDB contains more than 20 years of individual-level, massively dimensional data for nearly 6 million persons residing in Washington State over that time span. It contains data from approximately 20 administrative data systems, including the State's ProviderOne Medicaid Management Information System (MMIS data system and all other data sources necessary to implement the quantitative evaluation design described in this document, except in a few areas discussed below where new data collection may be required.

More specifically, the ICDB contains:

- Service event level utilization data across all Medicaid funded delivery systems (physical, mental health, substance use disorder, long-term services and support, and developmental disability services);

- Expenditure data at the service event and per-member per-month level of aggregation by major service modality, for all Medicaid beneficiaries over the time period relevant to this evaluation (with a few caveats related to issues like the methods for applying pharmacy rebates);
- Risk factors associated with chronic and acute disease conditions, including mental illness and substance use disorders, derived from the CDPS and Medicaid-Rx risk models and related tools; (For more information about the CDPS and Medicaid-Rx, visit http://cdps.ucsd.edu/).
- Assessment data on functional support needs, cognitive impairment, and behavioral challenges for persons receiving LTSS services;
- Data on "social outcomes" including arrests, employment and earnings, and homelessness and housing stability;
- Client demographics (age, gender, race/ethnicity);
- Medicaid enrollment by detailed coverage category;
- MCO enrollment or fee-for-service Medicaid coverage status;
- Medicare Parts A, B, and D integration for persons dually enrolled in Medicaid and Medicare; and
- Geographic residential location spans which are critical to regional attribution models.

The ICDB is updated on a quarterly basis. The ICDB analytical data infrastructure is complemented by a suite of Healthcare Effectiveness Data and Information Set (HEDIS) and related metric measurement algorithms that currently regularly produce a suite of health care and social service-related metrics on at least a semi-annual basis for all Medicaid beneficiaries in Washington State meeting measure specification requirements. Furthermore, the state agency teams maintaining the ICDB have deep expertise in identity management processes that may be necessary to link new ad hoc data sources if required.

Among the advantages to leveraging the State's nation-leading integrated analytical data environment is the elimination of dependencies on external entities for data collection and measurement, which otherwise would likely result in variation across projects in data integrity and measurement quality. We also note that the State's analytical environment can readily absorb new and changing measurement concepts, and apply those concepts retroactively for all relevant history to maintain consistent time series for analysis. As programs continue to be developed and implemented, we will determine what metrics will be most appropriate to evaluate the different components of MTP 2.0. In general, evaluation metrics will be selected based on a combination of factors including:

- Availability of stewarded metric specifications (preference will be given to HEDIS stewarded metrics and metrics in the Washington State Common Measure Set);
- Feasibility of implementation of metric specifics in the State's analytical data environment;
- Program and policy staff recommendations around key program outcomes; and
- CMS requirements for evaluation metrics.

We anticipate primarily using HEDIS stewarded metrics and supplementing with CMS stewarded metrics, such as those in program monitoring protocols, and State stewarded metrics. (For more information about state-stewarded metrics, please see the Cross-System Outcomes Measures for Adults Enrolled in Medicaid at https://www.dshs.wa.gov/ffa/research-and-data-analysis/cross-system-outcome-measures-adults-enrolled-medicaid).

**Quantitative analyses leveraging national Medicaid claims data.** For selected programs, the evaluation will use the Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF) dataset for 2016-2026. TAF is a successor to the Medicaid Analytic eXtract (MAX) files. The TAF data are more

comprehensive than MAX in population (e.g., including all managed care enrollees) and content (detailed enrollee and program enrollment information). The TAF data include demographics and eligibility information, inpatient claims, pharmacy claims, and other claims (e.g., primary care physician, laboratory services). The independent external evaluator currently has TAF files from 2017-2020 in-house; data from 2026 are anticipated to be available in November 2028, allowing for analyses through the first 3.5 years of the demonstration. As feasible, we plan to include TAF analysis for a subset of outcome metrics in the summative report.

**Evaluation Deliverables.**
The evaluation of the Demonstration will meet the following timeframes and deliverables.

**Table 3.1. Evaluation Timeline and Milestones**

| Deliverable | Responsible Party | Date |
|---|---|---|
| **Draft Evaluation Design** | State | January 26, 2024 |
| - Comments from CMS | CMS | 60 days from receipt |
| - Final evaluation design | State | 60 days from receipt |
| **Institutional Review Board updates obtained** | State | Q2 2025- Q4 2025 |
| **Quarterly briefings** from the independent external evaluator to highlight key findings from quarterly activities, data analysis, reflections and insight on the implementation of projects drawing on key informant interviews, document review, meetings attended, and activity review**.** | IEE | Beginning March 2025 |
| **Specification for data required from state** including a timeline, data gap analysis, and plan to address data gaps | IEE | As applicable, starting Q2 2025 |
| **Production and validation of baseline measures** (statewide and by specific populations as delineated in the project plan) | IEE | Q2 2025– Q2 2028 |
| **Quarterly, semi-annual, and annual metric updates** (depending on metric frequency) | State | As applicable starting Q2 2025 |
| **State progress reports** will include information on submittals from IE and progress of evaluation. | State | Include in Quarterly and Annual reports |
| **Conduct and Analyze Qualitative Interviews** (key informant interviews for 11 MTP 2.0 projects; additional beneficiary interviews for 5 MTP 2.0 projects) | | Q2 2025 – Q3 2028 |
| **Draft Serious Mental Illness and Substance Use Disorder Midpoint Assessment (SUD and SMI MPA)** | State | August 28, 2026 |
| - CMS comments | CMS | 60 days from receipt |
| - Final SMI MPA | State | 60 days from receipt of CMS comments |

(continued)**Table 3.1. Evaluation Timeline and Deliverables (continued)**

| | | |
|---|---|---|
| **Draft Interim Evaluation Report** | State | June 30, 2027 |
| - CMS comments | CMS | 60 days from receipt |

| | | |
|---|---|---|
| - Final Interim Evaluation Report | State | 60 days from receipt of CMS comments |
| **Draft Reentry Midpoint Assessment** | State | July 31, 2028 |
| - CMS comments | CMS | 60 days from receipt |
| - Final Interim Evaluation Report | State | 60 days from receipt of CMS comments |
| **Draft Summative Evaluation Report** | State | December 30, 2029 |
| - CMS comments | CMS | 60 days from receipt |
| - Final Summative Evaluation Report | State | 60 days from receipt of CMS comments |

# Section 4: Statewide Assessment

## General Background Information

In addition to assessments of individual waiver demonstration initiatives described in other sections of this proposal, the evaluation will assess the performance of Washington State's Medicaid system during MTP 2.0. Following the approach used in the evaluation of MTP 1.0, we will measure performance with metrics categorized across 11 domains. Our evaluation of MTP 1.0 included data from 2017; we will measure outcomes through 2028 in the proposed evaluation.

This long time series allows the advantage of a rich longitudinal assessment of changes across a variety of populations and measures. They will also allow for the assessment across different transition periods, including observations prior to the COVID-19 PHE (2017-2019), COVID-19 PHE period (2020-2022), the transition into MTP 2.0 (July 2023), and the initiation of various components of MTP 2.0, with some components introduced in a staggered fashion in 2023 and beyond.

In addition to this long time series, we will supplement these data by comparing changes in Washington to similar measures nationally or among a select cohort (e.g., states drawn from the West Coast), leveraging the national TAF data. The comparison of Washington to national averages or a selected cohort of states will provide novel information to Washington's Medicaid administrators. This information could include a greater understanding of where Washington stands relative to the national average at a given point in time or whether changes (improvements or reductions in quality; narrowing or widening of disparities) observed in Washington are unique to the state or also observed in peer states.

The statewide assessment is not predicated on any specific hypotheses or research questions. Instead, it is an opportunity for the evaluator to provide feedback to the state on the overall trajectory of its Medicaid program.

## Methodology

**Evaluation Design.** This quantitative analysis will assess statewide changes between 2017 and 2028, using a combination of visual trends, analyses by subgroups, and comparisons of changes occurring throughout MTP 2.0 to a 2023 baseline year.

**Medicaid population and subgroups.** We will assess changes across the following subgroups.

**Table 4.1. Subgroups**

| | | |
|---|---|---|
| **Health condition** | Chronic condition | People diagnosed with at least one chronic physical health condition, such as asthma or diabetes, from a list of chronic conditions |
| | Serious mental illness (SMI) | People diagnosed with at least one mental health condition, such as schizophrenia or bipolar disorder, from a list of chronic conditions |
| **Geography of residence** | Rural | People who resided in zip codes with a population center of less than 49,000 |
| | High poverty | People who resided in zip codes where the median income was in the bottom fifth of Washington state's income distribution |
| **Race and ethnicity**[1] | American Indian/Alaska Native[2]<br>Asian<br>Black<br>Hawaiian or pacific islander<br>Hispanic<br>White | Race and ethnicity groups from Medicaid enrollment records |

**Evaluation Period.** We propose to analyze data for July 1, 2017, through June 30, 2028, assuming that claims data for FY 2028 are available on January 1, 2029.

**Evaluation Measures.** We propose to use the following list of outcome measures, noting that the list below is tentative pending additional information about program implementation, parameters and availability of additional measures.

[1] The statewide assessment will provide additional consideration and information to contextualize the evaluation findings to reflect the impact that institutional racism had and continues to have on health outcomes.

[2] We acknowledge that there is an inherently political aspect to identification as American Indian/Alaska Native. Institutional and historical disparities and the lack of knowledge of the sovereign immunity of Tribal Nations in Washington create additional complexities in access to care and health care outcomes for those living in Indian Country.

**Table 4.2. Evaluation Measures**

| Domain | Measure name | HEDIS Measure Identifier |
|---|---|---|
| **Social determinants of health** | Homelessness | |
| | Employment | |
| | Criminal Justice Involvement | |
| **Prevention and Screening** | Childhood Immunization Status | CIS |
| | Immunizations for Adolescents | IMA |
| | Lead Screening in Children | LSC |
| | Cervical Cancer Screening | CCS |
| | Chlamydia Screening in Women | CHL |
| | Care for Older Adults | COA |
| | Oral Evaluation, Dental Services | OED |
| | Topical Fluoride for Children | TFC |
| **Respiratory Conditions** | Appropriate Testing for Pharyngitis | CWP |
| | Pharmacotherapy Management of COPD Exacerbation | PCE |
| | Asthma Medication Ratio | AMR |
| **Cardiovascular Conditions** | Controlling High Blood Pressure | CBP |
| | Persistence of Beta-Blocker Treatment After a Heart Attack | PBH |
| | Statin Therapy for Patients With Cardiovascular Disease | SPC |
| | Cardiac Rehabilitation | CRE |
| **Diabetes** | Glycemic Status Assessment for Patients With Diabetes | GSD |
| | Blood Pressure Control for Patients With Diabetes | BPD |
| | Eye Exam for Patients With Diabetes | EED |
| | Kidney Health Evaluation for Patients With Diabetes | KED |
| | Statin Therapy for Patients With Diabetes | SPD |

(continued)

**Table 4.2. Evaluation Measures (continued)**

| Domain | Measure name | Measure Identifier |
|---|---|---|
| **Behavioral Health** | Diagnosed Mental Health Disorders | DMH |
| | Follow-Up After Hospitalization for Mental Illness | FUH |
| | Follow-Up After Emergency Department Visit for Mental Illness | FUM |
| | Diagnosed Substance Use Disorders | DSU |
| | Follow-Up After High-Intensity Care for Substance Use Disorder | FUI |
| | Follow-Up After Emergency Department Visit for Substance Use | FUA |
| | Pharmacotherapy for Opioid Use Disorder | POD |
| | Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications | SSD |
| | Diabetes Monitoring for People With Diabetes and Schizophrenia | SMD |
| | Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia | SMC |
| | Adherence to Antipsychotic Medications for Individuals With Schizophrenia | SAA |
| **Care Coordination** | Advance Care Planning | ACP |
| | Transitions of Care | TRC |
| | Follow-Up After Emergency Department Visit for People With Multiple High-Risk Chronic Conditions | FMC |
| **Overuse/Appropriateness** | Non-Recommended PSA-Based Screening in Older Men | PSA |
| | Appropriate Treatment for Upper Respiratory Infection | URI |
| | Use of Imaging Studies for Low Back Pain | LBP |
| | Potentially Harmful Drug-Disease Interactions in Older Adults | DDE |
| | Use of High-Risk Medications in Older Adults | DAE |
| | Deprescribing of Benzodiazepines in Older Adults | DBO |
| | Use of Opioids at High Dosage | HDO |
| | Use of Opioids From Multiple Providers | UOP |
| | Risk of Continued Opioid Use | COU |

(continued)

**Table 4.2. Evaluation Measures (continued)**

| Domain | Measure name | Measure Identifier |
|---|---|---|
| **Access/Availability of Care** | Adults Access to Preventive/Ambulatory Health Services | AAP |
| | Initiation and Engagement of Substance Use Disorder Treatment | IET |
| | Prenatal and Postpartum Care | PPC |
| | Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics | APP |
| **Utilization and Risk Adjusted Utilization** | Well-Child Visits in the First 30 Months of Life | W30 |
| | Child and Adolescent Well-Care Visits | WCV |
| | Antibiotic Utilization for Respiratory Conditions | AXR |
| | Plan All-Cause Readmissions | PCR |
| | Hospitalization Following Discharge From a Skilled Nursing Facility | HFS |
| | Acute Hospital Utilization | AHU |
| | Emergency Department Utilization | EDU |
| | Hospitalization for Potentially Preventable Complications | HPC |
| **Cost** | Total healthcare expenditures | |

**Data Sources**. We will use the ICDB, supplemented by TAF data as feasible.

**Analytic Methods.**
We will display these changes visually and provide quantitative measures for changes between a baseline year, which we designate as 2023, and the evaluation year. For the interim report (due June 2027), we will assess changes through June 2026. For the summative report, we will assess changes through December 2028. In addition to these longitudinal changes, we will also provide a comparison to national trends for selected outcomes using TAF data, recognizing that these data may have a lag that is one to three years behind the Medicaid data provided directly by Washington. The goal of these analyses would be to allow for a comparison of Washington's performance – using TAF data – to selected states, over a shorter time period. These TAF analyses would be complementary to analyses of ICDB data, which allow for a longer time period covering more recent years.

## Quarterly Briefings

The IEE will conduct quarterly briefings with staff from HCA and DSHS, providing a valuable platform to present and discuss key findings derived from the quarterly evaluation activities. These briefings will help provide transparency and accountability and offer insights into the progress and challenges of implementing various projects. By drawing on diverse sources such as key informant interviews, comprehensive document reviews, and ongoing quantitative analyses, these briefings will ensure a holistic understanding of the ongoing work. The real-time exchange of information during these sessions will foster a collaborative environment and enable immediate feedback and constructive dialogue. This approach will facilitate informed decision-making and strategic planning, enhancing the effectiveness of

the waiver demonstration. Furthermore, these briefings will contribute significantly to the continuous improvement of practices and policies, ultimately benefiting the state of Washington through informed and responsive governance. We anticipate that the format of these briefings, which emphasizes interaction and live exchange, will allow for the immediate clarification of queries, the sharing of novel findings or concerning data anomalies, and the opportunity to align evaluation efforts with the state's evolving needs and priorities.

# Section 5: Foundational and Community Supports

## General Background Information

This initiative continues and expands the foundational community supports (FCS) program. The FCS program provides supportive housing and employment services to Medicaid recipients with complex healthcare needs. It includes Community Support Services (CSS, also referred to as supportive housing) and Individual Placement and Support (IPS, also called supported employment). CSS includes the following services: housing assessment and planning, outreach to and relationship management with landlords, assisting with housing applications, and education training and coaching for securing housing. CSS does not provide ongoing rental support. IPS includes the following services: employment assessment and planning, outreach to employers, assisting with job applications, education, training, and coaching for securing employment. At the end of 2021, the FCS program had just over 10,000 monthly enrollments in CSS and IPS services. Both programs focus on care coordination and linking enrollees to mental health and substance use treatment.

The waiver renewal includes the following changes to the FCS program:

1. Expand CSS eligibility criteria: lower minimum age from 18 to 16 years. Washington estimates that this change will lead to only a minor expansion of the eligible population by approximately one percentage point; however, it will align the eligibility criteria with other systems of care for adolescents and young adults ages 16-25.
2. Expand IPS eligibility criteria: include additional justice-involved risk factors. IPS eligibility is expanded to individuals exiting jail or prison or those on parole. Previously, these individuals were often not considered for FCS because eligibility is based on Medicaid records, and incarcerated individuals are currently not enrolled in Medicaid. The population affected by this change is large enough (about 7,700 individuals) to increase FCS enrollment moderately.
3. Provide one-time transition support to enrollees exiting behavioral health inpatient treatment facilities who were homeless the month before their admission. Support services include security deposits, first and last month's rent, and basic home goods. HCA estimates that approximately 2,700 individuals will be affected by this change. This expansion of benefits may reduce inpatient length of stay because discharge from behavioral health inpatient treatment facilities often requires proof of some residency.
4. Extend the eligibility of CSS service authorization from 6 to 12 months. This change aligns CSS services with a new law (the Apple Health and Homes Act, ESHB 1866), passed in 2022, that established a housing benefit, renewable in 12-month increments, for permanent housing units for CSS recipients.

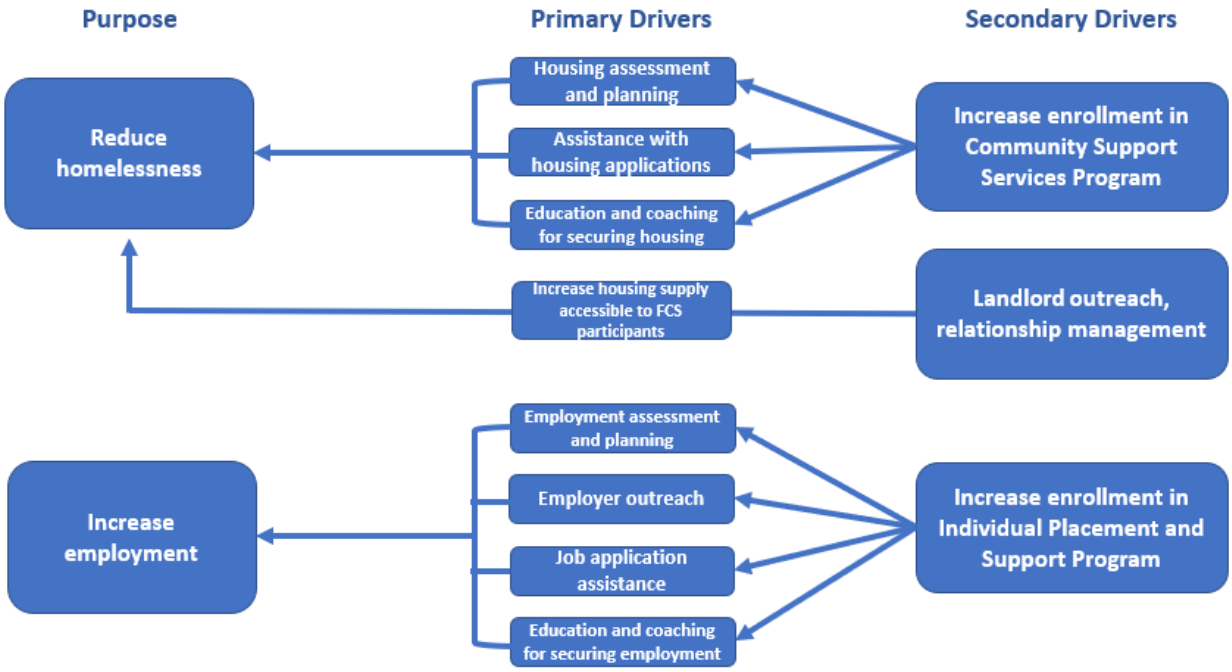
The FCS program will also coordinate a portion of the HRSN housing navigation services. Since May 2022, the state has supported a short-term rental subsidy that included first and last month's rent, with plans to include these services as part of the demonstration in mid-2024.

## Evaluation Questions and Hypotheses

**Driver Diagram.** Exhibit 5.1 below depicts the relationship between the initiative's purpose to reduce homelessness and increase employment and the primary and secondary drivers that are necessary to achieve

this overall goal. Eight primary drivers contribute directly towards achieving the initiative's purpose, with three secondary drivers that are necessary to support the primary drivers.

**Exhibit 5.1. Driver Diagram**




Demonstration hypotheses associated with this initiative pertain to understanding whether the provision of FCS—supportive housing and supported employment—will improve health outcomes and reduce costs for a targeted subset of the Medicaid population. We consider the following questions and hypotheses.

H1. Participation in FCS is associated with improved social outcome metrics (reduced homelessness, increased employment, reduced risk of criminal justice involvement).
H2. Participation in FCS is associated with increased access to and engagement in treatment for mental illness and substance use disorders.
H3. Participation in FCS is associated with improvements in the quality of care for behavioral and physical health conditions.
H4. Participation in FCS is associated with reduced emergency department utilization and avoidable utilization of inpatient hospital services related to physical or behavioral health conditions.
H5. Participation in FCS is associated with reduced per-member per-month health care expenditures.

The Foundational Community Supports Program will be supported with the use of electronic health information exchange (e.g., providers' use [creation and transmission] of employment and housing assessment templates, and registration and use of the Clinical Data Repository [CDR]).

Qualitative data collection and analysis will answer the following evaluation questions:

I1. What was the experience of those providing FCS with the program?
I2. What was the experience of providing the new housing subsidy benefit?

I3. How has the service authorization extension (from six to 12 months) impacted the Foundational Community Supports (FCS) program?
I4. How do the components of the FCS program align with (or vary from) adopted evidence-based models of care (fidelity), and why? What role do the fidelity reviews, which occurred in MTP 1.0, play in learning and sharing best practices? How have these reviews changed, if they have?
I5. How does the FCS Program use HIT to support eligibility determinations and service delivery, and what factors emerged as barriers and facilitators to HIT use? How were challenges addressed?
I6. How is the FCS Program impacted by local investments in housing supports?

## Methodology

**Evaluation Design.** We will use a mixed methods design in which quantitative analyses of claims data are informed and explained by qualitative interviews. The quantitative analyses will use a difference-in-differences approach, comparing outcomes for Medicaid beneficiaries receiving FCS to a propensity score-matched group of beneficiaries who do not receive FCS. Qualitative data will include collecting and analyzing any relevant revised or new program documents and conducting and analyzing semi-structured interviews with key program leaders and personnel implementing these programs.

**Target and Comparison Populations.** The target population of this component is Medicaid beneficiaries who receive FCS services. The comparison group will be derived by propensity score matching individuals who did not receive FCS services to the treatment population using the time before FCS enrollment. The matching approach aligns the timing of FCS enrollment across individuals. Our approach will follow the approach developed by the state of Washington as closely as possible, recognizing that we may not have the same information available to the state. As a sensitivity analysis, we will not use pre-intervention outcome measures in the matching algorithm due to regression to the mean concerns.

We will also consider the following stratifications:

- Stratification by program participation:
  - Those receiving CSS.
  - Those receiving IPS.
  - Those receiving both CSS and IPS.
- Stratification by the type of provider through which FCS was accessed:
  - Aging and Long-Term Support Administration (ALTSA)
  - HCA
- Subgroups. To the extent possible, we will consider conducting analyses for the following subgroups:
  - Geography of residence: Rural vs. Non-rural, with rural defined as residence in zip codes with a population center of less than 49,000
  - Race and ethnicity
  - Gender
  - Age

**Evaluation Period.** We propose to analyze data for July 1, 2023, through June 30, 2028, assuming that claims data for CY 2028 are available on January 1, 2029.

**Evaluation Measures.** We propose using the following evaluation measures.

**Table 5.1. Evaluation Measures**

| Research Question | Outcome measures used to address the research question | Sample or population subgroups to be compared | Data Sources | Analytic Methods |
|---|---|---|---|---|
| Goal: Link enrollees with housing and employment supports<br>**FCS Hypothesis 1: Participation in FCS is associated with improved social outcome metrics (reduced homelessness, increased employment, reduced risk of criminal justice involvement).** | | | | |
| FCS Research Question 1.1: How is participation in the FCS Program associated with social outcome metrics? | • Homelessness<br>• Transition out of homelessness<br>• Transition into homelessness<br>• Employment<br>• Criminal Justice Involvement | Eligible Medicaid enrollees | ICDB | Difference-in-Differences |
| Goal: Link enrollees with behavioral health services<br>**FCS Hypothesis 2: Participation in FCS is associated with increased access to and engagement in treatment for mental illness and substance use disorders.** | | | | |
| FCS Research Question 2.1: How is participation in the FCS Program associated with increased access to and engagement in treatment for mental illness and substance use disorders and improvements in the quality of care for behavioral and physical health conditions. | • Diagnosed Mental Health Disorders<br>• Antidepressant Medication Management<br>• Follow-Up After Hospitalization for Mental Illness<br>• Follow-Up After Emergency Department Visit for Mental Illness<br>• Diagnosed Substance Use Disorders<br>• Follow-Up After High-Intensity Care for Substance Use Disorder<br>• Follow-Up After Emergency Department Visit for Substance Use | Eligible Medicaid enrollees | ICDB | Difference-in-Differences |

(continued)

**Table 5.1. Evaluation Measures (continued)**

| | | | | |
|---|---|---|---|---|
| Goal: Link enrollees with behavioral health services<br>**FCS Hypothesis 3: Participation in FCS is associated with improvements in the quality of care for behavioral and physical health conditions.** | | | | |
| FCS Research Question 3.1: How is participation in the FCS Program associated with improvements in care for people with chronic conditions? | • Controlling High Blood Pressure<br>• Persistence of Beta-Blocker Treatment After a Heart Attack | Eligible Medicaid enrollees | ICDB | Difference-in-Differences |

| | | | | |
|---|---|---|---|---|
| | • Statin Therapy for Patients With Cardiovascular Disease<br>• Cardiac Rehabilitation<br>• Glycemic Status Assessment for Patients With Diabetes<br>• Blood Pressure Control for Patients With Diabetes<br>• Eye Exam for Patients With Diabetes<br>• Kidney Health Evaluation for Patients With Diabetes<br>• Statin Therapy for Patients With Diabetes | | | |
| Goal: Encourage appropriate and efficient use of health services<br>**FCS Hypothesis 4: Participation in FCS is associated with reduced emergency department utilization and avoidable utilization of inpatient hospital services related to physical or behavioral health conditions.** | | | | |
| FCS Research Question 4.1: How is participation in the FCS Program associated with acute care measures of hospital and emergency department use? | • Plan All-Cause Readmissions<br>• Hospitalization Following Discharge From a Skilled Nursing Facility<br>• Acute Hospital Utilization<br>• Hospitalization for Potentially Preventable Complications | Eligible Medicaid enrollees | ICDB | Difference-in-Differences |
| FCS Research Question 4.2: How is participation in the FCS Program associated with emergency department utilization? | • Emergency Department Utilization | Eligible Medicaid enrollees | ICDB | Difference-in-Differences |

(continued)

**Table 5.1. Evaluation Measures (continued)**

| Goal: Encourage appropriate and efficient use of health services<br>**FCS Hypothesis 5: Participation in FCS is associated with reduced per-member per-month health care expenditures.** | | | | |
|---|---|---|---|---|
| FCS Research Question 5.1: How is participation in the Foundational Community Supports Program associated with reduced per-member per-month health care expenditures? | • Total healthcare expenditures | Eligible Medicaid enrollees | ICDB | Difference-in-Differences |

**Table 5.2. Implementation Questions**

| **Implementation questions assessed via qualitative analyses** | | | | |
|---|---|---|---|---|
| FCS Implementation Question 1: What was the experience of those providing FCS with the program? | - Identification of barriers and facilitators in FCS success<br>- Description of how challenges were addressed | Service providers from Aging and Long-Term Support Administration, Health Care Authority, and Amerigroup | Key informants | Document review<br><br>Qualitative analysis |
| FCS Implementation Question 2: What was the experience of those providing the new FCS housing benefit? | - Identification of barriers and facilitators to new FCS housing subsidy benefit<br>- Description of how challenges were addressed<br>- Description of how new benefit addressed challenges that emerged in MTP 1.0 | Service providers from Aging and Long-Term Support Administration, Health Care Authority, and Amerigroup | Key informants | Document review<br><br>Qualitative analysis |
| FCS Implementation Question 3: How has the service authorization extension (from six to 12 months) impacted the FCS program? | - Description of impact of new housing subsidy benefit on FCS program | Service providers from Aging and Long-Term Support Administration, Health Care Authority, and Amerigroup | Key informants | Document review<br><br>Qualitative analysis |
| FCS Implementation Question 4: How do the components of the FCS program align with (or vary from) adopted evidence-based models of care (fidelity) and why? | - Role of fidelity reviews and other components of FCS | Service providers from Aging and Long-Term Support Administration, Health Care Authority, and Amerigroup | Key informants | Document review<br><br>Qualitative analysis |

(continued)

**Table 5.2. Implementation Questions (continued)**

| | | | | |
|---|---|---|---|---|
| FCS Implementation 5: How does the FCS Program use HIT to support eligibility determinations and service delivery? | - Identification of barriers and facilitators that apply to HIT | Service providers from Aging and Long-Term Support Administration, Health Care Authority, and Amerigroup | Key informants | Document review<br><br>Qualitative analysis |
| FCS Implementation Question 6: How is the FCS Program impacted by local investments in housing supports? | - Identification of local investments in housing supports.<br>- Description of impact on FCS program, including impact of change over time with greater Medicaid funding for housing supports | Service providers from Aging and Long-Term Support Administration, Health Care Authority, and Amerigroup | Key informants | Document review<br><br>Qualitative analysis |

We will also consider alternative homelessness measures:

- Transition into homelessness.
  - Definition: Percent of individuals who were with housing in the previous calendar quarter but without housing in the current quarter
- Transition out of homelessness.
  - Definition: Percent of individuals without housing in the previous calendar quarter but with housing in the current quarter.
  - Denominator: Individuals without housing in the previous calendar quarter
  - Numerator: Individuals without housing in the previous calendar quarter and with housing in the current calendar quarter

Note: we define these measures using the previous quarter for the denominator so that the last pre-enrollment quarter does not include changes due to FCS enrollment.

**Data Sources**. We will use the ICDB for these analyses. We will also coordinate with HCA to identify key informants for qualitative data collection.

**Analytic Methods.**

Quantitative approach

The unit of analysis is at the individual-quarter level. We use a difference-in-differences approach and define the pre-intervention period as the last two quarters before first FCS enrollment (also called the index quarter) and the post-intervention period as the third and fourth quarter following the index quarter. We will consider alternative specifications of the pre-intervention and post-intervention periods for our analysis to address outcome changes around FCS enrollment that might affect difference-in-differences estimates. The regression equation may be written as follows:

$$Y_{it} = \alpha Treat_i + \beta Post_t + \delta(Treat_i x Post_t) + \lambda X_{it} + \epsilon_{it},$$

Where $Y_{it}$ is the outcome of interest, $Treat_i$ is an indicator equal to one if individual $i$ is in the treatment group, $Post_t$ is an indicator equal to one for the post-intervention period, $X_{it}$ are demographic characteristics, $\epsilon_{it}$ is the error term, and the parameter of interest is $\delta$.

