DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop S2-01-16
Baltimore, Maryland 21244-1850

CENTERS FOR MEDICARE & MEDICAID SERVICES
CENTER FOR MEDICAID & CHIP SERVICES

State Demonstrations Group

OCT 2 6 2017

MaryAnne Lindeblad
Medicaid Director
Washington State Health Care Authority
626 8th Avenue SE
P.O. Box 45502
Olympia, Washington 98504-5502

Dear Ms. Lindeblad:

The Centers for Medicare & Medicaid Services (CMS) has completed its review of the evaluation design for Washington State's section 1115(a) demonstration (Project No. 11-W-00304/0), entitled "Medicaid Transformation Project" (MTP). We have determined that the submission dated October 10, 2017 meets the requirements set forth in the Special Terms and Conditions and hereby approve the MTP evaluation design.

If you have any questions, please do not hesitate to contact your project officer, Mr. Adam Goldman. Mr. Goldman can be reached at (410) 786-2242, or at Adam.Goldman@cms.hhs.gov. We look forward to continuing to partner with you and your staff on the Washington State MTP demonstration.

Sincerely,

[redacted]

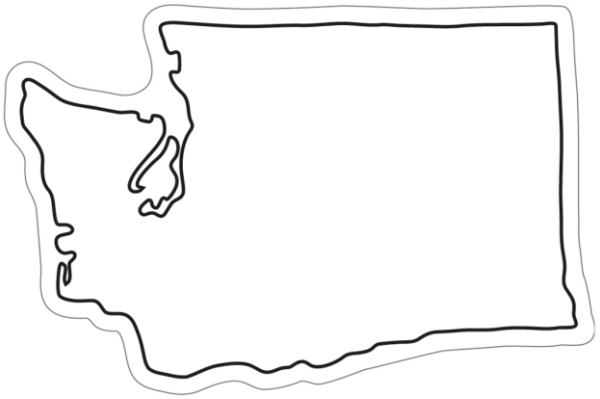
Angela D. Garner
Director
Division of System Reform Demonstrations

Enclosure

cc: David Meacham, Associate Regional Administrator, Seattle Regional Office

Medicaid Transformation Project Demonstration Evaluation Design

Washington State Medicaid Transformation Project
Section 1115(a) Medicaid Demonstration



OCTOBER 9, 2017

Approved January 9, 2017

Last Updated 5/9/2017

Contents

Medicaid Transformation Project Demonstration Evaluation Design

Washington State Medicaid Transformation Project Section 1115(a) Medicaid Demonstration

APPROVED JANUARY 9, 2017

Section 1: Overview of the Medicaid Transformation Project Demonstration

On January 9, 2017, the Centers for Medicare and Medicaid Services (CMS) approved Washington State's request for a Section 1115 Medicaid demonstration entitled Medicaid Transformation Project. The activities under the Demonstration are targeted to transform the health care delivery system to address local health priorities, deliver high-quality, cost-effective care that treats the whole person, and create sustainable linkages between clinical and community-based services. The Demonstration will test changes to payment, care delivery models and targeted services. The Demonstration is approved through December 21, 2021.

Over the next five years, Washington will:

- Integrate physical and behavioral health purchasing and service delivery to better meet whole person needs;
- Convert 90 percent of Medicaid provider payments to reward outcomes instead of volume;
- Support provider capacity to adopt new payment and care models;
- Implement population health strategies that improve health equity; and
- Provide new targeted services that address the needs of the state's aging populations and address key determinants of health.

The state will address the aims of the Demonstration through three programs:

- Delivery System Reform Incentive Payment (DSRIP) Program: Transformation through Accountable Communities of Health
- Long Term Services and Supports (LTSS) - Medicaid Alternative Care (MAC) and Tailored Supports for Older Adults (TSOA)
- Foundational Community Supports (FCS) -Targeted Home and Community-Based Services (HCBS) for eligible individuals.

DSRIP Program: Transformation through Accountable Communities of Health

This initiative aims to transform the health care delivery system through regional, collaborative efforts led by ACHs. ACHs are self-governing organizations comprised of multiple community representatives, and focused on improving health and transforming care delivery for the populations that live within the region. Providers within ACH regions will partner to implement evidence-based programs and promising practices, as defined in the DSRIP Planning Protocol (Attachment C), that address the needs of Medicaid beneficiaries.

Each ACH, through its partnering providers, is required to implement at least four transformation projects from the Transformation Project Toolkit and participate in statewide capacity building efforts to address the needs of Medicaid beneficiaries. Project performance will be measured based on state-defined milestones and metrics that track project planning, implementation, and sustainability. Transformation projects are spread across three domains:

- ***Domain 1: Health Systems and Community Capacity Building:*** This domain addresses the core health system capacities to be developed or enhanced to support delivery system transformation. Domain 1

outlines three required focus areas to be implemented and expanded across the delivery system, inclusive of all provider types, to benefit the entire Medicaid population.

- ***Domain 2: Care Delivery Redesign:*** Transformation projects within this domain focus on innovative models of care that will improve the quality, efficiency, and effectiveness of care processes. Person-centered approaches and integrated models are emphasized. Domain 2 includes one required and three optional projects. ACHs are required to select at least one of the optional projects for a minimum of two Domain 2 projects in total.
- ***Domain 3: Prevention and Health Promotion:*** Transformation projects within this domain focus on prevention and health promotion to reduce disparities and achieve health equity across regions and populations. Domain 3 includes one required and three optional projects. ACHs are required to select at least one of the optional projects for a minimum of two Domain 3 projects in total.

The domains, and the strategies defined within each domain, are interdependent. Domain 1 is focused on system wide planning and capacity building to reinforce transformation projects. Domain 1 strategies are to be tailored to support efforts in Domain 2 and Domain 3; projects in Domain 2 and Domain 3 integrate and apply Domain 1 strategies to the specified topics and approaches. In addition to the foundational activities in Domain 1, the Transformation Project Toolkit includes eight projects areas.

TABLE 1.
Menu of Transformation Projects

Domain 1	Health and Community Systems Capacity Building	
		Financial Sustainability through Value-based Payment
		Workforce
		Systems for Population Health Management
Domain 2	Care Delivery Redesign	
Project	2A	Bi-directional Integration of Physical and Behavioral Health through Care Transformation *(Required)*
Project	2B	Community-Based Care Coordination
Project	2C	Transitional Care
Project	2D	Diversion Interventions
Domain 3	Prevention and Health Promotion	
Project	3A	Addressing the Opioid Use Public Health Crisis *(Required)*
Project	3B	Reproductive and Maternal/Child Health
Project	3C	Access to Oral Health Services
Project	3D	Chronic Disease Prevention and Control

In support of delivery system reform and alignment with the aims of the overall demonstration, this initiative seeks to achieve the following objectives:

- ***Health Systems and Community Capacity.*** Create appropriate health systems capacity in order to expand effective community based-treatment models; reduce unnecessary use of intensive services and settings; and support prevention.
- ***Financial Sustainability through Participation in Value-based Payment.*** Accelerate the transition to paying for value across the continuum of Medicaid services to assure the sustainability of the transformation activities under DSRIP, and support the success of Alternative Payment Models required by the state for Medicaid managed care plans (see: STC 41, Table 1).
- ***Bi-directional Integration of physical and behavioral health.*** Achieve comprehensive integration of physical and behavioral health services through new care models.

- ***Community-based Whole-person Care.*** Use or enhance existing services in the community to promote care coordination across the continuum of health for beneficiaries, ensuring those with complex health needs are connected to the interventions and services needed to improve and manage their health.
- ***Improve Health Equity and Reduce Health Disparities.*** Implement prevention and health promotion strategies for targeted populations to address health disparities and achieve health equity.

Long Term Services and Supports (LTSS) - Medicaid Alternative Care (MAC) and Tailored Supports for Older Adults (TSOA)

Washington is a national leader in providing long-term services and supports (LTSS) to help people remain in their homes and communities, saving billions of dollars over the past two decades. Our LTSS system has sustained AARP's ranking of second in the nation for its high performance, while at the same time ranking among the lowest (34th) in cost. However, our population is aging, increasing the number of individuals who will be in need of these services. By 2040, the number of people 65 and older will more than double. As we age, we often need assistance with daily tasks such as bathing and medication reminders in order to stay in our own homes and communities rather than in expensive institutional care. While we will continue to provide more intensive services to those who need them, the Demonstration will help Washington State prepare for the "age wave." It will test new services and expand existing services traditionally provided outside of Medicaid that support unpaid family caregivers.

This "next generation" system of care will help protect people's savings and provide more support for family members and other unpaid caregivers who provide approximately 80 percent of care to people in need of long-term services and support. The majority of Washingtonians are uninsured for LTSS, with no affordable options for coverage. Individuals and their families often have no practical way to prepare financially for future LTSS needs, except by impoverishing themselves so they are eligible for full-scope Medicaid benefits. To highlight the importance of supporting unpaid caregivers, if just one-fifth of these caregivers stopped providing care, it would double the cost of LTSS in Washington State. Providing care for a family member can be among the most rewarding things a person can do, but it also has challenges. A high proportion of caregivers show increases in stress and effects on their own physical and mental health.

The Demonstration will offer additional choices that are intended to:

- Preserve and promote choice in how individuals and families receive services
- Support families in caring for loved ones while increasing the well-being of caregivers
- Delay or avoid the need for more intensive Medicaid-funded LTSS when possible

Medicaid Alternative Care (MAC) will provide support for unpaid family caregivers who support individuals who are eligible for Medicaid but choose to wrap services around their unpaid caregiver as an alternative to other forms of traditional paid services. This benefit package will provide supports enabling unpaid caregivers to continue to provide high-quality care while also focusing on their own health and well-being. It will include needed services such as training, support groups, respite services, and help with housework, errands, supplies, and home-delivered meals.

Tailored Supports for Older Adults (TSOA) will establish a new eligibility category and benefit package for individuals at risk of future Medicaid LTSS use, who currently do not meet Medicaid financial eligibility criteria, but do meet functional criteria for care. It is designed to help individuals and their families avoid or delay impoverishment and the future need for Medicaid LTSS services, while providing support to individuals and unpaid family caregivers. As with MAC, TSOA will include supports such as training, support groups, respite services, and help with housework, errands, supplies, and home-delivered meals. Individuals who do not have unpaid caregivers will receive services such as personal care, adult day services and home delivered meals.

Foundational Community Supports (FCS) -Targeted Home and Community-Based Services (HCBS) for Eligible Individuals

Demonstration HCBS, Community Transition Services (CTS) and Community Support Services (CSS), will help Medicaid beneficiaries reside in stable community settings.[1] The goal is to enhance the availability of services for those who are the most vulnerable and have complex care needs. The CTS and CSS benefits will provide services that link qualifying Medicaid enrollees to appropriate services, and one-time supports necessary for individuals to avoid more intensive care placements and move into stable community settings. The Demonstration -funded CTS and CSS benefits will not supplant existing services currently available to eligible populations. It will be targeted to serve specific high-risk populations and achieve the following outcomes:

- Support those who are unable to reside in stable community settings
- Decrease dependence on costly or restrictive institutional or residential care
- Provide continuity of care by reducing incidents of eviction and provider turnover
- Support those at highest risk for adverse outcomes

Demonstration-funded supported employment services will help Medicaid enrollees with physical, behavioral, or LTSS service needs gain and maintain stable employment. These services will include individualized job coaching and training, employer relations, and assistance with job placement. Informed by stakeholder engagement and population analysis, four outcomes have been identified and corresponding target populations are proposed. Targeted outcomes include:

- Helping individuals stay engaged in the labor market,
- Preventing the escalation of behavioral health service needs,
- Supporting those with significant long-term services and supports needs, and
- Supporting vulnerable youth and young adults.

In order to be eligible for these services, individuals must receive a needs assessment and meet well-defined housing or employment support need criteria, along with additional risk criteria.

Section 2: Evaluation Goals and Objectives

This section describes the overarching framework for evaluation of Demonstration impacts on delivery systems, clinical care, health outcomes, and costs in Washington State. Evaluation activities will be led by an independent external evaluator and supported by state agency teams with complementary data management and analytic subject matter expertise. Detailed design elements related to qualitative evaluation and quasi-experimental evaluation of ACH projects will be determined in conjunction with the independent external evaluator, and after detailed project design information becomes available from ACH project plans. The evaluation will encompass both an assessment of the impact of the Demonstration on the entire delivery system and evaluation of specific projects implemented under all three initiatives. Evaluation goals will include:

- **Assessment of overall Medicaid system performance under the DSRIP program** in developing community capacity to support health system transformation. This will be based on an assessment of post-demonstration changes in statewide performance levels, relative to pre-demonstration baseline performance levels, across the following measurement domains:[2]

[1] Potential changes to the FCS protocol are currently being reviewed with CMS. This document references FCS program descriptions reflected in the originally approved STCs, for purposes of illustrating the proposed evaluation approach. The final evaluation approach will reflect the actual design of the implemented FCS program.

[2] At this time we cannot commit to a comparison-group approach to measuring statewide Demonstration impacts, primarily due to uncertainty about the availability of the national T-MSIS data necessary for identifying comparison groups and

- Access to primary care, behavioral health care, and other preventive health care services;
- Quality of care;
- Reduction in use of costly ED, inpatient, or institutional care, including through the reduction of utilization for ambulatory care sensitive conditions and reduction of utilization disparities for persons with behavioral health risk factors;
- Social outcomes including housing stability and employment measured using beneficiary-level administrative data drawn from the State's rich integrated data environment (described further below); and
- Overall Medicaid expenditures on a per beneficiary per month basis.

- **Assessment of progress toward meeting VBP penetration targets.** This assessment is expected to be both qualitative and quantitative in nature, based on data sources such as provider surveys, focus groups, key informant interviews, and document review.[3] The independent external evaluator will assess the extent of use of VBP in contracting, the effectiveness of readiness support provided to providers, and the impact of use of VBP approaches on provider/plan behavior, patient health outcomes, and patient experience. This activity will leverage the assessments of the role of VBP approaches at the project scale, as outlined in the project-level evaluation design detail in Section 5.
- **Assessment of the impact of the Demonstration on the development of the workforce capacity needed to support health system transformation.** This assessment is also expected to be both qualitative and quantitative in nature, based on data sources such as:
  - Provider network adequacy information supplied by MCOs;
  - Performance metrics related to access to services, quality of care, and reduction in use of costly inpatient or institutional care; and
  - Provider surveys, focus groups, and key informant interviews, leveraging assessment of workforce capacity at the project scale as outlined in the project-level evaluation design detail in Section 5.
- **Assessment of the impact of the Demonstration on provider adoption and use of health information technology.** The methodology for assessing impacts in this area will be determined by the independent external evaluator and is expected to leverage provider surveys, focus groups, and/or key informant interviews to assess whether the Demonstration has affected the use of electronic and interoperable health information exchange to promote care coordination, targeted services, and positive outcomes of clinical care. As required by STC 109(b), this assessment will examine the extent to which the Demonstration has enhanced the state's health IT ecosystem to support delivery system and payment reform and the impact on ACH and provider partners' governance, financing, policy/legal issues and business operations. This evaluation activity would include providers who are and are not eligible for the Medicaid EHR Incentive Program, with a focus on use of HIT to improve health outcomes for high-risk populations including persons with co-occurring physical and behavioral health conditions. This activity will leverage the assessments of the role of HIT at the project scale, as outlined in the project-level evaluation design detail in Section 5.
- **Measurement of project-level impacts at the state and ACH level.** Outcomes will be assessed for project-specific target populations at the state and ACH level. Outcome measures will be produced centrally leveraging the state's rich integrated data environment and capacity for performance measure

measuring outcomes for beneficiaries drawn from Medicaid populations in other states. At the time of this writing, we note that the evaluation of the impact of Washington State's Health Home program on Medicaid program costs conducted for CMS by RTI, which takes a comparison-state approach using T-MSIS data, is two years overdue as a result of T-MSIS data limitations. We also note that a within-state contemporaneous comparison group cannot be used to measure overall Demonstration impacts, given the statewide scope of the Demonstration.

[3] More detail concerning the types of documents expected to be reviewed is contained in Section 3.

production. Evaluation will not rely on aggregation of performance measures produced separately by ACHs. This allows great flexibility in the creation of valid comparison groups for use in the application of quasi-experimental evaluation techniques, as described below. For projects that are undertaken by multiple ACHs, a comparative analysis will be undertaken to help determine key drivers of outcomes, dependencies and environmental factors that might contribute to positive or negative outcomes for specific projects.[4] As described in the sections that follow, the state will leverage its nation-leading internal analytic capacity and integrated data environment to support the independent external evaluator and provide a data infrastructure able to:

  - Identify beneficiary-level project participation, including potentially overlapping participation across multiple projects and initiatives;
  - Measure project outcomes at the ACH-project scale using statistically valid quasi-experimental evaluation designs; and
  - Assess differences in outcomes across ACHs within project areas based on factors such as differences in target populations (i.e., actual populations served).

- **Rapid-cycle project implementation support (formative evaluation).** Timely implementation reports will especially be useful to inform efforts early in the project implementation process. These reports will be available to CMS if requested. The design and frequency of these reports will be determined in collaboration with the independent external evaluator and ACH partners. An example set of implementation reports would include monthly or quarterly health risk factor profiles of the populations engaged in specific projects/initiatives, compared to target population benchmarks. Such reports would help assess levels of engagement and potential differences across ACHs in the composition of engaged beneficiaries that could inform the early stages of project implementation. Early implementation reports will be mainly used to identify and mitigate risks or take advantage of opportunities to improve project implementation. Later implementation reports will also be used to inform the broader analysis of project impacts and outcomes, in advance of delivery of STC-required evaluation reports in the fourth and fifth years of the Demonstration. These implementation support activities reflect formative evaluation of the development and early implementation of Demonstration-funded initiatives and component projects.

Detailed project-level specification of required evaluation design components is contained in Section 5 and Appendix 1, including project-level descriptions of:

  - Initiative and project goals and objectives
  - Target populations
  - Evaluation questions and testable hypotheses
  - Data strategies, data sources and data collection frequency
  - Outcome metrics
  - The statistical framework for measuring project impacts
  - Potential subgroup analyses to assess disparities and differences in beneficiary engagement and project impacts.

At the state level, data will be analyzed to determine if the Demonstration has affected the pre-Demonstration trajectory of measures of access to care, quality of care, health and social outcomes, and Medicaid cost measures. This will be based on an assessment of post-demonstration changes in statewide performance levels, relative to pre-demonstration baseline performance levels, across the range of

[4] Note that the CMS response to the prior evaluation design draft assumed that ACHs could choose different outcome measures for the same project. However, we anticipate using the same set (or at least a highly overlapping set) of centrally produced measures for all ACH projects within a given project type.

measurement domains described in the previous section.[5] While project-specific evaluations will use quasi-experimental program evaluation techniques focused on targeted project populations, the statewide analysis will include a broader Medicaid population perspective reflecting the potential combined impact of all activities undertaken under the Demonstration. The statewide impact evaluation will also focus on higher-risk beneficiaries who are expected to be significantly positively impacted by Demonstration initiatives, including but not limited to beneficiaries with SMI or co-occurring disorders, with multiple chronic conditions, with functional needs for LTSS services, living in underserved areas, or experiencing baseline disparities in health outcomes. Washington State has significant experience identifying and measuring disparities in access, quality, and health outcomes across these populations.

While the evaluation may not be able to completely isolate the effects of the Demonstration from other policy and program changes and investments under the SIM Grant, differences in timing, specific areas of impact, and target populations will facilitate the measurement of impacts associated with initiatives under the Demonstration. For example, the financial integration of behavioral and physical health services is being instituted under SIM and is expected to be completed by 2020. The financial integration of behavioral and physical health services is seen as a critical support for the effective integration of clinical care. Financial integration is being phased regionally, which will provide the opportunity to compare the effectiveness of Demonstration projects at the ACH scale across regions at the same stage of financial integration. Through the identification of appropriate comparison groups by region, the evaluation should be able to isolate the impact of Demonstration initiatives from financial integration impacts. As discussed further below, propensity score matching methodologies will be used in project-level analyses to ensure the identification of appropriate comparison groups for measuring impacts.