Special considerations

- We will monitor changes in enrollment that might be related to program changes (lower minimum age; inclusion of justice-involved risk factors; extended eligibility of CSS service authorization from 6 to 12 months).
- We will assess through interviews whether the Apple Health and Homes Act (ESHB 1866) makes obtaining housing easier for FCS beneficiaries. If possible, we will quantitatively assess the effects of this law as well (e.g., by stratifying before and after its implementation in 2022).
- We will continue to assess the effects of the COVID-19 PHE and the end of PHE, for instance, by stratifying our analysis by calendar year.
- When defining pre- and post-intervention periods for the matched control group, we will use the following process. For each FCS enrollee, we will identify comparison individuals by matching according to FCS participant characteristics at their time of enrollment. We will then assign the actual enrollment date of the matched FCS enrollee to their comparison individual, using that as a synthetic FCS enrollment date. The "pre-intervention period" will be defined as pre-enrollment date (actual for the treated group and synthetic for the comparison group), and the "post-intervention period" will be defined as observations after that enrollment date.

Additional design considerations

Some of the analyses identified above require examining a subset or stratification of the target population. When listing outcome variables, for concision, we have typically listed the target population as "eligible Medicaid beneficiaries," noting that in some cases, the eligible populations will change. For example, an outcome variable like "blood pressure control among patients with diabetes" is only relevant for patients with diabetes; statin therapy for patients with cardiovascular disease is only relevant for patients with cardiovascular disease. We will define these outcomes and subpopulations accordingly.

We also note that analyses of these subpopulations require assumptions that are similar to those of the larger subpopulations. For example, analyses that use the difference-in-differences approach rest on the assumption of parallel trends, and these assumptions extend to any analyses that focus on subsets or stratification.

The evaluation team has extensive experience in working with difference-in-difference models, including theoretical and empirical articles using difference-in-differences,[2–4,4–10] with several incorporating the most recent advances in sensitivity analyses and robustness checks.[2,4,11,12] For each analysis, we will assess the quality of the comparison group or the robustness of the assumptions. We note that, from a practical point of view, there are tradeoffs between (a) the number of outcomes that can be analyzed and (b) the extent to which the parallel trends assessment can be rigorously assessed and accounted for. Our evaluation will seek a balance in providing rigorous analyses and transparency in our assumptions in a manner commensurate with the number of outcomes and analyses conducted.

Where possible, we will implement sub-setting or stratification characteristics based on pre-intervention data. This will involve identifying relevant characteristics and ensuring they are measured prior to the implementation of the reform. By doing so, we aim to mitigate endogeneity concerns and enhance the validity of our analysis. In scenarios where defining sub-setting characteristics prior to the demonstration start is infeasible, we will explore the use of separate modeling approaches.

While we are committed to incorporating these methodologies, it is essential to retain some flexibility in our approach. The dynamic nature of Medicaid reforms and the variability in data availability

necessitates an adaptable research design. We will continuously assess the feasibility and appropriateness of these methods throughout the evaluation process. We will regularly review the implementation of these strategies and make adjustments as necessary. This iterative process will help ensure that our evaluation remains methodologically sound and aligned with the objectives of the reform.

Qualitative approach

A multi-disciplinary team with expertise in qualitative methods, primary care, practice improvement, and public health will conduct semi-structured interviews with program administrators or individuals with experience delivering technical assistance to service providers from ALTSA, HCA, and Amerigroup. Participants will be asked about their experiences providing technical assistance, the provider organizations they worked with, key program elements and changes, how these elements align with evidence, and their implementation successes and challenges. We will also conduct interviews with individuals from organizations that delivered FCS to learn about the clients they serve, their experiences with billing and providing supportive housing and employment, including the new housing subsidy benefit and extended service authorization period, fidelity across implementation organizations, and how they assessed the FCS program success. These organizations and the professionals we interview will be purposefully selected to maximize variation on characteristics such as type of support delivered, organization type, size, and location.

From our prior work on MTP 1.0, we already have a strong understanding of the specific individuals, departments, and organizations that were involved in FCS. We also learned that provider organizations' experiences varied by geography, size, provider type, and population served (e.g., medical organizations' experiences differed from community social service organizations), and we will sample based on those attributes. We anticipate interviewing approximately 3-5 state program administrators and representatives from Amerigroup and 20-25 individuals with experience delivering FCS. Sampling, data collection, and analysis will proceed iteratively; we will conduct a small number of interviews, analyze these data in a preliminary manner, and use the emerging findings to refine our interview guides and guide our sampling strategies to maximize learning. Our evaluation team will collaborate with HCA to identify contact information and a list of potential interviewees from HCA, ALTSA, and Amerigroup. We will work together to determine the best methods for identifying and recruiting organizations providing FCS.

Interviews will be conducted virtually using a video-conference format, preferably, and phone, if needed. Interviews will be audio-recorded with participant permission and generally last 45-60 minutes. Interviews will be professionally transcribed and reviewed for accuracy. All qualitative interviews will be de-identified and organized into Atlas.ti (Version 9, Atlas.ti Scientific Software Development GmbH, Berlin, Germany) for management and analysis. We will bring our knowledge from previous document reviews of FCS to this work. We will review any updated or new materials if available.

Data analysis will follow the five-step process outlined by Miller and Crabtree[13] in Table 5.3. We will analyze data in real-time so that emerging insights can inform subsequent data collection, as needed, and we can monitor when saturation is reached. Our team will listen to interviews and tag text in the transcript to code emerging themes. We will continue to analyze data in a group until we have developed a code book (list of codes with clear definitions) and there is consistency in how the team understands and applies these codes to the data. At this point, we will divide the remaining data, which will be analyzed independently and reviewed by a second analyst. We will continue to meet to discuss emerging findings, analytical questions, and coding differences.[13–15]

**Table 5.3. Five-Phase Data Analysis Process**

| |
|---|
| 1. Describing: Listen to and analyze (immersion) each interview to identify overarching patterns and preliminary findings (crystallization). Integrate with findings from other data sources as relevant. |
| 2. Organizing: Create a preliminary summary of results describing experiences, context, and factors that affect implementation (barriers and facilitators) as relevant. Conduct deeper, comparative analyses across the sample. |
| 3. Connecting: Summarize and integrate findings with quantitative data; Create matrices (c.f., Miles and Huberman) to make comparisons and identify cross-cutting findings. |
| 4. Corroborating/legitimating: We will seek additional data to confirm/disconfirm findings. Additional data/clarification will be sought from participants and others as needed. |
| 5. Representing the account: We identify ways of sharing findings that are meaningful for target audiences. |

Mixed methods analysis

The process described above will result in rich interpretive summaries and matrices that can be mixed with quantitative data. Quantitative data will identify the outcomes of the FCS program, and qualitative data will help inform that work and explain how the FCS program changed social outcome metrics (reduce houselessness, increase employment, reduce risk of criminal justice involvement) and why or why not, including the barriers and facilitators of implementing the program. Interviews will also focus on an assessment of the impacts of local investments in housing supports and the ways those may change with greater Medicaid funding for those services.

We will create a summary of qualitative and quantitative findings, and we will blend these in mixed methods summaries to identify how qualitative data explain the patterns emerging from the quantitative analyses. We will also develop these findings into a series of joint displays that we will use to refine and communicate these mixed methods findings. Mixed methods analyses will proceed in a series of meetings by the qualitative and quantitative teams. During meetings, we will review qualitative and quantitative findings, discuss possible emerging themes, and identify concordance or discordance of quantitative and qualitative findings. We will conduct additional follow-up analysis of non-concordant findings, if necessary.

**Methodological Limitations.**

The primary limitation of this approach is the extent to which selection into FCS is based on variables that are observable and incorporated into the propensity score match. Propensity score analysis, while useful, has notable limitations, primarily stemming from its reliance on the assumption that group differences are attributable to observable characteristics. This method presumes that all relevant variables influencing group assignment are measured and included, which may not always be true. Consequently, unobserved confounders - variables that affect treatment assignment and outcomes but are not included in the analysis - can lead to biased results. This limitation highlights the potential risk of drawing inaccurate conclusions, as the propensity score model might not fully account for all the factors driving the observed outcomes.

# Section 6: Medicaid Alternative Care (MAC) & Tailored Supports for Older Adults (TSOA)

## General Background Information

As population aging increases the need for long-term services and supports (LTSS), states are increasingly seeking strategies to meet the demand for Medicaid LTSS (e.g., in-home, assisted living facility, and nursing facility services) at manageable costs. Washington State implemented the Medicaid Alternative Care (MAC) and Tailored Supports for Older Adults (TSOA) programs in September 2017 as part of MTP 1.0.

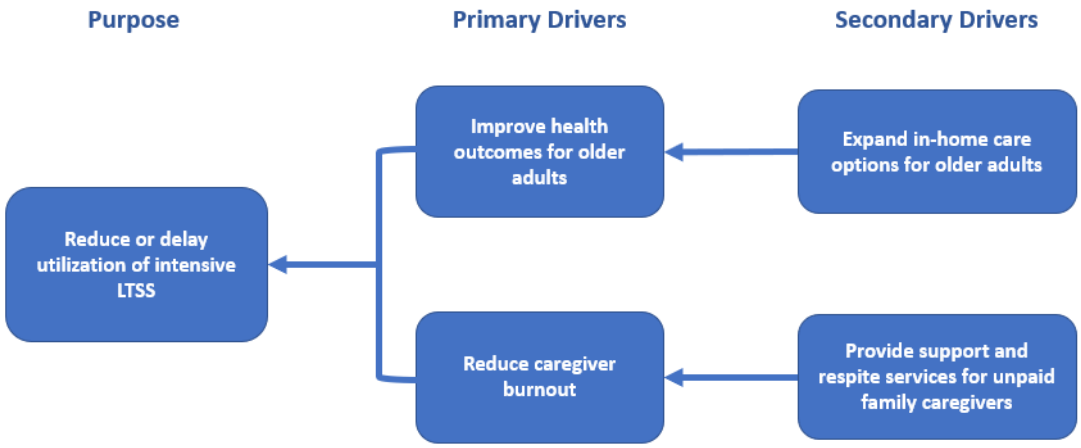
TSOA targets low-income older adults who are not yet enrolled in Medicaid, need help with activities of daily living, and are at risk of depleting financial assets to the point that they would become eligible for Medicaid. MAC also targets the same population but those who are enrolled in Medicaid. MAC and TSOA services are free and include limited hours of supportive care (e.g., personal care, home modification, meal delivery services, and household chores) for its participants and (where applicable) respite services for their informal caregivers. The goals of MAC and TSOA programs are decreasing caregiver distress and offering additional service options to delay or avoid the use of more intensive and costly Medicaid-paid LTSS.

Under MTP 2.0, Washington State will continue to offer both MAC and TSOA, with some minor changes to the eligibility criteria for these programs. These include an increase in income and resource limits for TSOA eligibility and four new services added to the MAC and TSOA benefits package: nurse delegation, pest eradication, specialized deep cleaning, and the community choice guide.

## Evaluation Questions and Hypotheses

**Driver Diagram.** Exhibit 6.1 below depicts the relationship between the initiative's purpose to reduce or delay the utilization of intensive LTSS and the primary and secondary drivers that are necessary to achieve this overall goal. Two primary drivers contribute directly towards achieving the initiative's purpose, with two secondary drivers necessary to support the primary drivers.

**Exhibit 6.1. Driver Diagram**



Demonstration hypotheses associated with this initiative pertain to understanding whether the MAC and TSOA programs will improve health outcomes and reduce costs for a targeted subset of the Medicaid population. We hypothesize that participation in the MAC and TSOA programs will lead to:

- **H1.** Participation in the MAC and TSOA programs will be associated with decreases in hospitalizations, ED visits, and 30-day readmission rates.
- **H2.** Participation in the MAC and TSOA programs will be associated with reductions in mortality rates.
- **H3.** Participation in the MAC and TSOA programs will be associated with reductions in total healthcare expenditures.
- **H4.** Participation in the TSOA program will decrease the need for Medicaid enrollment.
- **H5.** Participation in the MAC and TSOA programs will be associated with decreases in the use of traditional LTSS, including home-based, community-based, and nursing-facility services.

Qualitative data collection and analysis will answer the following evaluation questions:

- **I1.** What are the factors that explain the effectiveness of the MAC and TSOA programs?
- **I2.** What are beneficiaries' experiences with MAC and TSOA benefits?

Contingent on funding, we will also conduct a beneficiary survey will be to describe the experiences, outcomes, and conditions/circumstances of caregivers and care receivers participating in the programs.

## Methodology

**Evaluation Design.** We will use a mixed method design where quantitative analyses of claims data are informed and explained by qualitative interviews.

**Target and Comparison Populations.** In our analyses of MAC, the target populations include individuals who participated in MAC, and the comparison group includes a matched group of individuals at least 55 years old and enrolled in Medicaid who did not participate in MAC. In our analyses of TSOA, the target populations include individuals who participated in TSOA, and the comparison group includes a matched group of individuals at least 55 years old and enrolled in Medicare only (no Medicaid enrollment) who did not enroll in TSOA.

**Evaluation Period.** We propose to analyze data from July 1, 2023-June 30, 2028, assuming that claims data for CY 2028 will be available on January 1, 2029.

**Evaluation Measures.** We propose using the following evaluation measures.

**Table 6.1. Evaluation Measures**

| Research Question | Outcome measures used to address the research question | Sample or population subgroups to be compared | Data Sources | Analytic Methods |
|---|---|---|---|---|
| Goal: Reduce acute care use by providing additional service options at an earlier point for enrollees<br>**MAC/TSOA Hypothesis 1: Participation in the MAC and TSOA programs will be associated with decreases in hospitalizations, ED visits, and 30-day readmission rates.** | | | | |
| MAC/TSOA Research Question 1.1: How is participation in the MAC and TSOA programs associated with decreases in hospitalizations, emergency department (ED) visits, and 30-day readmission rates? | • Acute Hospital Use among Adults<br>• Emergency (ED) Department Visit Rate<br>• Plan All-Cause Readmissions | Eligible Medicaid enrollees | ICDB | Difference-in-Differences |
| Goal: Reduce mortality by providing additional service options at an earlier point for enrollees<br>**MAC/TSOA Hypothesis 2: Participation in the MAC and TSOA programs will be associated with reductions in mortality rates.** | | | | |
| MAC/TSOA Research Question 2.1: Is participation in the MAC and TSOA programs associated with reductions in mortality rates? | • Mortality rate | Eligible Medicaid enrollees | ICDB | Difference-in-Differences |
| Goal: Reduce health care expenditures by providing additional service options at an earlier point for enrollees<br>**MAC/TSOA Hypothesis 3: Participation in the MAC and TSOA programs will be associated with reductions in total healthcare expenditures.** | | | | |
| MAC/TSOA Research Question 3.1: How is participation in the MAC and TSOA programs will be associated with reductions in total healthcare expenditures? | • Total healthcare expenditures (both Medicaid and Medicare expenditures)<br>• Total Medicaid expenditures<br>• Total Medicare expenditures | Eligible Medicaid enrollees | ICDB | Difference-in-Differences |
| Goal: Reduce Medicaid enrollment by providing additional service options at an earlier point for enrollees<br>**MAC/TSOA Hypothesis 4: Participation in the TSOA program will decrease the need for Medicaid enrollment.** | | | | |
| MAC/TSOA Research Question 4.1: Is participation in the TSOA program associated with decreases in Medicaid enrollment? | • Enrollment in Medicaid | Eligible Medicaid enrollees | ICDB | Difference-in-Differences |

| Goal: Reduce the use of LTSS by providing additional service options at an earlier point for enrollees<br>**MAC/TSOA Hypothesis 5: Participation in the MAC and TSOA programs will be associated with decreases in the use of traditional LTSS, including home-based, community-based, and nursing-facility services.** | | | | |
|---|---|---|---|---|
| MAC/TSOA Research Question 5.1: How is participation in the MAC and TSOA programs associated with decreases in the use of traditional LTSS, including home-based, community-based, and nursing-facility services | • Use of Medicaid home-based services<br>• Use of Medicaid community-based services<br>• Use of Medicaid nursing facility services | Eligible Medicaid enrollees | ICDB | Difference-in-Differences |

**Table 6.2. Implementation Questions**

| **Implementation questions assessed via qualitative analyses** | | | | |
|---|---|---|---|---|
| MAC/TSOA Implementation Question 1: What are the factors that explain the effectiveness of the MAC and TSOA programs? | - Identification of barriers and facilitators to implementing MAC and TSOA<br>- Identification of factors that contribute to MAC and TSOA program success | Program administrators from the ALTSA, HCA and AAAs | Key informants | Document review<br><br>Qualitative analysis |
| MAC/TSOA Implementation Question 2: What are beneficiaries' experiences with the MAC and TSOA programs? | - Understanding of MAC and TSOA process, challenges, and benefits for enrollees | Eligible MAC and TSOA enrollees | Interviews with enrollees | Qualitative analysis |

**Data Sources.** We will use the ICDB for these analyses. We will also coordinate with HCA to identify key informants for qualitative data collection.

**Analytic Methods.**

Quantitative approach

We use the same analytic methods to evaluate MAC and TSOA.

We will create cohorts of treatment and comparison populations. The treatment group will consist of MAC or TSOA participants. We will use a matching method to identify a "comparison" group that looks similar to the target group in their demographics and other characteristics. More specifically, our matching will be:

- 1:5 matching without replacement
- Based on year, quarter, sex, state, county of residence, history of any mental health condition, history of any substance use condition, balance on the means of age and CDPS risk scores, functional and cognitive impairments, and other additional factors suggested by Washington State.

- Conducted using the R package `rsmatch` to implement risk-set matching, which is designed for time-varying observational studies.

Once we have produced matched samples, we will conduct our regression analysis. Our unit of observation will be person-quarter. We will conduct an event study design (i.e., a difference-in-differences approach used when the treatment occurs over time) to understand the association of MAC (or TSOA) participation with the aforementioned outcomes. We will compare outcomes for MAC (or TSOA) participants before and after their enrollment in MAC (or TSOA) to outcomes of a comparison group that did not enroll in MAC (or TSOA) during the same period. The pre-treatment period will be the last two quarters before MAC (or TSOA) enrollment (index quarter), and the post-treatment period will be the third and fourth quarters following the index quarter. The regression equation is written as follows:

$$Y_{it} = \alpha Treat_i + \beta Post_t + \delta(Treat_i \times Post_t) + \lambda X_{it} + \epsilon_{it},$$

where $Y_{it}$ is the outcome of interest for individual *i* during quarter $t$, $Treat_i$ is an indicator equal to one if individual $i$ is in the target (vs comparison) group, $Post_t$ is an indicator equal to one for the post-intervention period, $X_{it}$ are demographic and other characteristics, $\epsilon_{it}$ is the error term, and the parameter of interest is $\delta$.

Special considerations

- We will consider alternative specifications of the pre-intervention and post-intervention period to address outcome changes around MAC (TSOA) participation.
- We will monitor changes in MAC (or TSOA) participation that might be related to program changes, including changes in the amount of personal needs allowance for traditional LTSS users.
- The final evaluation will also account for the "WA Cares Fund" benefit. This benefit is scheduled to be implemented in July 2026 and will allow eligible individuals to access long-term care services and supports costing up to $36,500 (adjusted annually up to inflation) – covering services such as enabling family members to become paid caregivers, making homes accessible to stay independent longer, or getting temporary support and services after an accident.
- When defining pre- and post-intervention periods for the matched control group, we will use the following process. For each MAC or TSOA enrollee, we will identify comparison individuals by matching according to MAC or TSOA participant characteristics at their time of enrollment. We will then assign the actual enrollment date of the matched MAC or TSOA enrollee to their comparison individual, using that as a synthetic MAC or TSOA enrollment date. The "pre-intervention period" will be defined as pre-enrollment date (actual for the treated group and synthetic for the comparison group), and the "post-intervention period" will be defined as observations after that enrollment date.

Additional design considerations

Some of the analyses identified above require examining a subset or stratification of the target population. When listing outcome variables, for concision, we have typically listed the target population as "eligible Medicaid beneficiaries," noting that in some cases, the eligible populations will change. For example, an outcome variable like "blood pressure control among patients with diabetes" is only relevant for patients with diabetes; statin therapy for patients with cardiovascular disease is only relevant for patients with cardiovascular disease. We will define these outcomes and subpopulations accordingly.

We also note that analyses of these subpopulations require assumptions similar to those of the larger subpopulations. For example, analyses that use the difference-in-differences approach rest on the assumption of parallel trends, and these assumptions extend to any analyses that focus on subsets or stratification.

The evaluation team has extensive experience in working with difference-in-difference models, including theoretical and empirical articles using difference-in-differences,[2–4,4–10] with several incorporating the most recent advances in sensitivity analyses and robustness checks.[2,4,11,12] For each analysis, we will assess the quality of the comparison group or the robustness of the assumptions. We note that, from a practical point of view, there are tradeoffs between (a) the number of outcomes that can be analyzed and (b) the extent to which the parallel trends assessment can be rigorously assessed and accounted for. Our evaluation will seek a balance in providing rigorous analyses and transparency in our assumptions in a manner commensurate with the number of outcomes and analyses conducted.

Where possible, we will implement sub-setting or stratification characteristics based on pre-intervention data. This will involve identifying relevant characteristics and ensuring they are measured prior to the implementation of the reform. By doing so, we aim to mitigate endogeneity concerns and enhance the validity of our analysis. In scenarios where defining sub-setting characteristics prior to the demonstration start is infeasible, we will explore the use of separate modeling approaches.

While we are committed to incorporating these methodologies, it is essential to retain some flexibility in our approach. The dynamic nature of Medicaid reforms and the variability in data availability necessitates an adaptable research design. We will continuously assess the feasibility and appropriateness of these methods throughout the evaluation process. We will regularly review the implementation of these strategies and make adjustments as necessary. This iterative process will help ensure that our evaluation remains methodologically sound and aligned with the objectives of the reform.

Qualitative approach

To understand MAC and TSOA, we will collect relevant program documents and conduct interviews with the individuals who lead and administer these benefits, such as program administrators from ALTSA and HCA, as well as the Area Agencies on Aging (AAA) who coordinate and manage services for beneficiaries and their caregivers after the state determines eligibility. We will collect relevant documents about these programs and conduct 20-25 interviews with program leaders. These interviews will include questions about state and program leader experiences implementing these programs and assisting organizations in managing the services. Interviews will also seek to understand participants' experiences assisting beneficiaries and caregivers, working with partner organizations, the successes and challenges they encountered implementing the MAC and TSOA programs, and how they have addressed these challenges, if they have.

In addition, we will interview MAC and TSOA beneficiaries. TSOA and MAC provide free services to unpaid caregivers caring for family members. TSOA also supports individuals who do not have an unpaid caregiver. Preliminary findings from MTP 1.0 suggest that TSOA is used by more beneficiaries than the MAC program. For these reasons, we will recruit and conduct interviews with 10-15 TSOA beneficiaries, with variation on participation type (individuals with and without a caregiver), as well as region, with representation from across the thirteen AAAs in the State of Washington. For the MAC program, we will interview 8-10 beneficiaries, who also vary by AAA region.

When appropriate and possible, interviews will be conducted with the caregiver and the patient. Interviews will examine beneficiaries' experiences applying for and maintaining benefits, their experiences working with ALTSA, their local AAA, and their experiences receiving services (e.g., support groups and counseling, respite and personal care, medical equipment and supplies). Interviews will be 30 minutes in length. Patients (TSOA) or caregiver-patient dyads (MAC and TSOA) who participate in an interview will receive a $30 gift card as a "thank you." Our evaluation team will collaborate with HCA to identify contact information and a list of potential interviewees from ALTSA and the AAAs. We will work together to determine the best methods for identifying and recruiting beneficiaries and their caregivers.

Data collection and mixed methods analysis will be conducted using the same process described in Section 5.

MAC/TSOA Beneficiary Survey

Pending funding availability and contracting, survey data are expected to be collected by the survey unit of the DSHS Research and Data Analysis Division (RDA), with the independent external evaluator having primary responsibility for analyzing the collected data. DSHS-RDA will collaborate with the independent external evaluator and other program partners (such as DSHS-ALTSA who administers the programs) to design the surveys.

The primary purpose of the MAC/TSOA beneficiary survey will be to describe the experiences, outcomes, and conditions/circumstances of caregivers and care receivers participating in the programs. Survey instruments will be designed to complement the information available in administrative data, and collect additional key data and more in-depth information. Surveys can address questions beyond those involved in screening, establishing eligibility, and assessment.

Data to be collected with these surveys are expected to include:

- Opportunities and challenges encountered in program operations;
- Satisfaction with program participation;
- Care receiver quality of life;
- Values/preferences related to decision-making around these programs;
- Qualitative descriptions of caregiver and care receiver experiences, in their own words; and
- In-depth data regarding issues addressed in self-report data from assessments and related data (e.g., caregiver quality of life and LTSS placement intentions).

The study population for the surveys will be caregiver/care receiver dyads enrolled in MAC and TSOA, or TSOA individuals who have a completed care plan to receive first-time stage 3 services. All survey samples will be stratified by program.

**Methodological Limitations**

Our main data source – claims – lacks information about key quality domains, including measures of care satisfaction, care experience, and caregivers' experience. In addition, we will use a matching method to identify a "comparison" group that looks similar to the target group in their demographics and other characteristics. However, the identified comparison group may still differ in unobservable characteristics, particularly those that are correlated with MAC or TSOA program participation and dependent variables. If this were the case, our results would be biased. Further, we will estimate the effects of MAC and TSOA participation during the third and fourth post-enrollment quarters. Therefore,

we would not be able to observe the longer-term effects of MAC and TSOA participation. We will consider addressing this limitation by examining changes for a longer post-enrollment period, but such analysis would imply lower power due to a smaller sample size. Finally, we do not have access to administrative records of services delivered to people enrolled in MAC and TSOA programs, limiting our ability to assess services received and how they relate to outcome changes.

# Section 7: SUD Assessment

## General Background Information

This initiative continues the SUD waiver, which became effective on July 17, 2018. The SUD waiver was an amendment to the Section 1115 MTP waiver. It authorized Washington to receive federal financial participation (FFP) for the provision of all Medicaid state plan services, including SUD treatment services provided in residential and inpatient treatment facilities that meet the definition of an IMD for an average of 30 days.

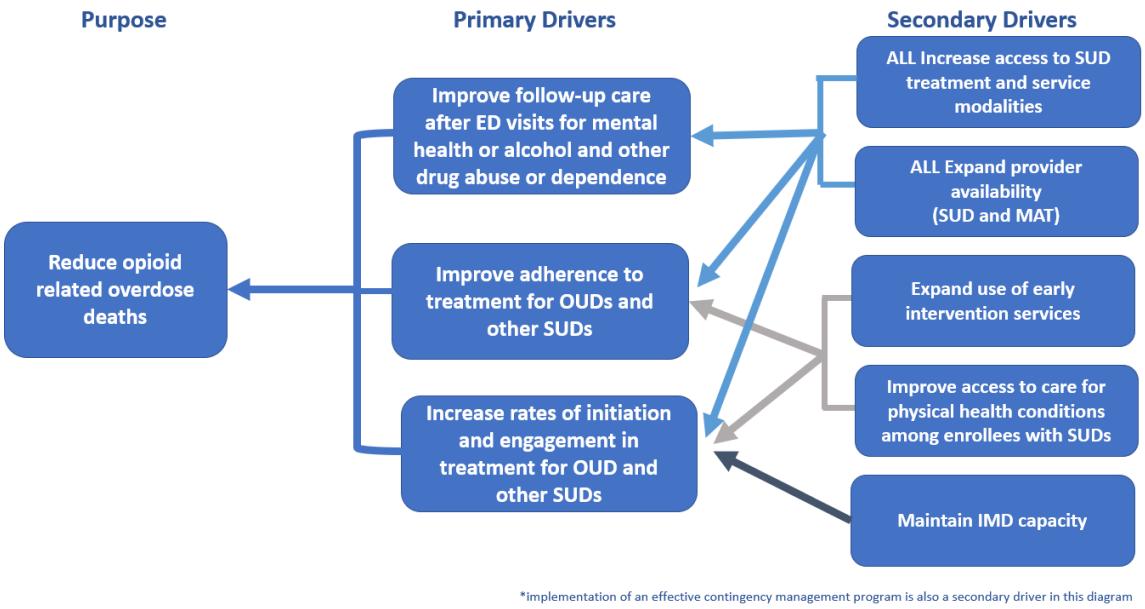
Beyond removing the IMD exclusion, the SUD waiver includes other provisions to improve care, including the following milestones:

1. Access to critical levels of care for Opioid Use Disorder (OUD) and other SUDs: coverage of OUD / SUD treatment services across a comprehensive continuum of care.
2. Use of evidence-based SUD-specific patient placement criteria: establishment of a requirement that providers assess treatment needs based on SUD-specific assessment tools (e.g., American Society of Addiction Medicine criteria or other comparable assessment and placement tools).
3. Patient placement: establishment of a utilization management approach such that beneficiaries have access to SUD services at the appropriate level of care and that interventions are appropriate for the diagnosis and level of care.
4. Use of nationally recognized SUD-specific program standards to set provider qualifications for residential treatment facilities.
5. Standards of care: establishment of a provider review process to ensure that residential treatment providers deliver care consistent with the specifications in the ASAM Criteria or other comparable, nationally recognized SUD program standards.
6. Standards of care: establishment of a requirement that residential treatment providers offer MAT on-site or facilitate access to MAT off-site.
7. Sufficient provider capacity at each level of care, including medication-assisted treatment for SUD / OUD.
8. Implementation of comprehensive treatment and prevention strategies to address opioid abuse and SUD / OUD.
9. Improved care coordination and transitions between levels of care.
10. SUD health information technology plan: implementation of a substance use disorder health information technology plan that describes the technology to support the aims of the demonstration.

## Evaluation Questions and Hypotheses

**Driver Diagram.** Exhibit 7.1 below depicts the relationship between the initiative's purpose to reduce opioid-related overdoses and the primary and secondary drivers that are necessary to achieve this overall goal. Three primary drivers contribute directly towards achieving the initiative's purpose, with five secondary drivers that are necessary to support the primary drivers.

**Exhibit 7.1. Driver Diagram**




Demonstration hypotheses associated with this initiative pertain to understanding whether the SUD waiver will improve health outcomes and reduce costs for a targeted subset of the Medicaid population. We consider the following questions and hypotheses.

This evaluation tests the hypothesis specified in Special Terms and Conditions (STC) 111. Broadly, we will test whether the SUD waiver will increase Medicaid beneficiary access to inpatient and residential SUD treatment services as part of an effort to provide the full continuum of treatment services and increase the likelihood that Medicaid beneficiaries receive SUD treatment in the setting most appropriate for their needs.

We will use administrative data to answer questions about the effect of expanded FFP for IMD services on measures of access, quality, health outcomes, and expenditures. We will focus on these key questions:

(1) Does the demonstration increase access to and utilization of SUD treatment services?
(2) Does the receipt of SUD services improve appropriate physical health care use?
(3) Are rates of opioid-related overdose deaths impacted by the demonstration?
(4) What was the impact on total expenditures and expenditures for SUD-related services?

We consider the following hypotheses:

**H1.** The SUD waiver will increase the number of providers of substance use treatment.
**H2.** The SUD waiver will increase the percentage of beneficiaries who adhere to treatment.
**H3.** The SUD waiver will decrease the rate of emergency department and inpatient visits within the beneficiary population for SUD.
**H4.** The SUD waiver will increase the quality of care for people with SUD.
**H5.** The SUD waiver will reduce overdose deaths, particularly those due to opioid overdoses.
**H6.** The SUD waiver will be associated with changes in expenditures for services.

Qualitative data collection and analysis will answer the following evaluation questions:

**I1.** What was the experience of implementing the SUD waiver?
**I2.** What are the factors that explain the effectiveness of the SUD waiver?

From work on MTP 1.0, we know the establishment of a requirement that residential treatment providers offer MAT on-site or facilitate access to MAT off-site was a substantial change. Therefore, we will also interview SUD treatment providers, specifically residential treatment providers, about their experiences implementing the MOUD requirement.

## Methodology

**Evaluation Design.**
We will use a mixed methods design where quantitative analyses of claims data are informed and explained by qualitative data (document review of waiver application, interviews). The quantitative analyses will use a difference-in-differences approach, using national Medicaid claims data to compare outcomes for enrollees in states that have not implemented an SUD waiver. These data will be supplemented with data from the state of Washington to track specific outcomes, including deaths and deaths attributable to opioid overdoses. Qualitative analysis will use an inductive approach.

**Target and Comparison Populations.** The target population includes Washington's Medicaid beneficiaries or measure-specific subpopulations and SUD providers. The comparison population includes Medicaid beneficiaries from states that have not yet implemented a SUD IMD waiver by the end of the evaluation period for outcomes that can be constructed using the Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF).

**Evaluation Period.** We propose to analyze TAF data from January 1, 2016, through December 31, 2026, assuming that TAF claims data for CY 2026 are available in November 2028. This approach would allow for analyses of 4.5 years of data before the initiation of Washington's waiver (January 2016 through June 2020), 4 years of data of the SUD waiver that includes MTP 1.0 and the COVID-19 PHE (July 2020 through June 2023), and 3.5 years of data from the MTP 2.0 waiver (July 2023 through December 2026), creating a long time-series of data that includes outcomes from enrollees in Washington and enrollees from comparison states that do not enact SUD waivers.

**Evaluation Measures.**
We propose using the following evaluation measures. The following table shows proposed measures, metric type, reporting frequency, and whether they can be constructed in TAF data.

**Table 7.1. Evaluation Measures**

| Research Question | Outcome measures used to address the research question | Sample or population subgroups to be compared | Data Sources | Analytic Methods |
|---|---|---|---|---|
| Goal: Increase the number of providers offering substance use treatment<br>**SUD Hypothesis 1: The SUD waiver will increase the number of providers of substance use treatment.** | | | | |
| SUD Research Question 1.1: Is the SUD waiver associated with an increase in the number of providers of substance use treatment? | • The number of providers who billed Medicaid for a SUD service<br>• The number of providers who billed Medicaid for MAT | Medicaid providers | ICDB or National Medicaid TAF data | Difference-in-Differences |

(continued)

**Table 7.1. Evaluation Measures (continued)**

| | | | | |
|---|---|---|---|---|
| Goal: Increase adherence to SUD treatment<br>**SUD Hypothesis 2: The SUD waiver will increase the percentage of beneficiaries who adhere to treatment of OUD and SUDs.** | | | | |
| SUD Research Question 2.1: How is the SUD waiver associated with the percentage of beneficiaries who adhere to treatment of OUD and SUDs? | • 180 days of continuous pharmacotherapy treatment for OUD<br>• SUD Treatment Rate<br>• Number of Medicaid beneficiaries who used outpatient services for SUD<br>• Number of Medicaid beneficiaries who used residential and/or inpatient services for SUD<br>• Number of Medicaid beneficiaries who used withdrawal management services<br>• Number of Medicaid beneficiaries who have a claim for medications for opioid use disorders | Eligible Medicaid enrollees | ICDB or National Medicaid TAF data | Difference-in-Differences |
| Goal: Reduce the use of acute services by providing better access to SUD treatment services<br>**SUD Hypothesis 3: The SUD waiver will decrease the rate of emergency department and inpatient visits within the beneficiary population for SUD.** | | | | |
| SUD Research Question 3.1: How is the SUD waiver associated with changes in the rate of emergency department and inpatient visits within the beneficiary population for SUD? | • Emergency department visits for SUD<br>• 30-day and 7-day follow-up for ED visits for mental health conditions<br>• Follow-Up After Emergency Department Visit for Substance Use | Eligible Medicaid enrollees | ICDB or National Medicaid TAF data | Difference-in-Differences |
| Goal: Improve the quality of SUD services<br>**SUD Hypothesis 4: The SUD waiver will increase the quality of care for SUD.** | | | | |
| SUD Research Question 4.1: How is the SUD waiver associated with changes in the quality of care? | • Access to preventive/ambulatory health services for adult Medicaid beneficiaries with SUD<br>• Continuity of Pharmacotherapy for Opioid Use Disorder<br>• People with an Opioid Prescription at or above 50mg MED | Eligible Medicaid enrollees | ICDB or National Medicaid TAF data | Difference-in-Differences |

(continued)

**Table 7.1. Evaluation Measures (continued)**

| | | | | |
|---|---|---|---|---|
| Goal: Reduce overdose deaths<br>**SUD Hypothesis 5: The SUD waiver will reduce overdose deaths.** | | | | |
| SUD Research Question 5.1: How is the SUD waiver associated with changes in overdose deaths, particularly those due to opioid overdoses? | • Overdose death rates | Eligible Medicaid enrollees | National Medicaid TAF data, supplemented with CDC WONDER data | Difference-in-Differences |
| Goal: Reduce expenditures by providing access to SUD treatment services<br>**SUD Hypothesis 6: The SUD waiver will be associated with changes in expenditures for services** | | | | |
| SUD Research Question 6.1: How is the SUD waiver associated with changes in expenditures for services? | • Expenditures for SUD services<br>• Total healthcare expenditures | Eligible Medicaid enrollees | ICDB or National Medicaid TAF data | Difference-in-Differences |

**Table 7.2. Implementation Questions**

| | | | | |
|---|---|---|---|---|
| **Implementation questions assessed via qualitative analyses** | | | | |
| SUD Implementation Question 1: What was the experience of implementing the SUD waiver? | - Identification of barriers and facilitators to implementing SUD waiver<br>- Description of how key challenges in IMC implementation were managed. | Providers; administrators at HCA and RDA; managers at managed care organizations | Key informants | Document review<br><br>Qualitative analysis |
| SUD Implementation Question 2: What are the factors that explain the effectiveness of the SUD waiver? | - Description of how the SUD waiver impacts access to IMDs and access to and utilization of SUD treatment services, as well as coordination with outpatient services<br>- Description of SUD treatment providers experience implementing the MOUD requirement | Providers; administrators at HCA and RDA; managers at managed care organizations | Key informants | Document review<br><br>Qualitative analysis |

**Data Sources**. The evaluation will use the Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF) dataset for 2016-2026. The independent external evaluator currently has TAF files from 2017-2020 in house and data from 2026 are anticipated to be available in November 2028. We plan to include TAF analysis for a subset of outcome metrics in the summative report. Data Sources. We will also coordinate with HCA to identify key informants for qualitative data collection.

**Analytic Methods.**

Quantitative approach

The primary analysis will use a difference-in-differences design (measures that allow the construction of a comparison group from other states).

The general regression approach will use the following specification:

$$y_{it} = \lambda WA_i + \beta_1 DMTP20\_23 + \beta_2 DY8_t + \beta_3 DY9_t + \beta_4 DY10_t + \beta_5 DY11_t + \\ \theta_1 MTP1_t \cdot WA_i + \theta_2 DY8_t \cdot WA_i + \theta_3 DY9 \cdot WA_i + \theta_4 DY10_t \cdot WA_i + \theta_5 DY11_t \cdot WA_i + \gamma X_{it} + \varepsilon_{it}$$

where $y_{it}$ is the outcome measure, $WA_i$ is an indicator variable for an individual residing in the state of Washington $MTP20\_23_t$ is a binary variable equal to one that captures the SUD demonstration under MTP 1.0 (July 2020 through June 2023), DY8-10 are dummy variables representing the Demonstration Years 8, 9, and 10 (the first, second, and third years of the MTP 2.0 demonstration), DY11 captures the last six months of the Demonstration Year 11., $X_{it}$ are covariates and $\varepsilon_{it}$ is the error term. In this case, the period from January 2016 through June 2020 is the reference period, capturing activity before the SUD waiver was implemented. The coefficients of interest are $\theta_1$through $\theta_5$, capturing the aggregated changes occurring during MTP 1.0 (which includes the COVID-19 PHE), and then year-specific changes occurring in the first 3.5 years of MTP 2.0, with the interaction terms (e.g., $DY8_t \cdot WA_i$) reflecting the difference-in-differences, netting out the secular changes occurring in non-waiver states.

Considerations for these regressions include:

- Functional form. The equation shows a linear regression specification. We will generally use this specification because of computational efficiency but will consider non-linear specifications (e.g., logistic regressions) in some instances (e.g., binary outcomes with low prevalence, such as the overdose death rate) and, in this case, translate coefficients into average marginal effects.
- Reporting of waiver effects. The above equation includes one estimate for each demonstration year. We will consider averaging some of these coefficients (e.g., the last two demonstration years) to simplify the presentation of the results. We will report the baseline prior to waiver implementation, levels during the (suitably chosen) post-intervention period, and the pre-post estimate.
- Death data are included in the TAF data, but their completion rates and accuracy are uncertain. If for example, a beneficiary disenrolled from Medicaid on May 31 and died of an overdose two days later, that death would not be captured. We will supplement our data with information from the Centers for Disease Control and Prevention (CDC) Wide-ranging Online Data for Epidemiologic Research (WONDER) database.

Differences-in-differences models require parallel trends, i.e., hypothetical changes in outcomes of individuals in Washington should be identical to changes in outcomes of individuals in comparison states if Washington had not implemented the waiver. While this assumption cannot be directly tested, we can assess whether there are parallel trends for the baseline period. We will consider trend adjustment if there is evidence of non-parallel trends. The independent external evaluator has extensive experience in working with difference-in-differences models and making adjustments when pre-policy trends are not parallel.[2,2–4]

Additional design considerations

Some of the analyses identified above require examining a subset or stratification of the target population. When listing outcome variables, for concision, we have typically listed the target population as “eligible Medicaid beneficiaries,” noting that in some cases, the eligible populations will change. For example, an outcome variable like “blood pressure control among patients with diabetes” is only relevant for patients with diabetes; statin therapy for patients with cardiovascular disease is only relevant for patients with cardiovascular disease. We will define these outcomes and subpopulations accordingly.

We also note that analyses of these subpopulations require assumptions that are similar to those of the larger subpopulations. For example, analyses that use the difference-in-differences approach rest on the assumption of parallel trends, and these assumptions extend to any analyses that focus on subsets or stratification.

The evaluation team has extensive experience in working with difference-in-difference models, including theoretical and empirical articles using difference-in-differences,[2–4,4–10] with several incorporating the most recent advances in sensitivity analyses and robustness checks.[2,4,11,12] For each analysis, we will assess the quality of the comparison group or the robustness of the assumptions. We note that, from a practical point of view, there are tradeoffs between (a) the number of outcomes that can be analyzed and (b) the extent to which the parallel trends assessment can be rigorously assessed and accounted for. Our evaluation will seek a balance in providing rigorous analyses and transparency in our assumptions in a manner commensurate with the number of outcomes and analyses conducted.

Where possible, we will implement sub-setting or stratification characteristics based on pre-intervention data. This will involve identifying relevant characteristics and ensuring they are measured prior to the implementation of the reform. By doing so, we aim to mitigate endogeneity concerns and enhance the validity of our analysis. In scenarios where defining sub-setting characteristics prior to the demonstration start is infeasible, we will explore the use of separate modeling approaches.

While we are committed to incorporating these methodologies, it is essential to retain some flexibility in our approach. The dynamic nature of Medicaid reforms and the variability in data availability necessitates an adaptable research design. We will continuously assess the feasibility and appropriateness of these methods throughout the evaluation process. We will regularly review the implementation of these strategies and make adjustments as necessary. This iterative process will help ensure that our evaluation remains methodologically sound and aligned with the objectives of the reform.

Qualitative approach

We will use the approach described in Section 5 to collect and analyze qualitative data. To understand the IMD waiver, we will review the waiver application and conduct semi-structured interviews with informants with experience-based knowledge of SUD treatment systems affected by the waiver. These informants will be selected to represent multiple sectors within the treatment delivery system, including provider organizations (emphasizing residential treatment), MCOs, and representatives from the HCA. Among provider organizations, the team will aim to maximize variation in geographic regions, provider size, and payer mix (predominantly Medicaid versus broad payer mix). We anticipate conducting approximately 15 interviews and will continue the process of iterative sampling, data collection, and analysis until saturation is reached.

**Methodological Limitations.**

One consideration is the data quality of TAF data**.** Data quality issues can negatively affect our analysis by introducing attenuation bias, affecting changes over time, or restricting our sample for the mixed methods analysis. We seek to address these concerns in our research design by focusing on outcome measures for which quality is likely high. We have also examined TAF data quality using a newly available data quality assessment. Still, we understand that data quality issues will be an important part of our analytic work. After obtaining TAF data, our team will examine potential data quality challenges in

a number of ways. First, we will draw from our experience working with Medicaid claims data to perform routine quality checks for all variables used in our analysis (e.g., outliers, missing or implausible values, drastic changes over time). Based on these quality checks, we will refine our exclusion criteria and develop sensitivity checks. Second, we will perform several regression checks. These might include using alternative functional forms, excluding potentially problematic covariates, or repeating regressions with subpopulations. Third, we will monitor TAF data quality briefs published regularly by CMS and TAF quality assessment. Our team has strong expertise in combining and harmonizing Medicaid claims from multiple states.

# Section 8: SMI Assessment

## General Background Information

This initiative continues and expands the Serious Mental Illness (SMI) waiver, which became effective on December 23, 2020. The waiver permits the allocation of federal matching funds to support short-term residential treatment services at an IMS for specific groups, with a maximum duration of 60 days and an average length of stay not exceeding 30 days. The waiver is applicable to two groups: (a) individuals who are currently covered under the state's Medicaid State Plan and (b) individuals qualified for TSOA. To be eligible for the latter, individuals must be 55 years or older, not already eligible for Categorically Needy or Alternative Benefit Plan Medicaid, meet the functional eligibility requirements for Home and Community-Based Services (HCBS) as outlined in the state plan or under section 1915(c), and have an income that does not exceed 300% of the supplemental security income rate as specified by section 1611(b)(1) of the Social Security Act.

Individuals facing a psychiatric crisis may require treatment in residential or inpatient settings. These environments provide crucial benefits such as ensuring safety, facilitating stabilization, and offering the chance to initiate or modify medication regimes. They also support the integration of multidisciplinary clinical teams and informal support networks. A nationwide issue, the scarcity of inpatient beds has resulted in an increase in ED visits for mental health issues. Often, patients with acute psychiatric conditions are held, or "boarded," in the ED, sometimes for periods ranging from 3 to 5 days, or in some cases, even longer. This boarding practice has led to significant operational challenges for hospitals and raised serious concerns about the safety and well-being of patients, along with the potential for adverse outcomes.

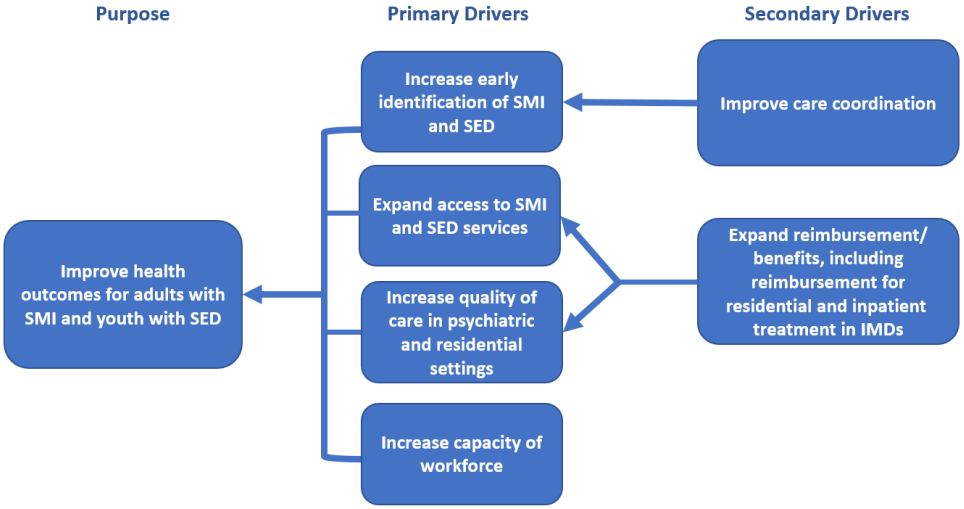
Beyond removing the IMD exclusion, the SMI waiver includes other provisions to improve care. For example, the SMI waiver included four milestones:

1. Ensuring Quality of Care in Psychiatric Hospitals and Residential Settings
2. Improving Care Coordination and Transitioning to Community-Based Care
3. Increasing Access to Continuum of Care, Including Crisis Stabilization Services
4. Earlier Identification and Engagement in Treatment, Including Through Increased Integration

## Evaluation Questions and Hypotheses

**Driver Diagram.** Exhibit 8.1 below depicts the relationship between the initiative's purpose to improve mental health outcomes and overall health for adults with SMI and youth with SED and the primary and secondary drivers necessary to achieve this overall goal. Three primary drivers contribute directly towards achieving the initiative's purpose, with three secondary drivers necessary to support the primary drivers.

**Exhibit 8.1. Driver Diagram**




Demonstration hypotheses associated with this initiative pertain to understanding whether the SMI waiver will improve health outcomes and reduce costs for adults with SMI and youth with SED. We consider the following questions and hypotheses.

We will test whether the SMI waiver will increase Medicaid beneficiaries' access to the full continuum of treatment services and increase the likelihood that Medicaid beneficiaries receive SMI treatment in the setting most appropriate for their needs. Specific hypotheses include the following:

- **H1.** The SMI/SED demonstrations will reduce utilization and length of stay in EDs among Medicaid beneficiaries with SMI/SED while awaiting mental health treatment.
- **H2.** The SMI/SED demonstration will reduce preventable readmissions to acute care hospitals and residential settings following psychiatric hospitalization
- **H3.** The SMI/SED demonstration will improve the availability of crisis stabilization services
- **H4.** Access of beneficiaries with SMI/SED to community-based services to address their chronic mental health care needs will improve under the demonstration, including through increased integration of primary and behavioral health care, as measured through the increases in:
    - Primary care visits
    - Outpatient specialty mental health visits
- **H5.** The SMI/SED demonstration will impact health care spending.

Qualitative data collection and analysis will answer the following evaluation questions:

- **I1.** What are SMI/SED program leaders and administrators, as well as psychiatric hospital, residential, and crisis stabilization program leaders' and administrators' experiences with the SMI/SED waiver implementation, including barriers and facilitators to implementation?
- **I2.** What factors explain why the SMI/SED waiver does (or does not) improve access to and quality of care?

## Methodology

**Evaluation Design.** We will use a mixed methods design where quantitative analyses of claims data are informed and explained by qualitative interviews. The quantitative analyses will use a difference-in-differences approach, using national Medicaid claims data to compare outcomes for enrollees in states that have not implemented an SMI waiver.

**Target and Comparison Populations.** The target population includes Washington's Medicaid beneficiaries with SMI or SED. The comparison population includes Medicaid beneficiaries from states that have not yet implemented an SMI IMD waiver by the end of the evaluation period.

**Evaluation Period.** We propose to analyze TAF data from January 1, 2016 through December 31, 2026. This approach would allow for analyses of 4 years of data before the initiation of Washington's SMI waiver and before the beginning of the COVID-19 PHE (January 2016 through December 2019), 1 year of data that included the COVID-19 PHE but preceded the SMI waiver (2020), 2.5 years of data of the SMI waiver that includes COVID-19 PHE (January 2021 through June 2023), and 3.5 years of data from the MTP 2.0 waiver (July 2023 through December 2026), creating a long time-series of data that includes outcomes from enrollees in Washington and enrollees from comparison states that do not enact SMI waivers.

**Evaluation Measures.** We propose using the following evaluation measures.

**Table 8.1. Evaluation Measures**

| Research Question | Outcome measures used to address the research question | Sample or population subgroups to be compared | Data Sources | Analytic Methods |
|---|---|---|---|---|
| Goal: Reduce the use of acute services by providing better access to mental health treatment services<br>**SMI/SED Hypothesis 1: The SMI/SED demonstrations will reduce utilization and length of stay in EDs among Medicaid beneficiaries with SMI/SED while awaiting mental health treatment.** | | | | |
| SMI/SED Research Question 1.1: How is the SMI/SED demonstrations associated with changes in utilization and length of stay in EDs among Medicaid beneficiaries with SMI/SED while awaiting mental health treatment? | • ED Visits for mental health conditions<br>• ED Visits among beneficiaries with SMI/ED<br>• Hospital Admissions for mental health conditions<br>• 30-day and 7-day follow-up for ED visits for mental health conditions<br>• ED visits with length of stay > 2 days | Eligible Medicaid enrollees | ICDB or National Medicaid TAF data | Difference-in-Differences |

(continued)

**Table 8.1. Evaluation Measures (continued)**

| | | | | |
|---|---|---|---|---|
| Goal: Reduce the use of preventable readmissions by providing better access to mental health treatment services **SMI/SED Hypothesis 2: The SMI/SED demonstration will reduce preventable readmissions to acute care hospitals and residential settings following psychiatric hospitalization.** | | | | |
| SMI/SED Research Question 2.1: How is the SMI/SED demonstrations associated with changes in preventable readmissions to acute care hospitals and residential settings following psychiatric hospitalization? | • 30-day readmission rates after psychiatric hospitalization | Eligible Medicaid enrollees | ICDB or National Medicaid TAF data | Difference-in-Differences |
| Goal: Improve the availability of crisis stabilization services **SMI/SED Hypothesis 3: The SMI/SED demonstration will improve the availability of crisis stabilization services.** | | | | |
| SMI/SED Research Question 3.1: How is the SMI/SED demonstrations associated with changes in the availability of crisis stabilization services? | • Use of crisis services, defined as crisis line service, mobile crisis services, hourly or per diem crisis services, residential crisis services, or crisis respite services. | Eligible Medicaid enrollees | ICDB or National Medicaid TAF data | Difference-in-Differences |
| Goal: Improve access to community-based services **SMI/SED Hypothesis 4: Access of beneficiaries with SMI/SED to community-based services to address their chronic mental health care needs will improve under the demonstration, including through increased integration of primary and behavioral health care.** | | | | |
| SMI/SED Research Question 4.1: How is the SMI/SED demonstration associated with changes in access of beneficiaries with SMI/SED to community-based services to address their chronic mental health care needs under the demonstration, including through increased integration of primary and behavioral health care? | • Primary care visits<br>• Outpatient specialty mental health visits | Eligible Medicaid enrollees | ICDB or National Medicaid TAF data | Difference-in-Differences |

(continued)

**Table 8.1. Evaluation Measures (continued)**

| Goal: Reduce health care expenditures by improving access to mental health services<br>**SMI/SED Hypothesis 5: The SMI/SED demonstration will impact health care spending.** | | | | |
|---|---|---|---|---|
| SMI/SED Research Question 5.1: How is the SMI/SED demonstrations associated with changes in health care spending? | • Expenditures for mental health services<br>• Total healthcare expenditures | Eligible Medicaid enrollees | ICDB or National Medicaid TAF data | Difference-in-Differences |

**Table 8.2. Implementation Questions**

| **Implementation questions assessed via qualitative analyses** | | | | |
|---|---|---|---|---|
| SMI/SED Implementation Question 1: What are SMI/SED program leaders and administrators, as well as psychiatric hospital, residential, and crisis stabilization program leaders' and administrators' experiences with the SMI/SED waiver implementation, including barriers and facilitators to implementation? | - Identification of barriers and facilitators to implementing SUD waiver, including access to IMDs and coordinating with outpatient services | Informants selected to represent multiple sectors within the treatment delivery system, with an emphasis on the residential treatment system and crisis stabilization services | Key informants | Qualitative analysis |
| SMI/SED Implementation Question 2: What factors explain why the SMI/SED waiver does (or does not) improve access to and quality of care (e.g., reduction of ED visits, unnecessary readmission)? | - Description of factors that contribute to that explain impact of SMI/SED waiver on access to and quality of care<br>- Identification of how and why access and quality of care varies, for example, by geography, with attention to implications for health equity | Informants selected to represent multiple sectors within the treatment delivery system, with an emphasis on the residential treatment system and crisis stabilization services | Key informants | Qualitative analysis |

**Data Sources.** The evaluation will use the Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF) dataset for 2016-2026. The independent external evaluator currently has TAF files from 2017-2020 in house and data from 2026 are anticipated to be available in November 2028. We plan to include TAF analysis for a subset of outcome metrics in the summative report. We will also coordinate with HCA to identify key informants for qualitative data collection.

**Analytic Methods.**

Quantitative approach

The primary analysis will use a difference-in-differences design (measures that allow the construction of a comparison group from other states).

The general regression approach will use the following specification:

$$y_{it} = \lambda WA_i + \beta_1 D\_2020_t + \beta_1 D\_2021\_23_t + \beta_3 DY8_t + \beta_4 DY9_t + \beta_5 DY10_t + \beta_6 DY11_t + \theta_1 D\_2020_t \cdot WA_i + \theta_2 D\_2021\_23_t \cdot WA_i + \theta_3 DY8_t \cdot WA_i + \theta_4 DY9 \cdot WA_i + \theta_5 DY10_t \cdot WA_i + \theta_6 DY11_t \cdot WA_i + \gamma X_{it} + \varepsilon_{it}$$

where $y_{it}$ is the outcome measure, $WA_i$ is an indicator variable for an individual residing in the state of Washington, $D\_2020_t$ is a binary variable equal to one that captures calendar year 2020 (the first year of the PHE, and the year prior to the SMI waiver initiation), $D\_2021\_23_t$ captures the period January 2021 through June 2023, representing the first 30 months of the SMI waiver occurring during MTP 1.0, and including portions of the COVID-19 PHE, DY8-10 are dummy variables representing the Demonstration Years 8, 9, and 10 (the first, second, and third years of the MTP 2.0 demonstration), DY11 captures the last six months of the Demonstration Year 11., $X_{it}$ are covariates and $\varepsilon_{it}$ is the error term. In this case, the period from January 2016 through December 2019 is the reference period, capturing activity before the SUD waiver was implemented. The coefficients of interest are $\theta_1$ through $\theta_6$, capturing the aggregated changes occurring with the onset of the PHE, during MTP 1.0 (which includes the COVID-19 PHE), and then year-specific changes occurring in the first 3.5 years of MTP 2.0, with the interaction terms (e.g., $DY8_t \cdot WA_i$) reflecting the difference-in-differences, netting out the secular changes occurring in non-waiver states.

Considerations for these regressions include:

- Functional form. The equation shows a linear regression specification. We will generally use this specification because of computational efficiency. However, we will consider non-linear specifications (e.g., logistic regressions) in some instances (e.g., binary outcomes with low prevalence, such as the overdose death rate) and, in this case, translate coefficients into average marginal effects.
- Reporting of waiver effects. The above equation includes one estimate for each demonstration year. We will consider averaging some of these coefficients (e.g., the last two demonstration years) to simplify the presentation of the results. We will report baseline levels prior to waiver implementation, levels during the (suitably chosen) post-intervention period, and the pre-post estimate.

Differences-in-differences models are based on the assumption of parallel trends, meaning that, hypothetically, the changes in outcomes for individuals in Washington should mirror those in comparison states if Washington had not enacted the waiver. Although we cannot directly test this assumption, it is possible to examine the existence of parallel trends during the baseline period. If we find indications of diverging trends, we may need to adjust for these discrepancies. The independent external evaluator, who is highly experienced in employing differences-in-differences models, is equipped to make necessary adjustments in cases where pre-policy trends do not align.[2,2–4]

<u>Additional design considerations</u>

Some of the analyses identified above require examining a subset or stratification of the target population. When listing outcome variables, for concision, we have typically listed the target population as “eligible Medicaid beneficiaries,” noting that in some cases, the eligible populations will change. For example, an outcome variable like “blood pressure control among patients with diabetes” is only relevant for patients with diabetes; statin therapy for patients with cardiovascular disease is only relevant for patients with cardiovascular disease. We will define these outcomes and subpopulations accordingly.

We also note that analyses of these subpopulations require assumptions that are similar to those of the larger subpopulations. For example, analyses that use the difference-in-differences approach rest on the assumption of parallel trends, and these assumptions extend to any analyses that focus on subsets or stratification.

The evaluation team has extensive experience in working with difference-in-difference models, including theoretical and empirical articles using difference-in-differences,[2–4,4–10] with several incorporating the most recent advances in sensitivity analyses and robustness checks.[2,4,11,12] For each analysis, we will assess the quality of the comparison group or the robustness of the assumptions. We note that, from a practical point of view, there are tradeoffs between (a) the number of outcomes that can be analyzed and (b) the extent to which the parallel trends assessment can be rigorously assessed and accounted for. Our evaluation will seek a balance in providing rigorous analyses and transparency in our assumptions commensurate with the number of outcomes and analyses conducted.

Where possible, we will implement sub-setting or stratification characteristics based on pre-intervention data. This will involve identifying relevant characteristics and ensuring they are measured prior to the implementation of the reform. By doing so, we aim to mitigate endogeneity concerns and enhance the validity of our analysis. In scenarios where defining sub-setting characteristics prior to the demonstration start is infeasible, we will explore the use of separate modeling approaches.

While we are committed to incorporating these methodologies, it is essential to retain some flexibility in our approach. The dynamic nature of Medicaid reforms and the variability in data availability necessitates an adaptable research design. We will continuously assess the feasibility and appropriateness of these methods throughout the evaluation process. We will regularly review the implementation of these strategies and make adjustments as necessary. This iterative process will help ensure that our evaluation remains methodologically sound and aligned with the objectives of the reform.

Qualitative approach

Data collection and mixed methods analysis will be conducted using the same process described in Section 5. To understand the SMI/SED waiver, we will review the waiver application and conduct semi-structured interviews with informants with experience-based knowledge of SMI treatment systems affected by the waiver. These informants will be selected to represent multiple sectors within the treatment delivery system, with an emphasis on the residential treatment system and crisis stabilization services. The team will aim to maximize variation in geographic regions, provider organization (to vary on number of beds), and payer mix (predominantly Medicaid versus broad payer mix). We anticipate conducting approximately 15 interviews (2-3 with state leaders, five interviews with MCOs, and 6-8 with provider organization leaders). However, we will continue the iterative sampling and data collection process until saturation is reached. Our evaluation team will collaborate with HCA to identify contact information and a list of potential interviewees. We will work together to determine the best methods for identifying and recruiting organizations impacted by the SMI/SED waiver.