Section 3. Overview of Major Evaluation Components and Activities

This section provides additional detail about the major evaluation activities expected to be undertaken across all three initiatives by the independent external evaluator and state agency evaluation support teams. We start with a description of qualitative methods used to support project implementation and inform quantitative evaluation analyses, and then turn to describing the rigorous quantitative evaluation methods that will leverage the State's advanced integrated analytical environment. Section 5 and Appendix 1 provide detailed project-specific mapping of demonstration hypotheses (STC 108), domains of focus (STC 109), research questions, testable hypotheses, outcome measures, and data sources, for both quantitative evaluation components, along with mapping of demonstration hypotheses, domains of focus, research questions, and testable hypotheses for qualitative evaluation components.

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;
- The level of readiness for the program among stakeholders;
- The effectiveness of VBP readiness support for providers and the impact of use of VBP approaches on provider/plan behavior and patient health outcomes;
- Provider capacity development, including domains such as HIT acquisition and use, VBP use, workforce availability, and workforce readiness/training;

[5] Note that the CMS response to the prior evaluation design draft suggested use of an approach in the spirit of a regression-discontinuity design which would include comparative data on the population "just over the eligibility threshold" for the purposes of state-level evaluation. While this approach may be feasible in the context of evaluating specific projects, it would not be feasible for the evaluation of statewide impacts due to the lack of access to health care encounter data for persons not enrolled in Medicaid.

- How acquisition and use of HIT and health information exchange technologies impact service delivery transformation; and
- Efforts to make the organizational changes necessary to support system transformation.

Qualitative analysis will help inform our understanding of why the Demonstration and its component projects did or did not achieve the expected effects, by exploring:

- Experiences of beneficiaries, providers, and other key stakeholders through focus groups, key informant interviews, and survey methods;
- Contextual changes that might affect outcomes;
- Unintended programmatic side effects; and
- How faithfully projects were implemented.

Qualitative analysis will help make more accessible findings from the quantitative impact analysis, by reinforcing quantitative findings in a non-technical format (e.g., through key-informant quotes, rather than statistics), helping to open the "black box" of program effects.

The design and execution of qualitative methods supporting the evaluation will be the lead responsibility of the independent external evaluator. This responsibility will include: defining the number of focus groups, key informant interviews, and provider surveys; determining the universes and/or sample frames from which participants will be selected; determining when focus groups, interviews, or surveys will be conducted; aligning data collection instruments to specific research questions and hypotheses; and designing the specific data collection instruments. Subjects for qualitative data collection and analysis are expected to include beneficiaries, providers, ACH staff/administrators, MCO staff/administrators, and state agency staff. Individual ACH projects are expected to define strata for sampling of subjects for qualitative analyses, to ensure representation from 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 quasi-experimental evaluation across all three initiatives, including evaluation at the ACH-project scale. The ICDB was explicitly designed to support quasi-experimental evaluation of health and social service interventions in Washington State, and has been widely used in evaluation studies published in peer-reviewed journals.[6]

The ICDB contains nearly 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 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);

[6] For a recent example, see Jingping Xing, Candace Goehring and David Mancuso. Care Coordination Program For Washington State Medicaid Enrollees Reduced Inpatient Hospital Costs Care Coordination Program For Washington State. Health Affairs, 34, no.4 (2015):653-661.

- 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;[7]
- 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.
- With regard to CMS reviewer questions pertaining to how frequently data is collected, the ICDB is updated on a quarterly basis. The ICDB analytical data infrastructure is complemented by a suite of HEDIS and related metric measurement algorithms that currently regularly produce most of the quantitative outcome metrics listed in Section 5 and Appendix 1 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 required for ACH project attribution.

Among the advantages to leveraging the State's nation-leading integrated analytical data environment is the elimination of dependencies on ACHs 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. For example, the addition of "FUA" and "FUM" metrics first implemented in the HEDIS® 2017 provided the state with useful new tools to assess coordination of physical and behavioral health care for persons with co-occurring conditions, and we retroactively produce those measures for prior time periods. Given the active work underway by NQF and NCQA, driven by CMS support, to improve the breadth of quality and outcome measures related to behavioral health conditions, if new measures are developed and released in 2018 or 2019 we would be able to retroactively engineer those measures into baseline time periods for the entire qualifying Medicaid population. This is one of the factors that support the expectation that the measure sets described in this design document may be modified if better performance measurement tools become available in the evaluation window.

Primary data collection for research questions that cannot be addressed using administrative data. Evaluation activities are expected to include key informant interviews, focus groups, stakeholder surveys, document review, and other activities as necessary to inform the qualitative analysis of initiative and project design and implementation. Qualitative analysis will be particularly important in evaluating the impact of DSRIP activities on progress toward meeting VBP penetration targets, the development of workforce capacity, and provider adoption and use of the state's health IT.

Methods such as key informant interviews, focus groups, and stakeholder surveys are expected to be used to assess the extent to which DSRIP funding has enhanced the state's health IT ecosystem to support delivery system and payment reform, with a focus on governance, financing, resolution of policy and legal barriers, and impacts on business operations. As noted elsewhere, the design and execution of qualitative methods supporting the evaluation will be the lead responsibility of the independent external evaluator. This responsibility will include: defining the number of focus groups, key informant interviews, and provider surveys; determining the universes and/or sample frames from which participants will be selected;

[7] For more information about the CDPS and Medicaid-Rx, visit http://cdps.ucsd.edu/.

determining when focus groups, interviews, or surveys will be conducted; aligning data collection instruments to specific research questions and hypotheses; and designing the specific data collection instruments.

Subjects for key informant interviews and focus groups will be identified through consultation with State subject matter experts, and are expected to span the range of Demonstration activities and participants. Data will be collected from state agency staff, ACHs, MCOs, provider organizations, local health jurisdictions, tribes, and other key public and private stakeholders as identified.

Documentation will be identified in consultation with subject matter experts within HCA. Documents would include, but not be limited to, annual updates to the VBP roadmap; the annual VBP provider[8] survey; available documentation and data on provider adoption of VBP; consumer experience surveys, such as the CAHPS[9] survey, provided to Medicaid clients; the HIT strategic roadmap and updates to the operational plan; ACH project plans and implementation plans; Independent Assessor assessments of plans, semi-annual review of ACH progress against miles stones and metrics included in approved project plans, any documents associated with at risk projects, mid-point assessment, and other documents created by the Independent Assessor related to the challenge pool and the reinvestment pool including annual assessments of MCO and ACH performance; and all quarterly reports submitted by HCA to CMS.

In addition, caregiver and care receiver survey data collection is planned to support evaluation of the MAC and TSOA programs. Survey data will mitigate the impact on the evaluation of the absence of comparable health service utilization data for non-Medicaid clients, and lack of LTSS-related functional assessment data for Medicaid clients not receiving LTSS services. More detail about the design and data collection and analysis processes for these surveys is contained in Section 5.

Statewide beneficiary project attribution model. Given the scale of the initiatives and projects supported by the Demonstration, a statewide project attribution data infrastructure will be necessary to support evaluation – in particular evaluation of the Demonstration at the ACH-project scale. The attribution model will capture the timing of beneficiary and/or provider engagement in Demonstration -funded projects across all three initiatives. The model will also identify potentially confounding policy changes and programs, such as participation in Health Homes or regional variation in the timing of implementation of physical and behavioral health integration through fully integrated managed care products. The attribution model will be a foundational data source for implementation of propensity score based quasi-experimental evaluation designs described below.

The attribution model will be based on regularly updated claims, encounters, Medicaid eligibility, and residential location data processed through the ICDB, supplemented where necessary with regularly updated ACH project-specific data streams (e.g., monthly participating beneficiary and/or provider rosters) for ACH projects where claims and encounters processed into the ICDB are not sufficient to identify participating beneficiaries. For initiatives 2 and 3, we have determined that data identifying utilization of Demonstration services will be available through information routinely integrated into the ICDB – for example, supportive housing and supported employment encounters submitted by the third-party administrator (Amerigroup) into the ProviderOne (MMIS) system.

[8] HCA issues an annual value-based payment (VBP) survey to track progress towards the state's paying for value goals, and to identify barriers impeding desired progress. The provider survey will offer valuable insight into the challenges providers face as they consider adopting new payment arrangements and guide state health care purchasing strategies in support of overcoming those challenges. The commercial health plan survey will help HCA track progress towards our paying for value goals, with particular insight into non-state purchased health care programs. The MCO survey will establish a statewide and regional (designated by Accountable Communities of Health) baseline of VBP attainment for requirements under the new Apple Health contracts and VBP incentives under the Medicaid Transformation Demonstration Project, respectively.

[9] The State uses the Adult CAHPS Survey and the Child and Child with Chronic Conditions Survey for Apple Health Medicaid enrollees, with adult and child surveys rotated every other year.

Final evaluation design determination. The statewide evaluation will identify whether the Demonstration impacted key metrics from a macro state-level perspective. However, it remains critical from the long-term sustainability perspective to understand which ACH projects positively impacted outcomes for participants, even if they were not implemented at a scale to produce statistically significant changes at the ACH or statewide geographic scale. This is critical information to identify which interventions should be supported or expanded after the demonstration ends.

Finalizing many components of the detailed evaluation design at the project scale will need to be deferred until after ACH project implementation plans are available in the spring of 2018, and will be done in collaboration with the independent external evaluator. This timing is necessary because much of critical information for finalizing the evaluation design is dependent on knowing what types of projects will be implemented by ACHs. Project-level evaluation designs cannot be completed until we know the answers to questions including:

- Which interventions have been selected?
- How program participants will be targeted?
- Which providers will be participating?
- How much capacity will be developed to serve the targeted population?
- What level of engagement in the target population is likely to be achieved?
- Are other ACHs targeting similar populations for their initiatives?

At this point we can provide a discussion of evaluation design options, with recognition that specific design choices are dependent on currently unknown parameters and guidance from the independent external evaluator.

For example, if we knew that a particular ACH project was going to serve a relatively high proportion of a well-defined target population, and we knew that population was not a target for projects in some of the other ACHs, we would likely consider an intent-to-treat difference-of-difference design where we would compare relative changes in the entire target population in both the implementing ACH and the comparison ACHs that did not target this population. The intent-to-treat aspect of the design and the geographic variation in implementation would be instruments available to us to reduce the impact of selection bias on estimated project impacts.

However, if an ACH project were designed to reach only a small proportion of the potential target population in that ACH, an intent-to-treat approach would wash out the effect of the project on “treated” beneficiaries, by including their experience with the vastly larger number of untreated beneficiaries in the target population. From one perspective, the intent-to-treat approach would answer the question of whether the intervention impacted outcomes in the larger ACH target population. With low intervention penetration, the answer would likely be “no.” But the question of whether the intervention impacted outcomes for those who engaged in the project is still highly relevant from the perspective of determining which interventions should be supported or expanded after the demonstration ends. And to address the question of impacts on the treated population, we would likely use a propensity score matching approach to identify an untreated comparison group. In the context of low intervention penetration, it might be appropriate to draw comparison group members from within the ACH implementing the intervention being evaluated, particularly if the ACH also implemented broad-based health system delivery redesign and community capacity building initiatives that are unique to the region.

These types of considerations will be worked through with the support of the independent external evaluator, after ACH project designs become available. We expect CMS to provide input and concur in the appropriateness of the final evaluation designs.

Propensity-score methods to estimate project-specific impacts. Propensity score matched comparison group designs will be broadly deployed across all project areas that are amenable to impact analysis using

administrative data, including MMIS-derived health service utilization data, LTSS assessment data, and linked "social determinant" outcome data.[10] Evaluation of Transformation project impacts at the ACH level is necessary to:

- Understand variation in outcomes across ACHs,
- Understand the degree to which improvements can be attributed to the specific activities undertaken under the Demonstration, and
- Inform post-Demonstration resource priorities in the state authorizing environment.

A matched comparison group is expected to be created for each ACH project, based on the characteristics of the target population for the specific intervention. The pre-post boundary for the treatment group will be based on the point at which they engage in the intervention. The pre-post boundary for the comparison group will be defined through the matching process, as described below. The matching process will generally proceed through the following steps:

- **Comparison frames for matching are identified by an initial broad set of criteria that align with the project targeting criteria.** For example, if an ACH intervention is targeting persons discharged from a hospital setting for improved care transitions, the starting point in defining the matching frame will be the identification of other qualifying discharges in the intervention "intake window", potentially both within and outside of the ACH (based on overarching evaluation design considerations discussed above). Similarly, if a care coordination intervention targets a particular set of beneficiaries using well-defined risk criteria, this initial stage of the process will identify all person-months for persons not receiving the intervention where the person meets the targeted risk criteria in the relevant baseline window (e.g., has PRISM risk scores within the eligibility range in the prior 12 month period). This approach to building a "person-month" frame for matching against the "person-months" associated with entry into the intervention by persons comprising the treatment group is illustrated in the evaluation of the precursor to the State's Health Home Program (Health Affairs, April 2015).[11] This approach leverages the richness of the State's integrated data environment and design of its analytical data infrastructure, which supports data management techniques that scan all relevant persons at all relevant points in time (months in this case) where they might be a "best" match to a person who entered the specific intervention under study at the time when they entered the intervention. The RDA project team supporting the independent external evaluator has extensive experience using these techniques for producing the high-volume of rigorous project evaluations required by the Demonstration.
- **Key predictors of engagement within the pooled intervention and comparison matching frame are examined to ensure inclusion of appropriate measurement dimensions in the PS model.** This includes creating an extensive set of "engagement predictors" that are determined, ex ante, to be potentially relevant to the matching process. This set of predictors is generally expected to span a wide range of the measurement domains contained with the State's ICDB, which may include:
  - Service 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 "major modality" (e.g., IP hospitalization, OP ED visits, etc.) per-member per-month level;
  - 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;

[10] Examples of propensity-score impact analyses using the types of linked administrative data available for the Demonstration evaluation can be found here: https://www.dshs.wa.gov/sesa/research-and-data-analysis. For a recently published specific example, see: https://www.dshs.wa.gov/sites/default/files/SESA/rda/documents/research-8-33.pdf.

[11] Jingping Xing, Candace Goehring and David Mancuso. Care Coordination Program For Washington State Medicaid Enrollees Reduced Inpatient Hospital Costs Care Coordination Program For Washington State. Health Affairs, 34, no.4 (2015):653-661.

- Data on functional support needs, cognitive impairment, and behavioral challenges for persons receiving LTSS services when applicable;
- Data on arrests, employment and earnings, and homelessness and housing stability when applicable;
- Client demographics (age, gender, race/ethnicity);
- Medicaid enrollment by detailed coverage category; and
- Urban/rural/frontier characteristics of the beneficiary's residential location.

- Application of machine learning techniques (e.g., stepwise logistic or lasso regression) to determine the final propensity score model.
- Propensity score matching using procedures in the R programming language (e.g., the Matchit procedure). For some interventions, exact matching may be required for key variables.

Project-level utilization and cost analyses generally will be conducted using a difference-of-difference design, where the pre-to-post change in experiences for beneficiaries receiving a particular intervention will be compared against the change experienced by the matched comparison group. As described above, for analyses using a difference-of-difference design the pre-post boundary for the treatment group will be based on the point at which they engage in the intervention. The pre-post boundary for the comparison group will be defined through the matching process, which uses a person-month matching frame for matching against the "person-months" associated with entry into the intervention by persons comprising the treatment group. This approach leverages the richness of the State's integrated data environment and design of its analytical data infrastructure, which support data management techniques that scan all relevant persons at all relevant points in time (months in this case) where they might be a "best" match to a person who entered the specific intervention under study. Analyses will draw on qualitative information to help interpret the quantitative assessment of project impacts on beneficiary outcomes. Outcome metrics and measurement approaches will be partially aligned with those used for determining ACH performance payments, where feasible.

In response to comments received on the prior draft of this document, we want to emphasize the appropriateness (and critical importance) of matching based on pre-treatment utilization patterns in evaluating many of the interventions supported by the Demonstration. Past utilization is not endogenous because it cannot be impacted by future treatment. The outcome of interest is <u>future</u> (that is, post treatment entry) utilization, not past utilization. Future utilization is never appropriate for inclusion in the matching process, while past utilization patterns can be essential to control for when interventions are targeted specifically based on prior risk or service utilization patterns, as will likely be the case in many care coordination, care transition, and diversion projects. Controlling for past utilization is one of the key ways to ensure that treatment and comparison groups do not have embedded within them differential expected levels of regression to the mean in utilization and cost metrics.

Data gap identification for each component of evaluation. Evaluation activities will ensure that data will be collected for all Demonstration projects as needed to facilitate the dissemination and comparison of valid quantitative data. Gaps in the extant data sources available to complete proposed evaluation activities will be identified and addressed. Currently known gaps, and the strategies to collect the necessary data, are summarized below:

- Qualitative data necessary for formative evaluation and support of the interpretation of quantitative findings will be collected using methods such as focus groups, key informant interviews, and surveys of beneficiaries and providers.
- New survey data will mitigate the impact on the evaluation of the absence of comparable health service utilization data for non-Medicaid clients, and lack of LTSS-related functional assessment data for Medicaid clients not receiving LTSS services, in the evaluation of the MAC and TSOA programs.

- Qualitative data related to health IT adoption and use by providers, who are and are not eligible for the Medicaid EHR Incentive Program, workforce supports needed to support adoption and use, and barriers to use.
- ACHs may be required to regularly report patient and/or provider rosters associated with specific projects, if that information cannot be obtained through regularly collected claims or encounter data. Reporting of this information may be considered as a potential component of "pay for reporting" criteria of the ACH performance payment formula.

Assessment of data limitations and threats to internal validity and generalizability outside of the Washington State environment. Evaluation products will include an assessment of threats to validity and generalizability. From the perspective of internal validity, a key potential threat is the presence of selection bias in the engagement of beneficiaries in specific projects, in the absence of randomized trial designs for project implementation. Although the propensity matching approach is recognized as a valid evaluation design, frequently accepted in the peer-reviewed program evaluation literature, the approach may not fully mitigate the threat of selection bias. In implementing this design, it will remain critical to understand the process that "selects" clients into projects and to use this knowledge to define a credible "matching frame" for each project.

In particular, we note that the specification of the structure of the matching model can have a large effect on the estimated program impact. For example, if selection into a project is tied to a specific pattern of service delivery (e.g., release from a hospital), or due to extreme baseline utilization, then ensuring that the matched comparison group has a similar "trajectory" of service use into the boundary of the pre/post periods will be critical. The richness of the administrative data available to the evaluation team will help reduce the selection bias threat, by moving more client characteristics from the "unobservable variable" column to the "observable variable" column, including the trajectory of prior health service utilization in the baseline period used for matching.[12] The recent evaluation of the State's "Money Follows the Person" program (Roads to Community Living) illustrates the criticality of matching on pre-period utilization trends in the context of interventions that target clients with specific pre-period utilization patterns. In the context of the RCL evaluation, the intervention requires a pattern of prior nursing facility utilization and client interest in community re-integration. The target population would tend to show significant regression to the mean (future reductions) in LTSS expenditures in the absence of any intervention. Comparing the intervention group against the experience of the broader nursing facility population would vastly overstate RCL program treatment effects. The chart on page 5 of the report referenced below illustrates this phenomenon, and the importance of matching on prior service utilization trends leading into the pre/post time boundary.[13]

Another threat to the internal validity of evaluation findings will be the challenge of controlling for all potential confounding interventions and policy changes – in particular the potential for beneficiaries to experience multiple overlapping treatment effects, both from other Demonstration projects and from other initiatives occurring simultaneously to the Demonstration. This risk will be mitigated through the development and maintenance of the statewide beneficiary project attribution model, as described above. The attribution model will be a foundational data source for implementation of propensity score based quasi-experimental evaluation designs.

The threats to the generalizability of project impact findings include the following considerations. First, conditions may be different in Washington State than in other states to which Demonstration-supported interventions might be extended. For example, Washington State has a highly rebalanced Medicaid LTSS delivery system, which has already achieved significant rebalancing of care from institutions to home and community settings. Second, variation in local conditions across Washington State may make it more

[12] For a recently published example of an impact analysis using propensity matching and leveraging detailed information on the trajectory of prior health service utilization, see: https://www.dshs.wa.gov/sites/default/files/SESA/rda/documents/research-8-33.pdf.

[13] See: https://www.dshs.wa.gov/sites/default/files/SESA/rda/documents/research-8-33.pdf.

challenging to generalize the effect of ACH-specific initiatives to other regions of the state. Required evaluation deliverables will speak to the potential to generalize findings outside of the Washington State environment.

Section 4. Process to Select an Outside Contractor

Required qualifications. Washington will select an independent external evaluator 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. Required qualifications and experience include 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 will be 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 will act appropriately to prevent a conflict of interest with the independent external evaluator. The independent external evaluator will have no affiliation with ACHs or their providers.

Cooperation with potential federal evaluator. Should CMS undertake an independent evaluation of any component of the demonstration, the state shall cooperate fully, to the greatest extent possible, with CMS or the evaluator selected by CMS. To promote efficiency, consistency, and best practices, the State independent external evaluator and any CMS evaluator will share data sources and methodology. There may be cases where the State and CMS evaluator choose to focus in different areas or pursue different modeling and statistical techniques. This will lead to a fuller and more nuanced understanding of the success and challenges of the Demonstration, as long as, both approaches fully consider the unique systems and experience in Washington State.

Collaboration with state agency program and research staff. The core evaluation, to be completed by the independent external evaluator, will include all elements required in the STCs. The state plans to fully leverage the independent evaluation to inform and support implementation, to develop internal reporting capability, to share lessons learned across projects and geography. To ensure that the evaluation work can be fully leveraged by the State; the independent external evaluator will be expected to consult extensively with State research staff to ensure agreement on scope, approach, and interpretation of the Washington context. Careful consultation will be essential to develop an evaluation that is responsive to the Washington experience, while identifying generalizable results.

The independent external evaluator will lead the evaluation and ultimately be responsible for the validity, reproducibility, and interpretation of the results. The State's role is to provide extensive guidance on unique aspects of the State's health system; health system participants; data availability, content, and interpretation; information flows; history and context of service provision, etc. The State will provide guidance on its needs and use cases for materials and results produced for the evaluation. The State will use its expertise and experience to provide the independent external evaluator with model identification and application within the Washington context. While all aspects of the evaluation plan outlined here will be the responsibility of the independent external evaluator, the State will participate in and conduct its own ongoing analysis and evaluation to support success across the Domains of the Demonstration.

The state plans to provide extensive consultation and data support for the independent external evaluator. The independent external evaluator will receive reports described in the STC under section 37 including bi-annual milestone and metric reports submitted by ACHs, quarterly DSRIP operational report protocols submitted by the state, and additional progress milestones for at risk projects. The independent external evaluator will conduct ongoing analyses of these data to inform both the interim and final evaluation reports.

Budget for the independent external evaluator evaluation activities. The total budget for the independent external evaluator is estimated to be over $4 Million for four years (Jan 1, 2018 through Dec 31, 2021). The estimated budget amount will cover all evaluation expenses, including salary, fringe, administrative costs, other direct costs such as travel for data collection, conference calls, etc., as well as, all costs related to quantitative and qualitative data collection and analysis, and report development. More detail and justification for proposed costs will be provided through the independent external evaluator selection process.

The state will also budget for sufficient state agency staff, at both HCA and DSHS, to efficiently and effectively support the independent external evaluator. State support will be similar to the level needed to undertake evaluation on its own. That is, state data, analytic, and research staff will have to undertake data gathering, prepping, and submitting in line with the research goals and objectives. State researchers will provide technical assistance, will create intermediate data products, will share their in-depth knowledge of existing state programs; state populations; Medicaid operations; and will leverage existing relationships with partner organizations. They will also provide information on state IT, local and provider information technology systems as well; data structures, collections, definitions; and compliance with state policies such as privacy and security.

The state will select and enter into a contract with an independent entity to conduct the evaluation of the Demonstration to meet the following timeframes and deliverables.

TABLE 2.
Evaluation Deliverables and Timeline

Deliverable	Responsible Party (from to)	Date
Draft Evaluation Design	State	May 9th, 2017
– Comments from CMS	CMS	60 days from receipt
– Final evaluation design	State	60 days from receipt
DSRIP Deliverables		DY 2, 3, 4, and 5
Quarterly progress reports from independent external evaluator to include 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 (IE) to State	One month prior to State quarterly and annual reports.
State progress reports will include information on submittals from IE and progress of evaluation.	State to CMS	Include in Quarterly and Annual reports
Semi-annual milestone and metric reports submitted by ACHs, including any additional milestones reported for at-risk projects	ACHs to State/State to IE	Twice a year or according to established schedule
Quarterly DSRIP operational report protocols	State to IE	All available and then quarterly starting with IE contract initiation.

Deliverable	Responsible Party (from to)	Date
Health IT (STC39)	State to CMS	Quarterly
Specification for data required from state including a timeline, data gap analysis, and plan to address data gaps.	IE to State	DY2, Q3
Quarterly, semi-annual, and annual metric updates (depending on metric frequency) for P4P measures	State to IE	Quarterly starting DY 2, Q3
Receipt of annual data submissions from state to support baseline analysis	State to CMS	Annually starting DY 2, Q4
Focus groups and key informant interviews to create baseline information for qualitative analysis	IE to State	90 days after submittal of detailed project plans
Analysis of (2017) baseline state metrics and data	IE	DY 3, Q1
Analysis of VBP materials including existing survey results, data, key informant interviews, and focus groups to create a baseline line assessment of VBP readiness and use in contracting both at the plan and provider level.	IE to State	DY 3, Q1 90 days after receiving focus group data
Review and synthesize documents, data, focus groups, and key informant interviews on baseline workforce capacity	IE to State	DY 3, Q1 90 days after receiving focus group data
Review and synthesize documents, data, focus groups, and key informant interviews on baseline ability and readiness of state HIT/HIE to support health system transformation	IE to State	DY 3, Q1 90 days after receiving focus group data
Qualitative analysis of other aspects of program implementation and operations	IE to State	DY 3, Q1 90 days after receiving focus group data
Identification and baseline analysis of high risk populations expected to be significantly impacted by Demonstration initiatives.	IE to State	DY 3, Q1
Quantitative baseline analysis of overall target populations at the state and ACH levels.	IE to State	DY 3, Q2
Quantitative analysis of project target populations both within and across ACHs.	IE to State	DY 3, Q2
Rapid cycle implementation reports	Joint IE/State products	To be included in quarterly reports to start 90 days after implementation. Quarterly starting DY 3, Q1
Evaluation of specific projects implemented under all three initiatives. Both ACH specific results and Statewide implementation.	IE to State	DY 4, Q1 preliminary results DY 5, Q4 final results
Focus groups and key informant interviews to assess impact of Demonstration on all initiatives	IE to State	DY4, Q2

Deliverable	Responsible Party (from to)	Date
Focus groups and key informant interviews to assess impact of Demonstration on all initiatives	IE to State	DY 5, Q2
Analysis of VBP materials including provider survey results, key informant interviews, and focus groups to assess impact of Demonstration activities on VBP readiness, adoption, and use in contracting both at the plan and provider level.	IE to State	90 days after receiving focus group data (target date DY 5 Q4)
Analyze documents, data, focus groups, and key information interviews to assess Demonstration impact on healthcare workforce capacity	IE to State	90 days after receiving focus group data (target date DY 5 Q4)
Analyze documents, data, focus groups, and key information interviews to assess impact of Demonstration on HIT/HIE investments, use, and impact on health system transformation	IE to State	90 days after receiving focus group data (target date DY 5 Q4)
Qualitative analysis of other aspects of program implementation and operations	IE to State	90 days after receiving focus group data (target date DY 5 Q4)
Draft Interim Evaluation Report	State	April 3rd, 2021
– CMS comments	CMS	TBD
– Final interim evaluation report	State	60 days from receipt of CMS comments
Draft Final Evaluation Report	State	January 30th, 2022
– CMS comments	CMS	TBD
– Final evaluation report	State	60 days from receipt of CMS comments

The independent external evaluator will provide additional analyses and reporting to enable Washington to fully leverage the work of evaluation to inform and improve the implementation of the initiatives under the Demonstration. For this reason, the evaluation will need to be undertaken in stages, with reports and information being produced for internal stakeholders at each stage. Early work will focus on qualitative data gathered from focus groups, key informant interviews, and surveys. As the implementation progresses, analysis and reports will move towards impact and outcomes. Washington will also be interested in an evaluation of the effectiveness of our measurement process and incentive payments in promoting effective project selection and implementation, and the extent to which measure selection promoted a positive impact on the targeted populations.

Washington is undertaking an ambitious set of Medicaid innovation initiatives to continue and build upon current success in transforming the way health services are provided. Washington seeks an independent external evaluator who has the capacity and vision to pursue publication of results in peer reviewed journals. Washington is committed to the value of sharing both positive and negative experiences with innovation in order to inform the broader health care transformation effort.

Section 5: PROJECT-LEVEL DETAIL
DSRIP Program: Transformation through Accountable Communities of Health

Project 2A: Bi-directional Integration of Physical and Behavioral Health through Care Transformation (Required)

Component	Description
Goals and objectives	Through a whole-person approach to care, address physical and behavioral health (BH) needs through an integrated network of providers, offering better coordinated care for patients and more seamless access to the services they need.
Target populations	All Medicaid beneficiaries (children and adults) particularly those with or at-risk for behavioral health conditions, including mental illness and/or substance use disorder (SUD).
Evaluation questions and testable hypotheses	Evaluation questions pertain to understanding whether projects undertaken to better integrate the delivery of physical and behavioral health services: • Increase screening and identification of need for behavioral and physical health care services • Increase access to and engagement in treatment for BH conditions • Improve quality of care for behavioral and physical health conditions • Improve patient behavioral and physical health outcomes • Reduce disparities in health and social outcomes for persons with behavioral health risk factors • Reduce inpatient, psychiatric inpatient, and ED utilization Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1.
Data strategy, sources and collection frequency	**Administrative data.** Impact analyses will use MMIS-derived physical, behavioral health, and LTSS service utilization data, LTSS assessment data, and linked "social determinant" outcome data. Data are routinely collected through the operation of existing data interfaces, and is generally linked (collected into) into the State's integrated client data environment on a quarterly basis. **Primary data collection.** Primary data will be collected for research questions that cannot be addressed using administrative data. Data collection efforts may include key informant interviews, focus groups, and stakeholder surveys. These data will support the qualitative analysis and interpretation of quantitative impact findings. The design and execution of qualitative methods and associated primary data collection will be the lead responsibility of the independent external evaluator. This responsibility will include: defining the number of focus groups, key informant interviews, and provider surveys; determining the universes and/or sample frames from which participants will be selected; determining when focus groups, interviews, or surveys will be conducted; aligning data collection instruments to specific research questions and hypotheses; and designing the specific data collection instruments.

Component	Description
	Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1.
Measures	Measures derived from administrative data sources in the State's integrated client data environment will include: • Measures of health service utilization and cost, including ED visits, inpatient admissions, LTSS utilization and overall Medicaid expenditures • Access to mental health and substance use disorder treatment • Other health care quality measures (e.g., psychotropic medication adherence, comprehensive diabetes care) Specific examples of potential measures include (but are not limited to): • Outpatient Emergency Department Visits per 1000 Member Months • Inpatient Admissions per 1,000 Member Months • Plan All-Cause 30-Day Readmission Rate • Psychiatric Hospital 30-Day Readmission Rate • Antidepressant Medication Management • Child and Adolescents' Access to Primary Care Practitioners • Comprehensive Diabetes Care: Eye Exam (Retinal) Performed • Comprehensive Diabetes Care: Medical Attention for Nephropathy • Medication Management for People with Asthma (5 to 64 Years) • Follow-up After Discharge from ED for Mental Health, Alcohol or Other Drug Dependence • Follow-up After Hospitalization for Mental Illness • Mental Health Treatment Penetration (Broad Version) • Substance Use Disorder Treatment Penetration Analyses may also consider impacts on social outcomes including measures of homelessness and housing stability; employment, hours worked, and earnings levels; and criminal justice involvement (arrests). Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1. Specifications for many of the state-developed outcome measures are provided in Appendix 2.
Statistical framework for measuring impacts	**Quantitative impact analysis.** A statewide project attribution data infrastructure will support the evaluation. The attribution model will capture the timing of beneficiary and/or provider engagement in Demonstration-funded projects. The model will also identify potentially confounding policy changes and programs, such as participation in Health Homes or regional variation in the timing of implementation of physical and behavioral health integration through fully integrated managed care contracts. The attribution model will be a foundational data source for implementation of propensity score based quasi-experimental evaluation designs. ACH projects will be separately evaluated, using difference-of-difference designs, where the pre-to-

Component	Description
	post change in experiences for beneficiaries receiving services will be compared against the change experienced by a matched comparison group. Analyses will draw on qualitative information to help interpret the quantitative assessment of project impacts on beneficiary outcomes. **Qualitative analysis.** A qualitative analysis of project implementation and operations will be conducted to identify implementation risks, determine opportunities to improve implementation, and inform the quantitative analysis of project impacts. The analysis for this project may address implementation issues such as: • Provider capacity to effectively deliver integrated care • Implementation fidelity to adopted models of integration (e.g., Bree Collaborative recommendations, Collaborative Care Model principles) • The adoption of EHRs and other systems that support bi-directional data sharing • The extent of clinical-community linkages • Communication flows among care team members • Adoption of care coordination and management processes • Supply of mental health providers, substance use disorder providers, social workers, nurse practitioners, primary care providers • Opportunities for use of telehealth • Workflow changes to support integration of new screening and care processes, care integration, communication • Effectiveness of payment structures and VBP payment models to incentivize effective service delivery • Adoption of evidence-based treatments
Subgroup analyses to assess disparities and differences	Analyses will be conducted to assess variation in outcome measures across groups with a history of significant differences and disparities in beneficiary experience. For example, the underlying rationale for prioritizing projects addressing bi-directional integration of physical and behavioral health care includes the observation that there are extreme rates of inpatient and ED utilization for Medicaid beneficiaries with serious mental illness and/or substance use disorders. Adult Medicaid beneficiaries with co-occurring mental illness and SUD experience inpatient hospitalizations and ED utilization at about 3 times the rate observed in the general medical population, and experience similar disparities in rates of arrest and homelessness. Other notable disparities include differences in measures of access and/or quality of care across racial and ethnic groups, between urban and rural/frontier regions of the state, and between persons with significant functional impairments receiving LTSS services and other Medicaid beneficiaries. Based on these considerations, we expect subgroup analyses to assess disparities in access to services and outcomes to include analysis of variation in beneficiary outcomes by: • Race/ethnicity, age and gender • Geography (ACH region, urban/rural/frontier)

Component	Description
	• Behavioral health risk characteristics: severity of mental illness, SUD, co-occurring mental illness and SUD • Presence of physical comorbidities or need for functional supports

Project 2B: Community-Based Care Coordination (optional).

Component	Description
Goals and objectives	Promote care coordination across the continuum of health services for Medicaid beneficiaries, ensuring those with complex health needs are connected to the interventions and services needed to improve and manage their health.
Target populations	Medicaid beneficiaries (adults and children) with one or more chronic disease or condition, or mental illness, or substance use disorder and at least one risk factor (e.g., unstable housing, food insecurity, high EMS utilization).
Evaluation questions and testable hypotheses	General hypothesis—Care coordination is essential for ensuring that children and adults with complex health needs are connected to evidence-based interventions and services that will improve their outcomes. A hub-based (or similar) model provides a platform for communication among multiple care providers, so that each is able to work in a more coordinated fashion. Specific hypotheses - Implementation of a hub-based coordination model is expected to: • Increase access to and engagement in treatment for those with complex and/or co-occurring conditions • Improve quality of care for behavioral and physical health conditions • Improve patient behavioral and physical health outcomes • Reduce disparities in health and social outcomes for persons with behavioral health risk factors and persons needing functional supports • Reduce inpatient, psychiatric inpatient, and ED utilization • Improve access to Home and Community-based LTSS services Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1.
Data strategy, sources and collection frequency	**Administrative data.** Impact analyses will use MMIS-derived physical, behavioral health, and LTSS service utilization data, LTSS assessment data, and linked "social determinant" outcome data. Data are routinely collected through the operation of existing data interfaces, and is generally linked into the state's integrated client data environment on a quarterly basis. **Primary data collection.** Primary data will be collected for research questions that cannot be addressed using administrative data. Data collection efforts may include key informant interviews, focus groups, and stakeholder surveys. These data will support the qualitative analysis and interpretation of quantitative impact findings. The design and execution of qualitative methods and associated primary data collection will be the lead responsibility of the independent external evaluator. This responsibility will include: defining the number of focus groups, key informant interviews, and provider surveys; determining the universes and/or sample frames

Component	Description
	from which participants will be selected; determining when focus groups, interviews, or surveys will be conducted; aligning data collection instruments to specific research questions and hypotheses; and designing the specific data collection instruments. Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1.
Measures	Measures derived from administrative data sources in the state's integrated client data environment will include: • Measures of health service utilization and cost, including ED visits, inpatient admissions, LTSS utilization and overall Medicaid expenditures • Access to mental health and substance use disorder treatment • Other health care quality measures (e.g., psychotropic medication adherence, comprehensive diabetes care) Specific examples of potential measures include (but are not limited to): • Outpatient Emergency Department Visits per 1000 Member Months • Inpatient Admissions per 1,000 Member Months • Plan All-Cause 30-Day Readmission Rate • Psychiatric Hospital 30-Day Readmission Rate • Antidepressant Medication Management • Child and Adolescents' Access to Primary Care Practitioners • Comprehensive Diabetes Care: Eye Exam (Retinal) Performed • Comprehensive Diabetes Care: Medical Attention for Nephropathy • Medication Management for People with Asthma (5 to 64 Years) • Follow-up After Discharge from ED for Mental Health, Alcohol or Other Drug Dependence • Follow-up After Hospitalization for Mental Illness • Mental Health Treatment Penetration (Broad Version) • Substance Use Disorder Treatment Penetration • Percent Homeless (Narrow Definition) • Percent Employed (Medicaid) • Home and Community-based Long Term Services and Supports Use • Skilled Nursing and Rehabilitation Facility Use Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1. Specifications for state-developed outcome measures are provided in Appendix 2.
Statistical framework for measuring impacts	**Quantitative impact analysis.** A statewide project attribution data infrastructure will support the evaluation. The attribution model will capture the timing of beneficiary and/or provider engagement in Demonstration-funded projects. The model will also identify potentially confounding policy changes and programs, such as participation in Health Homes or regional variation in the timing of implementation of physical and behavioral health integration through fully integrated managed care products.

Component	Description
	The attribution model will be a foundational data source for implementation of propensity score based quasi-experimental evaluation designs. ACH projects will be separately evaluated, using difference-of-difference designs, where the pre-to-post change in experiences for beneficiaries receiving services will be compared against the change experienced by a matched comparison group. Analyses will draw on qualitative information to help interpret the quantitative assessment of project impacts on beneficiary outcomes. **Qualitative analysis.** A qualitative analysis of project implementation and operations will be conducted to identify implementation risks, determine opportunities to improve implementation, and inform the quantitative analysis of project impacts. The analysis for this project may address issues such as: • Implementation fidelity to the adopted evidence-based care coordination approach (e.g., Pathways Community HUB) • Adequacy of procedures used to identify risk factors • Identification of evidence-based and best practice interventions • Capability of EHRs and other technologies used for identifying high-risk populations, linking to services, tracking beneficiaries, and documenting outcomes • Capacity and shortages for workforce to implement the selected care coordination focus areas • Effectiveness of payment structures and VBP payment models to incentivize effective service delivery
Subgroup analyses to assess disparities and differences	Analyses will be conducted to assess variation in outcome measures across groups with a history of significant differences and disparities in beneficiary experience. Understanding variation in the ability of care coordination interventions to engage and impact outcomes for different populations is an important consideration in assessing the success and extensibility of ACH interventions. Subgroup analyses to assess disparities in outcomes may include: • Race/ethnicity, age and gender • Geography (ACH region, urban/rural/frontier) • Type of risk factors, physical health conditions, behavioral health conditions, need for LTSS supports

Project 2C: Transitional Care (optional).

Component	Description
Goals and objectives	Improve transitional care services to reduce avoidable hospital utilization and ensure beneficiaries are getting the right care in the right place.
Target populations	Medicaid beneficiaries in transition from intensive settings of care or institutional settings, including beneficiaries discharged from acute care to home or to supportive housing, and beneficiaries with SMI discharged from inpatient care, or clients returning to the community from prison or jail.