**Methodological Limitations.** The TAF data are relatively new, and we acknowledge the need to assess data quality. Our approach includes leveraging our experience with Medicaid claims data to conduct routine quality checks (e.g., identifying outliers, missing values, or significant temporal variations). These checks will inform our criteria for data exclusion and the establishment of various sensitivity tests. Additionally, we will undertake multiple regression analyses, employing alternative methodologies, omitting questionable covariates, and focusing on specific subpopulations. Furthermore, we will

consistently review TAF data quality reports published by CMS and their quality assessments. Our expertise in merging Medicaid claims data from different states further strengthens our analytical capabilities.

We also note that the SMI waiver occurs during a period of significant changes in the health care system, including the introduction of the 9-8-8 hotline, disruptions from the COVID-19 PHE, and the expansion of the Certified Community Behavioral Health Clinics (CCBHC) model. There may also be a shift of long-term care center admissions to community settings that could create an upward bias in the measure of hospital admissions for mental health conditions. We recognize that all of these changes present potential confounders. However, the difference-in-differences approach is designed to net out these types of secular changes unrelated to the SMI policy. To ensure that our study detects effects attributable to the waivers, we will use visual and statistical assessments of our data to understand national and regional trends (e.g., occurring with the PHE or the 9-8-8 implementation) and use qualitative interviews to assess how states are using their Medicaid programs to respond to ongoing changes.

# Section 9: Continuous eligibility for children ages 0-5

## General Background Information

Since January 2020, Washington has offered continuous coverage to children 0-5 enrolled in Medicaid through two policy mechanisms. First, through the continuous coverage requirement authorized by the Families First Coronavirus Response Act (FFCRA), the state maintained Medicaid coverage for its full Medicaid and CHIP population—including those under the age of 6—throughout the COVID-19 public health emergency (PHE) from January 2020 until the April 2023 initiation of the state's Medicaid unwinding process. Subsequently, in April 2023, CMS approved the MTP 2.0 demonstration, which included a Medicaid continuous eligibility (CE) provision for children 0-5. Notably, the original MTP 2.0 demonstration did not include CE for children 0-5 enrolled in CHIP; however, the CHIP population was added via a demonstration amendment approved by CMS and implemented by HCA in January 2025. As a result, children 0-5 who enrolled in CHIP prior to the unwinding process (April 2023 through May 2024) either temporarily returned to 12-month periods of eligibility or were disenrolled.

Through the MTP 2.0 demonstration, since April 2023 for the Medicaid CE population and since January 2025 for the CHIP CE population, Washington will provide children eligible for Medicaid or separate CHIP (S-CHIP) coverage (family incomes up to 317% FPL) at the time of application with continuous eligibility from birth until the end of the month when their sixth birthday falls. Aside from instances when a child dies or is no longer a resident of the state of Washington, this enrollment will be continuous regardless of changes in circumstances that would otherwise cause a loss of eligibility, such as fluctuations in income.

Families with children living in low-income households face economic uncertainty, grappling with frequent variations in their income and expenses. These fluctuations often result in children being disenrolled, only to re-enroll within a short period of time, a phenomenon referred to as "churn." As an illustration, in 2017, the cumulative disenrollment rate over 12 months was 9.9% in states with 12-month continuous eligibility compared to 14.0% in states without the policy.[16] Further, Washington state data indicate that children of color disproportionately experience gaps in coverage. Children who experience churn are more likely to delay care, receive less preventive care, have unmet medical needs, and utilize the emergency room more frequently.[17,18] Furthermore, when children have stable coverage and continuous access to care, they are more likely to receive support services for health needs that, if unaddressed, can limit school readiness. Such health needs include developmental delays, mental health needs, asthma, vision impairment, and hearing impairment. HCA estimates that an average of 24,862 young children 0-5 enrolled in Medicaid and 16,707 children 0-5 enrolled in CHIP will be continuously enrolled through MTP 2.0 demonstration authority.

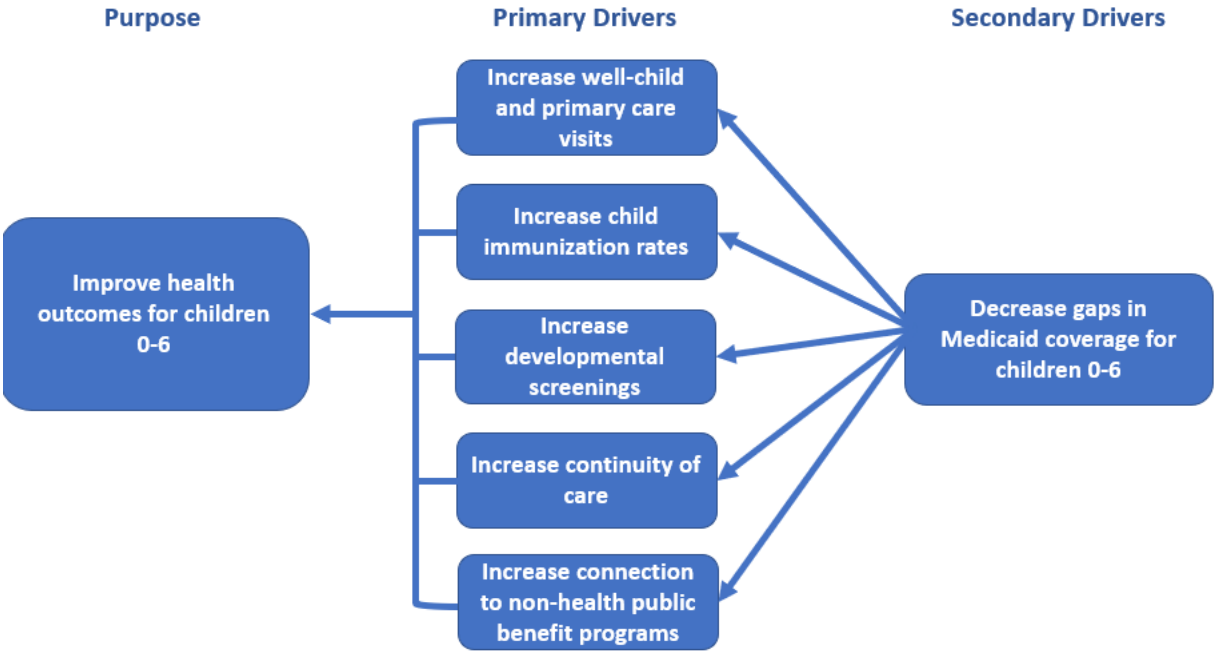
Continuous eligibility is a valuable tool to support young children's access to critical developmental screenings, vaccinations, and other preventive services in the early, formative years of life. For example, the American Academy of Pediatrics recommends 16 check-ups for children in their first six years of life, with more frequent visits in the initial months and years following birth. Continuous coverage can ensure children maintain access to preventive services to support their healthy development.

## Evaluation Questions and Hypotheses

**Driver Diagram.** Exhibit 9.1 below depicts the relationship between the initiative's purpose to reduce opioid-health for children 0-5 and the primary and secondary drivers that are necessary to achieve this overall goal.

Five primary drivers contribute directly towards achieving the initiative's purpose, with one secondary driver supporting the primary drivers.

**Exhibit 9.1. Driver Diagram**




Demonstration hypotheses associated with this initiative pertain to questions of coverage and the implications of increased coverage for children. We consider the following questions and hypotheses.

- **H1.** The continuous eligibility for children policy will be associated with increased enrollment and reduced churn for children 0-5.
- **H2.** The continuous eligibility for children policy will be associated with increases in in the measures of healthcare access and service utilization children 0-5.
- **H3.** The continuous eligibility for children policy will be associated with decreased emergency department visits and hospitalizations children 0-5.
- **H4.** The continuous eligibility for children policy will be associated with increased enrollment in non-health benefits programs for children 0-5.
- **H5.** The Continuous Medicaid eligibility for children eligibility policy will be associated with decreased children in poverty.

Qualitative data collection and analysis will answer the following evaluation questions:

- **I1.** What factors facilitated or impeded the implementation of the continuous eligibility for children policy?
- **I2.** What factors facilitated or impeded the policy from achieving maximum impacts on service use and health?
- **I3.** What communication efforts and messaging facilitate or impede knowledge of the continuous eligibility for children program among beneficiaries and key entities?
- **I4.** What is the experience of the continuous eligibility policy for Apple Health members and their caregivers?

## Methodology

**Evaluation Design.** We will combine qualitative interviews to assess implementation efforts, national survey data from the American Community Survey (ACS), and analyses of the ICDB administrative data. The qualitative interviews will focus on implementation of the provision, experience of the provision by beneficiary caregivers, and experience and perceived impact of the provision by healthcare providers and community-based organizations that serve young children and their families. For the ACS-based outcomes, we will conduct a difference-in-differences analysis comparing outcomes in Washington with outcomes in other states (states in consideration include Idaho, Nevada, and Utah).

For claims-based (ICDB) outcomes, we will conduct a pre-post analysis that compares outcomes for members in the post-intervention period with outcomes in the pre-intervention period. We will also include data from the COVID-19 Public Health Emergency (PHE) (2020-2022). Analyses of the ICDB will focus on claims-based outcomes, comparing trends across several different regimes of enrollment. We will include several different types of claims-based outcomes in our analysis:

- Outcome metrics related to insurance coverage
- Quality metrics, reported as % of qualifying members who meet metrics specific criteria
- Utilization metrics, reported PMPM

We note that we cannot measure outcomes for children who lose Medicaid coverage. Instead, we will compare utilization metrics (which are reported PMPM) for children enrolled in the 0-5 CE period and compare those to the COVID-19 PHE period with 2017-2019 as reference years. Among Medicaid-enrolled children, we expect that children with continuous coverage will have higher rates of screening and well-child visits than during those in the 2017-2019 years.

We will also assess two alternatives for reported utilization metrics. As an alternative to PMPM rates, we will measure rates for "any enrolled Medicaid child." This measurement approach may reduce some bias in generating a PMPM measure, where, e.g., a child who received a well-child visit but was only enrolled 6 months would have a higher PMPM rate than a child who received a well-child visit and was enrolled 12 months, even though the health outcomes would be the same.

As a second alternative, we will create measures of total utilization (e.g., total well-child visits paid for by Medicaid). This measure does not roll up to an enrollee-level measure. However, it provides insight into whether the continuous eligibility provision was associated with more preventive and screening measures delivered through Medicaid.

**Target and Comparison Populations.** The target population of this component is Medicaid and CHIP enrollees ages 0-5 who are included in the continuous eligibility provision. Comparison populations differ according to outcomes and analyses and may include Medicaid enrollees of the same age in different states and Medicaid enrollees of the same age at different periods in Washington.

**Evaluation Period.**
Since this policy intervention was implemented at different times for the Medicaid and CHIP groups respectively, we will define the periods for these populations separately. For claims-based (ICDB) outcomes, we will examine the periods for these populations as follows:

- Medicaid enrollees ages 0-5 (through the end of month of their sixth birthday)
    - Pre-Period: 2017-2019
    - PHE: 2020-2022
    - Post-Period: 2023-2027*
- CHIP enrollees ages 0-5 (through the end of the month of their sixth birthday)
    - Pre-Period: 2017-2019
    - PHE: 2020-2022
    - Transition Period: 2023-2024
    - Post-period: 2025-2027

Though the MTP 2.0 continuous eligibility provision was not in effect until April 2023, children 0-5 enrolled in Medicaid experienced continuous eligibility since 2020. Given the impact of the PHE across 2020-2022, we define 2023 as the start of the post-intervention period.

For ACS measures, we will examine the following periods for these populations as follows:

- Pre-Period: 2017-2019
- PHE: 2020-2022
- Transition Period**: 2023-2024
- Post-Period: 2025-2027

Some ACS outcomes (such as uninsurance rates for children) are defined more broadly and will be reported statewide. During the "transition period," children enrolled in Medicaid were subject to multi-year continuous coverage; however, children enrolled in CHIP were subject to 12-month periods of continuous coverage.

**Evaluation Measures.** We propose using the following evaluation measures.

**Table 9.1. Evaluation Measures**

| Research Question | Outcome measures used to address the research question | Sample or population subgroups to be compared | Data Sources | Analytic Methods |
|---|---|---|---|---|
| Goal: Reduce churn and increase the number of children enrolled in Medicaid and CHIP<br>**CE Hypothesis 1: The continuous eligibility for children policy will be associated with increased enrollment and reduced churn for children 0-5.** | | | | |
| CE Research Question 1.1: How is the Continuous eligibility for children policy associated with coverage gains? | • Uninsured rates for children | Children 0-5 | ACS | Difference-in-Differences |
| CE Research Question 1.2: How does the continuous eligibility policy for children impact rates of churn? | • Total enrollment<br>• Monthly disenrollment rates<br>• Rates of gaps in Medicaid coverage<br>• Lengths of gaps in Medicaid coverage | Children 0-5 subject to the CE policy | Medicaid enrollment data and ICDB | Descriptive analysis<br>Pre-post with controls |

(continued)

**Table 9.1. Evaluation Measures (continued)**

| | | | | |
|---|---|---|---|---|
| Goal: Improve preventive services among children<br>**CE Hypothesis 2: The continuous eligibility for children policy will be associated with increases in measures of healthcare access and service utilization for children 0-5.** | | | | |
| CE Research Question 2.1: Is the Continuous **eligibility for children** provision associated with increases in measures of service utilization? | • Childhood immunization status<br>• Child and Adolescent Well-Care Visits<br>• Continuity of care<br>• Primary care visits<br>• Visits with a non-primary care specialist physician<br>• Developmental Screening in the First Three Years of Life<br>• Utilization: Well-Child Visits | Children 0-5 subject to the CE policy | ICDB | Pre-post with controls |
| Goal: Decrease the use of acute services<br>**CE Hypothesis 3: The continuous eligibility for children policy will be associated with decreased emergency department visits and hospitalizations for children 0-5.** | | | | |
| CE Research Question 3.1: Is the Continuous **eligibility for children** provision associated with decreases in emergency department visits and hospitalizations? | • Emergency Department Visits<br>• Acute Hospital Utilization | Children 0-5 subject to the CE policy | ICDB | Pre-post with controls |
| Goal: Increase connection to non-health care public benefit programs<br>**CE Hypothesis 4: The continuous eligibility for children policy will be associated with increased enrollment in public benefits programs for children 0-5.** | | | | |
| CE Research Question 4.1: Is the Continuous eligibility for children provision associated with increased enrollment to non-health care public benefit programs? | • Enrollment in SNAP<br>• Enrollment in WIC<br>• Enrollment in TANF | Children 0-5 subject to the CE policy who are also eligible for specified public benefits programs | Medicaid enrollment data and ICDB | Pre-post with controls |
| Goal: Reduce the number of children in poverty<br>**CE Hypothesis 5: The Continuous eligibility for children policy will be associated with a decrease in the number of children in poverty.** | | | | |
| CE Research Question 5.1: Is the Continuous Medicaid enrollment provision associated with decreased children in poverty? | • Poverty status | Children 0-3 | ACS | Difference-in-Differences |

**Table 9.2. Implementation Questions**

| **Implementation questions assessed via qualitative analyses** | | | | |
|---|---|---|---|---|
| CE Implementation Question 1: What factors facilitated or impeded the implementation of the continuous eligibility for children policy? | - Description of implementation of continuous eligibility for children policy, including deviations for implementation plan<br>- Identification of barriers and facilitators to implementing the continuous eligibility provision<br>- Description of outreach and communication efforts<br>- Description of impacts to administrative burden related to redetermination for HCA and MCO staff | State administrators; informants from Medicaid managed care organizations; community partners; pediatricians | Key informants | Qualitative analysis |
| CE Implementation Question 2: What factors facilitated or impeded the policy from achieving maximum impacts on service use and health? | - Description of factors that facilitated or impeded maximum impact of the policy on service use, and ultimately health? | State administrators; informants from Medicaid managed care organizations; community partners; Caregivers of Medicaid enrollees subject to CE policy | Key informants | Qualitative analysis |
| CE Implementation Question 3: What communication efforts and messaging facilitate or impede knowledge of the continuous eligibility for children program among beneficiaries and key entities? | - Description of communications and outreach efforts initiated by state administrators, managed care organizations, community partners, and pediatricians<br>- Description of messaging and talking points and their clarity and effectiveness to recipients of those messages (i.e. eligible children and their caregivers, pediatricians)<br>- Description of caregiver of eligible child understanding continuous eligibility policy eligibility criteria, benefits, and timelines | State administrators; informants from Medicaid managed care organizations; community partners; pediatricians | Key informants | Qualitative analysis |

(continued)

**Table 9.2. Implementation Questions (continued)**

| | | | | |
|---|---|---|---|---|
| CE Implementation Question 4: What is the experience of the CE policy for Apple Health members and their caregivers? | - Description of beneficiary/caregiver's experience of continuous eligibility policy, including barriers and facilitators to enrollment<br>- Description of impact of continuous eligibility policy on eligible children's access to and receipt of care<br>- Description of impact of continuous eligibility on beneficiary/caregiver burden, including time to maintain enrollment and stress<br>- Description of beneficiary/caregiver satisfaction with continuous eligibility benefits | Caregivers of Medicaid enrollees subject to CE policy ; community partners; pediatricians | Key informants | Qualitative analysis |

**Data Sources**. We will use the ICDB, Medicaid and other public benefits enrollment data, and ACS for these analyses. We will also coordinate with HCA to identify key informants for qualitative data collection, including a representative beneficiary population.

**Analytic Methods.**

Quantitative approach – ACS data

We will use a modified difference-in-differences approach, comparing changes in Washington to changes in other states. We modify our approach because of enrollment changes occurring during the COVID-19 PHE, when disenrollments were halted. We will analyze data from 2017 through 2027.We will estimate the following regression:

$$y_{it} = \lambda WA_i + \beta_1 D\_2020\_22_t + \beta_2 D\_2023\_24_t + \beta_3 2025\_27_t + \theta D\_2020\_22_t * WA_i + \theta D\_2023\_24_t * WA_i + \theta D\_2025\_27_t * WA_i + \gamma X_{it} + \varepsilon_{it}$$

where $y_{it}$ is the outcome measure, $WA_i$ is an indicator variable for an individual residing in the state of Washington. The variable $D\_2020\_22_t$ captures calendar years 2020 through 2022, capturing the most significant period of the COVID-19 PHE. The variable D_2023_24 captures the transition period when children insured through Medicaid had continuous coverage, but those insured through CHIP did not. The variable D_2025_25 represents the post-period, after full state-wide implementation of children insured through Medicaid or CHIP. Coefficients of interest for the tables bellow are those that correspond with the relevant interaction terms.

Quantitative approach – Claims (ICDB) data

For outcomes based on claims data, we will conduct a pre/post analysis for two separate groups, with time periods defined differently based on the implementation of the intervention for each group:

1. For children with coverage through Medicaid, we will estimate the following regressions:

$$y_{it} = \beta_1 D\_2020\_22_t + \beta_2 D\_2023\_27_t + \gamma X_{it} + \varepsilon_{it} \quad \text{[Full sample 2017-2027] (1)}$$

$$y_{it} = \beta_1 D\_2023\_27_t + \gamma X_{it} + \varepsilon_{it} \quad \text{[Restricted sample 2020-2027] (2)}$$

2. For children with coverage through CHIP, we will estimate the following regression:

$$y_{it} = \beta_1 D\_2020\_22_t + \beta_2 D2023\_24_t + \beta_3 D2025\_27_t + \gamma X_{it} + \varepsilon_{it} \quad (3)$$

The reference for models (1) and (3) is 2017-2019, while the reference for model (2) 2020-2022 (PHE period). These flexible models will allow for comparisons of the continuous eligibility provision to the pre-pandemic period (2017-2019) and comparisons to the outcomes that occurred during the PHE when enrollment should have been consistent, but utilization trends may have differed. For children with coverage through CHIP, we will also define a post-PHE pre-intervention period when some disenrollment occurred. The coefficients of interest from the equations above are as follows:

- Equation 1: $\beta_1$ (ΔBL to PHE) and $\beta_2$ (ΔBL to Post-Period); Medicaid enrollees
- Equation 2: $\beta_1$ (ΔPHE to Post-Period); Medicaid enrollees
- Equation 3: $\beta_1$ (ΔBL to PHE) and $\beta_3$ (ΔBL to Post-Period); CHIP enrollees

Additional design considerations

Where possible, we will implement sub-setting or stratification characteristics based on pre-intervention data. This will involve identifying relevant characteristics and ensuring they are measured prior to the implementation of the reform. By doing so, we aim to mitigate endogeneity concerns and enhance the validity of our analysis. In scenarios where defining sub-setting characteristics prior to the demonstration start is infeasible, we will explore the use of separate modeling approaches.

While we are committed to incorporating these methodologies, it is essential to retain some flexibility in our approach. The dynamic nature of Medicaid reforms and the variability in data availability necessitates an adaptable research design. We will continuously assess the feasibility and appropriateness of these methods throughout the evaluation process. We will regularly review the implementation of these strategies and make adjustments as necessary. This iterative process will help ensure that our evaluation remains methodologically sound and aligned with the objectives of the reform.

Qualitative approach

We will conduct semi-structured interviews with Medicaid administrators and representatives from Managed Care Organizations (MCOs) to gather insights into their adaptive strategies in planning and care coordination in response to the continuous coverage provision. To assess the effectiveness of state communications regarding continuous coverage for children, the team will analyze state-issued materials and conduct structured interviews with parents. This dual approach will help evaluate the clarity and reach of these communications and their influence on parent awareness and utilization of coverage. We will also conduct in-depth interviews with pediatricians to understand how their practices are affected, including financial aspects, patient relationships, and the dynamics of trust and collaboration. We will complete interviews with a range of stakeholders, including agency leaders, MCOs, healthcare providers, community-based organizations, and primary caregivers of beneficiaries. We plan to conduct approximately 40 interviews until saturation is achieved. These interviews will include approximately 25 interviews with primary caregivers, who will receive a $30 gift card as a “thank you” for their participation.

Mixed methods analysis

The mixed methods analysis will be conducted through collaborative sessions that combine the qualitative and quantitative research teams. During these meetings, both teams will jointly review and contrast the outcomes from their respective research approaches. The primary objective will be to identify emerging themes and to explore areas of concordance or discordance between the qualitative and quantitative data. Each session will conclude with a collective decision on whether to delve deeper into discrepancies or unexpected findings based on their relevance and significance to the research objectives.

**Methodological Limitations.** There are a variety of limitations to consider in the current approach. There may be changes in Washington unrelated to the policy (such as economic fluctuations, healthcare trends, or other policy changes) that could affect outcomes and be difficult to disentangle in our current approach. There may also be variations in how the policy is implemented across different regions within the state, leading to heterogeneous effects not captured by a standard difference-in-differences approach.

In addition, the continuous eligibility provision might lead to estimates that suggest that visit and screening rates will be lower after the policy is implemented. This could occur if more healthy children are enrolled, and they are less likely to need health care (including preventive care). However, we have proposed several alternative measures (including counts of total visits) that should allow us to assess the extent to which these phenomena occur.

# Section 10: Continuous eligibility for postpartum individuals

## General Background Information

Since June 2022, Washington has offered continuous postpartum Medicaid coverage to postpartum people up to 12 months after the end of the pregnancy, regardless of changes in the postpartum person's income or whether they were enrolled in Medicaid/CHIP during pregnancy. This expansion continuous postpartum eligibility—referred to in Washington as After Pregnancy Coverage (APC)—is achieved through a combination of two policy mechanisms, both of which went into effect June 2022: Washington's State Plan Amendment (SPA) and substitute Senate Bill 5068. Implemented in June 2023, MTP 2.0's postpartum coverage initiative authorizes Washington to receive the federal match for providing this continuous postpartum Medicaid eligibility.

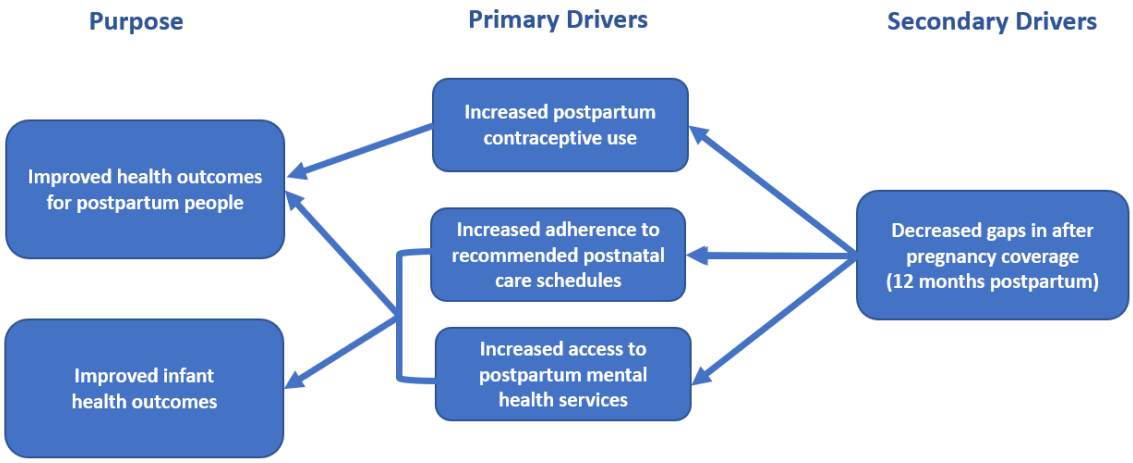
Continuous postpartum eligibility represents a shift from traditional Medicaid policies that often terminate or significantly alter coverage shortly after childbirth, leaving many new parents without essential healthcare services during a vulnerable time. In recent years, there has been a growing recognition of the critical importance of postpartum care in ensuring the health and well-being of new parents and their infants. Often referred to as the "fourth trimester," the postpartum period is a time of significant physical and emotional change; as such, access to comprehensive health services is vital. However, for many, the postpartum period is marked by a lack of continuous healthcare coverage, leading to gaps in care that can have serious consequences for the postpartum person and their infant.

Overall, the continuous eligibility for postpartum individuals policy in Washington State is anticipated to yield several significant benefits. Primarily, it ensures uninterrupted access to healthcare for postpartum people during the entire first year while they transition from pregnancy to full recovery, a period when many experience unmet health needs. Nearly 70% of postpartum people describe at least one physical problem in the first year of the postpartum period. Continuous postpartum coverage may improve health outcomes by facilitating ongoing postnatal care, including physical examinations, mental health services, and services supporting breastfeeding and infant care. Additionally, by maintaining coverage irrespective of income changes, this policy offers coverage stability that is especially important for populations at higher risk of postpartum complications, including people with low incomes and people of color. Furthermore, the policy may have broader socioeconomic benefits, including reducing healthcare costs associated with emergency care and fostering a healthier, more productive workforce by ensuring new parents are physically and mentally well-supported during this transformative phase of life.

## Evaluation Questions and Hypotheses

**Driver Diagram.** Exhibit 10.1 below depicts the relationship between the initiative's purpose to improve health for postpartum people and their infants and the primary and secondary drivers necessary to achieve this overall goal. Three primary drivers contribute directly towards achieving the initiative's purpose, with one secondary driver supporting the primary drivers.

**Exhibit 10.1. Driver Diagram**




We consider the following questions and hypotheses.

- **H1.** Continuous eligibility for postpartum individuals will increase the months of continuous coverage in the postpartum period.
- **H2.** Continuous eligibility for postpartum individuals will result in increased adherence to recommended postnatal care schedules, including regular check-ups and screenings for postpartum individuals.
- **H3.** Continuous eligibility for postpartum individuals will increase the likelihood of receiving mental health treatment among individuals diagnosed with postpartum depression and anxiety.
- **H4.** Continuous eligibility for postpartum individuals will be associated with improvements in infant health outcomes, such as reduced rates of emergency department visits and hospital readmissions.

Qualitative data collection and analysis will answer the following implementation questions:

- **I1.** What barriers and facilitators did program leaders face in implementing the policy?
- **I2.** What communication efforts and messaging facilitate or impede knowledge of the continuous postpartum eligibility among beneficiaries and key entities?
- **I3.** What factors explain why the postpartum coverage policy did (or does not) improve access to and quality of care?

## Methodology

**Evaluation Design.** Though the 12-months of continuous postpartum eligibility policy is funded through a blend of state and federal dollars—and was not authorized to receive the federal match until the June 2023 approval of the MTP 2.0 demonstration, Washington state has offered up to 12 months of continuous eligibility to postpartum people eligible for Medicaid/CHIP since June 2022. We propose analyzing the overall policy intervention, independent of specific authority or funding source that allowed for the policy's implementation. We will supplement these analyses with qualitative interviews.

**Target and Comparison Populations.** The target population is members (ages 12-54) who qualified for up to 12 months of postpartum after pregnancy coverage (APC) and their infants, with enrollments occurring between July 2022 and June 2027. The comparison population will be a similar group of enrollees with a pregnancy ending between January 2017 and December 2019 and infants enrolled in Medicaid or CHIP with births occurring between those dates. Note that length of observation period may vary for members of this group, but they should have coverage and be observable through the 2nd month following the end of pregnancy under former eligibility criteria. Members who remained enrolled after that two-month period will be observed for 12 months following the end of pregnancy, or until loss of coverage. Observation periods for infant's outcomes vary by metric.

**Evaluation Period.** We propose to analyze data from June 2022 through June 2027 and use a comparison cohort observed from January 2017 through December 2019 (three years of pre-PHE and pre-policy data).

**Evaluation Measures.** We propose to use the following list of evaluation measures.

**Table 10.1. Evaluation Measures**

| Research Question | Outcome measures used to address the research question | Sample or population subgroups to be compared | Data Sources | Analytic Methods |
|---|---|---|---|---|
| Goal: Increase continuous coverage and continuity of care for postpartum people<br>**CE Postpartum Hypothesis 1: Continuous eligibility for postpartum individuals will increase the months of continuous coverage in the postpartum period.** | | | | |
| CE Postpartum Research Question 1.1: How is continuous postpartum coverage associated with changes in months of coverage in the postpartum period? | • Length of Postpartum Insurance Coverage<br>• Percent of individuals continuously enrolled for 12 months postpartum | Eligible Medicaid enrollees | ICDB | |
| Goal: Increase access to preventive care in the postnatal period<br>**CE Postpartum Hypothesis 2: Continuous eligibility for postpartum individuals will result in increased adherence to recommended postnatal care schedules, including regular check-ups and screenings for postpartum individuals.** | | | | |
| CE Postpartum Research Question 2.1: How is continuous postpartum coverage associated with changes in adherence to recommended postnatal care schedules, including regular check-ups and screenings for postpartum individuals? | • Postpartum Care (PPC)<br>• Chlamydia Screening for Women (CHL)<br>• Continuity of Pharmacotherapy for Opioid Use Disorder; limited to postpartum people with OUD (CONT-PHARM-OUD)<br>• Long-Acting Reversible Contraceptives within 90 Days of Delivery (CCP_90DAY_LARC)<br>• Effective Contraception within 90 Days of Delivery (CCP_90DAY_TOTAL) | Eligible Medicaid enrollees | ICDB | Modified pre-post analysis. |

(continued)

**Table 10.1. Evaluation Measures (continued)**

| | | | | |
|---|---|---|---|---|
| Goal: Increase access to mental health services in the postnatal period<br>**CE Postpartum Hypothesis 3: Continuous eligibility for postpartum individuals will increase the likelihood of receiving mental health treatment among individuals diagnosed with postpartum depression and anxiety.** | | | | |
| CE Postpartum Research Question 3.1: How is continuous postpartum coverage associated with changes in the likelihood of receiving mental health treatment among individuals diagnosed with postpartum depression and anxiety? | • Mental Health Treatment Penetration – Broad Version (SUPPL-MH-B)<br>• Antidepressant Medication for Adults - 12 Weeks and 6 Months (HEDIS-AMM-84D & HEDIS-AMM-180D) | Eligible Medicaid enrollees | ICDB | Modified pre-post analysis |
| Goal: Improve infant health<br>**CE Postpartum Hypothesis 4: Continuous postpartum coverage will be associated with improvements in infant health outcomes, such as reduced rates of emergency department visits and hospital readmissions.** | | | | |
| CE Postpartum Research Question 4.1: How is continuous postpartum coverage associated with changes in infant health outcomes, such as reduced rates of emergency department visits and hospital readmissions? | • Emergency Department Visits among newborns<br>• Hospitalizations among Newborns<br>• Well child visits within first 30 months of life (W30_15mo)<br>• Immunization for Children (CIS_COMB10) | Newborns enrolled in Medicaid | ICDB | Modified pre-post analysis |

**Table 10.2. Implementation Questions**

| | | | | |
|---|---|---|---|---|
| **Implementation questions assessed via qualitative analyses** | | | | |
| CE Postpartum Implementation Question 1: What barriers and facilitators did program leaders face in implementing the policy? | - Identification of barriers and facilitators to implementing the continuous eligibility provision<br>- Description of deviations from implementation plan<br>- Description of how implementations challenges were addressed, or why they were not addressed | State administrators, informants from Medicaid managed care organizations | Key informants | Qualitative analysis |

(continued)

**Table 10.2. Implementation Questions (continued)**

| | | | | |
|---|---|---|---|---|
| CE Postpartum Implementation Question 2: What communication efforts and messaging facilitate or impede knowledge of the continuous postpartum eligibility among beneficiaries and key entities? | - Description of communications and outreach efforts initiated by state administrators, managed care organizations, community partners, and healthcare providers<br>- Description of messaging and talking points and their clarity and effectiveness to recipients of those messages (i.e. eligible postpartum individuals; healthcare providers)<br>- Description eligible postpartum individuals understanding continuous postpartum eligibility policy eligibility criteria, benefits, duration period, and options for coverage upon termination of postpartum eligibility extension<br>- Description of how program communication differed, if it did, for individuals who were covered during pregnancy and those who received Medicaid/CHIP coverage in the postpartum period | State administrators; informants from Medicaid managed care organizations; healthcare providers (including obstetricians, gynecologists, primary care providers); beneficiaries currently or formerly eligible for continuous postpartum eligibility | Key informants | Qualitative analysis |
| CE Postpartum Implementation Question 3: What factors explain why the postpartum coverage policy did (or does not) improve access to and quality of care for postpartum individuals and their infants? | - Identification of links between coverage and access to care<br>- Description of how and why policy impact on access to and quality of vary , for example, by race and ethnicity or geography, with attention to implications for health equity? | State administrators; informants from Medicaid managed care organizations; healthcare providers (including obstetricians, gynecologists, primary care providers); beneficiaries currently or formerly eligible for continuous postpartum eligibility | Key informants | Qualitative analysis |

**Data Sources**. We will use the ICDB for these analyses. We will also coordinate with HCA to identify key informants for qualitative data collection, including a representative beneficiary population.

**Analytic Methods.**
We will compare outcomes for individuals covered by this policy to individuals who were similar but enrolled in a period that preceded the PHE and the expanded coverage policy. We will estimate a regression of the following form:

$$Y_{it} = \beta Post\_SPA\_policy_t + \lambda X_{it} + \epsilon_{it},$$

Where $Y_{it}$ is the outcome of interest, $Post\_SPA\_policy_t$ is an indicator equal to one for postpartum individuals with births occurring in the post intervention period, $X_{it}$ are demographic characteristics, $\epsilon_{it}$ is the error term, and the parameter of interest is $\beta$. We will cluster the error term at the primary care service area (PCSA) level. This approach allows for the control of various confounding variables, such as age and pre-existing health conditions, aiding in isolating the policy's effects. Additionally, comparing to a cohort that predates both the policy and the PHE helps separate the effects of the policy from the unique healthcare challenges posed by the pandemic.

Covariates to include in regression analysis:

- CDPS indicators: cancer, cardiovascular, CNS, diabetes, eye, gastro, genital, hematological, infectious, metabolic, pulmonary, renal, skeletal, skin
- Age group: <18, 18 to 24, 25 to 34, 35 to 44, 45 to 54
- Rural: rural, urban

Additional design considerations

Some of the analyses identified above require examining a subset or stratification of the target population. When listing outcome variables, for concision, we have typically listed the target population as “eligible Medicaid beneficiaries”, noting that in some cases the eligible populations will change. For example, an outcome variable like “blood pressure control among patients with diabetes” is only relevant for patients with diabetes; statin therapy for patients with cardiovascular disease is only relevant for patients with cardiovascular disease. We will define these outcomes and subpopulations accordingly.

Where possible, we will implement sub-setting or stratification characteristics based on pre-intervention data. This will involve identifying relevant characteristics and ensuring they are measured prior to the implementation of the reform. By doing so, we aim to mitigate endogeneity concerns and enhance the validity of our analysis. In scenarios where defining sub-setting characteristics prior to the demonstration start is infeasible, we will explore the use of separate modeling approaches.

While we are committed to incorporating these methodologies, it is essential to retain some flexibility in our approach. The dynamic nature of Medicaid reforms and the variability in data availability necessitates an adaptable research design. We will continuously assess the feasibility and appropriateness of these methods throughout the evaluation process. We will regularly review the implementation of these strategies and make adjustments as necessary. This iterative process will help ensure that our evaluation remains methodologically sound and aligned with the objectives of the reform.

Qualitative approach

To inform and contextualize quantitative data, we will conduct a qualitative study involving Medicaid administrators, Managed Care Organization (MCO) administrators, and healthcare providers to gain a deeper understanding of the impacts of Washington State's 12-month continuous postpartum eligibility

policy. This qualitative approach will conduct semi-structured interviews with key stakeholders. Informants will be selected to reflect a wide range of stakeholders impacted by the postpartum coverage policies, including providers, tribal providers, MCOs, and representatives from HCA. Through these interviews, we will explore their perspectives on the policy's implementation, challenges, and successes. The goal is to gain insights into the administrative and operational aspects of the policy, such as changes in enrollment processes, healthcare delivery adaptations, and any barriers encountered in policy execution. Providers' perspectives will be particularly valuable in understanding how the policy has affected clinical practices, patient engagement, and care outcomes. This qualitative approach will also identify unanticipated positive and negative consequences and provide context to the quantitative data, thereby offering a comprehensive understanding of the policy's overall impact. By synthesizing the experiences and viewpoints of these stakeholders, we will provide nuanced recommendations for policy refinement and implementation strategies, contributing to the broader knowledge base of effective healthcare policy administration. We anticipate conducting approximately 20 interviews across both deliverables; however, we will continue the process of iterative sampling until saturation is reached.

**Methodological Limitations.** One limitation of this approach is that the comparison group for the analysis is selected from the period preceding the policy change and COVID-19 PHE. Changes in healthcare practices, technology, and societal factors over time could also influence the observed differences between the cohorts, not just the policy implementation. The lingering effects of the COVID-19 pandemic on the healthcare system and patient behavior might still influence post-policy outcomes, complicating the analysis. Finally, the awareness of the policy among individuals and any resulting changes in healthcare service utilization post-policy implementation need to be carefully considered, as they could significantly impact the study's findings.

# Section 11: Reentry from a carceral setting

## General Background Information

This program is a new component of Washington's waiver. Washington will provide limited coverage for certain pre-release services for up to 90 days immediately prior to the expected release date to qualifying Medicaid and CHIP enrollees and demonstration enrollees who are residing in state prisons, county and city jails, youth correctional facilities, or tribal jails.

Under the Medicaid Inmate Exclusion Policy (MIEP), states have been prohibited from using Medicaid dollars to provide health care services to incarcerated individuals who would otherwise be eligible for coverage. Under MTP 2.0, Washington will also alter its strategy for individuals in carceral settings to reduce barriers to accessing Medicaid/CHIP post-release.

The program includes three mandatory pre-release services and four optional pre-release service:

1. **Reentry targeted case management** to address physical and behavioral health needs
2. **Medication for alcohol and opioid use disorder** when clinically appropriate
3. **30-day supply of medications and medical supplies at release**
4. Medications during the pre-release period
5. Lab and radiology
6. Services provided by community-health workers with lived experience
7. Physical and behavioral clinical consultation

Given the importance of addressing the multifaceted needs of carceral and re-entry populations, the initiative aims to provide incarcerated individuals pre-release healthcare services and case management so that they can establish relationships with community-based providers that facilitate successful care transitions. This bridge in Medicaid/CHIP coverage aims to promote continuity of care and improve health outcomes for justice-involved individuals.

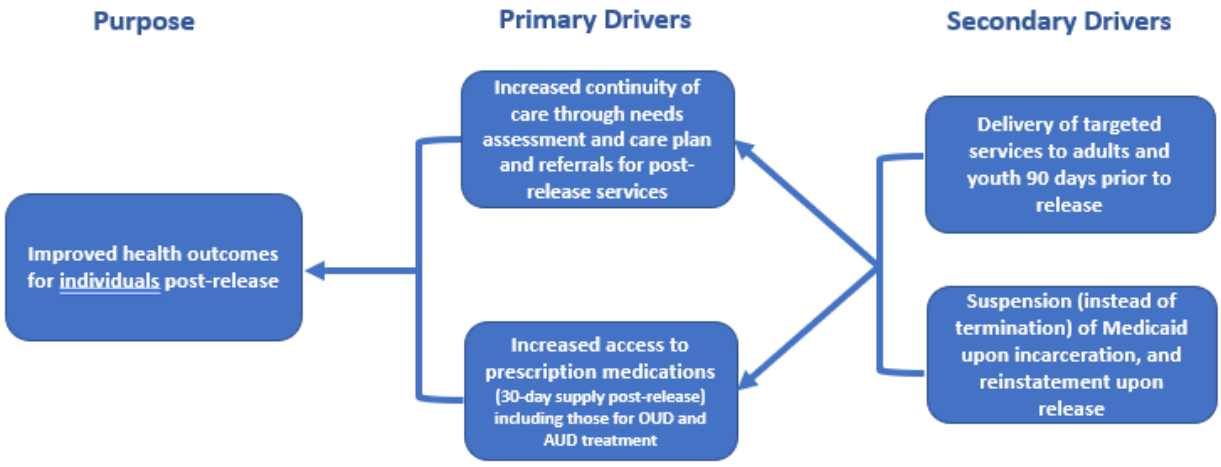
Through House Bill 1348 (2021-2022 biennium) and Senate Bill 5304 (2023-2024 biennium), the Washington State Legislature directed HCA to provide specific benefits for incarcerated individuals during the 30 days prior to release. The waiver authority authorizes pre-release services for a longer pre-release period—up to 90 days—for adults and youth incarcerated in state prisons, county or city jails, youth correctional facilities, or tribal jails. Minimum benefits include case management to address physical and behavioral health needs, medications for SUD, and a 30-day supply of all prescription medications prescribed for the beneficiary at the time of release. HCA estimates a population of around 4000.

Washington plans to roll out the reentry program in a phased manner, with one cohort beginning July 1, 2025, one beginning January 1, 2026, and one beginning July 1, 2026. The state is requiring participating facilities to offer the three mandatory pre-release services (Reentry Targeted Case Management, medications for opioid use disorder (MOUD) and medications for alcohol use disorder (MAUD), and 30-day supply of medications and medical supplies at release) and have the option to also offer 4 additional services (medications during the prerelease period, lab and radiology, services by community health workers with lived experience,  and physical and behavioral clinical consultations).

## Evaluation Questions and Hypotheses

**Driver Diagram.** Exhibit 11.1 below depicts the relationship between the initiative's purpose to improve health outcomes for individuals post-release and reduce recidivism and the primary and secondary drivers necessary to achieve this overall goal. Two primary drivers contribute directly towards achieving the initiative's purpose, with two secondary drivers necessary to support the primary drivers.

**Exhibit 11.1. Driver Diagram**




As specified in CMS guidance, we will investigate the following hypotheses:

- **H1.** The reentry demonstration will increase Medicaid coverage and the continuity of Medicaid coverage for individuals in carceral settings just prior to release.
- **H2.** The reentry demonstration will improve access to services and service uptake in carceral settings and after release.
- **H3.** The reentry demonstration will increase investments in health care and related services to improve the quality of care and maximize successful reentry for soon-to-be released individuals and those transitioning into Medicaid upon release.
- **H4.** The demonstration will reduce all-cause deaths in the near-term post-release.
- **H5.** The demonstration will reduce emergency department (ED) visits and inpatient hospitalizations among recently released Medicaid beneficiaries.

Qualitative data collection and analysis will answer the following implementation questions, as outlined by CMS specifications:

- **I1.** Which key entities are collaborating to implement and operationalize the demonstration, and what are their main roles?
- **I2.** What challenges or barriers have key entities experienced while implementing the demonstration, and what strategies did they use to overcome them?
- **I3.** How have key entities participating in the demonstration contributed to the coordination of care for beneficiaries?
- **I4.** What strategies has the state used to increase coverage among Medicaid-eligible individuals and sustain coverage for individuals enrolled in Medicaid prior to incarceration?
- **I5.** What strategies has the state used to provide benefits to individuals before release?

**I6.** What strategies did the state use to promote continuity of care, and connect individuals to health and HRSN services after release?
**I7.** How do pre-release health providers, case managers, and community-based providers describe their experience with the demonstration?
**I8.** How did the state involve individuals with lived experience in the design and implementation of the demonstration?
**I9.** What is the experience of receiving reentry services in a carceral setting?

## Methodology

**Evaluation Design.** We will use a mixed methods design, conducting qualitative interviews that focus on the implementation of the program. Pending post-release beneficiary recruitment feasibility, we will also conduct a set of post-release interviews with people who previously received reentry services while incarcerated for inclusion in the Summative Evaluation Report. The quantitative analyses compare outcomes for Medicaid enrollees released from state custody and receiving reentry services to a propensity-score weighted group of enrollees released from state custody who do not receive reentry services. This analysis is predicated on the assumption that some individuals released from state custody during MTP 2.0 will be eligible for Medicaid but will not receive reentry services. If reentry services are comprehensive, we will use an alternative approach (described below).

**Target and Comparison Populations.** The target population of this component is Medicaid beneficiaries who receive reentry services. The comparison group will be derived by propensity score weighted individuals who did not receive reentry services.

**Evaluation Period.** We propose to analyze data for July 1, 2025, through June 30, 2028, assuming that claims data for CY 2028 are available on January 1, 2029, and that the reentry program is implemented on July 1, 2025.

**Evaluation Measures.** We propose using the following evaluation measures.

**Table 11.1. Evaluation Measures**

| Research Question | Outcome measures used to address the research question | Sample or population subgroups to be compared | Data Sources | Analytic Methods |
|---|---|---|---|---|
| Goal: Increase Medicaid/CHIP coverage<br>**Reentry Hypothesis 1: Reentry services will lead to increases in Medicaid/CHIP coverage and continuity of Medicaid coverage for individuals in carceral settings just prior to release.** | | | | |
| Reentry Research Question 1.1: How did the implementation of the demonstration impact Medicaid enrollment for participants? | • Number of incarcerated individuals newly enrolled in Medicaid out of all individuals incarcerated in the facility<br>• Number of incarcerated beneficiaries whose Medicaid benefits were maintained or suspended rather than terminated out of all individuals incarcerated in the facility | Incarcerated individuals released from comparable facilities that are not, or not yet participating in the in the reentry demonstration | ProviderOne enrollment data, data from the Jail Booking and Reporting System (JBRS), Department of Corrections (DOC). Available in the ICDB. | Descriptive analysis of quarterly trends |
| Reentry Research Question 1.2: How did Medicaid enrollment differ by beneficiary characteristics and facility type? | Same as above | Same as above, subgroup analysis by beneficiary characteristics (sex, race, age) and facility type (jails vs. prison) | ICDB | Descriptive analysis of trends |
| Goal: Increase access to services in carceral settings and after release<br>**Reentry Hypothesis 2: The reentry demonstration will improve access to services and service uptake in carceral settings and after release.** | | | | |
| Reentry Research Question 2.1: How has the availability of pre-release services changed with the implementation of the demonstration? | • Ratio of individual providers that provide service to incarcerated Medicaid beneficiaries to incarcerated Medicaid beneficiaries<br>• Ratio of facilities that provide services to incarcerated Medicaid beneficiaries | N/A | ProviderOne data, data from JBRS in ProviderOne | Descriptive analysis of annual provider-to-enrollee ratios (e.g., describing trends over time.) |

(continued)

**Table 11.1. Evaluation Measures (continued)**

| | | | | |
|---|---|---|---|---|
| Reentry Research Question 2.2: How has the demonstration affected individuals' access to and uptake of pre-release and post-release services, including services that address HRSNs? | • Likelihood of receiving case management before release<br>• Likelihood of receiving MAT services before release<br>• Likelihood of receiving 30-day supply of prescription upon release<br>• Number of social service referrals for HRSN pre-release<br>• Likelihood of receiving preventative care and office visits within 6 months of release<br>• Likelihood of receiving behavioral health care within 6 months of release<br>• Likelihood of having a claim for MAT within 6 months of release<br>• Receipt of social services for HRSN post-release | Incarcerated individuals released from comparable facilities that are not, or not yet participating in the in the reentry demonstration | Variables will be constructed through a combination of case management and care coordination data; ProviderOne data, JBRS data, and Medicaid claims, included in ICDB (HRSN-related measures may require data from HUBs). Services that are not billed to Medicaid may be inaccessible or difficult to track. | Pre-release measures will be assessed by over time at a statewide and per-beneficiary level.<br><br>Post-release measures will be assessed through difference-in-differences |
| Reentry Research Question 2.3: How do these measures differ by beneficiary characteristics and facility type? | Same as above | Same as above, subgroup analysis by beneficiary characteristics (sex, race, age) and facility type (jails vs. prison) | ICDB | Same as above |

(continued)

**Table 11.1. Evaluation Measures (continued)**

| Goal: Increase investment in health care and related services and improve quality of care<br>**Reentry Hypothesis 3: The reentry demonstration will increase investments in health care and related services to improve the quality of care and maximize successful reentry for soon-to-be-released individuals and those transitioning into Medicaid upon release.** | | | | |
|---|---|---|---|---|
| Reentry Research Question 3.1: How have investments aimed to improve the delivery of pre-release and post-release health care and related services impacted the quality of care for individuals soon-to-be-released or recently released? | • Asthma in Younger Adults Admission Rate (HEDIS Measure PQI15)<br>• Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate (HEDIS Measure PQI05-AD)<br>• Heart Failure Admission Rate (HEDIS Measure PQI08-AD)<br>• Diabetes Short-Term Complications Admission Rate (HEDIS Measure PQ101-AD)<br>• HIV Viral Load Suppression (HVL-AD)<br>• Initiation and Engagement of Substance Use Disorder Treatment (HEDIS Measure IET-AD)<br>• Use of Pharmacotherapy for Opioid Use Disorder (HEDIS Measure OUD-AD)<br>• Access to Primary Care for Adults with SMI<br>• Access to Primary Care for Adults with SUD<br>• Mental Health Services Utilization – Inpatient<br>• Residential and Inpatient SUD Services (per 1,000 Member Months) | Incarcerated individuals released from comparable facilities that are not, or not yet participating in the in the reentry demonstration | | Difference-in-differences |

(continued)

**Table 11.1. Evaluation Measures (continued)**

| | | | | |
|---|---|---|---|---|
| Reentry Research Question 3.2: How did beneficiaries' experiences of the quality of care pre- and post-release differ by beneficiary characteristics and facility type? | Same as above | Same as above, subgroup analysis by beneficiary characteristics (sex, race, age) and facility type (jails vs. prison) | ICDB | Differences-in-differences |
| Goal: Reduce all-cause deaths<br>**Hypothesis 4: The demonstration will reduce all-cause deaths in the near-term post-release.** | | | | |
| Reentry Research Question 4.1: How did all-cause deaths in the near-term post-release change during the demonstration? | • All-cause mortality rate within 30 days post-release<br>• All-cause mortality rate within 6 months post-release<br>• All-cause mortality rate within 12 months post-release | Incarcerated individuals released from comparable facilities that are not, or not yet participating in the in the demonstration | ProviderOne data, data from JBRS in ProviderOne, Vital Statistics. Available in the ICDB. | Differences-in-differences |
| Reentry Research Question 4.2: How did all-cause deaths near-term differ by beneficiary characteristics? | Same as above | Same as above, subgroup analysis by beneficiary characteristics (sex, race, age) and facility type (jails vs. prison) | ICDB | Differences-in-differences |
| Goal: Reduce ED visits and inpatient hospitalizations<br>**Reentry Hypothesis 5: The demonstration will reduce emergency department (ED) visits and inpatient hospitalizations among recently release Medicaid beneficiaries.** | | | | |
| Reentry Research Question 5.1: How did the use of ED visits among recently released Medicaid beneficiaries change during the demonstration? | • Number of ED visits within 30 days post-release<br>• Number of ED visits within 6 months post-release<br>• Number of ED visits within 12 months post-release<br>• Emergency Department Visits for SUD (30 days, 6 months, and 12 months post-release)<br>• Mental Health Services Utilization-Emergency Department (30 days, 6 months, and 12 months post-release) | Incarcerated individuals released from comparable facilities that are not, or not yet participating in the in the reentry demonstration | ProviderOne data, data from JBRS in ProviderOne. Available in the ICDB. | Differences-in-differences |

(continued)

**Table 11.1. Evaluation Measures (continued)**

| | | | | |
|---|---|---|---|---|
| Reentry Research Question 5.2: How did the use of inpatient care among recently released Medicaid beneficiaries change during the demonstration? | • Number of Inpatient visits within 30 days post-release<br>• Number of Inpatient visits within 6 months post-release<br>• Number of Inpatient visits within 12 months post-release<br>• Residential and Inpatient SUD Services (30 days, 6 months, and 12 months post-release)<br>• Mental Health Services Utilization-Inpatient (30 days, 6 months, and 12 months post-release) | Incarcerated individuals released from comparable facilities that are not, or not yet participating in the in the reentry demonstration | ProviderOne data, data from JBRS in ProviderOne. Available in the ICDB. | Differences-in-differences |
| Reentry Research Question 5.3: How did the use of ED and inpatient visits differ by beneficiary characteristics? | Same as above | Same as above, subgroup analysis by beneficiary characteristics (sex, race, age) and facility type (jails vs. prison) | ICDB | Differences-in-differences |

**Table 11.2 Implementation Questions**

| **Implementation questions assessed via qualitative analyses** | | | | |
|---|---|---|---|---|
| Reentry Implementation Question 1: Which key entities are collaborating to implement and operationalize the demonstration, and what are their main roles? | - Identification of barriers and facilitators to implementing the reentry program<br>- Description of how and why the roles or participation of those key entities changed during the demonstration<br>- Description of how key entities describe their overall experience with implementing the demonstration | State Medicaid administrators; MCOs; administrators in prison/jail system; pre-release health providers; pre- and post-release case managers; community-based providers | Key informants | Qualitative analysis |

(continued)

**Table 11.2 Implementation Questions (continued)**

| | | | | |
|---|---|---|---|---|
| Reentry Implementation Question 2: What challenges or barriers have key entities experienced while implementing the demonstration, and what strategies did they use to overcome them? | - Description of program barriers to implementation | State Medicaid administrators; MCOs; administrators in prison/jail system; pre-release health providers; pre- and post-release case managers; community-based providers | Key informants | Qualitative analysis |
| Reentry Implementation Question 3: How have key entities participating in the demonstration contributed to the coordination of care for beneficiaries? | - Identification of how key entities understand their role in contributing to coordination of care for beneficiaries<br>- Description of how key entities understand their challenges and successes towards successful coordination for beneficiaries | Pre-release health providers; pre- and post-release case managers; community-based providers | Key informants | Qualitative analysis |
| Reentry Implementation Question 4: What strategies has the state used to increase coverage among Medicaid-eligible individuals and sustain coverage for individuals enrolled in Medicaid prior to incarceration? | - Identification of strategies used by state to increase coverage | State Medicaid administrators; MCOs; administrators in prison/jail system | Key informants | Qualitative analysis |
| Reentry Implementation Question 5: What strategies has the state used to provide benefits to individuals before release? | - Identification of strategies used by state to provide pre-release benefits (including providing case management, person-centered care plans, medication-assisted treatment, and a 30-day supply of medication upon release, as clinically appropriate), such as fostering strategic partnerships, improving cross-system collaboration, and implementing changes to data collection or data sharing practices<br>- Description of how strategies varied by facility type or beneficiary characteristics | State Medicaid administrators; MCOs; administrators in prison/jail system | Key Informants | Qualitative analysis |

(continued)

**Table 11.2 Implementation Questions (continued)**

| | | | | |
|---|---|---|---|---|
| Reentry Implementation Question 6: What strategies did the state use to promote continuity of care, and connect individuals to health and HRSN services after release? | - Description of strategies used by state, such as strategic partnerships, fostering cross-system collaboration, and implementing changes to data collection or data sharing practices | State Medicaid administrators; MCOs; administrators in prison/jail system; pre-release health providers; pre- and post-release case managers; community-based providers | Key informants | Qualitative analysis |
| Reentry Implementation Question 7 How do pre-release health providers, case managers, and community-based providers describe their experience with the demonstration? | - Description of provider experience with the demonstration<br>- Identification of barriers and challenges<br>- Description of suggestions for improving the demonstration | Pre-release health providers; pre- and post-release case managers; community-based providers | Key informants | Qualitative Analysis |
| Reentry Implementation Question 8: How did the state involve individuals with lived experience in the design and implementation of the demonstration? | - Description of state efforts to involve individuals with lived experience<br>- Description of how the state modified implementation based on input from demonstration participants, individuals with lived experience, health care providers, or corrections staff | State Medicaid administrators; MCOs; administrators in prison/jail system; pre-release health providers; pre- and post-release case managers; community-based providers | Key informants | Qualitative analysis |
| Reentry Implementation Question 9: What is the experience of receiving reentry services in a carceral setting? | - Description of formerly incarcerated person's experience receiving reentry services<br>- Description of formerly incarcerated person's satisfaction with reentry services and benefits<br>- Description of impact of receiving reentry services on access to and receipt of health care services<br>- Description of impact of receiving reentry services on reintegration into the community | Formerly incarcerated people (post-release) who received reentry services while incarcerated*<br><br>* pending recruitment feasibility | Key informants | Qualitative analysis |

**Data Sources**. We will use the ICDB for the majority of the quantitative analyses outlined above, as Washington's Jail Booking and Reporting System (JBRS) is integrated in HCA's ProviderOne data system and is accessible via ICDB. We will also coordinate with HCA to identify key informants.

**Analytic Methods.**

Quantitative approach

Quantitative analyses will be used to address Hypotheses 1-5. We provide detailed analytic plans for each hypothesis and research question below.

For these analyses, we will conduct a retrospective cohort study linking Washington Medicaid and state corrections release data. We will include individuals ages 19 to 64 years who were released from state custody and enrolled in Medicaid within 180 days of release.

**Reentry Hypothesis 1: Reentry services will lead to increases in Medicaid/CHIP coverage and continuity of Medicaid coverage for individuals in carceral settings just prior to release.**

Reentry Research Question 1.1: How did the implementation of the demonstration impact Medicaid enrollment for participants?

RQ 1.1 focuses on the enrollment of individuals leaving carceral settings. Because this is a new policy and because it focuses only on enrollment – which applies only to those who fall under the policy – there is no natural "pre-policy period" or comparison group. We will address these questions with descriptive analyses showing the trends in enrollment, focusing on (1) the number of incarcerated individuals newly enrolled in Medicaid out of all individuals incarcerated in the facility and (2) the number of incarcerated beneficiaries whose Medicaid benefits were maintained or suspended rather than terminated out of all individuals incarcerated in the facility. We will calculate these as quarterly rates and display changes over time.

Reentry Research Question 1.2: How did Medicaid enrollment differ by beneficiary characteristics and facility type?

For RQ 1.2, we will provide sub-analyses stratified by beneficiary characteristics (sex, race and ethnicity, and age categories [18-34, 35-49, 49-64) and facility type (jails vs. prison).

**Reentry Hypothesis 2: The reentry demonstration will improve access to services and service uptake in carceral settings and after release.**

Reentry Research Question 2.1: How has the availability of pre-release services changed with the implementation of the demonstration?

RQ 2.1 focuses on providers and facilities that are providing services to individuals leaving carceral services. As with RQ 1.1., there is no natural pre-period or comparison group. Thus, we will calculate these ratios and display changes over time.

Reentry Research Question 2.2: How has the demonstration affected individuals' access to and uptake of pre-release and post-release services, including services that address HRSNs?

R2.2. focuses on several outcomes, some of which occur during or pre-release, and some of which occur post-release. Analyses for these will differ according to the timing of the measure.

Pre-release measures include the likelihood of receiving case management before release, likelihood of receiving MAT services before release, likelihood of receiving 30-day supply of

prescription upon release, number of social service referrals for HRSN pre-release. For these measures, there is no natural comparison group (since services are not available to those not in the re-entry program) and no natural pre-period. Thus, we will display the provision of these services over time, at a statewide level (to test for an overall increase in these services) and on a per-beneficiary level, focusing on those in the re-entry program (to assess how the amount of services to discharged beneficiaries changes over time).

Post-release measures include the likelihood of receiving preventative care and office visits within 6 months of release, likelihood of receiving behavioral health care within 6 months of release, likelihood of having a claim for MAT within 6 months of release, and receipt of social services for HRSN post-release. These measures are theoretically available to anyone leaving a carceral setting.

To assess these changes, we will rely on the anticipated roll-out of these services in Washington. The planned implementation will be done in phases, and it is anticipated that not all facilities will be included. As noted above, the roll-out will occur in three waves: July 1, 2025, January 1, 2026, and July 1, 2026.