Evaluation questions and testable hypotheses	General hypothesis—Points of transition out of intensive services/settings and into the community are critical intervention points in the care continuum. Individuals discharged from intensive settings may not have a stable environment to return to or may lack access to reliable care. More intensive transitional care and care management can improve access to care for these individuals and reduce avoidable hospital utilization. Specific hypotheses—Implementation of enhanced transitional care is expected to: • Increase access to and engagement in community-based treatment for physical and behavioral health conditions • Reduce inpatient admissions, psychiatric inpatient admissions, ED utilization, and institutional stays • Improve access to Home and Community-based Long Term Services and Supports Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1.
Data strategy, sources and collection frequency	**Administrative data.** Impact analyses will use MMIS-derived physical, behavioral health, and LTSS service utilization data, LTSS assessment data, and linked "social determinant" outcome data. Data are routinely collected through the operation of existing data interfaces, and are generally linked into the state's integrated client data environment on a quarterly basis. **Primary data collection.** Primary data will be collected for research questions that cannot be addressed using administrative data. Data collection efforts may include key informant interviews, focus groups, and stakeholder surveys. These data will support the qualitative analysis and interpretation of quantitative impact findings. The design and execution of qualitative methods and associated primary data collection will be the lead responsibility of the independent external evaluator. This responsibility will include: defining the number of focus groups, key informant interviews, and provider surveys; determining the universes and/or sample frames from which participants will be selected; determining when focus groups, interviews, or surveys will be conducted; aligning data collection instruments to specific research questions and hypotheses; and designing the specific data collection instruments. Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1.
Measures	Measures derived from administrative data sources in the state's integrated client data environment will include: • Measures of health service utilization and cost, including ED visits, inpatient admissions, LTSS utilization and overall Medicaid expenditures • Access to mental health and substance use disorder treatment • Other health care quality measures (e.g., psychotropic medication adherence, comprehensive diabetes care) Specific examples of potential measures include (but are not limited to): • Outpatient Emergency Department Visits per 1000 Member Months • Inpatient Admissions per 1,000 Member Months • Plan All-Cause 30-Day Readmission Rate • Psychiatric Hospital 30-Day Readmission Rate

	• Follow-up After Discharge from ED for Mental Health, Alcohol or Other Drug Dependence • Follow-up After Hospitalization for Mental Illness • Percent Homeless (Narrow Definition) • Home and Community-based Long Term Services and Supports Use Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1. Specifications for many of the state-developed outcome measures are provided in Appendix 2.
Statistical framework for measuring impacts	**Quantitative impact analysis.** A statewide project attribution data infrastructure will support the evaluation. The attribution model will capture the timing of beneficiary and/or provider engagement in Demonstration-funded projects. The model will also identify potentially confounding policy changes and programs, such as participation in Health Homes or regional variation in the timing of implementation of physical and behavioral health integration through fully integrated managed care products. The attribution model will be a foundational data source for implementation of propensity score based quasi-experimental evaluation designs. ACH projects will be separately evaluated, using difference-of-difference designs, where the pre-to-post change in experiences for beneficiaries receiving services will be compared against the change experienced by a matched comparison group. Analyses will draw on qualitative information to help interpret the quantitative assessment of project impacts on beneficiary outcomes. **Qualitative analysis.** A qualitative analysis of project implementation and operations will be conducted to identify implementation risks, determine opportunities to improve implementation, and inform the quantitative analysis of project impacts. The analysis for this project may address implementation issues such as: • Implementation fidelity to the adopted evidence-based or evidence-informed approaches to transitional care (e.g., INTERACT, TCM, CTI, APIC Model) • Capacity of population health management/HIT systems to effectively deliver care transition services • Workforce capacity and shortages • Workflow changes to support integration of care transition processes and communications • Effectiveness of payment structures and VBP payment models to incentivize effective service delivery
Subgroup analyses to assess disparities and differences	Subgroup analyses to assess disparities in access to services and outcomes may include, depending on the specific populations targeted by the selected transitional care initiatives: • Race/ethnicity, age and gender • Geography (ACH region, urban/rural/frontier) • Delivery system affiliation (e.g., transfers from Acute inpatient care, SNF, inpatient psychiatric care, prison, or jail • Chronicity of housing instability • Extent of prior criminal justice involvement

Project 2D: Diversion Interventions (optional).

Component	Description
Goals and objectives	Implement diversion strategies to: (1) promote more appropriate use of emergency care services and person-centered care through increased access to primary care and social services, and (2) redirect low-level offenders engaged in drug or prostitution activity to community-based services, instead of jail and prosecution.
Target populations	Medicaid beneficiaries presenting at the ED for non-acute conditions, Medicaid beneficiaries who access the EMS system for a non-emergent condition, and Medicaid beneficiaries with mental health and/or substance use conditions coming into contact with law enforcement.
Evaluation questions and testable hypotheses	General hypothesis—Diversion strategies provide opportunities to re-direct individuals away from high-cost medical and legal avenues and into community based health care and social services that can offer comprehensive assessment, care/case planning and management to lead to more positive outcomes. Specific hypotheses—Implementation of these diversion strategies is expected to: • Reduce ED utilization • Improve access to primary care • Improve access to behavioral health services • Reduce homeless rates • Reduce arrest rates Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1.
Data strategy, sources and collection frequency	**Administrative data.** Impact analyses will use MMIS-derived physical, behavioral health, and LTSS service utilization data, LTSS assessment data, and linked "social determinant" outcome data. Data are routinely collected through the operation of existing data interfaces, and is generally linked into the State's integrated client data environment on a quarterly basis. **Primary data collection.** Primary data will be collected for research questions that cannot be addressed using administrative data. Data collection efforts may include key informant interviews, focus groups, and stakeholder surveys. These data will support the qualitative analysis and interpretation of quantitative impact findings. The design and execution of qualitative methods and associated primary data collection will be the lead responsibility of the independent external evaluator. This responsibility will include: defining the number of focus groups, key informant interviews, and provider surveys; determining the universes and/or sample frames from which participants will be selected; determining when focus groups, interviews, or surveys will be conducted; aligning data collection instruments to specific research questions and hypotheses; and designing the specific data collection instruments. Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1.
Measures	Measures derived from administrative data sources in the State's integrated client data environment will include:

Component	Description
	• Measures of health service utilization and cost, including ED visits, inpatient admissions, and overall Medicaid expenditures • Access to mental health and substance use disorder treatment • Social outcomes including homelessness and criminal justice involvement Specific examples of potential measures include (but are not limited to): • Percent Homeless (Narrow Definition) • Percent Arrested • Outpatient Emergency Department Visits per 1000 Member Months • Follow-up After Discharge from ED for Mental Health, Alcohol or Other Drug Dependence • Adult Access to Preventive/Ambulatory Care • Mental Health Treatment Penetration (Broad Version) • Substance Use Disorder Treatment Penetration Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1. Specifications for many of the state-developed outcome measures are provided in Appendix 2.
Statistical framework for measuring impacts	**Quantitative impact analysis.** A statewide project attribution data infrastructure will support the evaluation. The attribution model will capture the timing of beneficiary and/or provider engagement in Demonstration-funded projects. The model will also identify potentially confounding policy changes and programs, such as participation in Health Homes or regional variation in the timing of implementation of physical and behavioral health integration through fully integrated managed care products. The attribution model will be a foundational data source for implementation of propensity score based quasi-experimental evaluation designs. ACH projects will be separately evaluated, using difference-of-difference designs, where the pre-to-post change in experiences for beneficiaries receiving services will be compared against the change experienced by a matched comparison group. Analyses will draw on qualitative information to help interpret the quantitative assessment of project impacts on beneficiary outcomes. **Qualitative analysis.** A qualitative analysis of project implementation and operations will be conducted to identify implementation risks, determine opportunities to improve implementation, and inform the quantitative analysis of project impacts. The analysis for this project may address implementation issues such as: • Implementation fidelity to evidence-supported diversion strategies • Willingness and readiness of stakeholders to participate • Potential shortages of community health workers, social workers, mental health providers, substance abuse disorder providers. • Ability to use electronic health records (EHRs) and Health Information Exchange (HIE) systems to facilitate communication between emergency departments, community paramedics and other health care providers

Component	Description
	• Effectiveness of payment structures and VBP payment models to incentivize effective service delivery
Subgroup analyses to assess disparities and differences	Subgroup analyses to assess disparities in access to services and outcomes may include, depending on the specific populations targeted by the selected diversion initiatives: • Race/ethnicity, age and gender • Geography (ACH region, urban/rural/frontier) • Functional risk factors (presence of behavioral risks, severity of physical comorbidities) • Extent of prior criminal justice involvement • Chronicity of housing instability

Project 3A: Addressing the Opioid Use Public Health Crisis (required).

Component	Description
Goals and objectives	Reduce opioid-related morbidity and mortality through strategies that target prevention, treatment, overdose prevention, and recovery supports. Selected specific objectives include: • Reducing opioid use through prevention measures (e.g., adherence to opioid prescribing guidelines, Prescription Drug Monitoring Program promotion) • Increasing opioid use disorder treatment capacity (e.g., numbers of providers certified to prescribe medication-assisted therapies, innovative use of telehealth in rural areas) • Identifying and treating opioid use disorder among pregnant women • Increasing treatment engagement (e.g., promoting projects that offer low barrier access to buprenorphine in emergency departments, correctional facilities, syringe exchange programs, SUD and mental health programs) • Preventing overdoses (e.g. increased availability of naloxone)
Target populations	Medicaid beneficiaries, including youth, who use, misuse, or abuse, prescription opioids and/or heroin.
Evaluation questions and testable hypotheses	Implementation of strategies to reduce opioid-related morbidity and mortality is expected to: • Reduce opioid-related deaths • Reduce non-fatal overdose involving prescription opioids • Increase substance use disorder treatment penetration among opioid users • Reduce the number of patients on high-dose chronic opioid therapy • Increase the numbers receiving Medication Assisted Therapy (MAT) with Buprenorphine and Methadone Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1.

Data strategy, sources and collection frequency	**Administrative data.** Impact analyses will use MMIS-derived physical, behavioral health, and LTSS service utilization data, LTSS assessment data, and linked "social determinant" outcome data. Data are routinely collected through the operation of existing data interfaces, and is generally linked into the State's integrated client data environment on a quarterly basis. **Primary data collection.** Primary data will be collected for research questions that cannot be addressed using administrative data. Data collection efforts may include key informant interviews, focus groups, and stakeholder surveys. These data will support the qualitative analysis and interpretation of quantitative impact findings. The design and execution of qualitative methods and associated primary data collection will be the lead responsibility of the independent external evaluator. This responsibility will include: defining the number of focus groups, key informant interviews, and provider surveys; determining the universes and/or sample frames from which participants will be selected; determining when focus groups, interviews, or surveys will be conducted; aligning data collection instruments to specific research questions and hypotheses; and designing the specific data collection instruments. Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1.
Measures	Measures derived from administrative data sources in the State's integrated client data environment will include: • Opioid Related Deaths (Medicaid Enrollees and Total Population) per 100,000 covered lives • Non-fatal overdose involving prescription opioids per 100,000 covered lives • Substance Use Disorder Treatment Penetration, by type of treatment, for persons with opiate use disorder • Outpatient Emergency Department Visits per 1000 Member Months • Inpatient Admissions per 1,000 Member Months Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1. Specifications for many of the state-developed outcome measures are provided in Appendix 2.
Statistical framework for measuring impacts	**Quantitative impact analysis.** A statewide project attribution data infrastructure will support the evaluation. The attribution model will capture the timing of beneficiary and/or provider engagement in Demonstration-funded projects. The model will also identify potentially confounding policy changes and programs, such as participation in Health Homes or regional variation in the timing of implementation of physical and behavioral health integration through fully integrated managed care products. The attribution model will be a foundational data source for implementation of propensity score based quasi-experimental evaluation designs. ACH projects will be separately evaluated, using difference-of-difference designs, where the pre-to-post change in experiences for beneficiaries receiving services will be compared against the change experienced by a matched comparison group. Analyses will draw on qualitative information to help interpret the quantitative assessment of project impacts on beneficiary outcomes.

	Qualitative analysis. A qualitative analysis of project implementation and operations will be conducted to identify implementation risks, determine opportunities to improve implementation, and inform the quantitative analysis of project impacts. The analysis for this project may address implementation issues such as: • Enhancements in EHRs and other systems to support clinical decisions in accordance with guidelines • Efforts to increase use of the Prescription Drug Monitoring Program (PDMP) • Effectiveness of payment structures and VBP payment models to incentivize effective service delivery • Results of integrating telehealth approaches • Effectiveness of structural supports (e.g. case management capacity, nurse care managers, integration with substance use disorder providers) to support medical providers to implement and sustain medication assisted treatment
Subgroup analyses to assess disparities and differences	Subgroup analyses to assess disparities in access to services and outcomes may include: • Race/ethnicity, age and gender • Geography (ACH region, urban/rural/frontier) • Nature of opioid use (heroin injection, prescription opioids) • Presence of co-occurring mental illness, physical comorbidities and functional support needs • Extent of homelessness • Extent of prior criminal justice involvement In response to feedback on the initial evaluation design submission, we note that persons with opiate use disorders (and, more generally, persons with substance use disorders) have extremely high rates of homelessness and criminal justice involvement, relative to the general Medicaid population. As such, understanding the impact of opioid-related initiatives on populations with a history of prior homelessness or criminal justice involvement is of particular concern, as these beneficiaries are at high risk of experiencing adverse future outcomes.

Project 3B: Reproductive and Maternal/Child Health (optional).

Component	Description
Goals and objectives	Broad objective—Ensure that women have access to high quality reproductive health care throughout their lives and promote the health and safety of Washington's children. Specific objectives include: • Ensuring that families have intended and healthy pregnancies that lead to healthy children by promoting utilization of effective reproductive health strategies, healthy behaviors and risk reduction, effective contraceptive use, safe and quality prenatal and perinatal care, and general preventive care • Promoting healthy pregnancy and parenting through evidence-based home visiting models for pregnant high-risk mothers. • Improving child health through improving regional well-child visit rates and childhood immunization rates.

Component	Description
Target populations	Medicaid beneficiaries who are women of reproductive age, pregnant women, mothers of children ages 0-3, and children ages 0-17.
Evaluation questions and testable hypotheses	Implementation of strategies related to reproductive health and maternal/child health are expected to: • Reduce rates of teen pregnancy • Reduce the number of unintended pregnancies • Reduce the rate of low-birth weight deliveries • Increase substance use disorder treatment penetration among pregnant women • Increase Well-Child Visit rates among infants and young children • Increase rates of Chlamydia Screening • Improve access to effective contraceptive care (including LARC) • Increase childhood immunization rates Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1.
Data strategy, sources and collection frequency	**Administrative data.** Impact analyses will primarily use MMIS-derived physical and behavioral health data, and vital records (birth certificates from the Department of Health Center for Health Statistics individually linked to Medicaid clients in the First Steps Database, a component of the ICDB). Data are routinely collected through the operation of existing data interfaces, and is generally linked into the State's integrated client data environment on a quarterly basis. Measures related to unintended pregnancy and immunization rates will use Department of Health's the Pregnancy Risk Assessment Monitoring System (PRAMS) survey and immunization registry data, respectively. **Primary data collection.** Primary data will be collected for research questions that cannot be addressed using administrative data. Data collection efforts may include key informant interviews, focus groups, and stakeholder surveys. These data will support the qualitative analysis and interpretation of quantitative impact findings. The design and execution of qualitative methods and associated primary data collection will be the lead responsibility of the independent external evaluator. This responsibility will include: defining the number of focus groups, key informant interviews, and provider surveys; determining the universes and/or sample frames from which participants will be selected; determining when focus groups, interviews, or surveys will be conducted; aligning data collection instruments to specific research questions and hypotheses; and designing the specific data collection instruments. Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1.
Measures	Measures derived from administrative and PRAMS survey data sources in the State's integrated client data environment will include: • Rate of Teen Pregnancy (15 – 19) • Rate of Unintended Pregnancies (PRAMS survey) • Rate of Low Birth Weight Births

Component	Description
	• Prenatal care in the first trimester of pregnancy • Mental Health Treatment Penetration (Broad Version) • Substance Use Disorder Treatment Penetration • Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life • Well-Child Visits in the First 15 Months of Life • Chlamydia Screening in Women Ages 16 to 24 • Contraceptive Care – Most & Moderately Effective Methods • Contraceptive Care – Access to LARC • Contraceptive Care – Postpartum • Childhood Immunization Status Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1. Specifications for many of the state-developed outcome measures are provided in Appendix 2.
Statistical framework for measuring impacts	**Quantitative impact analysis.** A statewide project attribution data infrastructure will support the evaluation. The attribution model will capture the timing of beneficiary and/or provider engagement in Demonstration-funded projects. The model will also identify potentially confounding policy changes and programs, such as participation in Health Homes or regional variation in the timing of implementation of physical and behavioral health integration through fully integrated managed care products. The attribution model will be a foundational data source for implementation of propensity score based quasi-experimental evaluation designs. ACH projects will be separately evaluated, using difference-of-difference designs, where the pre-to-post change in experiences for beneficiaries receiving services will be compared against the change experienced by a matched comparison group. Analyses will draw on qualitative information to help interpret the quantitative assessment of project impacts on beneficiary outcomes. **Qualitative analysis.** A qualitative analysis of project implementation and operations will be conducted to identify implementation risks, determine opportunities to improve implementation, and inform the quantitative analysis of project impacts. The analysis for this project may address implementation issues such as: • Fidelity to evidence-based models (e.g., Nurse Family Partnership, Bright Futures) • Effectiveness of payment structures and VBP payment models to incentivize effective service delivery • Barriers to increasing immunization rates • Adoption of evidence-based interventions to reduce substance abuse during pregnancy
Subgroup analyses to assess disparities and differences	Subgroup analyses to assess disparities in access to services and outcomes may include, depending on the specific projects designed in this domain: • Race/ethnicity, age and gender • Geography (ACH region, urban/rural/frontier)

Component	Description
	• Behavioral health risk factors (e.g., maternal depression, other maternal mental illness conditions, substance use during pregnancy)

Project 3C: Access to Oral Health Services (optional).

Component	Description
Goals and objectives	Increase access to oral health services to prevent or control the progression of oral disease and ensure that oral health is recognized as a fundamental component of whole-person care.
Target populations	All Medicaid beneficiaries, especially adults.
Evaluation questions and testable hypotheses	The project focuses on providing oral health screening and assessment, intervention, and referral in the primary care setting, or through the deployment of mobile clinics and/or portable equipment. This is expected to increase access to oral health services for adults, improve prevention and control the progression of oral disease, and reduce reliance on emergency departments for oral pain and related conditions. Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1.
Data strategy, sources and collection frequency	**Administrative data.** Impact analyses will use MMIS-derived physical, behavioral health, and dental service data. Data are routinely collected through the operation of existing data interfaces, and are generally linked into the State's integrated client data environment on a quarterly basis. **Primary data collection.** Primary data will be collected for research questions that cannot be addressed using administrative data. Data collection efforts may include key informant interviews, focus groups, and stakeholder surveys. These data will support the qualitative analysis and interpretation of quantitative impact findings. The design and execution of qualitative methods and associated primary data collection will be the lead responsibility of the independent external evaluator. This responsibility will include: defining the number of focus groups, key informant interviews, and provider surveys; determining the universes and/or sample frames from which participants will be selected; determining when focus groups, interviews, or surveys will be conducted; aligning data collection instruments to specific research questions and hypotheses; and designing the specific data collection instruments. Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1.
Measures	Measures derived from administrative data sources in the State's integrated client data environment will include: • Oral health services utilization among Medicaid beneficiaries • Primary Caries Prevention Intervention as Part of Well/Ill Child Care as Offered by Primary Care Medical Providers • Outpatient Emergency Department Visits per 1000 Member Months • Ongoing Care in Adults with Chronic Periodontitis

Component	Description
	• Periodontal Evaluation in Adults with Chronic Periodontitis • Caries at Recall (Adults and Children) • Adult Treatment Plan Completed • Sealants - % Dental Sealants for 6-9 Year-Old Children at Elevated Caries Risk • Dental Sealants for 10-14 Year-Old Children at Elevated Caries Risk Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1. Specifications for many of the state-developed outcome measures are provided in Appendix 2.
Statistical framework for measuring impacts	**Quantitative impact analysis.** A statewide project attribution data infrastructure will support the evaluation. The attribution model will capture the timing of beneficiary and/or provider engagement in Demonstration-funded projects. The model will also identify potentially confounding policy changes and programs, such as participation in Health Homes or regional variation in the timing of implementation of physical and behavioral health integration through fully integrated managed care products. The attribution model will be a foundational data source for implementation of propensity score based quasi-experimental evaluation designs. ACH projects will be separately evaluated, using difference-of-difference designs, where the pre-to-post change in experiences for beneficiaries receiving services will be compared against the change experienced by a matched comparison group. Analyses will draw on qualitative information to help interpret the quantitative assessment of project impacts on beneficiary outcomes. **Qualitative analysis.** A qualitative analysis of project implementation and operations will be conducted to identify implementation risks, determine opportunities to improve implementation, and inform the quantitative analysis of project impacts. The analysis for this project may address implementation issues such as: • Ability to elicit dental service provider participation • Shortages of dentist, hygienist, and other dental care providers, and primary care providers • Alignment between payment structures and the integration of oral health services • Referral relationships with dentists and other specialists, such as ENTs and periodontists • Effectiveness of payment structures and VBP payment models to incentivize effective service delivery
Subgroup analyses to assess disparities and differences	Subgroup analyses to assess disparities in access to services and outcomes may include, depending on the specific projects designed in this domain: • Race/ethnicity, age and gender • Geography (ACH region, urban/rural/frontier), including an assessment of regional variation in the supply of oral health providers • Factors such as behavioral health conditions and functional support needs that might affect ability to access dental services

Project 3D: Chronic Disease Prevention and Control (optional).