We propose to estimate a dynamic difference-in-differences model for staggered implementation, using data from January 1, 2023 (when most COVID-19 disruptions had dissipated) through December 31, 2028. The dynamic difference-in-differences approach is preferred over the traditional "two-way fixed effects (TWFE)" model, which can produce biased results in the presence of treatment effect heterogeneity. As with other difference-in-differences approaches, this specification compares pre- and post-implementation period changes in enrollees that exit facilities with reentry programs to pre- and post- implementation period changes in comparison facilities. To account for staggered waiver implementation, the model defines implementation dynamically as follows:

$$Y_{ist} = \gamma_s + \lambda_t + \left(\sum_{l=-L^{pre}}^{L^{post}} \theta_l \, D_{st}^{l}\right) + \beta X_{ist} + \varepsilon_{ist}, \qquad (1)$$

where $Y_{ist}$ is the outcome of interest for individual $i$ exiting facility $s$ at time $t$; $\gamma_s$ are facility fixed effects; $\lambda_t$ are time fixed effects of each study quarter, with one quarter omitted as a reference period; $l$ is a counter for time since the program initiation, where negative numbers indicate pre-waiver initiation periods, zero indicates the first quarter of program implementation, and positive numbers subsequent program implementation periods; $L^{pre}$ and $L^{post}$ are maximum pre- and post-waiver initiation quarters; $\mathrm{D}_{\mathrm{st}}^{\mathrm{l}}$ are program implementation indicators; $\mathrm{X}_{\mathrm{ist}}$ is a vector of covariates and $\varepsilon_{\mathrm{ist}}$ are other unobserved factors.

The coefficients $\theta_{\mathrm{l}}$ represent the common "event study" parameters, capturing changes leading up to and following treatment. The program implementation indicators, $\mathrm{D}_{\mathrm{st}}^{\mathrm{l}}$, take a value of one if an program (i) will be implemented $\mathrm{l}$ periods from now in facility s at time t (for $\mathrm{l} < 0$), representing outcomes in quarters leading up to the implementation; (ii) is initiated in facility s at time t (if $\mathrm{l} = 0$); and (iii) was initiated $\mathrm{l}$ periods ago (if $\mathrm{l} > 0$), representing outcomes in quarters following the intervention. The model described in equation (1) thus estimates changes in outcomes relative to the last pre-treatment periods in facilities implementing the reentry program relative to changes in outcomes that occurred in comparison facilities over time.

There have been a variety of recent advances in the difference-in-differences and event study literature. The evaluation team is well-versed in these and has developed models that accommodate the variation in treatment timing approaches, including work by Sun and Abraham and Callaway (2021) and Sant'Anna (2020).

The regression above is written as a linear regression. Given the nested nature of the data (beneficiaries within institutions), we will also explore an alternative approach, using a multilevel regression, nesting individuals within the institutions from which they are discharged. Theoretically, this would account for more variance in the model and increase statistical power. We note that there may be some obstacles and tradeoffs with this approach. There may be data constraints that allow us to link enrollees to specific institutional locations from which they were discharged. In addition, multilevel models often introduce new assumptions (i.e., random effects at each level of the model must be assumed to be normally distributed and uncorrelated with the outcome variable, which may not hold in the case of reentry services), which, if not met, can introduce bias. These models can also be computationally intensive, making analyses of large numbers of enrollees across multiple outcomes challenging.

We also note that the approach described above relies on the ability to link JBRS data with Medicaid beneficiaries in the period before reentry (e.g., going back through January 2023). In the event that the pre-policy linkages present data quality issues, we will adjust our approach to analyze data that focus on periods when data linkages are valid. In this case, our "treated" group will consist of enrollees who discharged from jails or prisons that are part of the reentry program, and the "untreated" group will consist of enrollees discharged from institutions not participating in the reentry program. We will use propensity scores to weight the untreated group. Propensity scores will be estimated using logistic regression, considering demographic factors such as age, gender, region of residence, race and ethnicity, as well as health risk markers derived from claims data.

The untreated group (those who did not receive reentry services) will be weighted to match the treated group (those who received reentry coverage) on these propensity scores, thereby creating a balanced comparison that minimizes confounding variables. The weighting process will use the inverse probability of treatment weighting (IPTW) approach to achieve this balance. Once we have derived these weights, we will incorporate them into a regression specification as follows:

$$Y_{it} = \beta Treat_i + \lambda X_{it} + \epsilon_{it},$$

Where $Y_{it}$ is the outcome of interest, $Treat_i$ is an indicator equal to one for individuals receiving reentry services, $X_{it}$ are demographic characteristics, $\epsilon_{it}$ is the error term, and the parameter of interest is $\beta$. We will conduct a weighted regression, where the untreated group receives weights based on the propensity score model. This "doubly robust" regression allows for the control of various confounding variables, such as age and pre-existing health conditions.

Reentry Research Question 2.3: How do these measures differ by beneficiary characteristics and facility type?

For RQ 2.3, we will provide sub-analyses stratified by beneficiary characteristics (sex, race and ethnicity, and age categories [18-34, 35-49, 49-64) and facility type (jails vs. prison).

**Reentry Hypothesis 3: The reentry demonstration will increase investments in health care and related services to improve the quality of care and maximize successful reentry for soon-to-be-released individuals and those transitioning into Medicaid upon release.**

Reentry Research Question 3.1: How have investments aimed to improve the delivery of pre-release and post-release health care and related services impacted the quality of care for individuals soon-to-be-released or recently released?

RQ 3.1 focuses on a variety of HEDIS measures (e.g., Asthma in Younger Adults Admission Rate; Diabetes Short-Term Complications Admission Rate; Use of Pharmacotherapy for Opioid Use Disorder). We will follow the same analytic approach as described in the post-release measures for RQ 2.1.

Reentry Research Question 3.2: How did beneficiaries' experiences of the quality of care pre- and post-release differ by beneficiary characteristics and facility type?

For RQ 3.2, we will provide sub-analyses stratified by beneficiary characteristics (sex, race and ethnicity, and age categories [18-34, 35-49, 49-64) and facility type (jails vs. prison).

**Reentry Hypothesis 4: The demonstration will reduce all-cause deaths in the near-term post-release**

Reentry Research Question 4.1: How did all-cause deaths in the near-term post-release change during the demonstration?

RQ 4.1 focuses on all-cause mortality rate (within 30 days post-release, 6 months, and 12 months post-release). We will follow the same analytic approach as described in the post-release measures for RQ 2.1.

Reentry Research Question 4.2: How did all-cause deaths near-term differ by beneficiary characteristics?

For RQ 4.2, we will provide sub-analyses stratified by beneficiary characteristics (sex, race and ethnicity, and age categories [18-34, 35-49, 49-64) and facility type (jails vs. prison).

**Reentry Hypothesis 5: The demonstration will reduce emergency department (ED) visits and inpatient hospitalizations among recently released Medicaid beneficiaries.**

Reentry Research Question 5.1: How did the use of ED visits among recently released Medicaid beneficiaries change during the demonstration? Reentry Research Question 5.2: How did the use of inpatient care among recently released Medicaid beneficiaries change during the demonstration?

RQs 5.1 and 5.2 focus on utilization measures that apply to all individuals released from jails or prisons. We will follow the same analytic approach as described in the post-release measures for RQ 2.1.

Reentry Research Question 5.3: How did the use of ED and inpatient visits differ by beneficiary characteristics?

For RQ 5.3, we will provide sub-analyses stratified by beneficiary characteristics (sex, race and ethnicity, and age categories [18-34, 35-49, 49-64) and facility type (jails vs. prison).

Additional Details that apply to generally to the Quantitative Approach – testing hypotheses for 30 days vs. 90 days of reentry services

In addition to the general tests above, contingent on CMS approval for Washington and the availability of data to categorize enrollees and the length of which pre-release services are provided, we will conduct additional analyses that are intended to test for differences in outcomes for individuals who receive 30 days of coverage or less, compared individuals who receive coverage for a period over 30 days and up to 90 days immediately prior to a beneficiary's expected release date. We will follow a design similar to that described above, redefining the treatment group as individuals with 60 to 90 days of coverage and the comparison group as individuals with less than 30 days of coverage.

Additional design considerations

Some of the analyses identified above require examining a subset or stratification of the target population. When listing outcome variables, for concision, we have typically listed the target population as "eligible Medicaid beneficiaries," noting that in some cases, the eligible populations will change. For example, an outcome variable like "Asthma in Younger Adults Admission Rate (HEDIS Measure PQI15)" is only relevant for a specified population. We will define these outcomes and subpopulations accordingly.

We also note that analyses of these subpopulations require assumptions similar to those of the larger subpopulations. For example, analyses that use the difference-in-differences approach rest on the assumption of parallel trends, and these assumptions extend to any analyses that focus on subsets or stratification.

While we are committed to incorporating these methodologies, it is essential to retain some flexibility in our approach. The dynamic nature of Medicaid reforms and the variability in data availability necessitates an adaptable research design. We will continuously assess the feasibility and appropriateness of these methods throughout the evaluation process. We will regularly review the implementation of these strategies and make adjustments as necessary. This iterative process will help ensure that our evaluation remains methodologically sound and aligned with the objectives of the reform.

Qualitative approach

Our qualitative analysis will include interviews with Medicaid officials, correctional facility administrators and providers, and community providers who coordinate services with carceral settings. We will use semi-structured interviews, along with a review of documents collected from publicly available and from the participants we interview. These conversations will be designed to identify the barriers and facilitators impacting the policy's implementation. We aim to provide context about the policy's practical dimensions, such as modifications in enrollment procedures, adjustments in healthcare provision, and any obstacles faced in the policy's implementation. We will engage carceral and community service providers to understand their experiences both providing services in carceral settings and developing relationships to facilitate the transition of individuals into the community post-release. Across our analyses, we will observe cross-system communication and coordination between carceral and community settings. This qualitative component of the evaluation will further help uncover unintended effects, both beneficial and detrimental, providing additional context to our quantitative findings. We anticipate conducting approximately 30 interviews across a range of key informants, including state leaders responsible for program implementation, carceral facility leaders, and

participating providers delivering re-entry services (both in-reach providers and carceral providers). Pending post-release beneficiary recruitment feasibility, we will also conduct up to 10 interviews of post-release interviews with people who previously received reentry services while incarcerated. Formerly incarcerated participants will receive a $30 gift card as a “thank you” for participating. Our evaluation team will collaborate with HCA to develop the best methods for identifying and recruiting beneficiaries who received reentry services while incarcerated. All data collection, analysis, and mixed methods analysis will be conducted using the same process as described in Section 5.

**Methodological Limitations.** Our analysis relies on a cohort study design where the comparison cohort is weighted to the treatment group using a propensity score model. While propensity score weighting is useful for addressing observable confounders, it cannot account for unmeasured variables that may influence outcomes. In the context of using claims data, this means that critical aspects of general health or well-being, which are not typically captured in such datasets, remain unaddressed. Consequently, this could lead to residual confounding, affecting the validity of our findings. Additionally, the quality of the propensity score model is contingent on the comprehensiveness and accuracy of the variables included; any omission of key predictors could bias the results. Our approach also assumes that the treatment effect is uniform across all individuals, which may not be true in practice, potentially leading to oversimplified conclusions about the intervention's impact.

# Section 12: Long-Term Services and Supports Presumptive Eligibility

## General Background Information

Long-Term Services and Supports Presumptive Eligibility (LTSS PE) is a new benefits package under MTP 2.0 that allows the state to waive certain Medicaid requirements while individuals are applying for in-home and community-based LTSS. LTSS PE gives applicants presumed eligible immediate access to a limited set of in-home and community-based LTSS prior to a final financial eligibility determination and full functional eligibility assessment. While presumptive eligibility has been used for MAC and TSOA users, this initiative expands its application.

LTSS PE seeks to eliminate the institutional bias in Medicaid that can inadvertently funnel older adults and people with disabilities into institutional care. In doing so, LTSS PE aims to expedite the delivery of benefits in the most appropriate and least restrictive setting, averting unnecessary or premature nursing facility care. Prior to LTSS PE, individuals with pending community or in-home LTSS services applications were met with a crossroads: wait two to three months to establish full functional and financial eligibility, relying on family support or private pay before urgently needed services would begin or enter a skilled nursing facility that can bear the cost of providing services immediately until they are retroactively paid upon full eligibility determination. LTSS PE creates a new path for individuals seeking community or in-home LTSS services by creating a mechanism for home and community-based service providers to provide services and be paid without delay.

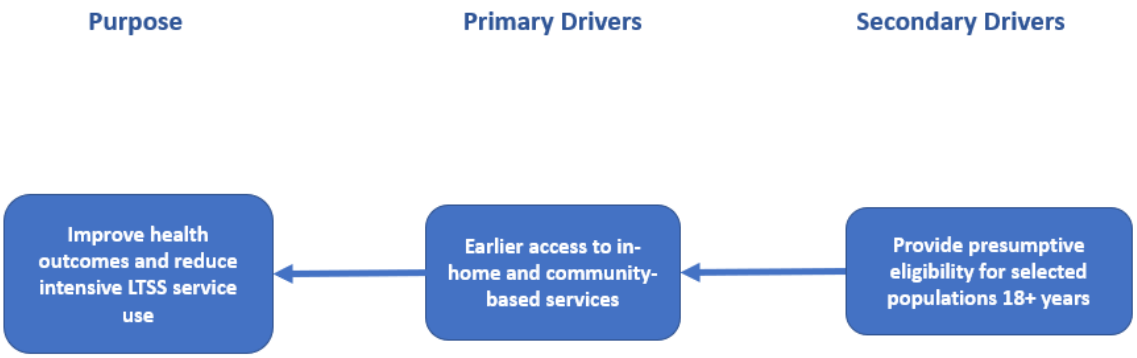
Individuals 18 years and older may qualify for LTSS PE if they live in their own home, have been discharged from an acute care hospital or community psychiatric hospital within the last 30 days (during phase one), can attest that their income is below the monthly limit, and are not receiving any other Medicaid-funded LTSS. The LTSS PE program can cover personal care services for clients with a Medicaid Personal Care (MPC) level of care or personal care services for clients with a Nursing Facility Level of Care (NFLOC), as well as a variety of other services, including home delivered meals, and community transitions or sustainability services.

LTSS PE will be implemented in three phases. The first phase will open LTSS PE to people discharged from an acute care or psychiatric hospital. The second phase removes the requirement of recent discharge and expands LTSS PE to individuals seeking services in their own homes. The third and final phase will expand LTSS PE to people seeking community-based LTSS in a residential licensed facility. HCA anticipates that the program will apply to a small number of individuals in the first few months but will grow to apply to approximately 20 individuals per month.

## Evaluation Questions and Hypotheses

**Driver Diagram.** Exhibit 12.1 below depicts the relationship between the initiative's purpose to improve health outcomes and reduce intensive LTSS service use and the primary and secondary drivers necessary to achieve this overall goal. Within this initiative, one primary driver contributes directly towards achieving the initiative's purpose, with one secondary driver necessary to support the primary drivers.

**Exhibit 12.1. Driver Diagram**




Our evaluation questions address the following hypotheses:

**H1.** The LTSS PE program will reduce the waiting time to receive home and community-based services.

**H2.** The LTSS PE program will accurately identify individuals who could benefit from MAC & TSOA.

**H3.** The LTSS PE program will reduce skilled nursing facility (SNF) use.

## Methodology

**Evaluation Design.** The LTSS PE analysis will be primarily descriptive.

**Target and Comparison Populations.** The target population will be those enrolled in LTSS PE.

**Evaluation Period.** We propose to analyze data for July 1, 2023, through June 30, 2028, assuming that claims data for CY 2028 are available on January 1, 2029.

**Evaluation Measures.** We propose using the following evaluation measures.

**Table 12.1. Evaluation Measures**

| Research Question | Outcome measures used to address the research question | Sample or population subgroups to be compared | Data Sources | Analytic Methods |
|---|---|---|---|---|
| Goal: Improve access to in-home or community-based services provided through MAC & TSOA<br>**LTSS PE Hypothesis 1: The LTSS PE program will reduce the waiting time to receive home and community-based services.** | | | | |
| LTSS PE Research Question 1.1: How does access to care change? | • Number of days to from application to the MAC or TSOA program to their first utilization of services<br>• Number and percentage of people using LTSS PE | Eligible Medicaid enrollees | ICDB, supplemented with application data | Descriptive analysis |

(continued)

**Table 12.1. Evaluation Measures (continued)**

| | | | | |
|---|---|---|---|---|
| Goal: Identify enrollees who could benefit from MAC & TSOA services<br>**LTSS PE Hypothesis 2: The LTSS PE program will accurately identify individuals who could benefit from MAC & TSOA.** | | | | |
| LTSS PE Research Question 2.1: How does the accuracy rate in LTSS PE determinations after full financial and functional eligibility determinations change over time? | • Assessments of screening tool and subsequent eligibility determinations | Eligible Medicaid enrollees | ICDB, supplemented with application data | Descriptive analysis |
| Goal: Reduce SNF use<br>**LTSS PE Hypothesis 3: The LTSS PE program will reduce skilled nursing facility (SNF) use.** | | | | |
| LTSS PE Research Question 3.1: How do the number and percentage of people admitted to a skilled nursing facility change after implementing LTSS PE? | • Skilled nursing facility use | Eligible Medicaid enrollees | ICDB, supplemented with application data | Descriptive analysis |
| LTSS PE Research Question 3.2: What are the characteristics of people who use LTSS PE compared to those who do not? | • Demographic data | Eligible Medicaid enrollees | ICDB, supplemented with application data | Descriptive analysis |
| LTSS PE Research Question 3.3: How does HCBS service use differ among enrollees who use LTSS PE compared to those who do not use LTSS PE? | • HCBS services. | Eligible Medicaid enrollees | ICDB, supplemented with application data | Descriptive analysis/ Regression of LTSS PE users vs. non-users |

**Data Sources**. We will use the ICDB for these analyses.

**Analytic Methods.**

Quantitative approach

We will describe the first two outcome measures each month throughout the evaluation period. We will also stratify our data by multiple factors, as applicable:

- County of residence (for the first three outcomes)
- Urban vs rural area (for the first three outcomes)
- MSA-level number of personal care workers per 1,000 residents (for the first outcome)
- County-level SNF beds per 1,000 residents (for the third outcome)

We will also describe the key demographic and health characteristics (age, sex, race/ethnicity, chronic conditions, functional and cognitive impairments, urban/rural area, Medicare eligibility) and the type of HCBS received between people who started in presumptive status and the rest.

Contingent on feasibility, we will also collect pre-demonstration data for the PE assessment and use these data to assess wait times between application and provision of services before, during, and after the program's implementation to characterize changes in access to care. We will use these data to describe how wait times between eligibility application, eligibility confirmation, and first receipt of in-home services change with the PE program.

To mitigate any small sample issues associated with an anticipated low volume of participants (approximately 20 individuals per month), we will limit the extent to which we stratify any outcomes and, alternatively, aggregate data over extended periods, producing quarterly, semi-annual, or annual summaries to ensure robust and privacy-compliant reporting of program outcomes.

Qualitative approach

We do not plan to conduct a qualitative study to understand the effect of LTSS PE.

**Methodological Limitations.** An important limitation of this study is the lack of a control group or comparison data. We do not have data on the experience of individuals who might need HCBS but do not enroll under LTSS PE. We cannot identify the counterfactual scenario without data on individuals not enrolled in the LTSS PE program. This limitation restricts our ability to draw definitive conclusions about the program's impact and effectiveness. Additionally, without a comparison group, the analysis is constrained in its capacity to isolate the program’s effects from other external factors that may influence the observed outcomes.

# Section 13: Contingency Management

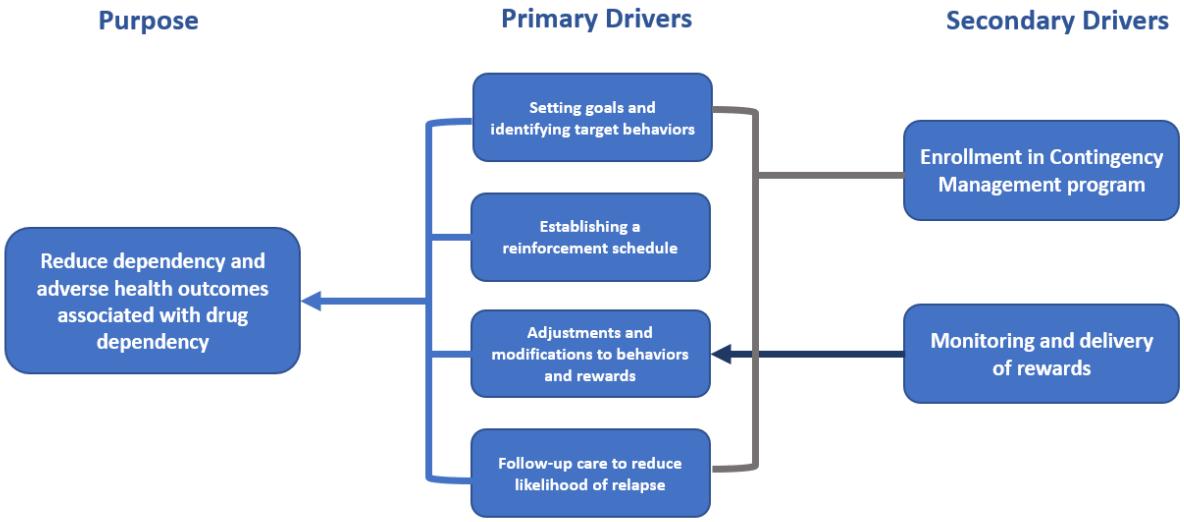
## General Background Information

Contingency management (CM) is a new component of MTP 2.0. CM is an evidence-based approach in the treatment of substance use disorders that utilizes behavioral principles to reinforce abstinence and positive behavior changes that apply to drug-using behaviors. This approach is grounded in the theory of operant conditioning, where desirable behaviors are rewarded, thus increasing the likelihood of their recurrence. In the context of substance use treatment, CM typically involves providing patients with tangible incentives or rewards for evidence of abstinence (e.g., negative point-of-care drug tests) or engagement in treatment-related activities. CM is considered among the most effective interventions for stimulant use disorders (methamphetamines). Within Washington's demonstration, under CM, participants with qualifying stimulant use disorders may receive small gift cards for goods and services, with a maximum amount of $599 per 12-month period. Washington will provide training and implementation assistance to participating treatment sites to ensure they are prepared to administer CM.

## Evaluation Questions and Hypotheses

**Driver Diagram.** Exhibit 13.1 below depicts the relationship between the initiative's purpose to reduce drug dependency and adverse health outcomes and the primary and secondary drivers necessary to achieve this overall goal. Five primary drivers contribute directly towards achieving the initiative's purpose, with one secondary driver necessary to support the primary drivers.

**Exhibit 13.1. Driver Diagram**



Hypotheses associated with this initiative pertain to its effectiveness in improving outcomes for Medicaid enrollees with substance use disorders. We hypothesize that CM will:

**H1.** CM will increase rates of initiation and engagement in substance use disorder treatment.
**H2.** CM will reduce overdose deaths.
**H3.** CM will reduce utilization of emergency departments, inpatient admissions, and hospital readmissions.
**H4.** CM will improve access to primary care.
**H5.** CM will improve social outcome metrics.

Qualitative data collection and analysis will answer the following evaluation questions:

I1. What are program leader and administrator experiences with CM implementation? What were barriers and facilitators to implementing this program?
I2. What were they key elements of CM, and how do those align with fidelity?
I3. What were participants experiences in the CM program?
I4. How did the CM program affect access to primary care and social outcomes?

## General Background Information

Authority to use waiver funds to address health-related social needs (HRSN) is a new component of MTP 2.0. In recent years, states aiming to enhance Medicaid outcomes and reduce costs have focused on addressing HRSN. These factors focus on addressing individual-level outcomes resulting from barriers to accessing healthy food, safe and stable housing, healthcare and transportation.  . Neglecting these needs often leads to poorer health results and increased healthcare expenses. Tackling these health-related social needs can enhance health outcomes and lower Medicaid costs. Washington's latest waiver, approved by CMS, allows for the inclusion or expanded coverage of specific HRSN services. The HRSN services include nutrition education; medically tailored food assistance; short-term grocery resources; recuperative care and short-term posthospitalization housing; short-term post-transition housing for up to six months; housing supports; and medically necessary home modifications and remediations to address high-risk clinical conditions. Additional support includes case management, outreach, education, and infrastructure investments to bolster these services. Expanding Medicaid's reach by covering specific HRSN services and supports is anticipated to further Medicaid's goals. This approach is designed to help beneficiaries maintain their coverage continuity and gain access to necessary healthcare services. HRSN services will be delivered through both fee-for-service and managed care systems, with some services offered via nine regional Community Hubs and one statewide Native Hub.

The waiver approvals also clarify that these services apply only to specific populations. Targeted populations may include: individuals post-discharge or those with chronic conditions, who screen positive for food, housing, or financial insecurity, individuals transitioning out of institutional care or congregate settings; individuals who are homeless, at risk of homelessness, or transitioning out of an emergency shelter; youth transitioning out of the child welfare system; enrollees who live in the community and are compromised in their activities of daily living and/or have been assessed to have a behavioral health need, and whose unpaid caregivers require relief to avoid the enrollee being placed in an institution; adults who are intoxicated but conscious, cooperative, able to walk, nonviolent, and free from immediate medical distress, who would otherwise be transported to the emergency department or

jail; or have presented at the emergency department and can safely be diverted to a stabilization center; individuals at risk for institutionalization due to inaccessible living environments; individuals with poorly controlled asthma, or other medical condition(s) exacerbated by in-home environmental factors; and individuals with functional impairments and no other adequate support system.

## Methodology

**Evaluation Design.** We will use a mixed methods design where qualitative interviews inform and explain quantitative analyses of claims data. The quantitative analyses will use a difference-in-differences approach, comparing outcomes for Medicaid beneficiaries receiving CM to a propensity-score matched group of beneficiaries who do not receive CM. Qualitative analysis will be inductive, focusing on operant condition, the theory that informs this program.

**Treatment and Comparison Populations.** The treatment population of this study is CM participants. The comparison population will be a group of matched non-participants who qualify for the program but are not selected.

**Evaluation Period.** We propose to analyze data for July 1, 2023, through June 30, 2028, assuming that the CM initiative begins July 1, 2024 (allowing us 12 months of observation prior to the entry into CM) and further assumes that claims data for CY 2028 are available on January 1, 2029.

**Evaluation Measures.** We propose using the following evaluation measures.

**Table 13.1. Evaluation Measures**

| Research Question | Outcome measures used to address the research question | Sample or population subgroups to be compared | Data Sources | Analytic Methods |
|---|---|---|---|---|
| Goal: Increase engagement with treatment<br>**CM Hypothesis 1: CM will increase rates of initiation and engagement in substance use disorder treatment.** | | | | |
| CM Research Question 1.1: How is CM associated with changes in the rates of initiation and engagement in substance use disorder treatment? | • Substance Use Disorder (SUD) Treatment Rate<br>• Initiation and Engagement of Substance Use Disorder Treatment | Eligible Medicaid enrollees | ICDB | Difference-in-Differences |
| **Goal: Reduce overdose deaths by increasing engagement with treatment**<br><br>**CM Hypothesis 2: CM will reduce overdose deaths.** | | | | |
| CM Research Question 2.1: How is CM associated with changes in overdose deaths? | • Overdose deaths | Eligible Medicaid enrollees | ICDB | Difference-in-Differences |

(continued)

**Table 13.1. Evaluation Measures (continued)**

| | | | | |
|---|---|---|---|---|
| Goal: Reduce the use of acute services by increasing engagement with treatment<br>**CM Hypothesis 3: CM will reduce utilization of emergency departments, inpatient admissions, and hospital readmissions.** | | | | |
| CM Research Question 3.1: How is CM associated with changes in the utilization of emergency departments, inpatient admissions, and hospital readmissions? | • Emergency (ED) Department Visit Rate<br>• Acute Hospital Use among Adults<br>• Hospital Readmission within 30 Days | Eligible Medicaid enrollees | ICDB | Difference-in-Differences |
| Goal: Increase access to primary care<br>**CM Hypothesis 4: CM will improve access to primary care.** | | | | |
| CM Research Question 4.1: How is CM associated with changes in access to primary care? | • Primary care visits | Eligible Medicaid enrollees | ICDB | Difference-in-Differences |
| Goal: Reduce homelessness and contacts with the justice system<br>**CM Hypothesis 5: CM will improve social outcome metrics.** | | | | |
| CM Research Question 5.1: How is CM associated with changes in the social outcome metrics? | • Homelessness<br>• Transition out of homelessness (defined below)<br>• Transition into homelessness (defined below)<br>• Employment<br>• Criminal Justice Involvement | Eligible Medicaid enrollees | ICDB | Difference-in-Differences |

**Table 13.2 Implementation Questions**

| | | | | |
|---|---|---|---|---|
| **Implementation questions assessed via qualitative analyses** | | | | |
| CM Implementation Question 1: What are program leader and administrator experiences with CM implementation? What were barriers and facilitators to implementing this program? | - Identification of barriers and facilitators to implementing the reentry program | State Medicaid administrators; administrators in prison/jail system; behavioral health providers | Key informants | Qualitative analysis |
| CM Implementation Question 2: What were they key elements of CM, and how do those align with fidelity? | - Identification of key elements of CM, and alignment with fidelity | State Medicaid administrators; administrators in prison/jail system; behavioral health providers | Key informants | Qualitative analysis |

(continued)

**Table 13.2 Implementation Questions** (continued)

| | | | | |
|---|---|---|---|---|
| CM Implementation Question 3: What were participants experiences in the CM program? | - Description of CM program participants experiences<br>- What did beneficiaries find helpful about the program<br>- Where do participants see opportunities to strengthen the program and its impact | Participants in CM | Key informants | Qualitative analysis |
| CM Implementation Question 4: How did the CM program affect access to primary care and social outcomes? | - Understanding of CM experience among participants | Participants in CM | Key informants | Qualitative analysis |

**Data Sources**. We will use the ICDB for these analyses. We will also coordinate with HCA to identify key informants for qualitative data collection.

**Analytic Methods.**

Quantitative approach

The unit of analysis is at the individual-quarter level. We use a difference-in-differences approach, which requires defining a pre- and post-intervention period relative to the first CM enrollment (also called the index quarter). Several considerations influence the selection of appropriate pre- and post-intervention periods. First, the post-intervention period should be sufficiently long to capture the full effects of the policy. Second, a longer post-intervention period implies a smaller sample size due to right-censoring. Third, the pre-and post-intervention period should not include temporary outcome changes around the time of enrollment that do not reflect the effects of the policy. To balance these considerations, we propose excluding the last two quarters before the index quarter as the pre-intervention period and the first two quarters following the index quarter as the post-intervention period. Following a preliminary review of outcome trends of CM participants relative to their enrollment, we will consider alternative pre- or post-intervention period definitions (e.g., the first full year following enrollment) to ensure that our design captures the effects of the policy. Propensity scores will be estimated using logistic regression, considering demographic factors such as age, region of residence, race and ethnicity, and gender. We will match exactly on the primary drug or drug dependencies (e.g., methamphetamines, alcohol, opioids, or marijuana.).

The regression equation may be written as follows:

$$Y_{it} = \alpha Treat_i + \beta Post_t + \delta(Treat_i x Post_t) + \lambda X_{it} + \epsilon_{it},$$

Where $Y_{it}$ is the outcome of interest, $Treat_i$ is an indicator equal to one if individual $i$ is in the treatment group, $Post_t$ is an indicator equal to one for the post-intervention period $X_{it}$ are demographic characteristics, $\epsilon_{it}$ is the error term, and the parameter of interest is $\delta$.

Special considerations:

- We will assess whether outcomes move in parallel for the treatment and comparison group prior to CM enrollment. Parallel trends before enrollment suggest that subsequent changes can be

attributed to the effects of CM; we will discuss implications for interpreting results in cases where trends are not parallel.

- One option to address non-parallel trends is to include pre-enrollment outcomes in the propensity score matching step. However, matching on pre-intervention outcome trends may introduce regression to the mean bias. Alternatively, we may select appropriate pre- and post-intervention periods to minimize the influence of temporary outcome changes around the time of enrollment.
- The regression approach estimates the average effects of CM enrollment for the full post-enrollment period. Alternatively, we can specify multiple post-intervention periods to capture short-term and longer-term effects of the program.
- Pending a sufficient sample size, we will also consider stratification by demographic groups (e.g., gender, age, race and ethnicity) or geography (rural versus urban).

Additional design considerations

Some of the analyses identified above require examining a subset or stratification of the target population. When listing outcome variables, for concision, we have typically listed the target population as "eligible Medicaid beneficiaries," noting that in some cases, the eligible populations will change. For example, an outcome variable like "blood pressure control among patients with diabetes" is only relevant for patients with diabetes; statin therapy for patients with cardiovascular disease is only relevant for patients with cardiovascular disease. We will define these outcomes and subpopulations accordingly.

We also note that analyses of these subpopulations require assumptions similar to those of the larger subpopulations. For example, analyses that use the difference-in-differences approach rest on the assumption of parallel trends, and these assumptions extend to any analyses that focus on subsets or stratification.

The evaluation team has extensive experience in working with difference-in-difference models, including theoretical and empirical articles using difference-in-differences,[2–4,4–10] with several incorporating the most recent advances in sensitivity analyses and robustness checks.[2,4,11,12] For each analysis, we will assess the quality of the comparison group or the robustness of the assumptions. We note that, from a practical point of view, there are tradeoffs between (a) the number of outcomes that can be analyzed and (b) the extent to which the parallel trends assessment can be rigorously assessed and accounted for. Our evaluation will seek a balance in providing rigorous analyses and transparency in our assumptions in a manner that is commensurate with the number of outcomes and analyses conducted.

Where possible, we will implement sub-setting or stratification characteristics based on pre-intervention data. This will involve identifying relevant characteristics and ensuring they are measured prior to the implementation of the reform. By doing so, we aim to mitigate endogeneity concerns and enhance the validity of our analysis. In scenarios where defining sub-setting characteristics prior to the demonstration start is infeasible, we will explore the use of separate modeling approaches.

While we are committed to incorporating these methodologies, it is essential to retain some flexibility in our approach. The dynamic nature of Medicaid reforms and the variability in data availability necessitates an adaptable research design. We will continuously assess the feasibility and appropriateness of these methods throughout the evaluation process. We will regularly review the implementation of these strategies and make adjustments as necessary. This iterative process will help ensure that our evaluation remains methodologically sound and aligned with the objectives of the reform.

Qualitative approach

We will use the same approach described in Section 5 above to collect and analyze qualitative data. To understand CM, we will collect relevant program documents and conduct semi-structured interviews with informants, including HCA administrators who are implementing and/or knowledgeable about CM, individuals at Washington State University leading the training efforts and managing the fidelity reviews, and leaders at participating sites. For the participating sites, we will aim to conduct interviews with state leaders of CM (N=3), WSU trainers (N=7), and one representative from the majority of pilot sites (N=20). We anticipate conducting approximately 30 interviews, but we will continue the process of iterative sampling and data collection until saturation is reached.

To answer the last research question, we will conduct approximately 15 interviews (30 minutes) with beneficiaries who participated in the CM pilot. The interviews will focus on learning about their experiences with this type of treatment incentive. We will aim to sample participants who received care from a range of the participating sites. Interview participants will receive a $30 gift card as a "thank you." Our evaluation team will collaborate with HCA to develop the best methods for identifying and recruiting beneficiaries who participated in the CM pilot.

**Methodological Limitations.** One of the primary limitations of this evaluation design is the extent to which we can accurately identify participants in the CM program. Ideally, the CM program will include a patient registry that can be linked to claims data for evaluation purposes. A second concern is uncertainty around the total number of CM participants. For the evaluation to be statistically powerful and reliable, a sufficient number of participants is crucial. Third, the analysis is limited to administrative records and thus does not include information regarding the use of gift cards. Fourth, people are not randomly assigned to the CM program, and their outcomes might, therefore, systematically differ from those of the comparison group in ways that could affect the validity of the difference-in-differences design.

# Section 14: Health-Related Social Needs

## Implementing the HRSN Initiative

Washington State's HRSN protocol establishes a detailed and innovative framework for addressing adverse social determinants of health among Medicaid beneficiaries. The HRSN initiative enables Medicaid enrollees to access evidence-based, non-medical services tailored to address unmet social needs that contribute to poor health outcomes. The protocol defines a comprehensive set of services, including nutrition supports (e.g., medically tailored meals, grocery provisions, and fruit and vegetable prescriptions), housing-related services (e.g., short-term post-hospitalization housing, rent assistance, and environmental modifications), and other supports like case management and caregiver respite. These interventions are guided by eligibility criteria that include a combination of clinical and social risk factors. Eligibility is determined through evidence-based screening tools that assess needs such as food insecurity, housing instability, financial challenges, and interpersonal safety.

Central to the protocol's implementation is the integration of Washington's nine Accountable Communities of Health (ACHs) and one statewide Native Hub, which serve as regional anchors for service delivery. ACHs, as independent nonprofit organizations, align with the state's Medicaid purchasing regions to ensure localized, community-driven services. Community Hubs and the Native Hub established under this framework will provide care coordination, outreach, and education, acting as connectors between individuals and the services they require. This approach allows for tailored service delivery while ensuring that all eligible beneficiaries across the state have access to support.

The protocol emphasizes the importance of medical appropriateness and individual choice in the provision of services. Beneficiaries may opt out of services at any time, and participation does not preclude access to other medically necessary care. To facilitate continuity of care, the state is developing shared care plans that can be accessed by providers, managed care organizations (MCOs), and community-based organizations. These plans ensure that services are coordinated effectively and that referrals are tracked to completion using a closed-loop system.

To receive funding, Hubs must establish advisory bodies, demonstrate contract and risk management capabilities, and submit detailed policies for care management, data collection, and privacy. They must implement a HRSN screening process aligned with other Hubs and submit plans for outreach, closed-loop referrals, and community-driven responsive service delivery. Each Hub must develop person-centered care plans, updated annually, and expand its network to include community partners for referrals. The model is intended to improve access to community-based services that are not integrated into Washington's Medicaid systems.

Washington has proposed a per-member-per-month (PMPM) payment rate of $2.68 to ensure financial stability for hubs, recognizing their limited reserves and community-focused missions. Payments will be conditioned on quarterly data reporting, with end-of-year reconciliations to validate service performance and cost alignment.

**Implementation of the HRSN program has a phased launch.**

**Phase 1a launched January 1, 2025,** directing uses nine Community Hubs and the statewide Native Hub to focus on "social care supports":

- Case management
- Outreach
- Education

**Phase 1b will launch Spring and Summer 2025** and will include:

- Housing transition navigation services
- Rent/temporary housing
- Medical respite (e.g., recuperative care and short-term post-hospitalization housing. Launch date: July 2025)

**Later phases** will include:

- Nutrition supports
- Home accessibility, remediation, and adaptation services (medically necessary environmental accessibility and remediation adaptation)
- Caregiver respite services
- Community transition services (including transportation for non-emergency, non-medical needs and personal care and homemaker services)Stabilization centers *
- Day habilitation*

* pending future rate methodology approvals of the services

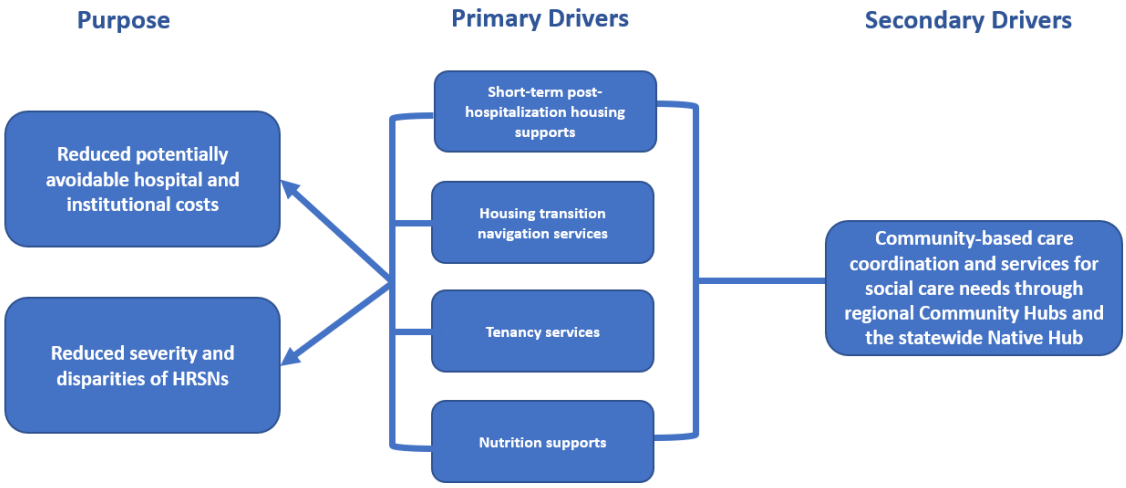
The state is pursuing dual funding mechanisms, utilizing both fee-for-service and managed care models. For managed care enrollees, selected HRSN services may be provided under in-lieu-of-services (ILOS) authority, further expanding access.

The HRSN protocol also incorporates robust public communication strategies, ensuring transparency and stakeholder engagement. It allows for flexibility in adapting services based on evolving needs, including updating eligibility criteria and expanding service offerings.

## Evaluation Questions and Hypotheses

**Driver Diagram.** Exhibit 14.1 below depicts the relationship between the initiative's purpose to improve health outcomes and reduce unnecessary medical service use and the primary and secondary drivers that are necessary to achieve this overall goal. In this example, four primary drivers contribute directly towards achieving the initiative's purpose, with one secondary driver necessary to support the primary drivers.

**Exhibit 14.1. Driver Diagram**




We will address the following hypotheses:

- **H1.** The demonstration will meet or reduce the severity of HRSN for beneficiaries overall and among subpopulations who experience inequities in HRSN.
- **H2.** By meeting or reducing the severity of HRSN, the demonstration will increase beneficiaries' use of preventive and routine care and reduce their use of potentially avoidable hospital and institutional care (ED visits, inpatient care, and nursing facilities).
- **H3.** By meeting or reducing HRSN, the demonstration will improve physical and mental health outcomes among beneficiaries overall and among subpopulations who experience disparities in physical and mental health outcomes.

**Evaluation Measures.** Following CMS guidance, we consider the following hypotheses, research questions, and implementation questions.

**Table 14.1. Evaluation Measures**

| Research Question | Outcome measures used to address the research question | Sample or population subgroups to be compared | Data Sources | Analytic Methods |
|---|---|---|---|---|
| Goal: Meet or reduce severity of HRSN<br>**HRSN Hypothesis 1. The demonstration will meet or reduce the severity of HRSN for beneficiaries overall and among subpopulations who experience inequities in HRSN.** | | | | |
| HRSN Research Question 1.1: How does the HRSN demonstration impact the use of HRSN services? | • Number of people receiving HRSN services<br>• Types of HRSN services received, including<br><br>**Phase 1a Services**<br>• HRSN referrals<br>• Outreach<br>• Education<br><br>**Phase 1b Services**<br>• Housing transition<br>• Navigation services<br>• Rent/temporary housing<br>• Medical respite (e.g., recuperative care and short-term post-hospitalization housing. Launch date: July 2025)<br><br>**Later Phase Services**<br>• Nutrition supports<br>• Stabilization centers *<br>• Day habilitation*<br>  ○ Caregiver respite<br>Home accessibility, remediation, and adaptation services<br>Community transition services<br>• Percent of people who received more than 1 HRSN service<br><br>*pending future rate methodology approvals of the services | Likely to be an indicator file from Hubs that will flag HUB enrollment for individuals; Additional work needed to identify what data may be available as appropriate; ProviderOne | Inclusion of this variable is tentative. If the service is billed to Medicaid (as a claim or encounter) then this will be feasible. If not, additional data will be required from facilities and/or HUBs. | Descriptive analysis of quarterly trends |

(continued)

**Table 14.1. Evaluation Measures (continued)**

| | | | | |
|---|---|---|---|---|
| HRSN Research Question 1.2: How does the HRSN demonstration impact rates of HRSN and their severities? | • Receipt of Substance Use Disorder Treatment for Medicaid Beneficiaries Following Release from a Correctional Facility<br>• Receipt of Outpatient Mental Health Treatment for Medicaid Beneficiaries Following Release from a Correctional Facility.<br>• Employment (Percentage of enrollees ages 18 to 64 with any earnings in the year, as reported by the Washington State Employment Security Department<br>• Arrest Rate (Percentage of enrollees ages 18 to 64 years of age who were arrested at least once in the year, as reported by the Washington State Patrol.)<br>• The percentage of Medicaid enrollees who were homeless in at least one month in the measurement year (referred to as HOME-N)<br>• The percentage of Medicaid enrollees who were homeless or unstably housed in at least one month in the measurement year (HOME-B) | Eligible Medicaid enrollees, including HRSN beneficiaries | ICDB supple-mented with JBRS and HRSN data | Generalized Random Forest |
| HRSN Research Question 1.3: How does the HRSN demonstration impact disparities in HRSN? | Same as 1.2 | Same as 1.2, disaggregated as feasible | Same as 1.2 | Same as 1.2 |
| HRSN Research Question 1.4: How do beneficiaries understand the HRSN demonstration? | Description of beneficiary understanding of HRSN demonstration | Beneficiaries receiving HRSN services | Key informants | Qualitative analysis |
| HRSN Research Question 1.5: How does the HRSN demonstration impact beneficiary use of HRSN services? | Description of impact of HRSN demonstration services on beneficiaries | Beneficiaries receiving HRSN services | Key informants | Qualitative analysis |

(continued)

**Table 14.1. Evaluation Measures (continued)**

| | | | | |
|---|---|---|---|---|
| Goal: Increase beneficiaries' use of preventive and routine care and reduce potentially avoidable hospital and institutional care.<br>**HRSN Hypothesis 2: By meeting or reducing the severity of HRSN, the demonstration will increase beneficiaries' use of preventive and routine care and reduce avoidable hospital and institutional care utilization (ED visits, inpatient care, and nursing facilities).** | | | | |
| HRSN Research Question 2.1: How does the HRSN demonstration impact beneficiaries' use of preventive and routine care? | • Adults Access to Preventive/Ambulatory Health Services (AAP)<br>• Child and Adolescent Well-Care Visits (WCV)<br>• Immunizations for Adolescents (IMA)<br>• Cervical Cancer Screening (CCS)<br>• Chlamydia Screening in Women (CHL) | Eligible Medicaid enrollees, including HRSN beneficiaries | Pre-post analysis | Generalized Random Forest |
| HRSN Research Question 2.2: How does the HRSN demonstration impact the use of hospital and institutional care? | • Plan All-Cause Readmissions (PCR)<br>• Acute Hospital Utilization (AHU)<br>• Emergency Department Utilization (EDU) | Eligible Medicaid enrollees<br><br>Eligible Medicaid enrollees, including HRSN beneficiaries | ICDB supple-mented with HRSN data | Generalized Random Forest |
| HRSN Research Question 2.3: How does the HRSN demonstration impact disparities in the use of hospital and institutional care? | Same as 2.2 | Same as 2.2, disaggregated as feasible | Same as 2.2 | Same as 2.2 |
| HRSN Research Question 2.4: How does the HRSN demonstration affect health care expenditures? | • Total health care expenditures | Eligible Medicaid enrollees | ICDB supple-mented with HRSN data | Pre-post analysis |
| Goal: Improve physical and mental health outcomes<br>**HRSN Hypothesis 3: By meeting or reducing HRSN, the demonstration will improve physical and mental health outcomes among beneficiaries overall and among subpopulations who experience disparities in physical and mental health outcomes.** | | | | |
| HRSN Research Question 3.1: How does the HRSN demonstration impact beneficiaries' physical and mental health outcomes? | Description of HRSN demonstration impact on beneficiary physical and mental health outcomes | Beneficiaries receiving HRSN services; HCA, MCOs, HRSN Connectors and Service Providers | Key informants | Qualitative analysis |
| HRSN Research Question 3.2: How does the HRSN demonstration impact disparities in health outcomes? | - Description of HRSN demonstration impact on disparities in health outcomes | Beneficiaries receiving HRSN services; HCA, MCOs, HRSN Connectors and Service Providers | Key informants | Qualitative analysis |

**Table 14.2. Implementation Questions**

| **Implementation questions assessed via qualitative analyses** | | | | |
|---|---|---|---|---|
| HRSN Implementation Question 1: Which key entities are collaborating to implement and operationalize the demonstration, and what are their main roles? How and why have the roles or participation of those key entities changed during the demonstration? | - Identification of key entities<br>- Description of key roles and changes in those roles | HCA, MCOs, HRSN Connectors and Service Providers | Key informants | Document review<br><br>Qualitative Analysis |
| HRSN Implementation Question 2: What are barriers and facilitators for key entities implementing the demonstration, and what strategies have key entities used to overcome barriers? | - Identification of implementation barriers and facilitators<br>- Identification of key strategies to overcome barriers<br>- Description of suggestions to improve implementation | HCAHCA, MCOs, HRSN Connectors and Service Providers | Key informants | Document review<br><br>Qualitative Analysis |
| HRSN Implementation Question 3: What facilitators and barriers to participation do beneficiaries experience, and what does this information suggest about the need for refinements to beneficiary and provider outreach as well as demonstration implementation or design more broadly? | - Description of barriers and facilitators to implementation<br>- Description of suggestions to improve implementation | Beneficiaries receiving HRSN services | Key informants | Document review<br><br>Qualitative Analysis |
| HRSN Implementation Question 4: What strategies and tools do key entities use to identify beneficiaries with social risk factors and facilitate beneficiary participation in the demonstration? | - Identification of strategies and tools used to identify members with HRSNs and facilitate member participation<br>- Identification of adaptations | HCA, MCOs, HRSN Connectors and Service Providers | Key informants | Document review<br><br>Qualitative Analysis |
| HRSN Implementation Question 5: How are key entities implementing HRSN case management and providing HRSN services through the demonstration? | - Description of HRSN case management and service delivery strategies | HCA, MCOs, HRSN Connectors and Service Providers | Key informants | Document review<br><br>Qualitative Analysis |

(continued)

**Table 14.2. Implementation Questions (continued)**

| | | | | |
|---|---|---|---|---|
| HRSN Implementation Question 6: What infrastructure are key entities developing or acquiring using demonstration funds? What did the state learn about promising practices to build infrastructure to support HRSN screening, case management, and service delivery? | - Description of infrastructure developed or acquired through demonstration funds<br>- Lessons learned about infrastructure development practices to support HRSN screening, case management, and service delivery | HCA, MCOs, HRSN Connectors and Service Providers | Key informants | Document review<br><br>Qualitative Analysis |
| HRSN Implementation Question 7: How does the local availability of and investment in social services outside of the demonstration change during the demonstration? | - Description of local availability and investment in social services outsides those in the demonstration | HCA , MCOs, HRSN Connectors and Service Providers | Key informants | Document review<br><br>Qualitative Analysis |

**Data Sources**. We will use a variety of data sources, including the ICDB (which includes data on social outcomes, including homelessness, criminal justice involvement, and employment) and coordination with managed care organizations, Native and Community Hubs, and HCA, to identify registries of patients receiving HRSN services. We will also coordinate with HCA and managed care plans to identify a representative beneficiary population eligible for qualitative interviews.

## Methodology

**Evaluation Design.** To evaluate the implementation questions (IQ 1-7), we will collect relevant documents related to the HRSN program and conduct semi-structured interviews with Medicaid administrators, MCOs, Accountable Communities of Health (ACHs), and community-based organizations. To test hypotheses 1-3, we will conduct quantitative analyses of claims-based outcomes. To answer the research questions 1.1 to 3.2, we will conduct semi-structured interviews with Medicaid beneficiaries that receive HRSN benefits to understand their experiences with the benefit, as well as how receiving the benefit impacts their access to and quality of care.

**Target and Comparison Populations.** The target population consists of Washington Medicaid enrollees receiving HRSN services. Our primary analyses will not include a comparison population.

**Evaluation Period.** We propose to analyze data for January 1, 2023, through June 30, 2028, assuming that the initial phase of HRSN services begins July 1, 2024 (allowing us 18 months of observation prior to the provision of HRSN) and further assumes that claims data for CY 2028 are available on January 1, 2029.

**Analytic Methods.**

Quantitative approach

Descriptive analyses will include measures of HRSN use (e.g., percentage of members who received HRSN, per capita spending associated with HRSN use, types of HSRN services, and regional and demographic characteristics associated with HRSN use.)

To analyze social outcomes (homelessness, criminal justice involvement, employment) and utilization, we will use Generalized Random Forests (GRF) to evaluate the effects of the HRSN program. We will analyze outcomes for enrollees receiving any HRSN service.[19] We will conduct a separate analysis for enrollees receiving the Housing Transition Services (HTS) component.

We choose GRF rather than a difference-in-differences approach because the program will be rolled out across the state at the same time and there is not a clear comparison group, other than the eligible enrollees who do not use HRSN services. GRF is a powerful, data-driven approach that extends traditional regression models by flexibly capturing nonlinear relationships and interactions between individual characteristics and policy effects. Unlike standard regression methods, which assume a fixed functional form, GRF learns the structure of the data adaptively, identifying how the policy's impact varies across different subgroups of Medicaid enrollees. This allows us to uncover whether certain individuals benefit more or less from receiving HRSN or HTS services, providing nuanced insights that would be missed in simpler models. The evaluation team has experience in working with GRF estimation.[20,21]

To account for the phased rollout of the policy, we will apply GRF separately to each implementation phase—Phase 1a (January 2025), Phase 1b (March 2025), and Phase 1c (September 2025). This phase-specific analysis enables us to compare enrollees who received HRSN services broadly versus those who received HTS specifically, while adjusting for differences in observed characteristics. By doing so, we can assess whether the expansion of services over time leads to different patterns in emergency department utilization, while ensuring that comparisons are made within a consistent policy environment at each stage.

For each phase of the HRSN rollout, we will estimate the following function:

$$Y_i = \alpha + \tau_i(HRSN_i) + \lambda X_i + \epsilon_i,$$

Where $Y_i$ is the outcome of interest, $HRSN_i$ takes a value of 1 if the individual received HRSN services, and $X_i$ represents enrollee characteristics. The symbol $\tau_i$ represents the heterogeneous treatment effect function that it estimated nonparametrically through GRF.

A key advantage of GRF in this analysis is that, despite its flexibility in modeling complex interactions, the estimated treatment effects remain easily interpretable for lay audiences, much like traditional linear regression results. The output provides clear, localized average treatment effects for different subgroups, making it straightforward to communicate how receiving HRSN or HTS services influences utilization. This balance of interpretability and analytical rigor ensures that our findings are both robust for policymakers and accessible to non-technical stakeholders interested in understanding the real-world impact of these Medicaid policy changes.

One consideration of the GRF is that it is more computationally intensive than a traditional regression approach. We believe that we will be able to automate these estimation procedures across a range of outcomes and populations. In the event that this is not feasible, we will assess other approaches, including a pre-post analysis that would focus on changes in outcomes among people who receive HRSN.

As details of the HRSN benefit are clarified, we will assess other modeling approaches, including interrupted time series and difference-in-differences. We note that the CMS Evaluation Design Technical Assistance Guide for Section 1115 Demonstrations: Health-Related Social Needs recommends that evaluators consider a difference-in-differences regression model if data from other states are available. Theoretically, we could use TAF data to create a cohort of data from other states and then use the implementation dates of HRSN implementation dates to serve as a "post" period. Alternatively, if different regions roll out their HRSN implementations in a staggered fashion, this may create opportunities for a difference-in-difference approach using data within Washington.

For each quantitative analysis, we will also conduct analyses for race and ethnicity subgroups, rural vs. urban populations, and gender.

Additional design considerations

Where possible, we will implement sub-setting or stratification characteristics based on pre-intervention data. This will involve identifying relevant characteristics and ensuring they are measured prior to the implementation of the reform. By doing so, we aim to mitigate endogeneity concerns and enhance the validity of our analysis. In scenarios where defining sub-setting characteristics prior to the demonstration start is infeasible, we will explore the use of separate modeling approaches.

While we are committed to incorporating these methodologies, it is essential to retain some flexibility in our approach. The dynamic nature of Medicaid reforms and the variability in data availability necessitates an adaptable research design. We will continuously assess the feasibility and appropriateness of these methods throughout the evaluation process. We will regularly review the implementation of these strategies and make adjustments as necessary. This iterative process will help ensure that our evaluation remains methodologically sound and aligned with the objectives of the reform.

Qualitative approach

Our qualitative work will include two components. The first component will focus on questions of implementation. We will examine how HRSN implementation happened and if it happened as envisioned, identify the factors that functioned as facilitators or barriers to implementation, and determine the strategies and tools used to identify beneficiaries with social risk factors and facilitate beneficiary participation. We will also query about the types of services being deployed across different regions, assessing, for example, the extent to which housing capacity may inhibit opportunities to expand housing supports or how the availability of social services and participating community organizations may change over time.

To assess these questions, we will purposively select approximately 20-25 key informants working to implement and operationalize the HRSN demonstration. We anticipate this will include state, MCO, ACH administrators, and Community Hub care coordinators managers. We will also interview approximately 12-15 representatives from community-based organizations across the state that deliver HRSN services. We will select these informants to maximize variation in organization type, geographic region, service provided, and role.

To answer IQ7 ("How does the local availability of and investment in social services outside of the demonstration (such as housing supports) change during the demonstration?"), we plan to conduct follow-up interviews with a selected group of key informants approximately one year after the first interview is conducted. The first interviews will be 45-60 minutes in length; follow-up interviews will be shorter (approximately 30 minutes long) and focus on IQ7. Once the state submits the Protocol for HRSN Infrastructure and the Protocol for HRSN Services, we will include those documents in our analysis and revise the data collection plan accordingly.

The second component of our qualitative work will focus on appreciating beneficiaries' understanding of the HRSN benefit and their experience with it, including the role HRSN services have in mitigating beneficiary needs and how these services affect preventive and routine care utilization and physical and mental health outcomes. The evaluator will work with HCA and Washington's MCOs to secure data for a representative beneficiary population eligible for the HRSN services.

HRSN beneficiaries will be purposively selected to maximize variation on key subpopulations of interest, which we will modify with input from the state. We will exclude American Indians and Alaska Natives (AI/AN) from this sample as they will be the focus of data collection and analysis in Section 15 (Native Hub). We will plan to oversample for underrepresented groups as needed to ensure that saturation is reached. For child beneficiaries who are children (newborns to 18), we will interview a primary caregiver.

To accomplish this, we will work with and leverage state infrastructure. Interviews will be conducted by video or telephone as needed. Interviews will be approximately 30 minutes in length and audio-recorded with permission. Participants will receive a $30 gift card as a "thank you."

Interview data will be collected and analyzed in the same manner described in Section 5, with the exception of follow-up interviews, which will be shorter.

**Methodological Limitations.** The primary limitation of this approach is the uncertainty around HRSN, how it will be implemented, and whether we will be able to consistently identify enrollees who receive HRSN and link those connections to claims data. An additional limitation is the extent to which new data structures can be created to capture HRSN services accurately since these will look different than traditional medical claims data.

# Section 15: Native Hub

## General Background Information

The Native Hub is a new component of MTP 2.0. In a government-to-government relationship, the state will work with Tribes to create a single statewide Native Hub to provide navigation services and support similar to the nine community hubs. The Native Hub is a network of Tribes, Indian Health Care Providers (IHCPs), Tribal social service divisions, and Native-led, Native-serving organizations providing HRSN services for targeted populations, focusing on American Indian and Alaska Native beneficiaries. Washington's Medicaid beneficiaries who identify as American Indian and Alaska Native are predominantly covered by Washington's fee-for-service program (i.e., not enrolled in a managed care plan).

The Native Hub is designed to support whole-person care coordination, including assessments of what types of care individuals receive, whether they have an established care coordinator, and connecting with others, providing HRSN services across the state as a source of information and best practices. The Native Hub is also charged with providing closed-loop referrals to other organizations based on a collective database populated by others serving Native people.

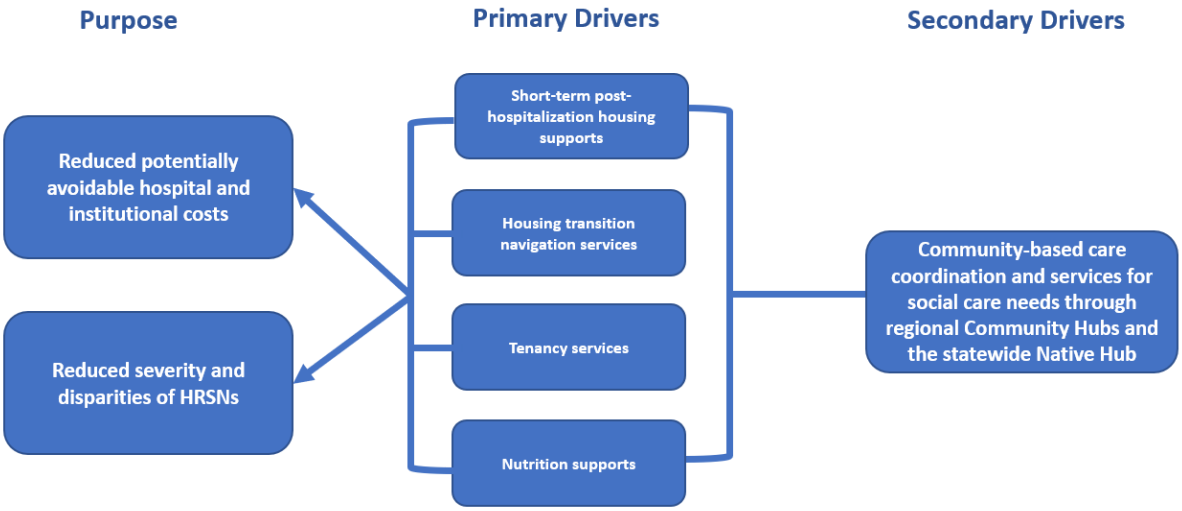
Additionally, the Native Hub seeks to raise awareness among managed care organizations, large medical systems, and state agencies of the role Tribes and IHCPs play in caring for Native individuals. Due to the complexities of American Indians and Alaska Natives as a political status, which allows for certain unique rules in health care purchasing and policy, it is not uncommon for the relationship between an individual and the IHCP as the primary medical home to be broken.