Component	Description
Goals and objectives	Integrate health system and community approaches to improve chronic disease management and control.
Target populations	Medicaid beneficiaries (children and adults) with, or at risk for, arthritis, cancer, chronic respiratory disease (asthma), diabetes, heart disease, obesity and stroke, with a focus on those populations experiencing the greatest burden of chronic disease(s) in the region.
Evaluation questions and testable hypotheses	The project focuses on integrating health system and community approaches to improve chronic disease management and control. Implementation of evidence-based guidelines and best practices for chronic disease care and management using the Chronic Care Model is expected to: • Improve the quality of care for chronic conditions • Improve patient outcomes • Reduce utilization of inpatient and emergency department services • Increase patient activation/confidence to self-manage chronic conditions Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1.
Data strategy, sources and collection frequency	**Administrative data.** Impact analyses will use MMIS-derived physical, behavioral health, and LTSS service utilization data, and LTSS assessment data. Data are routinely collected through the operation of existing data interfaces, and are generally linked into the State's integrated client data environment on a quarterly basis. **Primary data collection.** Primary data will be collected for research questions that cannot be addressed using administrative data. Data collection efforts may include key informant interviews, focus groups, and stakeholder surveys. These data will support the qualitative analysis and interpretation of quantitative impact findings. The design and execution of qualitative methods and associated primary data collection will be the lead responsibility of the independent external evaluator. This responsibility will include: defining the number of focus groups, key informant interviews, and provider surveys; determining the universes and/or sample frames from which participants will be selected; determining when focus groups, interviews, or surveys will be conducted; aligning data collection instruments to specific research questions and hypotheses; and designing the specific data collection instruments. Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1.
Measures	Measures derived from administrative data sources in the State's integrated client data environment may include (depending on region-specific target populations): • Outpatient Emergency Department Visits per 1000 Member Months • Inpatient Admissions per 1000 Medicaid Member Months • Child and Adolescents' Access to Primary Care Practitioners

Component	Description
	• Adult Access to Preventive/Ambulatory Care • Comprehensive Diabetes Care: Eye Exam (retinal) performed • Comprehensive Diabetes Care: Medical attention for nephropathy • Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life • Well-Child Visits in the First 15 Months of Life • Medication Management for People with Asthma (5 – 64 Years) • Influenza Immunizations 6 months of age and older • Statin Therapy for Patients with Cardiovascular Disease • Adult Body Mass Index Assessment Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1. Specifications for many of the state-developed outcome measures are provided in Appendix 2.
Statistical framework for measuring impacts	**Quantitative impact analysis.** A statewide project attribution data infrastructure will support the evaluation. The attribution model will capture the timing of beneficiary and/or provider engagement in Demonstration-funded projects. The model will also identify potentially confounding policy changes and programs, such as participation in Health Homes or regional variation in the timing of implementation of physical and behavioral health integration through fully integrated managed care products. The attribution model will be a foundational data source for implementation of propensity score based quasi-experimental evaluation designs. ACH projects will be separately evaluated, using difference-of-difference designs, where the pre-to-post change in experiences for beneficiaries receiving services will be compared against the change experienced by a matched comparison group. Analyses will draw on qualitative information to help interpret the quantitative assessment of project impacts on beneficiary outcomes. **Qualitative analysis.** A qualitative analysis of project implementation and operations will be conducted to identify implementation risks, determine opportunities to improve implementation, and inform the quantitative analysis of project impacts. The analysis for this project may address implementation issues such as: • Fidelity to Chronic Care Model (CCM) guidelines • Ability of Health Information Technology systems to support data sharing, clinical-community linkages, timely communication among care team members, and care coordination and management processes • Shortages of Community Health Workers, Certified Asthma Educators, Certified Diabetes Educators, Home Health care Providers • Required workflow changes to support Registered Nurses and other clinical staff to be working to the top of professional licensure • Effectiveness of payment structures and VBP payment models to incentivize effective service delivery

Component	Description
Subgroup analyses to assess disparities and differences	Subgroup analyses to assess disparities in access to services and outcomes may include, depending on the specific projects designed in this domain: • Race/ethnicity, age and gender • Geography (ACH region, urban/rural/frontier) • Differences in selected target populations and chronic conditions

PROJECT-LEVEL DETAIL

Long Term Services and Supports (LTSS) - Medicaid Alternative Care (MAC) and Tailored Supports for Older Adults (TSOA)

Component	Description
Goals and objectives	Providing limited-scope LTSS to individuals "at risk" for Medicaid – and to Medicaid beneficiaries who are not currently receiving Medicaid-funded LTSS – to avoid or delay eligibility for and use of full Medicaid LTSS benefits, while preserving quality of life for beneficiaries and reducing costs for the state and federal government.
Target populations	**MAC.** Eligible individuals for the MAC program include current Medicaid beneficiaries who are functionally eligible for LTSS, but have chosen to receive limited-scope services supporting an unpaid caregiver rather than traditional Medicaid-funded LTSS. Further eligibility criteria include: • Age 55 or older; • Eligible for Categorically Needy (CN) or Alternative Benefit Plan (ABP) services; and • Meet functional eligibility criteria for Nursing Facility Level of Care (NFLOC) as determined through an eligibility assessment. **TSOA.** The demonstration establishes a new eligibility category for persons "at risk" of becoming eligible for Medicaid in order to access LTSS. This "At Risk" or "Tailored Supports for Older Adults" (TSOA) eligibility group is comprised of individuals who could receive Medicaid State Plan benefits under 42 CFR §435.236 and §435.217.Under the Demonstration, these persons may access a new LTSS benefit package designed to preserve quality of life while delaying increases in support needs (and the financial impoverishment) required for full Medicaid benefits. The individuals must: • Be age 55 or older; • Be a U.S. citizen or in eligible immigration status; • Not be currently eligible for CN or ABP Medicaid; • Meet functional eligibility criteria for NFLOC as determined through an eligibility assessment; • Be cared for by an unpaid caregiver in need of support services, or be an individual without a caregiver; • Have income up to 300% of the SSI Federal Benefit Rate.

Component	Description
	– To determine eligibility for TSOA services, the state will consider the income of the applicant, not their spouse/dependents, when determining if gross income is at or below the 300% SSI Federal Benefit Rate limit; and – To determine income, Washington will use the Social Security Income (SSI)-related income methodologies currently in use for determining eligibility for Medicaid LTSS. No post-eligibility treatment of income will apply and eligibility will be determined using only the applicant's income. Like the MAC population, Washington will not apply post-eligibility treatment of income to the TSOA populations. • Resource Limits -- Have countable resources below $53,100 for a single applicant and below $53,100 plus the state spousal resource standard for a married couple. – To determine resources, the State will us the Social Security Income (SSI)-related resource rules currently in use for determining eligibility for Medicaid LTSS with the following exceptions: a. Transfer of asset penalties do not apply b. Excess home equity provisions do not apply
Evaluation questions and testable hypotheses	Demonstration hypotheses (STC 108) associated with this initiative pertain to understanding the effects of modifying eligibility criteria and benefit packages for long-term services and supports, and assessing whether providing limited scope LTSS to individuals "at risk" for Medicaid – and to Medicaid beneficiaries who are not currently receiving Medicaid-funded LTSS – will avoid or delay eligibility for and use of full Medicaid LTSS benefits, while preserving quality of life for beneficiaries and reducing costs for the state and federal government. The domains of focus and associated research questions specified in STC 109 are: "What are the effects of modifying eligibility criteria and benefit packages for long-term services and supports?" Detailed project-level mapping of Initiative 2 research questions, testable hypotheses, data sources, and outcome metrics are provided in this section, and are not reproduced in Appendix 1. Specific testable hypotheses will include: • Do caregivers show change from baseline to 6-month follow-up in survey/self-report measures of: – Caregiving burden – Physical/mental health status – Quality of life • Do care receivers, including TSOA individuals without unpaid caregivers, show change from baseline to 6-month follow-up in survey/self-report measures of: – Physical/mental health status – Quality of life • Are caregivers and care receivers satisfied with their experience with the program?

Component	Description
	• Do MAC program participants show similar health outcomes to comparable recipients of traditional Medicaid LTSS services? • Following implementation of the MAC and TSOA programs, are Medicaid-paid LTSS cost trends lower than expected based on forecasts derived from baseline Medicaid-paid LTSS utilization rates and the observed changes in per cap costs and the composition of the Washington State population? Detailed mapping of research questions, outcome metrics, and data sources are provided in the sections below, and are not reproduced in Appendix 1.
Data strategy, sources and collection frequency	**Participant Self-Report Data.** Self-report data from Caregivers (CG) and care receivers (CR) to support evaluation of the MAC and TSOA programs will be collected from participants through two sources: (1) assessments (Tailored Caregiver Assessment and Referral (TCARE®) for caregivers and GetCare for persons without caregivers) and related administrative data and (2) surveys. These two data collection methods are complementary, as some data is best collected in the course of screening, establishing eligibility, service planning and periodic re-screening and re-assessment. Other data elements are best collected through survey methods. Self-report data to be collected are expected to include: • Opportunities and challenges encountered in program implementation (supporting formative evaluation); • Satisfaction with program participation; • Caregiver characteristics, perceived burdens, stressors, relationship with care receiver, quality of life, and physical/mental health issues; • Care receiver living situation, assistance needs, problematic behaviors, cognitive status, quality of life, and physical/mental health; • Values/preferences related to decision-making around these programs; • LTSS placement intentions; and • Qualitative descriptions of caregiver and care receiver experiences, in their own words. Self-report data will mitigate the impact on the evaluation of the absence of comparable health service utilization data for non-Medicaid clients, and lack of LTSS-related functional assessment data for Medicaid clients not receiving LTSS services. ***Self-Reported Administrative Assessment Data.*** IT systems used to administer the MAC and TSOA programs (e.g., TCARE and GetCare) are expected to collect information on a number of domains of interest for evaluation. These data are expected to be gathered by the program in the course of application, planning, and initial and ongoing screenings and assessments. Program IT systems will capture information for the universe of persons served, and are likely to be relied upon to support the range of potential subgroup analyses. In some cases, information captured by administrative data systems are collected at a time that best reflects the circumstances of caregivers and care receivers at the time of decision-making. Data will be collected initially at the time of initial application, screening and assessment. For those receiving ongoing services, re-screening will occur every 6 months and reassessment annually,

Component	Description
	allowing longitudinal analysis. The following measurement domains may be particularly informed by data gathered using program IT systems: • Caregiver characteristics, perceived burdens, relationship with care receiver, issues with caregiving, mental health indicators, and overall health status; • Care receiver living situation, assistance needs, problematic behaviors, cognitive status, and items related to physical/mental health; • LTSS placement intentions ***Survey Data*.** The primary purpose of the surveys 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. They allow more detailed answers, less opportunity for bias, and precise identification of respondent. The surveys will also collect early feedback on program implementation to support formative evaluation. 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. Data to be collected with these surveys are expected to include: • Opportunities and challenges encountered in program implementation (supporting formative evaluation); • 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). **Survey 1.** In the winter of 2018 (at least 4 months after program implementation), RDA will conduct a survey to identify emerging issues from the perspective of caregivers and care receivers. This survey will also serve as a pilot test to refine procedures, survey questions, and data collection cost estimates for subsequent survey waves. Because the primary goal of this survey wave is rapid collection of qualitative data to support program implementation through formative evaluation, the sample size will be relatively small. RDA will complete at least 50 telephone interviews with enrolled CGs and 50 with CRs who have completed full intake assessments of each of the two programs (MAC and TSOA), with a planned total of 232 interviews (accounting for pretesting and expected differences in response rates). **Survey 2.** Between April 2018 and December 2018, RDA will survey a random sample of CG-CR dyads soon after they first receive services/benefits through MAC or TSOA. The time required for reliable identification of all beneficiaries is still unknown, but we anticipate contact attempts starting approximately 30 days after

Component	Description
	first receipt of benefits. Survey 2 will serve as a "baseline" for comparisons of measures representing the domains listed above. **Survey 3**. Between March 2019 and September 2019, RDA will conduct another survey targeting participants interviewed in Survey 2. Contact attempts will begin approximately 12 months after the Survey 2 interview date. Survey 3 will provide a second measurement point that will enable description of how CGs and CRs experience the effects of participation in the MAC and TSOA programs. **Survey design and sampling.** The study population for all three 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 utilize random sampling, and will be stratified by program. If indicated by the pilot results and enrollee characteristics, additional stratification factors may be chosen for surveys 2 and 3. A primary purpose of Survey 1 is to obtain early feedback about implementation. For this reason, selection for survey 1 will focus on early enrollees who are new to LTSS. The specific selection criteria will depend on the pace of enrollment, characteristics and geographic dispersion of early enrollees, and availability of the sampling frame. In general, all members of a group with slowest enrollment will be selected sequentially until a target proportional to that population is reached. Other groups will be sampled systematically from a random start point, with every kth dyad selected according to an interval determined by the expected enrollment of each group over the time period required to complete the slowest group. Surveys 2 and 3 are planned as two longitudinal waves in which respondents to survey 2 will be re-interviewed for survey 3. Depending on pilot results, resources, project needs, we expect to augment survey 3 with a cross-sectional random sample. All participants interviewed in Survey 2 will be eligible to complete survey 3, including those who are no longer receiving services. Based on experience conducting surveys of similar populations, we estimate that 70% of CG/CR dyads can be contacted and will consent to take the survey in the first year, but 25% of CRs will be unable to complete an interview due to cognitive or physical limitations. We estimate 1-year attrition of up to 56%, based on a 2014 RDA analysis of TCARE assessment results for the Family Caregiver Support Program (FCSP). The final plan for survey 2 sample selection will be determined after evaluation of survey 1 results and enrollment patterns in Demonstration Year 1. Sample size estimates are based on paired t-test requirements for 90% power to detect differences of 1 SD ($p < .05$) in a population with $M = 0$ and $SD = 1$, plus a contingency adjustment of 1.25 (minimum n = 30 pairs for each combination of program (MAC or TSOA) and role (CG or CR). In the event of high attrition, augmenting the survey 3 sample with up to 170 additional participants with similar length of participation (85 CG-CR dyads) will allow equivalent power for cross-sectional (two-sample) t-test comparisons. Data will be weighted to reflect selection probabilities and (if needed) adjusted for nonresponse. **Assessment and mitigation of potential biasing factors.** In any longitudinal survey there is potential for bias if nonresponse is correlated with the measurements of interest. The abundance of administrative and program data will allow us to assess this potential in surveys 2 and 3 by analyzing the relationships between survey response and variables from the NFLOC prescreening and TCARE assessments,

Component	Description
	including but not limited to LTSS placement intentions, caregiver ratings of care receiver health and quality of life, caregiver health status and burdens experienced, and demographic characteristics. If these analyses indicate the potential for nonresponse bias, post-stratification weights will be constructed using the factors that are most strongly related to nonresponse. Weighted survey data will be analyzed using routines that adjust for complex designs using the Taylor series method or resampling methods for variance adjustment, such as SAS PROC SURVEYREG. **LTSS utilization and cost impact estimates.** These estimates will use Medicaid-paid LTSS cost and utilization data derived from ProviderOne and related service payment data, linked to Medicare Part A, B and D data for persons dually eligible for Medicare and Medicaid. As described in detail in Section 3, Medicaid data are routinely collected through the operation of existing payment processes, and is generally linked into the State's ICDB environment on a quarterly basis. Washington State is a national leader in the integration of Medicare data to support analytical and care management uses for dual eligibles. Medicaid-paid LTSS cost and utilization data will be combined with Washington State population data derived from US Census Bureau data products (e.g., the American Community Survey), as reflected in the County Population Estimation Model (CPEM) maintained by the OFM Forecasting and Research Division. The CPEM is expected to be updated by the end of CY 2017 with projections through at least 2025, with updates on an approximately annual basis as new American Community Survey data are released.
Measures	**Survey and administrative self-report measures.** As detailed above, administrative assessment data is expected to capture measures related to caregiver characteristics and issues; caregiver condition/circumstances, and LTSS placement intentions. Many of these measures are part of the evidence-based, validated TCARE® screening and assessment system, which has been a component of numerous recognized evidence-based assessments. Survey instruments will be designed to complement the information available in administrative data, and collect additional key data and more in-depth data. As detailed above, the first survey wave is designed to inform program implementation and operation, rather than to measure program impacts on caregiver and care receiver experiences and outcomes. Measures of participant experiences and potential impacts on quality of life, caregiver burdens and health, and participant satisfaction with program participation will be derived from data captured in the second and third survey waves, described above. The precise specifications of wave 2 and wave 3 survey instruments are expected to be determined in consultation with the independent external evaluator. **Comparisons between MAC clients and recipients of traditional Medicaid LTSS services.** This component of the evaluation will focus on health service utilization and related outcomes, including: • Outpatient Emergency Department Visits per 1000 Member Months (NCQA HEDIS® EDU or similar state-defined alternative) • Inpatient Admissions per 1,000 Member Months (NCQA HEDIS® IHU or similar state-defined alternative)

Component	Description
	• Plan All-Cause 30-Day Readmission Rate (NCQA HEDIS® PCR) • Nursing facility entry rate (state-defined measure derived from nursing home claim data currently integrated into the State's ICDB) • Mortality rates (state-defined measure derived from death certificate records currently integrated into the State's ICDB **Overall LTSS utilization and cost impact estimates.** Estimates of impacts on Medicaid-paid LTSS utilization and costs will be derived using the "synthetic estimation projection" approach described in the next section. This analysis will rely on measures of Medicaid-paid LTSS service costs and utilization derived from state agency administrative data, combined with Washington State population data derived from US Census Bureau data products (e.g., the American Community Survey), as reflected in the County Population Estimation Model maintained by the OFM Forecasting and Research Division.
Statistical framework for measuring impacts	**Survey and administrative assessment measures.** Due to the lack of data necessary to create a "comparison sampling frame" for persons meeting comparable eligibility criteria who do not engage in MAC or TSOA services, analysis of survey and assessment data will focus on levels and changes in measures for the intervention group between the second (baseline) and third survey waves described above. This is essentially a pre-test/post-test design, where we recognize that the pre-test survey wave will occur very early in the "treatment period" (e.g., approximately 30 days after first receipt of benefits). Analysis of administrative data from TCARE assessments and related sources will take a similar approach, with changes in caregiver and care receiver circumstances measured from their initial assessment through subsequent assessments. In the absence of comparison groups of similar caregiver and care receiver dyads not receiving MAC or TSOA services, analysis of administrative assessment data is likely to be used primarily to understand participant experiences and differences in experiences across populations. **Comparisons between MAC clients and recipients of traditional Medicaid LTSS services.** A statewide project attribution data infrastructure will support the evaluation. The attribution model will capture the timing of beneficiary and/or provider engagement in Demonstration-funded projects. The model will also identify potentially confounding policy changes and programs, such as participation in Health Homes or regional variation in the timing of implementation of physical and behavioral health integration through fully integrated managed care products. The attribution model will be a foundational data source for implementation of propensity score based quasi-experimental evaluation designs. An assessment of the difference between MAC clients and recipients of traditional Medicaid LTSS services will be conducted using difference-of-difference designs where appropriate, wherein the pre-to-post change in experiences for beneficiaries receiving services will be compared against the change experienced by a matched comparison group. The matching process will leverage the available baseline assessment data for MAC clients and recipients of traditional Medicaid LTSS services. The pre-post boundary for each treatment group (MAC and traditional LTSS) will be based on the point at which they first engage in the intervention, with

Component	Description
	the imposition of a minimum prior period with no LTSS service receipt. The PS matching process will proceed through the following steps: • Examination of key baseline predictors of treatment entry within the pooled intervention and comparison matching frame to ensure inclusion of appropriate measurement dimensions in the PS model. This includes creating an extensive set of predictors that are determined, ex ante, to be potentially relevant to the matching process. This set of predictors is generally expected to span a wide range of the measurement domains contained with the State's ICDB, which may include: – Service utilization data across Medicare and Medicaid funded delivery systems (physical, mental health, substance use disorder, long-term services and support, and developmental disability services); – Expenditure data at the "major modality" (e.g., IP hospitalization, OP ED visits, etc.) per-member per-month level; – Risk factors associated with chronic disease conditions, including mental illness and substance use disorders, derived from the CDPS and Medicaid-Rx risk models; – Data on functional support needs, cognitive impairment, and behavioral challenges from the client's initial LTSS assessment at the point of intake into the MAC or traditional LTSS service; – Client demographics (age, gender, race/ethnicity); – Medicaid enrollment by detailed coverage category; and – Urban/rural/frontier characteristics of the beneficiary's residential location. • Application of machine learning techniques (e.g., stepwise logistic or lasso regression) to determine the final propensity score model. • Propensity score matching using procedures in the R programming language (e.g., the Matchit procedure). Exact matching may be required for key variables (e.g., age and gender). As with all Demonstration initiatives, target populations are expected to partially overlap across projects and programs. The statewide project attribution data infrastructure will be leveraged to identify project participation longitudinally at the beneficiary level. Analyses may be limited to subpopulations of clients with "common support" across baseline matching criteria, and subpopulations not engaged in other Demonstration projects or other initiatives. This restriction has parallels to study enrollment restrictions commonly imposed in the randomized clinical trial context. The baseline period for construction of matching variables will typically be the prior 12 months, but may be of longer duration if information from prior periods is determined to be predictive of engagement in MAC or traditional LTSS services. Outcome periods will typically be periods comprised of one or more 12-month segments or intervals, depending on the length of available follow-up time. Impact will generally be estimated in a regression framework using SAS regression procedures and models including controls for baseline characteristics, notably including those characteristics on which exact matching is not imposed.