The unique rules and challenges that exist for Indian health care purchasing and policy are the context within which an evaluation must occur. Experts exist who understand the cultural and political realities that Tribes, IHCPs, and Native individuals are faced with when navigating the health care system. It will be imperative to this evaluation to connect with some of those experts in order to properly evaluate if the Native Hub is successful.

## Evaluation Questions and Hypotheses

**Driver Diagram.** Exhibit 15.1 below depicts the relationship between the initiative's purpose to improve health outcomes and reduce unnecessary medical service use and the primary and secondary drivers that are necessary to achieve this overall goal. Four primary drivers contribute directly towards achieving the initiative's purpose, with one secondary driver necessary to support the primary drivers.

**Exhibit 15.1. Driver Diagram**




Our evaluation questions parallel those described in our overall HRSN services evaluation. In addition, we will examine the ability of the Native Hub to create capacity in Indian Country and the development of cross-system connections and awareness. We will assess implementation questions and research questions that assess the effectiveness of the Native Hub.

Within the context of the Native Hub and Indian Country, we will address the following hypotheses.

- **H1.** The Native Hub will meet or reduce the severity of HRSN for American Indian and Alaska Native beneficiaries.
- **H2.** By meeting or reducing the severity of HRSN, the Native Hub will increase American Indian and Alaska Native beneficiaries' use of preventive and routine care and reduce their use of potentially avoidable hospital and institutional care (ED visits, inpatient care, and nursing facilities).
- **H3.** By meeting or reducing HRSN, the Native Hub will improve physical and mental health outcomes among beneficiaries overall and among American Indian and Alaska Native beneficiaries.

## Methodology

**Evaluation Design.** Our research questions will focus on quantitative analyses of claims-based outcomes led by the IEE team and qualitative interviews with American Indian and Alaska Native enrollees led by an Indigenous subcontractor to assess their experiences with access to and quality of care. Qualitative data will inform and explain quantitative findings.

**Target and Comparison Populations.** The target population consists of Washington American Indian and Alaska Native Medicaid enrollees receiving HRSN services. Our primary analyses will not include a comparison population.

**Evaluation Period.** We propose to analyze data for January 1, 2023, through June 30, 2028, assuming that the Native Hub will be providing HRSN services beginning on July 1, 2024 (allowing us 12 months of

observation prior to the provision of HRSN services) and further assumes that claims data for CY 2028 are available on January 1, 2029.

**Evaluation Measures.** We propose using the following evaluation measures.

**Table 15.1. Evaluation Measures**

| Research Question | Outcome measures used to address the research question | Sample or population subgroups to be compared | Data Sources | Analytic Methods |
|---|---|---|---|---|
| Goal: Reduce HRSN<br>**Native Hub Hypothesis 1: The Native Hub will meet or reduce the severity of HRSN for American Indian and Alaska Native beneficiaries.** | | | | |
| Native Hub Research Question 1.1: How does the HRSN demonstration impact the use of HRSN services for American Indian and Alaska Native beneficiaries? | • Number of American Indian and Alaska Native beneficiaries receiving HRSN services<br>• Types of HRSN services received (including Phase 1a, Phase 1b, and later Phase services, described above in Section 14.<br>• Percent of American Indian and Alaska Native beneficiaries who received more than 1 HRSN service | American Indian and Alaska Native Medicaid enrollees | ICDB supple-mented with HRSN data. Additional work needed to identify what data may be available as appropriate; ProviderOne | Descriptive analysis of quarterly trends |

(continued)

**Table 15.1. Evaluation Measures (continued)**

| | | | | |
|---|---|---|---|---|
| Native Hub Research Question 1.2: Among American Indian and Alaska Native beneficiaries, how does the HRSN demonstration impact rates of HRSN and their severities? | • Receipt of Substance Use Disorder Treatment for Medicaid Beneficiaries Following Release from a Correctional Facility<br>• Receipt of Outpatient Mental Health Treatment for Medicaid Beneficiaries Following Release from a Correctional Facility.<br>• Employment (Percentage of enrollees ages 18 to 64 with any earnings in the year, as reported by the Washington State Employment Security Department)<br>• Arrest Rate (Percentage of enrollees ages 18 to 64 years of age who were arrested at least once in the year, as reported by the Washington State Patrol.)<br>• The percentage of Medicaid enrollees who were homeless in at least one month in the measurement year (referred to as HOME-N)<br>• The percentage of Medicaid enrollees who were homeless or unstably housed in at least one month in the measurement year (HOME-B) | American Indian and Alaska Native Medicaid enrollees | ICDB supple-mented with HRSN data. Additional work needed to identify what data may be available as appropriat e; ProviderOn e | Generalized Random Forest |
| Goal: Improve the use of preventive care<br>**Native Hub Hypothesis 2: By meeting or reducing the severity of HRSN, the Native Hub will increase American Indian and Alaska Native beneficiaries' use of preventive and routine care and reduce their use of potentially avoidable hospital and institutional care (ED visits, inpatient care, and nursing facilities).** | | | | |
| Native Hub Research Question 2.1: How does the Native Hub impact beneficiaries' use of preventive and routine care? | • Primary Care Visits<br>• Childhood Immunization Status<br>• Immunizations for Adolescents<br>• Lead Screening in Children<br>• Cervical Cancer Screening<br>• Chlamydia Screening in Women | American Indian and Alaska Native Medicaid enrollees | ICDB supple-mented with HRSN data. Additional work needed to identify what data may be available as appropriate; ProviderOne | Pre-post analysis |

(continued)

**Table 15.1. Evaluation Measures (continued)**

| | | | | |
|---|---|---|---|---|
| Native Hub Research Question 2.2: How does the HRSN demonstration impact beneficiaries' use of hospital and institutional care? | • Plan All-Cause Readmissions<br>• Acute Hospital Utilization<br>• Emergency Department Utilization | American Indian and Alaska Native Medicaid enrollees | ICDB supple-mented with HRSN data. Additional work needed to identify what data may be available as appropriate; ProviderOne | Pre-post analysis |

**Data Sources**. We will use a variety of data sources, including the ICDB (which includes data on social outcomes, including homelessness, criminal justice involvement, and employment) and coordination with managed care organizations and HCA, to identify registries of patients receiving HRSN services. We will consult with HCA's Office of Tribal Affairs on issues pertaining to data sovereignty. The Indigenous subcontractor will also coordinate with HCA and managed care plans to identify a representative beneficiary population eligible for qualitative interviews.

**Analytic Methods.**

Quantitative approach

Our study will encompass both descriptive and comparative analyses. The descriptive component will focus on quantifying the utilization of HRSN services among enrollees, including the variety of services used. We will also assess demographic and regional trends in HRSN usage and the frequency with which American Indian and Alaska Native enrollees access HRSN services through the Native Hub.
Analyses of social outcomes (homelessness, criminal justice involvement, employment) and utilization (e.g., outcomes listed in RQ 1.2, RQ 2.1, and RQ 2.2) will follow the approach described in Section 15, using a Generalized Random Forest to flexibly estimate the impact of HRSN services in each phase.

**Methodological Limitations.** The primary limitation of this approach is the uncertainty around HRSN and the Native Hub, including the extent to which we can reliably identify enrollees who receive HRSN through the Native Hub and link those services to claims data. An additional limitation is the extent to which new data structures can be created to capture HRSN services accurately since these will look different than traditional medical claims data.

# Section 16: Community Hubs

## General Background Information

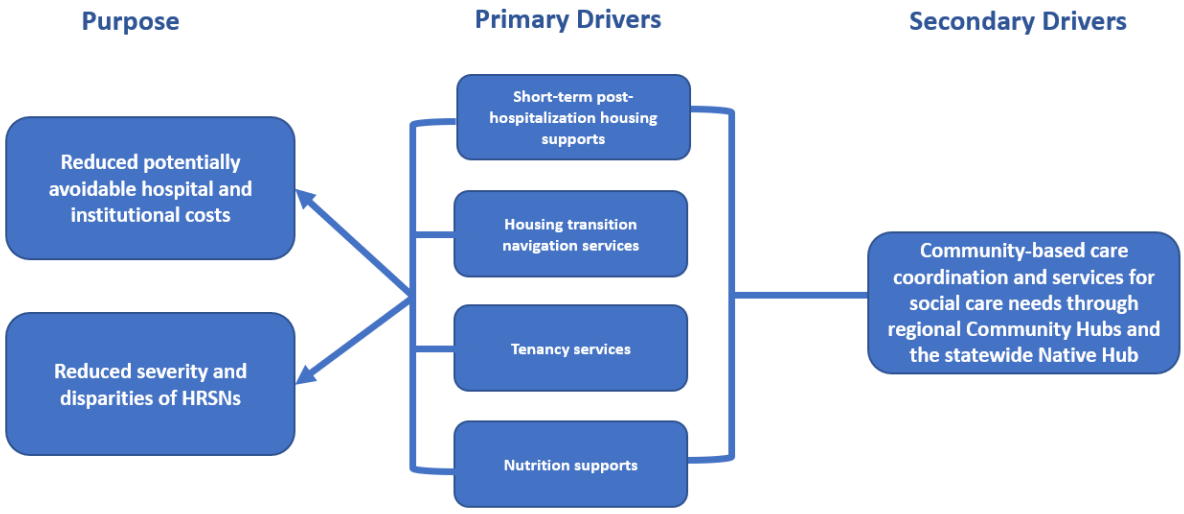
The Community Hub (referred to by the State as Community Care Hub) is a new component of MTP 2.0. Nine Community Hubs will be developed to provide case management, outreach, and education services to eligible individuals and support HRSN administration, in addition to one statewide Native Hub. The Community Hubs will be run by Washington's Accountable Communities of Health (ACHs)—independent entities that have closely partnered with the state and communities to advance Medicaid transformation priorities, including through the original Medicaid Transformation Project demonstration.

Through Community Hubs, eligible individuals will benefit from enhanced community-based care coordination and connection to appropriate community resources and organizations. Community Hubs are intended to play a critical role in pinpointing both community-wide and individual unmet HRSNs, connecting a network of community organizations to guarantee that individuals are linked to essential community services and support systems.

## Evaluation Questions and Hypotheses

**Driver Diagram.** Exhibit 16.1 below depicts the relationship between the initiative's purpose to improve health outcomes and reduce unnecessary medical service use and the primary and secondary drivers that are necessary to achieve this overall goal. In this example, we focus on housing supports. As HRSN services are more clearly defined, we will extend these drivers to focus on other core services. In this example, four primary drivers contribute directly towards achieving the initiative's purpose, with one secondary driver necessary to support the primary drivers.

**Exhibit 16.1. Driver Diagram**



Our evaluation of Community Hubs will be conducted in parallel with our overall HRSN services evaluation, with a focus on differences within the nine individual Community Hubs.
We will assess the following evaluation and implementation questions:

**H1.** In each of the nine Community Hubs, the demonstration will effectively meet or reduce the severity of HRSN for individuals.
**H2.** Community Hubs will improve the connection to community-based, non-clinical care.
**H3.** Community Hubs will reduce the use of acute care and reduce reliance on potentially avoidable hospital and institutional care (such as ED visits, inpatient care, and nursing facilities).

**I1.** How does heterogeneity across ACHs influence the design and operationalization of Community Hubs?
**I2.** How do local factors serve as barriers or facilitators in standing up Community Hubs?
**I3.** How do Community Hubs differ in the types of HRSN services they plan to emphasize? What explains those differences?
**I4.** What infrastructure do Community Hubs develop or acquire?
**I5.** How does the local availability of and investment in social services influence the work of Community Hubs?

**Inclusion of Native Hub as part of Community Hub interviews.** Implementation questions IQ1-IQ5 focus on Community Hubs. However, we will include interviews of stakeholders and administrators involved in the Native Hub for questions IQ2-IQ5 in order to provide additional information that compares how these work is structured and operationalized. The manner in which this inclusion takes shape will depend in part on the planning and design of the Native Hub.

## Methodology

**Evaluation Design.** To evaluate the implementation questions (IQ 1-5), we will collect relevant documents related to the Community Hub demonstration and conduct semi-structured interviews with Community Hubs, Health Department and Care Connect administrators across the nine regions across the state. Evaluation of hypotheses and research questions will focus on quantitative analyses of claims-based outcomes. Qualitative data will inform and explain quantitative analyses.

**Target and Comparison Populations.** The target population consists of Medicaid enrollees receiving HRSN services. Our primary analyses will not include a comparison population.

**Evaluation Period.** We propose to analyze data for January 1, 2023, through June 30, 2028, assuming that the Community Hubs will be providing HRSN services beginning on July 1, 2024 (allowing us 12 months of observation prior to the provision of HRSN services) and further assumes that claims data for CY 2028 are available on January 1, 2029.

**Evaluation Measures.** We propose using the following evaluation measures.

**Table 16.1. Evaluation Measures**

| Research Question | Outcome measures used to address the research question | Sample or population subgroups to be compared | Data Sources | Analytic Methods |
|---|---|---|---|---|
| Goal: Deploy and provide HRSN services to reduce severity of HRSN.<br>**HRSN Infrastructure Hypothesis 1: In each of the nine Community Hubs, the demonstration will effectively meet or reduce the severity of HRSN for individuals.** | | | | |
| **HRSN Infrastructure Research Question 1.1:** What are the variations in the rates of HRSN service use across different Community Hubs? | • Number of people receiving HRSN services<br>• Types of HRSN services received, including<br><br>**Phase 1a Services**<br>• Case management \<br>• Outreach<br>• Education<br><br>**Phase 1b Services**<br>• Housing transition<br>• Navigation services<br>• Rent/temporary housing<br>• Medical respite (e.g., recuperative care and short-term post-hospitalization housing. Launch date: July 2025)<br><br>**Later Phase Services**<br>• Nutrition supports<br>• Stabilization centers*<br>• Day habilitation*<br>• Caregiver respite<br>  • Home accessibility, remediation, and adaptation services<br>  • Community transition services<br><br>• Percent of people who received more than 1 HRSN service<br>*pending future rate methodology approvals of the services | Likely to be an enrollment file from Hubs that will flag HUB enrollment for individuals; Additional work needed to identify what data may be available as appropriate; ProviderOne | Inclusion of this variable is tentative. If the service is billed to Medicaid (as a claim or encounter) then this will be feasible. If not, additional data will be required from facilities and/or HUBs. | Descriptive analysis of differences across hubs |

(continued)

**Table 16.1. Evaluation Measures (continued)**

| | | | | |
|---|---|---|---|---|
| HRSN Infrastructure 1.2: How does the HRSN demonstration impact outcomes related to social determinants of health across different Community Hubs? | • Receipt of Substance Use Disorder Treatment for Medicaid Beneficiaries Following Release from a Correctional Facility<br>• Receipt of Outpatient Mental Health Treatment for Medicaid Beneficiaries Following Release from a Correctional Facility.<br>• Employment (Percentage of enrollees ages 18 to 64 with any earnings in the year, as reported by the Washington State Employment Security Department)<br>• Arrest Rate (Percentage of enrollees ages 18 to 64 years of age who were arrested at least once in the year, as reported by the Washington State Patrol.)<br>• The percentage of Medicaid enrollees who were homeless in at least one month in the measurement year (referred to as HOME-N)<br>• The percentage of Medicaid enrollees who were homeless or unstably housed in at least one month in the measurement year (HOME-B)<br>• | Eligible Medicaid enrollees, including HRSN beneficiaries | ICDB supple-mented with JBRS and HRSN data | Generalized Random Forest for each hub |
| Goal: Improve the use of preventive care<br>**HRSN Infrastructure Hypothesis 2: Community Hubs will improve the connection to community-based, non-clinical care.** | | | | |
| HRSN Infrastructure Research Question 2.1: How does the HRSN demonstration impact beneficiaries' use of preventive and routine care across different Community Hubs? | • Primary Care Visits<br>• Childhood Immunization Status<br>• Immunizations for Adolescents<br>• Lead Screening in Children<br>• Cervical Cancer Screening<br>• Chlamydia Screening in Women | Eligible Medicaid enrollees, including HRSN beneficiaries | ICDB supple-mented HRSN data | Generalized Random Forest for each hub |

(continued)

**Table 16.1. Evaluation Measures (continued)**

| | | | | |
|---|---|---|---|---|
| Goal: Reduce the use of acute care and institutional care<br>**HRSN Infrastructure Hypothesis 3: Community Hubs will reduce the use of acute care and reduce reliance on potentially avoidable hospital and institutional care (such as ED visits, inpatient care, and nursing facilities).** | | | | |
| HRSN Infrastructure Research Question 3.1: How does the HRSN demonstration impact the use of hospital and institutional care across different Community Hubs? | • Plan All-Cause Readmissions<br>• Acute Hospital Utilization<br>• Emergency Department Utilization | Eligible Medicaid enrollees | ICDB supple-mented HRSN data | Generalized Random Forest for each hub |

**Table 16.2. Implementation Questions**

| | | | | |
|---|---|---|---|---|
| **Implementation questions assessed via qualitative analyses** | | | | |
| HRSN Infrastructure Implementation Question 1: How does heterogeneity across ACHs influence the design and operationalization of Community Hubs? | - Understanding of differences in the development of Community Hubs | State Medicaid administrators; representatives from ACHs; MCO representatives | Key informants | Qualitative analysis<br><br>Document review |
| HRSN Infrastructure Implementation Question 2: How do local factors serve as barriers or facilitators in standing up Community Hubs? | - Identification of barriers and facilitators to implementing HRSN | State Medicaid administrators; representatives from ACHs; MCO representatives | Key informants | Qualitative analysis<br><br>Document review |
| HRSN Infrastructure Implementation Question 3: How do Community Hubs differ in the types of HRSN services they plan to emphasize? | - Identification of differences among types of HRSN services emphasized by specific community Hubs | State Medicaid administrators; representatives from ACHs; MCO representatives | Key informants | Qualitative analysis<br><br>Document review |
| HRSN Infrastructure Implementation Question 4: What infrastructure do Community Hubs develop or acquire? | - Identification of Community Hub infrastructure development | State Medicaid administrators; representatives from ACHs; MCO representatives | Key informants | Qualitative analysis<br><br>Document review |
| HRSN Infrastructure Implementation Question 5: How is the local availability of and investment in social services influence the work of Community Hubs? | - Identification of variation in local availability and investment in social services across specific Community Hub service areas | State Medicaid administrators; representatives from ACHs; MCO representatives | Key informants | Qualitative analysis<br><br>Document review |

**Data Sources**. We will use a variety of data sources, including the ICDB (which includes data on social outcomes, including homelessness, criminal justice involvement, and employment), and coordination with managed care organizations and HCA to identify registries of patients receiving HRSN services. We will also coordinate with HCA and managed care plans to identify key informants, including a representative beneficiary population eligible for qualitative interviews.

**Analytic Methods.**

Quantitative approach

Our study will encompass both descriptive and comparative analyses. The descriptive component will focus on quantifying the utilization of HRSN services among enrollees and assessing differences across Community Hubs.

Analyses of social outcomes (homelessness, criminal justice involvement, employment) and utilization (e.g., outcomes listed in RQ 1.2, RQ 2.1, and RQ 3.1) will follow the approach described in Section 15, using a Generalized Random Forest to flexibly estimate the impact of HRSN services in each phase. We will conduct separate outcomes for each HUB.

Qualitative approach

Our qualitative work will examine how Community Hub implementation happened and if it happened as envisioned, identifying how certain factors functioned as facilitators or barriers to implementation and how this varied based on local conditions and ACH attributes. We will also identify the strategies and tools key entities use to address challenges.

To assess these questions, we will purposively select approximately 15-20 key informants working to implement and operationalize Community Hubs. Participants will include representatives from Community Hubs, HCA, and Care Connect administrators working to implement and operationalize the Community Hubs across the 9 ACHs. We will select informants to maximize variation in organization type, geographic region, and role.

**Methodological Limitations.** The primary limitation of this approach is the uncertainty around HRSN and the Community Hubs, including the extent to which we can reliably identify individuals who receive HRSN through the Community Hubs and link those services to claims data. An additional limitation is the extent to which new data structures can be created to capture HRSN services accurately since these will look different than traditional medical claims data.

## SECTION 17: References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# ATTACHMENTS

# Attachment 1: Independent External Evaluator

For the broader 1115 Waiver evaluation, Washington selected an independent external evaluator (IEE) that has the expertise, experience, and impartiality to conduct a sophisticated program evaluation that meets all requirements specified in the Special Terms and Conditions including specified reporting timeframes. Oregon Health Sciences University (OHSU) was selected after an RFP process. Required qualifications and experience included:

- Multi-disciplinary health services research skills and experience;
- An understanding of and experience with the Medicaid program;
- Familiarity with Washington State Medicaid programs and populations;
- Experience assessing the ability of health IT ecosystems to support delivery system and payment reforms, including issues related to governance, financing, policy/legal issues and business operations;
- And experience conducting complex, multi-faceted evaluations of large, multi-site health and/or social services programs.

Potential evaluation entities were assessed on their relevant work experience, staff expertise, data management and analytic capacity, experience working with state agency program and research staff, proposed resource levels and availability of key staff, track record of related publications in peer-reviewed journals, and the overall quality of their proposal. Proposed deliverables must meet all standards of leading academic institutions and academic journal peer review. In the process of identifying, selecting, and contracting with an independent external evaluator, the State acted appropriately to prevent a conflict of interest with the independent external evaluator. The independent external evaluator has no affiliation with ACHs or their providers.

After discussion with CMS, Washington received approval to use OHSU as the Independent External Evaluator for the SMI/SED amendment evaluation.

The IEE certifies that, to the best of its knowledge, there exists no actual or potential conflict between the business or economic interests of Evaluator, its employees, or its agents, on the one hand, and the business or economic interests of the State, on the other hand, arising out of, or relating in any way to, the subject matter of the proposed evaluation plan. If any changes occur with respect to the IEE's status regarding conflict of interest, the IEE shall promptly notify the State in writing. The IEE will conduct evaluation activities in an independent manner in accordance with the CMS-approved draft evaluation design.

## Attachment 2: Evaluation Budget

The budget for the full evaluation contract totals $13,344,075 over five and a half years (Q3 2024 – Q4 2029). This anticipated full Independent Evaluator budget is inclusive of all staff, administrative, and other costs, with two exceptions: the proposed budget includes Native Hubs quantitative (claims-based) evaluation. Washington's Health Care Authority (HCA) will explore with the Office of Tribal Affairs any additional evaluation needs and data questions that are Tribal specific. This will be addressed in a different workstream and not part of the OHSU evaluation. Second, HCA will explore the option of a beneficiary survey for the MAC/TSOA program; its implementation will be performed as funding resources allow.

**Table A – MTP 2.0 Evaluation 5-Quarter Proposed Budget**

| # | Deliverable | Due | Deliverables Total |
|---|---|---|---|
| **1. Ongoing communications with HCA on waiver and evaluation progress** | | | |
| 1.1.1-1.1.3 | Detailed Project Analytic Plans (1.1.1 includes analytic plans for 9 projects, 1.1.2 includes analytic plans for 4 projects, both for interim report; 1.1.3 includes updates to 13 analytic plans for summative report) | Q4 2024; Q3 2025 Q1 2028 | 293,904 |
| 1.2.1 - 1.2.13 | Institutional Review Board Approvals for 13 projects | Q3 2024 - Q3 2025 | 256,210 |
| 1.3.1 - 1.3.16 | Progress presentations (quarterly, 16 total) | Q4 2024 - Q2 2029 | 886,000 |
| | | **subtotal** | **$1,436,114** |
| **2. Collect and Analyze Qualitative Data** | | | |
| 2.1.1-2.1.2 | Foundational Community Supports Interviews | Q4 2024; Q3 2025 | 193,836 |
| 2.2.1-2.2.2 | MAC and TSOA Interviews | Q4 2024; Q3 2025 | 302,026 |
| 2.3.1-2.3.2 | SUD Waiver Interviews | Q3 2026; Q2 2027 | 168,275 |
| 2.4.1-2.4.2 | SMI/SED IMD Waiver Interviews | Q3 2027; Q2 2028 | 168,275 |
| 2.5.1-2.5.2 | Continuous Eligibility Children 0-5 Interviews | Q2 2025; Q2 2027 | 290,135 |
| 2.6.1 - 2.6.2 | Continuous eligibility for postpartum individuals Interviews | Q3 2025; Q2 2027 | 204,425 |
| 2.7.1 - 2.7.2 | Reentry Interviews | Q4 2026; Q2 2028 | 293,650 |
| 2.8.1 - 2.8.2 | Contingency Management Interviews | Q4 2025; Q3 2027 | 223,242 |
| 2.9.1 - 2.9.2 | HRSN Benefit Interviews | Q4 2026; Q3 2028 | 594,267 |
| 2.10.1, 2.10.2 | Community Hubs Interviews | Q4 2026; Q3 2028 | 259,200 |
| | | **subtotal** | **$2,697,331** |
| **3. Analyze Quantitative Data** | | | |
| 3.1.1-3.1.5 | Production and validation of baseline measures (statewide and by specific populations as delineated in the project plan) | Q2 2026 - Q2 2028 | $1,854,080 |
| 3.2.1-3.2.16 | Quarterly updates to performance measures and models, starting Q3 2024 (these inform quarterly progress updates, tasks 1.3.1 - 1.3.16) | Q3 2024- Q2 2028 | 858,675 |
| | | **subtotal** | **$2,712,755** |

Table A, continued

| **4. Reports** | | | |
|---|---|---|---|
| 4.1 | Draft Interim Evaluation Report (estimated deadline 4/30/27) | Q2 2027 | 1,716,475 |
| 4.2 | Final Interim Report (estimated deadline 6/30/27) | Q2 2027 | 672,475 |
| 4.3 | Draft SUD Midpoint Assessment (estimated deadline 6/26/26) | Q2 2026 | 248,525 |
| 4.4 | Final SUD Midpoint Assessment (estimated deadline 8/28/26) | Q3 2026 | 182,625 |
| 4.5 | Draft SMI IMD Midpoint Assessment Report (estimated deadline 6/26/26) | Q2 2026 | 251,175 |
| 4.6 | Final SMI Midpoint Assessment Report (estimated deadline 8/28/26) | Q3 2026 | 168,225 |
| 4.7 | Draft Reentry Midpoint Assessment Report (due 5/26/28) | Q2 2028 | 251,175 |
| 4.8 | Final Reentry Midpoint Assessment Report (estimated deadline 7/31/28) | Q3 2028 | 168,225 |
| 4.9 | Draft Summative Evaluation Report (estimated deadline 9/30/29) | Q3 2029 | 1,937,775 |
| 4.10 | Final Summative Evaluation Report (estimated deadline 12/30/29) | Q4 2029 | 901,200 |
| | | **subtotal** | **$6,497,875** |
| **MTP 2.0 Evaluation full-waiver (5.5 years) budget proposal total** | | **$13,344,075** | |

## Attachment 3: Evaluation Timeline and Milestones

| Deliverable | Responsible Party | Date |
|---|---|---|
| **Draft Evaluation Design** | State | January 26, 2024 |
| - Comments from CMS | CMS | 60 days from receipt |
| - Final evaluation design | State | 60 days from receipt |
| **Institutional Review Board updates obtained** | State | Q1 2052- Q4 2025 |
| **Quarterly briefings** from independent external evaluator to highlight key findings from quarterly activities, data analysis, reflections and insight on the implementation of projects drawing on key informant interviews, document review, meetings attended, and activity review**.** | Independent External Evaluator (IEE) | Beginning February 2025 |
| **Specification for data required from state** including a timeline, data gap analysis, and plan to address data gaps | IEE | As applicable, starting Q1 2025 |
| **Production and validation of baseline measures** (statewide and by specific populations as delineated in project plan) | IEE | Q2 2024 – Q2 2028 |
| **Quarterly, semi-annual, and annual metric updates** (depending on metric frequency) | State | As applicable starting Q2 2025 |
| **State progress reports** will include information on submittals from IE and progress of evaluation. | State | Include in Quarterly and Annual reports |
| **Conduct and Analyze Qualitative Interviews** (key informant interviews for 11 MTP 2.0 projects; additional beneficiary interviews for 5 MTP 2.0 projects) | | Q4 2024 – Q2 2029 |
| **Draft Serious Mental Illness Midpoint Assessment (SMI MPA)** | State | August 28, 2026 |
| - CMS comments | CMS | 60 days from receipt |
| - Final SMI MPA | State | 60 days from receipt of CMS comments |
| **Draft Substance Use Disorder Midpoint Assessment (SUD MPA)** | State | August 28, 2026 |
| - CMS comments | CMS | 60 days from receipt |
| - Final SUD MPA | State | 60 days from receipt of CMS comments |
| **Draft Interim Evaluation Report** | State | June 30, 2027 |
| - CMS comments | CMS | 60 days from receipt |
| - Final Interim Evaluation Report | State | 60 days from receipt of CMS comments |
| **Draft Reentry Midpoint Assessment** | State | July 31, 2028 |
| - CMS comments | CMS | 60 days from receipt |
| - Final Interim Evaluation Report | State | 60 days from receipt of CMS comments |
| **Draft Summative Evaluation Report** | State | December 30, 2029 |
| - CMS comments | CMS | 60 days from receipt |
| - Final Summative Evaluation Report | State | 60 days from receipt of CMS comments |

## Attachment 4: Acronyms List

| | |
|---|---|
| MTP | Medicaid Transformation Project |
| LTSS | Long-term Services and Supports |
| HRSN | Health-Related Social Needs |
| SUD | Substance Use Disorder |
| SMI | Serious Mental Illness |
| SED | Serious Emotional Disturbances |
| IMD | Institutions for Mental Disease |
| MAC | Medicaid Alternative Care |
| TSOA | Tailored Supports for Older Adults |
| FCS | Foundational Community Supports |
| CHIP | The Children's Health Insurance Program |
| LTSS PE | Long-term Services and Supports Presumptive Eligibility |
| CM | Contingency management |
| IEE | Independent External Evaluator |
| ED | Emergency Department |
| HCA | Health Care Authority (Washington) |
| DSHS | Washington State Department of Social and Health Services |
| PHE | Public Health Emergency |
| BIPOC | Black, Indigenous, People of Color |
| MCO | Managed Care Organization |
| ACH | Accountable Communities of Health |
| ICDB | Integrated Client Databases |
| CDPS | Chronic Illness and Disability Payment System |
| HEDIS | Healthcare Effectiveness Data and Information Set |
| T-MSIS | Transformed Medicaid Statistical Information System |
| TAF | T-MSIS Analytic File |
| MAX | Medicaid Analytic eXtract (files) |
| CSS | Community Support Services |
| IPS | Individual Placement and Support |
| ALTSA | Aging and Long-Term Support Administration |
| AAA | Area Agencies on Aging |
| FFP | Federal Financial Participation |
| IMD | Institutions for Mental Disease |
| OUD | Opioid Use Disorder |
| MAT | Medication Assisted Treatment |
| STC | Special Terms and Conditions |
| HCBS | Home and Community-Based Services |
| ACS | American Community Survey |