Component	Description
	The ICDB will be the data source all measurement within this component of the evaluation. As was discussed in more detail in Section 3, the ICDB is designed to support quasi-experimental evaluation of health and social service interventions in Washington State, has been widely used in evaluation studies published in peer-reviewed journals, and contains data from the administrative data systems, including Medicare Parts A, B, and D data and the State's ProviderOne MMIS data system, necessary to implement this component of the quantitative evaluation design. **Overall LTSS utilization and state and federal cost impact estimates.** Estimates of impacts on Medicaid-paid LTSS utilization and costs will be done using a "synthetic estimation projection" approach. This approach involves: • Measuring baseline SFY 2017 (pre-Demonstration) Medicaid-paid LTSS utilization in Washington State, by detailed demographic cells defined by age, gender, race/ethnicity, and income level as derived from ACS data for Washington State; • Applying these utilization rates to (1) observed changes in per cap (per service user per month)[14] costs by LTSS service modality and (2) the forecast demographic composition of the Washington State population based on a process maintained by the Governor's Office of Financial Management which leverages ACS data for Washington State; and • Comparing the actual levels of Medicaid-paid LTSS utilization and costs under the Demonstration, including the MAC and TSOA program costs, to the levels of utilization and costs projected from the synthetic estimation model derived from baseline utilization, the observed evolution of per cap LTSS costs, and forecast changes to the composition of the Washington State population.
Subgroup analyses to assess disparities and differences	The dimensions to be considered for analysis of disparities and differences in access to services and outcomes, to the extent feasible using available survey and administrative data, may include: • Age and gender • Race/ethnicity • Geography (urban/rural/frontier) • Functional risk factors (presence of cognitive impairment or dementia, behavioral risks, severity of physical comorbidities) • Care receiver relationship to caregiver • For the TSOA program, clients with caregivers relative to clients without caregivers

PROJECT-LEVEL DETAIL
Foundational Community Supports Program

[14] These are per user per month costs by major LTSS service modality (nursing facility, in-home personal care, and community residential care) that are used as key components of the State's LTSS budget forecast, along with monthly caseload data. In other words, we expect to use the observed evolution of these LTSS cost parameters in this analysis.

Component	Description
Goals and objectives	Provide targeted community transition services, community support services, and supported employment services to help at-risk clients reside in stable community settings and gain and maintain stable employment, helping to improve beneficiary housing stability, employment outcomes, health outcomes, quality of life, and reduce Medicaid program costs[15].
Target populations	Potential changes to the FCS protocol are currently being reviewed with CMS. This table references FCS program descriptions reflected in the originally approved STCs, for purposes of illustrating the proposed evaluation approach. The final evaluation approach will reflect the actual design of the implemented FCS program. As with all Demonstration initiatives, target populations are expected to partially overlap across projects and programs. The statewide project attribution data infrastructure will be leveraged to identify project participation longitudinally at the beneficiary level. Analyses based on the propensity score matching approach may be limited to subpopulations of FCS clients with "common support" across baseline matching criteria, and subpopulations not engaged in other Demonstration projects or other initiatives. This restriction has parallels to study enrollment restrictions commonly imposed in the randomized clinical trial context. Eligible individuals include those who would be eligible under a section 1915(c) waiver program or a section 1915(i) state plan amendment and are determined to be require FCS services in order to obtain and maintain stable housing and/or employment. FCS is comprised of: • **Community Transition Services (CTS).** One-time supports designed to assist eligible clients transitioning out of institutional settings, or prevent eligible clients from entering institutional settings. Supports cover expenses necessary to enable an eligible client to obtain an independent, community-based living setting. • **Community Support Services (CSS).** Ongoing supportive services designed to support placement in an independent, community-based setting, as established in the eligible client's needs assessment and individualized treatment plan. • **Supported Employment - Individual Placement and Support (IPS).** Ongoing supports to participants who, because of their disabilities, need intensive support to obtain and maintain employment in the general workforce for which an individual is compensated at or above the minimum wage, but not less than the customary wage and level of benefits paid by the employer for the same or similar work performed by individuals without disabilities. CTS eligibility criteria include Medicaid clients age 18 and older, who meet the following criteria:

[15] Potential changes to the FCS protocol are currently being reviewed with CMS. This document references FCS program descriptions reflected in the originally approved STCs, for purposes of illustrating the proposed evaluation approach. The final evaluation approach will reflect the actual design of the implemented FCS program.

Component	Description
	• But for the provision of such services, the client would require admission into an institutional setting, or, • Is transitioning out of an institutional setting and, but for the provision of such services, would not be able to access and maintain a community-based setting; and • Exhibits one or more of the following characteristics: – Chronically homeless, as defined by the US Department of Housing and Urban Development, – Frequent or lengthy institutional or residential care stays, – Frequent turnover of in-home caregivers, or – Has a Predictive Risk Intelligence System (PRISM) score of 1.5 or above PRISM integrates medical, behavioral health and long-term care data to assess an individual's projected service needs. For the purposes of CTS, institutional settings include settings requiring a nursing facility level of care, inpatient medical hospitals, or inpatient behavioral health facilities. CSS eligibility criteria include Medicaid clients age 18 or older who are in need of Community Support Services, as determined by a functional needs assessment. The assessment must determine that one or more of the following characteristics are present: • Chronically homeless as defined by the US Department of Housing and Urban Development, • Frequent or lengthy institutional contacts as defined in the functional needs assessment, • Frequent or lengthy adult residential care stays as defined in the functional needs assessment, • Frequent turnover of in-home caregivers as defined in the functional needs assessment, or • Have a Predictive Risk Intelligence System (PRISM) Risk Score of 1.5 or above. IPS eligibility includes Medicaid clients age 16 or older who are in need of IPS, as determined by a functional needs assessment. The assessment must determine that one or more of the following characteristics are present: • Enrolled in the state Housing and Essential Needs (HEN) or Aged, Blind or Disabled (ABD) program • A diagnosed Serious and Persistent Mental Illness (SPMI) • Multiple instances of inpatient substance use treatment • Co-occurring mental and substance-use disorders • Working age youth, age 16 and older, with a behavioral health diagnosis • Receiving long-term services and supports
Evaluation questions and testable hypotheses	Demonstration hypotheses (STC 108) associated with this initiative pertain to understanding whether the provision of foundational community supports - supportive housing and supported employment - will improve health outcomes and reduce costs for a targeted subset of the Medicaid population. The domains of focus and associated research questions specified in STC 109 include assessing the effectiveness of the providing foundational community supports in terms of health,

Component	Description
	quality of life, and other benefits to the Medicaid program. Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1. The term "targeted subset" used in the STC refers to the targeted eligibility criteria associated with the FCS program, as indicated in the "target population" section immediately above. Again, we note that as with all Demonstration initiatives, target populations are expected to partially overlap across projects and programs. The statewide project attribution data infrastructure will be leveraged to identify project participation longitudinally at the beneficiary level. Analyses based on the propensity score matching approach may be limited to subpopulations of FCS clients with "common support" across baseline matching criteria, and subpopulations not engaged in other Demonstration projects or other initiatives. This restriction has parallels to study enrollment restrictions commonly imposed in the randomized clinical trial context. Evaluation questions pertain to understanding whether the provision of foundational community supports will improve health outcomes and reduce costs for a targeted subset of the Medicaid population. Specific testable hypotheses, as described in more detail in Appendix 1, will include: • Do CTS or CSS services reduce homelessness and increase housing stability? • Do IPS services increase employment rates and earnings levels? • Do CTS, CSS or IPS services reduce the risk of criminal justice involvement? • Do CTS, CSS or IPS services reduce health service utilization and costs, including ED visits, inpatient admissions, or institutional LTSS utilization and overall Medicaid expenditures? • Is receipt of CTS, CSS or IPS services associated with increased engagement in other supportive preventative care, mental health or substance use treatment services (with increased engagement in such services considered to be a positive outcome)? • Is receipt of CTS, CSS or IPS services associated with increased measures of health care quality, consistent with positive effects on the beneficiary's ability to manage physical and behavioral health conditions? • Is Health IT used to support service delivery on behalf of persons for whom CTS, CSS, or IPS services are provided. For example, does health technology support the exchange of information between programs (such as criminal justice, Homeless Management Information System, Vocational Rehabilitation, and Medicaid) or providers (such as Emergency medical Response, EDs, acute care hospitals, and MH/SUD providers))? If so, how? If not, why not?
Data strategy, sources and collection frequency	Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1. Impact analyses will use MMIS-derived physical and behavioral health service utilization data, LTSS assessment data, and linked "social determinant" outcome data. Data is routinely collected through the operation of existing data interfaces, and is generally linked into the State's integrated client data environment on a quarterly basis.

Component	Description
	To address a request for clarification from feedback received on the prior draft, we note that LTSS data is one of multiple sources of health risk factor information (e.g., ICD-10 diagnoses, cognitive performance scale scores, ADL functional need scores) integrated into the State's ICDB. Propensity-score models will generally match treatment group members to comparison group members with comparable baseline levels of LTSS utilization. In this context, use of LTSS assessment data ensures balance on assessment-derived risk factors for subpopulations with comparable balance in their exposure to LTSS assessment processes. This is an example of our use of the vast dimensionality of risk information in the ICDB to reduce (i.e., mitigate) the magnitude of selection bias that could occur if the proposed analytical approaches were undertaken in a less information-rich environment.
Measures	Detailed project-level mapping of evaluation research questions, testable hypotheses, data sources, and outcome metrics is provided in Appendix 1. Specifications for many of the state-developed outcome measures are provided in Appendix 2. Measures derived from administrative data sources in the State's integrated client data environment will include: • Measures of homelessness and housing stability • Measures of employment, hours worked and earnings • Measures of criminal justice involvement • Measures of health service utilization and cost, including ED visits, inpatient admissions, nursing facility utilization and overall Medicaid expenditures • Access to mental health and substance use disorder treatment • Other health care quality measures (e.g., psychotropic medication adherence, comprehensive diabetes care)
Statistical framework for measuring impacts	**Quantitative impact analysis.** A statewide project attribution data infrastructure will support the evaluation. The attribution model will capture the timing of beneficiary and/or provider engagement in Demonstration-funded projects. The model will also identify potentially confounding policy changes and programs, such as participation in Health Homes or regional variation in the timing of implementation of physical and behavioral health integration through fully integrated managed care products. The attribution model will be a foundational data source for implementation of propensity score based quasi-experimental evaluation designs. An assessment of the difference between FCS program participants and non-participants with comparable baseline attributes will be conducted using difference-of-difference designs where appropriate, wherein the pre-to-post change in experiences for beneficiaries receiving services will be compared against the change experienced by a matched comparison group. The matching process will leverage the richness of baseline demographic, risk, and utilization data contained in the State's ICDB. The pre-post boundary for each treatment group will be based on the point at which they first engage in the intervention. The PS matching process will proceed through the following steps: • Examination of key baseline predictors of treatment entry within the pooled intervention and comparison matching frame to ensure inclusion of appropriate measurement dimensions in the PS model. This includes creating

Component	Description
	an extensive set of predictors that are determined, ex ante, to be potentially relevant to the matching process. This set of predictors is generally expected to span a wide range of the measurement domains contained with the State's ICDB, which may include: – Service utilization data across Medicaid funded delivery systems (physical, mental health, substance use disorder, long-term services and support, and developmental disability services); – Expenditure data at the "major modality" (e.g., IP hospitalization, OP ED visits, etc.) per-member per-month level; – Risk factors associated with chronic disease conditions, including mental illness and substance use disorders, derived from the CDPS and Medicaid-Rx risk models; – Data on functional (ADL) support needs, cognitive impairment, and behavioral challenges from the client's current LTSS assessment, if applicable; – Prior patterns of housing instability or homelessness; – Prior rates of employment and earnings levels; – Prior arrest experiences; – Client demographics (age, gender, race/ethnicity); – Medicaid enrollment by detailed coverage category; and – Urban/rural/frontier characteristics of the beneficiary's residential location. • Application of machine learning techniques (e.g., stepwise logistic or lasso regression) to determine the final propensity score model. • Propensity score matching using procedures in the R programming language (e.g., the Matchit procedure). Exact matching may be required for key variables (e.g., age and gender). As with all Demonstration initiatives, target populations are expected to partially overlap across projects and programs. The statewide project attribution data infrastructure will be leveraged to identify project participation longitudinally at the beneficiary level. Analyses may be limited to subpopulations of clients with "common support" across baseline matching criteria, and subpopulations not engaged in other Demonstration projects or other initiatives. This restriction has parallels to study enrollment restrictions commonly imposed in the randomized clinical trial context. The baseline period for construction of matching variables will typically be the prior 12 months, but may be of longer duration if information from prior periods is determined to be predictive of engagement in FCS services. Outcome periods will typically be periods comprised of one or more 12-month segments or intervals, depending on the length of available follow-up time. Impact will generally be estimated in a regression framework using SAS regression procedures and models including controls for baseline characteristics, notably including those baseline characteristics on which exact matching is not imposed. The ICDB will be the data source all measurement within this component of the evaluation. As was discussed in more detail in Section 3, the ICDB is designed to

Component	Description
	support quasi-experimental evaluation of health and social service interventions in Washington State, has been widely used in evaluation studies published in peer-reviewed journals, and contains data from the administrative data systems, including Medicare Parts A, B, and D data and the State's ProviderOne MMIS data system, necessary to implement this component of the quantitative evaluation design. **Qualitative analysis.** A qualitative analysis of project implementation and operations will be conducted to identify implementation risks, determine opportunities to improve implementation, and inform the quantitative analysis of project impacts. The analysis for this project may address implementation issues such as: • Provider capacity to effectively deliver CTS, CSS and supported employment services • Implementation fidelity to CTS, CSS and supported employment service models • Use of HIT to support delivery of CTS, CSS and supported employment services • The extent of linkages between CTS, CSS and supported employment service providers and other health care providers • Effectiveness of payment structures and VBP payment models to incentivize effective service delivery
Subgroup analyses to assess disparities and differences	Among the dimensions that will be considered for analysis of disparities and differences in access to services and outcomes include: • Race/ethnicity, age and gender • Geography (urban/rural/frontier) • Delivery system affiliation (e.g., physical health, mental health, SUD, LTSS and/or Tribal) • Chronicity of housing instability • Extent of prior employment history • Functional risk factors (presence of cognitive impairment or TBI, behavioral health risk factors, severity of physical comorbidities) • Extent of prior criminal justice involvement • Previously institutionalized populations

APPENDIX 1

Alignment of Demonstration and Project-Specific Testable Hypotheses to Evaluation Metrics and Data Sources

TABLE 1.
Project 2A: Bi-Directional Integration of Care and Primary Care Transformation

H_1

Demonstration Hypotheses (STC 108)	**Do ACH projects improve individual health outcomes, and thereby contribute to improved population health outcomes?**	
Research Questions Identified in Domains of Focus (STC 109)	**Q**	***Were ACH projects addressing Bi-Directional Integration of Care and Primary Care Transformation effective in achieving the goals of better care for individuals, including:*** • *Access to care,* • *Quality of care, and* • *Health outcomes?*
Project-Specific Testable Hypotheses	1.1	***Do ACH projects addressing Bi-Directional Integration of Care and Primary Care Transformation . . .*** . . . increase ***screening*** for physical health conditions, with a focus on eliminating disparities for persons with behavioral health risk factors?
		PERFORMANCE METRICS • NCQA HEDIS® Adults' Access to Preventive/Ambulatory Health Services (AAP) • NCQA HEDIS® Child and Adolescents' Access to Primary Care Practitioners • NCQA HEDIS® Breast Cancer Screening (BCS) • NCQA HEDIS® Cervical Cancer Screening (CCS) • NCQA HEDIS® Colorectal Cancer Screening (COL) • NCQA HEDIS® Chlamydia Screening (CHL) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.
Project-Specific Testable Hypotheses	1.2	***Do ACH projects addressing Bi-Directional Integration of Care and Primary Care Transformation . . .*** . . . increase ***access*** to and ***engagement*** in treatment for mental illness and/or substance use disorders?
		PERFORMANCE METRICS • Mental Health Service Penetration (state-defined, see Appendix 2 for measure specification) • Substance Used Disorder Treatment Penetration (state-defined, see Appendix 2 for measure specification) • NCQA HEDIS® Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (IET) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.
Project-Specific Testable Hypotheses	1.3	***Do ACH projects addressing Bi-Directional Integration of Care and Primary Care Transformation . . .*** . . . improve ***quality*** of care for behavioral and physical health conditions?

		PERFORMANCE METRICS • NCQA HEDIS® All-Cause 30-Day Readmission (PCR) • State-defined 30-Day Readmission psychiatric readmission measure analogous to NCQA HEDIS®PCR (see Appendix 2 for measure specification) • NCQA HEDIS® Comprehensive Diabetes Care: Eye Exam (Retinal) Performed • NCQA HEDIS® Comprehensive Diabetes Care: Medical Attention for Nephropathy • NCQA HEDIS® Comprehensive Diabetes Care: Hemoglobin A1c Testing • NCQA HEDIS® Medication Management for People with Asthma (MMA) • NCQA HEDIS® Antidepressant Medication Management (AMM) • NCQA HEDIS® Adherence to Antipsychotics for Persons with Schizophrenia (SAA) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	1.4	***Do ACH projects addressing Bi-Directional Integration of Care and Primary Care Transformation . . .*** . . . improve ***coordination*** of care for persons with co-occurring behavioral and physical health conditions?
		PERFORMANCE METRICS • NCQA HEDIS® Diabetes Screening for People with Schizophrenia/Bipolar Disorder • NCQA HEDIS® Follow-up after Emergency Department Visit for Alcohol or Drug Dependence within 7/30 Days (FUA) • NCQA HEDIS® Follow-up after Emergency Department Visit for Mental Illness within 7/30 Days (FUM) • NCQA HEDIS® Follow-Up After Hospitalization for Mental Illness (FUH) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	1.5	***Do ACH projects addressing Bi-Directional Integration of Care and Primary Care Transformation . . .*** . . . improve beneficiary ***health and social outcomes***?
		PERFORMANCE METRICS • NCQA HEDIS® Inpatient Hospital Utilization (IHU) or similar state-defined alternative • NCQA HEDIS® Emergency Department Utilization (EDU) or similar state-defined alternative • Balance between institutional (nursing facility) and home- and community-based LTSS utilization (see Appendix 2 for measure specification) • Employment Rate (state-defined, see Appendix 2 for measure specification) • Arrest Rate (state-defined, see Appendix 2 for measure specification) • Homelessness Rate (state-defined, see Appendix 2 for measure specification) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

	1.6	***Do ACH projects addressing Bi-Directional Integration of Care and Primary Care Transformation . . .***

Project-Specific Testable Hypotheses		. . . reduce disparities in health and social outcomes for persons with mental illness and/or substance use disorders, relative to Medicaid beneficiaries without behavioral health service needs?
		PERFORMANCE METRICS Stratification of measures listed above related to physical health care, service utilization, and cost into subpopulations based with mental illness and/or substance use disorders. • Presence of mental illness will be defined using the denominator criteria from the state-defined mental health service penetration rate metric. • Presence of substance use disorder will be defined using the denominator criteria from the state-defined Substance Use Disorder Treatment penetration rate metric. • Subpopulations with serious mental illness (SMI) may be defined by use of Chronic Illness and Disability Payment System (CDPS) Psychiatric High, Psychiatric Medium, and Psychiatrics Medium Low risk groups which include persons with schizophrenia, mania/bipolar disorders, major recurrent depression, and conditions of comparable severity. **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

H_2

Demonstration Hypotheses (STC 108)	**Do ACH projects reduce use of potentially avoidable intensive services and service settings, contributing to holding spending growth below national trends?**

Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***Were ACH projects addressing Bi-Directional Integration of Care and Primary Care Transformation effective in achieving lower health care costs?***

Project-Specific Testable Hypotheses	2.1	***Do ACH projects addressing Bi-Directional Integration of Care and Primary Care Transformation . . .*** . . . reduce potentially avoidable utilization of inpatient hospital services related to physical or behavioral health conditions?
		PERFORMANCE METRICS • NCQA HEDIS® All-Cause 30-Day Readmission (PCR) • State-defined 30-Day Readmission psychiatric readmission measure analogous to NCQA HEDIS®PCR (see Appendix 2 for measure specification) • NCQA HEDIS® Inpatient Hospital Utilization (IHU) or similar state-defined alternative **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	2.2	***Do ACH projects addressing Bi-Directional Integration of Care and Primary Care Transformation . . .*** . . . reduce ED utilization?
		PERFORMANCE METRICS • NCQA HEDIS® Emergency Department Utilization (EDU) or similar state-defined alternative **DATA SOURCES**

		RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	2.3	***Do ACH projects addressing Bi-Directional Integration of Care and Primary Care Transformation . . .*** . . . reduce utilization of nursing facility care for persons requiring long-term services and supports?
		PERFORMANCE METRICS • Balance between institutional (nursing facility) and home- and community-based LTSS utilization (see Appendix 2 for measure specification) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	2.4	***Do ACH projects addressing Bi-Directional Integration of Care and Primary Care Transformation . . .*** . . . reduce per-member per-month health care expenditures?
		PERFORMANCE METRICS • State-defined measures of per-member per-month health care expenditures across physical health, mental health, substance use disorder, and LTSS service domains **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

H_3

Demonstration Hypotheses (STC 108)	**Are ACHs able to implement projects that (1) support redesigned care delivery, (2) expand health system capacity, and (3) accelerate adoption of value-based payment reform?**

Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***To what extent are ACH projects in this domain implemented with fidelity to the selected models of care?***
	Q.	***To what extent do ACH projects in this domain achieve the intended care delivery reform?***
	Q.	***To what extent do ACH projects in this domain contribute to advancements in the state's health IT ecosystem?***
	Q.	***To what extent do ACH projects in this domain contribute to adoption of value-based payment reform?***

Project-Specific Testable Hypotheses	3.1	***Do ACH projects addressing Bi-Directional Integration of Care and Primary Care Transformation support redesigned care delivery?*** This includes: • Provider capacity to effectively deliver integrated care • Fidelity to the adopted models of care

		PERFORMANCE METRICS Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

Project-Specific Testable Hypotheses	3.2	***Do ACH projects addressing Bi-Directional Integration of Care and Primary Care Transformation expand health system capacity?*** HIT/HIE related capacity: • Increased use of HIT/HIE technologies • Adoption of EHRs and other IT systems • Supporting the creation, exchange, and re-use of data • Improved care coordination through use of HIT/HIE technologies • Acquisition and use of interoperable HIT/HIE technologies • Using HIT/HIE to impact quality, continuity and cost of care
		PERFORMANCE METRICS Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

Project-Specific Testable Hypotheses	3.3	***Do ACH projects addressing Bi-Directional Integration of Care and Primary Care Transformation expand health system capacity?*** Provider related capacity: • Increase clinical-community linkages • Increase communication flows among care team members • Adoption of integrated care coordination and care management process • Increase supply of behavioral health providers, social workers, nurse practitioners, and primary care providers • Use of telehealth • Changes in workflows to support integration of new screenings and care processes
		PERFORMANCE METRICS Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

Project-Specific Testable Hypotheses	3.4	***Do ACH projects addressing Bi-Directional Integration of Care and Primary Care Transformation accelerate adoption of value-based payment reform?*** This includes: • Adoption of VBP payment models to incentivize effective service delivery • Adoption of evidence-based treatment
		PERFORMANCE METRICS Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

TABLE 2.
Project 2B: Community-Based Care Coordination

H_1

Demonstration Hypotheses (STC 108)	**Do ACH projects improve individual health outcomes, and thereby contribute to improved population health outcomes?**	
Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***Were ACH projects addressing Community-Based Care Coordination effective in achieving the goals of better care for individuals, including:*** • *Access to care,* • *Quality of care, and* • *Health outcomes?*
Project-Specific Testable Hypotheses	1.1	***Do ACH projects addressing Community-Based Care Coordination increase access to and engagement in treatment for those with complex and/or co-occurring conditions?***
		PERFORMANCE METRICS • NCQA HEDIS® Adults' Access to Preventive/Ambulatory Health Services (AAP) • NCQA HEDIS® Child and Adolescents' Access to Primary Care Practitioners • NCQA HEDIS® Comprehensive Diabetes Care: Eye Exam (Retinal) Performed • NCQA HEDIS® Comprehensive Diabetes Care: Medical Attention for Nephropathy • NCQA HEDIS® Diabetes Screening for People with Schizophrenia/Bipolar Disorder • Mental Health Service Penetration (state-defined, see Appendix 2 for measure specification) • Substance Used Disorder Treatment Penetration (state-defined, see Appendix 2 for measure specification) • NCQA HEDIS® Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (IET) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.
Project-Specific Testable Hypotheses	1.2	***Do ACH projects addressing Community-Based Care Coordination improve quality of care for behavioral and physical health conditions?***
		PERFORMANCE METRICS • NCQA HEDIS® All-Cause 30-Day Readmission (PCR) • State-defined 30-Day Readmission psychiatric readmission measure analogous to NCQA HEDIS®PCR (see Appendix 2 for measure specification) • NCQA HEDIS® Comprehensive Diabetes Care (CDC) • NCQA HEDIS® Medication Management for People with Asthma (MMA) • NCQA HEDIS® Antidepressant Medication Management (AMM) • NCQA HEDIS® Adherence to Antipsychotics for Persons with Schizophrenia (SAA) • NCQA HEDIS® Follow-Up After Hospitalization for Mental Illness (FUH) • NCQA HEDIS® Follow-up after Emergency Department Visit for Alcohol or Drug Dependence within 7/30 Days (FUA) • NCQA HEDIS® Follow-up after Emergency Department Visit for Mental Illness within 7/30 Days (FUM) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	1.3	***Do ACH projects addressing Community-Based Care Coordination improve patient health and social outcomes?***
		PERFORMANCE METRICS • NCQA HEDIS® Inpatient Hospital Utilization (IHU) or similar state-defined alternative • NCQA HEDIS® Emergency Department Utilization (EDU) or similar state-defined alternative • Employment Rate (state-defined, see Appendix 2 for measure specification) • Arrest Rate (state-defined, see Appendix 2 for measure specification) • Homelessness Rate (state-defined, see Appendix 2 for measure specification) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.
Project-Specific Testable Hypotheses	1.4	***Do ACH projects addressing Community-Based Care Coordination improve health and social outcomes for persons with behavioral health risk factors and persons needing functional supports (e.g., persons receiving home- and community-based LTSS services)?***
		PERFORMANCE METRICS Stratification of measures listed above related to physical health care, service utilization, and cost into subpopulations with mental illness and/or substance use disorders and use of LTSS services. • Presence of mental illness will be defined using the denominator criteria from the state-defined mental health service penetration rate metric. • Presence of substance use disorder will be defined using the denominator criteria from the state-defined Substance use disorder treatment penetration rate metric. • Subpopulations with serious mental illness (SMI) may be defined by use of Chronic Illness and Disability Payment System (CDPS) Psychiatric High, Psychiatric Medium, and Psychiatrics Medium Low risk groups which include persons with schizophrenia, mania/bipolar disorders, major recurrent depression, and conditions of comparable severity. • LTSS service utilization will be derived from payment data. **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

H_2

Demonstration Hypotheses (STC 108)	**Do ACH projects reduce use of potentially avoidable intensive services and service settings, contributing to holding spending growth below national trends?**

Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***Were ACH projects addressing Community-Based Care Coordination effective in achieving lower health care costs?***
	2.1	***Do ACH projects addressing Community-Based Care Coordination reduce inpatient, psychiatric inpatient, and ED utilization?***

Project-Specific Testable Hypotheses		**PERFORMANCE METRICS** • NCQA HEDIS® Inpatient Hospital Utilization (IHU) or similar state-defined alternative • NCQA HEDIS® Emergency Department Utilization (EDU) or similar state-defined alternative **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	2.2	***Do ACH projects addressing Community-Based Care Coordination reduce potentially avoidable utilization of inpatient hospital services related to physical or behavioral health conditions?***
		PERFORMANCE METRICS • NCQA HEDIS® All-Cause 30-Day Readmission (PCR) • State-defined 30-Day Readmission psychiatric readmission measure analogous to NCQA HEDIS®PCR (see Appendix 2 for measure specification) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.
Project-Specific Testable Hypotheses	2.3	***Do ACH projects addressing Community-Based Care Coordination reduce ED utilization?***
		PERFORMANCE METRICS • NCQA HEDIS® Emergency Department Utilization (EDU) or similar state-defined alternative **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.
Project-Specific Testable Hypotheses	2.4	***Do ACH projects addressing Community-Based Care Coordination reduce utilization of nursing facility care for persons requiring long-term services and supports?***
		PERFORMANCE METRICS • Balance between institutional (nursing facility) and home- and community-based LTSS utilization (see Appendix 2 for measure specification) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.
Project-Specific Testable Hypotheses	2.5	***Do ACH projects addressing Community-Based Care Coordination reduce per-member per-month health care expenditures?***
		PERFORMANCE METRICS • State-defined measures of per-member per-month health care expenditures across physical health, mental health, substance use disorder, and LTSS service domains **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

H_3

Demonstration Hypotheses (STC 108)	**Are ACHs able to implement projects that (1) support redesigned care delivery, (2) expand health system capacity, and (3) accelerate adoption of value-based payment reform?**

Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***To what extent are ACH projects in this domain implemented with fidelity to the selected models of care?***
	Q.	***To what extent do ACH projects in this domain achieve the intended care delivery reform?***
	Q.	***To what extent do ACH projects in this domain contribute to advancements in the state's health IT ecosystem?***
	Q.	***To what extent do ACH projects in this domain contribute to adoption of value-based payment reform?***
Project-Specific Testable Hypotheses	3.1	***Do ACH projects addressing Community-Based Care Coordination support redesigned care delivery?*** This includes: • Provider capacity to effectively deliver integrated care • Fidelity to the adopted models of care
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.
Project-Specific Testable Hypotheses	3.2	***Do ACH projects addressing Community-Based Care Coordination expand health system capacity?*** HIT/HIE related capacity: • Increased use of HIT/HIE technologies • Adoption of EHRs and other IT systems • Supporting the creation, exchange, and re-use of data • Improved care coordination through use of HIT/HIE technologies • Acquisition and use of interoperable HIT/HIE technologies • Using HIT/HIE to impact quality, continuity and cost of care
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.
Project-Specific Testable Hypotheses	3.3	***Do ACH projects addressing Community-Based Care Coordination expand health system capacity?*** Provider related capacity: • Increase clinical-community linkages • Increase communication flows among care team members • Adoption of integrated care coordination and care management process

		• Increase supply of behavioral health providers, social workers, nurse practitioners, and primary care providers • Use of telehealth • Changes in workflows to support integration of new screenings and care processes
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

Project-Specific Testable Hypotheses	3.4	***Do ACH projects addressing Community-Based Care Coordination accelerate adoption of value-based payment reform?***
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

TABLE 3.
Project 2C: Transitional Care

H_1	
Demonstration Hypotheses (STC 108)	**Do ACH projects improve individual health outcomes, and thereby contribute to improved population health outcomes?**

Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***Were ACH projects addressing Transitional Care effective in achieving the goals of better care for individuals, including:*** • *Access to care,* • *Quality of care, and* • *Health outcomes?*

Project-Specific Testable Hypotheses	1.1	***Do ACH projects addressing Transitional Care increase access to and engagement in community-based treatment for behavioral health conditions?***
		PERFORMANCE METRICS • Mental Health Service Penetration (state-defined, see Appendix 2 for measure specification) • Substance Used Disorder Treatment Penetration (state-defined, see Appendix 2 for measure specification) • NCQA HEDIS® Follow-Up After Hospitalization for Mental Illness (FUH) • NCQA HEDIS® Follow-up after Emergency Department Visit for Alcohol or Drug Dependence within 7/30 Days (FUA) • NCQA HEDIS® Follow-up after Emergency Department Visit for Mental Illness within 7/30 Days (FUM) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	1.2	***Do ACH projects addressing Transitional Care reduce inpatient admissions, psychiatric inpatient admissions, ED utilization, and institutional stays?***
		PERFORMANCE METRICS • NCQA HEDIS® Inpatient Hospital Utilization (IHU) or similar state-defined alternative • NCQA HEDIS® Emergency Department Utilization (EDU) or similar state-defined alternative • NCQA HEDIS® All-Cause 30-Day Readmission (PCR) • State-defined 30-Day Readmission psychiatric readmission measure analogous to NCQA HEDIS®PCR (see Appendix 2 for measure specification) • Homelessness Rate (state-defined, see Appendix 2 for measure specification) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	1.3	***Do ACH projects addressing Transitional Care improve access to Home and Community-based Long Term Services and Supports?***
		PERFORMANCE METRICS • Balance between institutional (nursing facility) and home- and community-based LTSS utilization (see Appendix 2 for measure specification) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.
Project-Specific Testable Hypotheses	1.4	***Do ACH projects addressing Bi-Directional Integration of Care and Primary Care Transformation . . .*** . . . improve beneficiary ***social outcomes***?
		PERFORMANCE METRICS • Employment Rate (state-defined, see Appendix 2 for measure specification) • Arrest Rate (state-defined, see Appendix 2 for measure specification) • Homelessness Rate (state-defined, see Appendix 2 for measure specification) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

H_2

Demonstration Hypotheses (STC 108)	**Do ACH projects reduce use of potentially avoidable intensive services and service settings, contributing to holding spending growth below national trends?**

Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***Were ACH projects addressing Transitional Care effective in achieving lower health care costs?***

Project-Specific Testable Hypotheses	2.1	***Do ACH projects addressing Transitional Care reduce potentially avoidable utilization of inpatient hospital services related to physical or behavioral health conditions?***

		PERFORMANCE METRICS • NCQA HEDIS® All-Cause 30-Day Readmission (PCR) • State-defined 30-Day Readmission psychiatric readmission measure analogous to NCQA HEDIS®PCR (see Appendix 2 for measure specification) • NCQA HEDIS® Inpatient Hospital Utilization (IHU) or similar state-defined alternative **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	2.2	***Do ACH projects addressing Transitional Care reduce ED utilization?***
		PERFORMANCE METRICS • NCQA HEDIS® Emergency Department Utilization (EDU) or similar state-defined alternative **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	2.3	***Do ACH projects addressing Transitional Care reduce utilization of nursing facility care for persons requiring long-term services and supports?***
		PERFORMANCE METRICS • Balance between institutional (nursing facility) and home- and community-based LTSS utilization (see Appendix 2 for measure specification) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	2.4	***Do ACH projects addressing Transitional Care reduce per-member per-month health care expenditures?***
		PERFORMANCE METRICS • State-defined measures of per-member per-month health care expenditures across physical health, mental health, substance use disorder, and LTSS service domains **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

H_3

Demonstration Hypotheses (STC 108)	**Are ACHs able to implement projects that (1) support redesigned care delivery, (2) expand health system capacity, and (3) accelerate adoption of value-based payment reform?**

Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***To what extent are ACH projects in this domain implemented with fidelity to the selected models of care?***
	Q.	***To what extent do ACH projects in this domain achieve the intended care delivery reform?***

	Q.	***To what extent do ACH projects in this domain contribute to advancements in the state's health IT ecosystem?***
	Q.	***To what extent do ACH projects in this domain contribute to adoption of value-based payment reform?***

Project-Specific Testable Hypotheses	3.1	***Do ACH projects addressing Transitional Care support redesigned care delivery?*** This includes: • Provider capacity to effectively deliver integrated care • Fidelity to the adopted models of care
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

Project-Specific Testable Hypotheses	3.2	***Do ACH projects addressing Transitional Care expand health system capacity?*** HIT/HIE related capacity: • Increased use of HIT/HIE technologies • Adoption of EHRs and other IT systems • Supporting the creation, exchange, and re-use of data • Improved care coordination through use of HIT/HIE technologies • Acquisition and use of interoperable HIT/HIE technologies • Using HIT/HIE to impact quality, continuity and cost of care
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

Project-Specific Testable Hypotheses	3.3	***Do ACH projects addressing Transitional Care expand health system capacity?*** • Provider related capacity: • Increase clinical-community linkages • Increase communication flows among care team members • Adoption of integrated care coordination and care management process • Increase supply of behavioral health providers, social workers, nurse practitioners, and primary care providers • Use of telehealth • Changes in workflows to support integration of new screenings and care processes
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

Project-Specific Testable Hypotheses	3.4	***Do ACH projects addressing Transitional Care accelerate adoption of value-based payment reform?*** This includes: • Adoption of VBP payment models to incentivize effective service delivery • Adoption of evidence-based treatment
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

TABLE 4.
Project 2D: Diversion Interventions

H_1

Demonstration Hypotheses (STC 108)	**Do ACH projects improve individual health outcomes, and thereby contribute to improved population health outcomes?**

Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***Were ACH projects addressing Diversion Interventions effective in achieving the goals of better care for individuals, including:*** • *Access to care,* • *Quality of care, and* • *Health outcomes?*

Project-Specific Testable Hypotheses	1.1	***Do ACH projects addressing Diversion Interventions reduce ED utilization?***
		PERFORMANCE METRICS • NCQA HEDIS® Emergency Department Utilization (EDU) or similar state-defined alternative **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	1.2	***Do ACH projects addressing Diversion Interventions improve access to primary care?***
		PERFORMANCE METRICS • NCQA HEDIS® Adults' Access to Preventive/Ambulatory Health Services (AAP) • NCQA HEDIS® Child and Adolescents' Access to Primary Care Practitioners **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	1.3	***Do ACH projects addressing Diversion Interventions improve access to behavioral health services?***
		PERFORMANCE METRICS • Mental Health Service Penetration (state-defined, see Appendix 2 for measure specification)

		• Substance Used Disorder Treatment Penetration (state-defined, see Appendix 2 for measure specification) • NCQA HEDIS® Follow-up after Emergency Department Visit for Alcohol or Drug Dependence within 7/30 Days (FUA) • NCQA HEDIS® Follow-up after Emergency Department Visit for Mental Illness within 7/30 Days (FUM) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	1.4	***Do ACH projects addressing Diversion Interventions reduce homelessness rates?***
		PERFORMANCE METRICS • Homelessness Rate (state-defined, see Appendix 2 for measure specification) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	1.5	***Do ACH projects addressing Diversion Interventions reduce arrest rates?***
		PERFORMANCE METRICS • Arrest Rate (state-defined, see Appendix 2 for measure specification) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

H_2

Demonstration Hypotheses (STC 108)	**Do ACH projects reduce use of potentially avoidable intensive services and service settings, contributing to holding spending growth below national trends?**

Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***Were ACH projects addressing Diversion Interventions effective in achieving lower health care costs?***

Project-Specific Testable Hypotheses	2.1	***Do ACH projects addressing Diversion Interventions reduce potentially avoidable utilization of inpatient hospital services related to physical or behavioral health conditions?***
		PERFORMANCE METRICS • NCQA HEDIS® All-Cause 30-Day Readmission (PCR) • State-defined 30-Day Readmission psychiatric readmission measure analogous to NCQA HEDIS®PCR (see Appendix 2 for measure specification) • NCQA HEDIS® Inpatient Hospital Utilization (IHU) or similar state-defined alternative **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

	2.2	***Do ACH projects addressing Diversion Interventions reduce ED utilization?***

Project-Specific Testable Hypotheses		**PERFORMANCE METRICS** • NCQA HEDIS® Emergency Department Utilization (EDU) or similar state-defined alternative **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	2.3	***Do ACH projects addressing Diversion Interventions reduce utilization of nursing facility care for persons requiring long-term services and supports?***
		PERFORMANCE METRICS • Balance between institutional (nursing facility) and home- and community-based LTSS utilization (see Appendix 2 for measure specification) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	2.4	***Do ACH projects addressing Diversion Interventions reduce per-member per-month health care expenditures?***
		PERFORMANCE METRICS • State-defined measures of per-member per-month health care expenditures across physical health, mental health, substance use disorder, and LTSS service domains **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

H_3

Demonstration Hypotheses (STC 108)	**Are ACHs able to implement projects that (1) support redesigned care delivery, (2) expand health system capacity, and (3) accelerate adoption of value-based payment reform?**

Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***To what extent are ACH projects in this domain implemented with fidelity to the selected models of care?***
	Q.	***To what extent do ACH projects in this domain achieve the intended care delivery reform?***
	Q.	***To what extent do ACH projects in this domain contribute to advancements in the state's health IT ecosystem?***
	Q.	***To what extent do ACH projects in this domain contribute to adoption of value-based payment reform?***

Project-Specific Testable Hypotheses	3.1	***Do ACH projects addressing Diversion Interventions support redesigned care delivery?*** This includes: • Provider capacity to effectively deliver integrated care • Fidelity to the adopted models of care

		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.
Project-Specific Testable Hypotheses	3.2	***Do ACH projects addressing Diversion Interventions expand health system capacity?*** HIT/HIE related capacity: • Increased use of HIT/HIE technologies • Adoption of EHRs and other IT systems • Supporting the creation, exchange, and re-use of data • Improved care coordination through use of HIT/HIE technologies • Acquisition and use of interoperable HIT/HIE technologies • Using HIT/HIE to impact quality, continuity and cost of care
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.
Project-Specific Testable Hypotheses	3.3	***Do ACH projects addressing Diversion Interventions expand health system capacity?*** Provider related capacity: • Increase clinical-community linkages • Increase communication flows among care team members • Adoption of integrated care coordination and care management process • Increase supply of behavioral health providers, social workers, nurse practitioners, and primary care providers • Use of telehealth • Changes in workflows to support integration of new screenings and care processes
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.
Project-Specific Testable Hypotheses	3.4	***Do ACH projects addressing Diversion Interventions accelerate adoption of value-based payment reform?*** This includes: • Adoption of VBP payment models to incentivize effective service delivery • Adoption of evidence-based treatment
		PERFORMANCE METRICS

		• Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

TABLE 5.
Project 3A: Addressing the Opioid Use Public Health Crisis

H_1

Demonstration Hypotheses (STC 108)		**Do ACH projects improve individual health outcomes, and thereby contribute to improved population health outcomes?**
Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***Were ACH projects "Addressing the Opioid Use Public Health Crisis" effective in achieving the goals of better care for individuals, including:*** • *Access to care,* • *Quality of care, and* • *Health outcomes?*
Project-Specific Testable Hypotheses	1.1	***Do ACH projects addressing the Opioid Use Public Health Crisis reduce opioid-related deaths?***
		PERFORMANCE METRICS • Opioid Related Deaths (Medicaid Enrollees and Total Population) per 100,000 covered live (CDC standards used to define opioid related deaths) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.
Project-Specific Testable Hypotheses	1.2	***Do ACH projects addressing the Opioid Use Public Health Crisis reduce non-fatal overdose involving prescription opioids?***
		PERFORMANCE METRICS • Non-fatal overdose involving prescription opioids per 100,000 covered lives **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.
Project-Specific Testable Hypotheses	1.3	***Do ACH projects addressing the Opioid Use Public Health Crisis increase substance use disorder treatment penetration among opioid users?***
		PERFORMANCE METRICS • Substance Use Disorder Treatment Penetration, for persons with opiate use disorder (variation of state-defined metric restricted to persons with identified opiate use disorder – see Appendix 2 2) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.
Project-Specific Testable Hypotheses	1.4	***Do ACH projects addressing the Opioid Use Public Health Crisis reduce the number of patients on high-dose chronic opioid therapy?***
		PERFORMANCE METRICS

		• Bree Collaborative: Patients on high-dose chronic opioid therapy by varying thresholds (specification under development) • Bree Collaborative: Patients with concurrent sedatives prescriptions (specification under development) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	1.5	***Do ACH projects addressing the Opioid Use Public Health Crisis increase the numbers receiving Medication Assisted Therapy (MAT) with Buprenorphine and Methadone?***
		PERFORMANCE METRICS • Bree Collaborative: Medication Assisted Therapy (MAT) for Opiate Use Disorder Using Buprenorphine or Methadone (specification under development) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

H_2

Demonstration Hypotheses (STC 108)	**Do ACH projects reduce use of potentially avoidable intensive services and service settings, contributing to holding spending growth below national trends?**

Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***Were ACH projects "Addressing the Opioid Use Public Health Crisis" effective in achieving lower health care costs?***

Project-Specific Testable Hypotheses	2.1	***Do ACH projects addressing the Opioid Use Public Health Crisis reduce potentially avoidable utilization of inpatient hospital services related to physical or behavioral health conditions?***
		PERFORMANCE METRICS • NCQA HEDIS® All-Cause 30-Day Readmission (PCR) • State-defined 30-Day Readmission psychiatric readmission measure analogous to NCQA HEDIS®PCR (see Appendix 2 for measure specification) • NCQA HEDIS® Inpatient Hospital Utilization (IHU) or similar state-defined alternative **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	2.2	***Do ACH projects addressing the Opioid Use Public Health Crisis reduce ED utilization?***
		PERFORMANCE METRICS • NCQA HEDIS® Emergency Department Utilization (EDU) or similar state-defined alternative **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	2.3	***Do ACH projects addressing the Opioid Use Public Health Crisis reduce utilization of nursing facility care for persons requiring long-term services and supports?***
		PERFORMANCE METRICS • Balance between institutional (nursing facility) and home- and community-based LTSS utilization (see Appendix 2 for measure specification) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	2.4	***Do ACH projects addressing the Opioid Use Public Health Crisis reduce per-member per-month health care expenditures?***
		PERFORMANCE METRICS • State-defined measures of per-member per-month health care expenditures across physical health, mental health, substance use disorder, and LTSS service domains **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

H_3

Demonstration Hypotheses (STC 108)	**Are ACHs able to implement projects that (1) support redesigned care delivery, (2) expand health system capacity, and (3) accelerate adoption of value-based payment reform?**

Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***To what extent are ACH projects in this domain implemented with fidelity to the selected models of care?***
	Q.	***To what extent do ACH projects in this domain achieve the intended care delivery reform?***
	Q.	***To what extent do ACH projects in this domain contribute to advancements in the state's health IT ecosystem?***
	Q.	***To what extent do ACH projects in this domain contribute to adoption of value-based payment reform?***

Project-Specific Testable Hypotheses	3.1	***Do ACH projects addressing the Opioid Use Public Health Crisis support redesigned care delivery?*** This includes: • Provider capacity to effectively deliver integrated care • Fidelity to the adopted models of care
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

Project-Specific Testable Hypotheses	3.2	***Do ACH projects addressing the Opioid Use Public Health Crisis expand health system capacity?*** HIT/HIE related capacity: • Increased use of HIT/HIE technologies • Adoption of EHRs and other IT systems • Supporting the creation, exchange, and re-use of data • Improved care coordination through use of HIT/HIE technologies • Acquisition and use of interoperable HIT/HIE technologies • Using HIT/HIE to impact quality, continuity and cost of care
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

Project-Specific Testable Hypotheses	3.3	***Do ACH projects addressing the Opioid Use Public Health Crisis expand health system capacity?*** Provider related capacity: • Increase clinical-community linkages • Increase communication flows among care team members • Adoption of integrated care coordination and care management process • Increase supply of behavioral health providers, social workers, nurse practitioners, and primary care providers • Use of telehealth • Changes in workflows to support integration of new screenings and care processes
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

Project-Specific Testable Hypotheses	3.4	***Do ACH projects addressing the Opioid Use Public Health Crisis accelerate adoption of value-based payment reform?*** This includes: • Adoption of VBP payment models to incentivize effective service delivery • Adoption of evidence-based treatment
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

TABLE 6.
Project 3B: Reproductive and Maternal Child Health

H_1		
Demonstration Hypotheses (STC 108)		**Do ACH projects improve individual health outcomes, and thereby contribute to improved population health outcomes?**
Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***Were ACH projects addressing Reproductive and Maternal/Child Health effective in achieving the goals of better care for individuals, including:*** • *Access to care,* • *Quality of care, and* • *Health outcomes?*
Project-Specific Testable Hypotheses	1.1	***Do ACH projects addressing Reproductive and Maternal/Child Health reduce rates of teen pregnancy?***
		PERFORMANCE METRICS • State-defined measure rate of teen pregnancy (specification forthcoming) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.
Project-Specific Testable Hypotheses	1.2	***Do ACH projects addressing Reproductive and Maternal/Child Health reduce the number of unintended pregnancies?***
		PERFORMANCE METRICS • Washington State Department of Health Rate of Unintended Pregnancies (PRAMS survey) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.
Project-Specific Testable Hypotheses	1.3	***Do ACH projects addressing Reproductive and Maternal/Child Health reduce the rate of low-birth weight deliveries?***
		PERFORMANCE METRICS • Agency for Healthcare Research and Quality (AHRQ) Rate of Low Birth Weight Births (state-defined, specification forthcoming) • NCQA HEDIS® Prenatal care in the first trimester of pregnancy (PPC) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.
Project-Specific Testable Hypotheses	1.4	***Do ACH projects addressing Reproductive and Maternal/Child Health increase engagement in behavioral health treatment penetration among pregnant women?***
		PERFORMANCE METRICS • Substance Used Disorder Treatment Penetration (state-defined, see Appendix 2 for measure specification) • Mental Health Service Penetration (state-defined, see Appendix 2 for measure specification) **DATA SOURCES**

		RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	1.5	***Do ACH projects addressing Reproductive and Maternal/Child Health increase Well-Child Visit rates among infants and young children?***
		PERFORMANCE METRICS • NCQA HEDIS® Well-Child Visits in the First 15 Months of Life • NCQA HEDIS® Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	1.6	***Do ACH projects addressing Reproductive and Maternal/Child Health increase rates of Chlamydia screening?***
		PERFORMANCE METRICS • NCQA HEDIS® Chlamydia Screening (CHL) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	1.7	***Do ACH projects addressing Reproductive and Maternal/Child Health improve access to effective contraceptive care (including LARC)?***
		PERFORMANCE METRICS • U.S. Office of Population Affairs (OPA) Contraceptive Care – Most & Moderately Effective Methods (specification forthcoming) • U.S. Office of Population Affairs (OPA) Contraceptive Care – Access to LARC (specification forthcoming) • U.S. Office of Population Affairs (OPA) Contraceptive Care – Postpartum (specification forthcoming) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	1.8	***Do ACH projects addressing Reproductive and Maternal/Child Health increase childhood immunization rates?***
		PERFORMANCE METRICS • NCQA HEDIS® Childhood Immunization Status (CIS) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

H_2

Demonstration Hypotheses (STC 108)	**Do ACH projects reduce use of potentially avoidable intensive services and service settings, contributing to holding spending growth below national trends?**

Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***Were ACH projects addressing Reproductive and Maternal/Child Health effective in achieving lower health care costs?***

Project-Specific Testable Hypotheses	2.1	***Do ACH projects addressing Reproductive and Maternal/Child Health reduce potentially avoidable utilization of inpatient hospital services related to physical or behavioral health conditions?***
		PERFORMANCE METRICS • NCQA HEDIS® All-Cause 30-Day Readmission (PCR) • State-defined 30-Day Readmission psychiatric readmission measure analogous to NCQA HEDIS®PCR (see Appendix 2 for measure specification) • NCQA HEDIS® Inpatient Hospital Utilization (IHU) or similar state-defined alternative **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	2.2	***Do ACH projects addressing Reproductive and Maternal/Child Health reduce ED utilization?***
		PERFORMANCE METRICS • NCQA HEDIS® Emergency Department Utilization (EDU) or similar state-defined alternative **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	2.3	***Do ACH projects addressing Reproductive and Maternal/Child Health reduce per-member per-month health care expenditures?***
		PERFORMANCE METRICS • State-defined measures of per-member per-month health care expenditures across physical health, mental health, substance use disorder, and LTSS service domains **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

H_3

Demonstration Hypotheses (STC 108)	**Are ACHs able to implement projects that (1) support redesigned care delivery, (2) expand health system capacity, and (3) accelerate adoption of value-based payment reform?**

Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***To what extent are ACH projects in this domain implemented with fidelity to the selected models of care?***
	Q.	***To what extent do ACH projects in this domain achieve the intended care delivery reform?***
	Q.	***To what extent do ACH projects in this domain contribute to advancements in the state's health IT ecosystem?***
	Q.	***To what extent do ACH projects in this domain contribute to adoption of value-based payment reform?***

Project-Specific Testable Hypotheses	3.1	***Do ACH projects addressing Reproductive and Maternal/Child Health support redesigned care delivery?*** This includes: • Provider capacity to effectively deliver integrated care • Fidelity to the adopted models of care
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

Project-Specific Testable Hypotheses	3.2	***Do ACH projects addressing Reproductive and Maternal/Child Health expand health system capacity?*** HIT/HIE related capacity: • Increased use of HIT/HIE technologies • Adoption of EHRs and other IT systems • Supporting the creation, exchange, and re-use of data • Improved care coordination through use of HIT/HIE technologies • Acquisition and use of interoperable HIT/HIE technologies • Using HIT/HIE to impact quality, continuity and cost of care
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

Project-Specific Testable Hypotheses	3.3	***Do ACH projects addressing Reproductive and Maternal/Child Health expand health system capacity?*** Provider related capacity: • Increase clinical-community linkages • Increase communication flows among care team members • Adoption of integrated care coordination and care management process • Increase supply of behavioral health providers, social workers, nurse practitioners, and primary care providers • Use of telehealth • Changes in workflows to support integration of new screenings and care processes
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

Project-Specific Testable Hypotheses	3.4	***Do ACH projects addressing Reproductive and Maternal/Child Health accelerate adoption of value-based payment reform?*** This includes: • Adoption of VBP payment models to incentivize effective service delivery • Adoption of evidence-based treatment

		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

TABLE 7.
Project 3C: Access to Oral Health Services

H_1

Demonstration Hypotheses (STC 108)	**Do ACH projects improve individual health outcomes, and thereby contribute to improved population health outcomes?**

Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***Were ACH projects addressing Access to Oral Health Services effective in achieving the goals of better care for individuals, including:*** • *Access to care,* • *Quality of care, and* • *Health outcomes?*

Project-Specific Testable Hypotheses	1.1	***Do ACH projects addressing Access to Oral Health Services increase access to oral health services for children?***
		PERFORMANCE METRICS • Dental Quality Alliance (DQA) Primary Caries Prevention Intervention as Part of Well/Ill Child Care as Offered by Primary Care Medical Providers (specification forthcoming) • Dental Quality Alliance (DQA) Caries at Recall (Children) (specification forthcoming) • Dental Quality Alliance (DQA) Sealants - % Dental Sealants for 6-9 Year-Old Children at Elevated Caries Risk (specification forthcoming) • Dental Quality Alliance (DQA) Dental Sealants for 10-14 Year-Old Children at Elevated Caries Risk (specification forthcoming) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	1.2	***Do ACH projects addressing Access to Oral Health Services increase access to oral health services for adults?***
		PERFORMANCE METRICS • State-defined measure of oral health services utilization among Medicaid beneficiaries (specification forthcoming) • National Network for Oral Health Access (NNOHA) Adult Treatment Plan Completed (specification forthcoming) • National Network for Oral Health Access (NNOHA) Caries at Recall (Adult) (specification forthcoming) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	1.3	***Do ACH projects addressing Access to Oral Health Services improve prevention and control the progression of oral disease?***
		PERFORMANCE METRICS • Dental Quality Alliance (DQA) Ongoing Care in Adults with Chronic Periodontitis (specification forthcoming) • Dental Quality Alliance (DQA) Periodontal Evaluation in Adults with Chronic Periodontitis (specification forthcoming) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	1.4	***Do ACH projects addressing Access to Oral Health Services reduce reliance on emergency departments for oral pain and related conditions?***
		PERFORMANCE METRICS • NCQA HEDIS® Emergency Department Utilization (EDU) or similar state-defined alternative, with stratification to identify oral pain and related conditions **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

H_2

Demonstration Hypotheses (STC 108)	**Do ACH projects reduce use of potentially avoidable intensive services and service settings, contributing to holding spending growth below national trends?**

Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***Were ACH projects addressing Access to Oral Health Services effective in achieving lower health care costs?***

Project-Specific Testable Hypotheses	2.1	***Do ACH projects addressing Access to Oral Health Services reduce potentially avoidable utilization of inpatient hospital services?***
		PERFORMANCE METRICS • NCQA HEDIS® Inpatient Hospital Utilization (IHU) or similar state-defined alternative **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	2.2	***Do ACH projects addressing Access to Oral Health Services reduce ED utilization?***
		PERFORMANCE METRICS • NCQA HEDIS® Emergency Department Utilization (EDU) or similar state-defined alternative **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	2.3	***Do ACH projects addressing Access to Oral Health Services reduce per-member per-month health care expenditures?***
		PERFORMANCE METRICS • State-defined measures of per-member per-month health care expenditures across physical health, mental health, substance use disorder, and LTSS service domains **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

H_3

Demonstration Hypotheses (STC 108)	**Are ACHs able to implement projects that (1) support redesigned care delivery, (2) expand health system capacity, and (3) accelerate adoption of value-based payment reform?**

Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***To what extent are ACH projects in this domain implemented with fidelity to the selected models of care?***
	Q.	***To what extent do ACH projects in this domain achieve the intended care delivery reform?***
	Q.	***To what extent do ACH projects in this domain contribute to advancements in the state's health IT ecosystem?***
	Q.	***To what extent do ACH projects in this domain contribute to adoption of value-based payment reform?***

Project-Specific Testable Hypotheses	3.1	***Do ACH projects addressing Access to Oral Health Services support redesigned care delivery?*** This includes: • Provider capacity to effectively deliver integrated care • Fidelity to the adopted models of care
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

Project-Specific Testable Hypotheses	3.2	***Do ACH projects addressing Access to Oral Health Services expand health system capacity?*** HIT/HIE related capacity: • Increased use of HIT/HIE technologies • Adoption of EHRs and other IT systems • Supporting the creation, exchange, and re-use of data • Improved care coordination through use of HIT/HIE technologies • Acquisition and use of interoperable HIT/HIE technologies • Using HIT/HIE to impact quality, continuity and cost of care

		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

Project-Specific Testable Hypotheses	3.3	***Do ACH projects addressing Access to Oral Health Services expand health system capacity?*** Provider related capacity: • Increase clinical-community linkages • Increase communication flows among care team members • Adoption of integrated care coordination and care management process • Increase supply of behavioral health providers, social workers, nurse practitioners, and primary care providers • Use of telehealth • Changes in workflows to support integration of new screenings and care processes
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

Project-Specific Testable Hypotheses	3.4	***Do ACH projects addressing Access to Oral Health Services accelerate adoption of value-based payment reform?*** This includes: • Adoption of VBP payment models to incentivize effective service delivery • Adoption of evidence-based treatment
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

TABLE 8.
Project 3D: Chronic Disease Prevention and Control

H_1

Demonstration Hypotheses (STC 108)		**Do ACH projects improve individual health outcomes, and thereby contribute to improved population health outcomes?**
Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***Were ACH projects addressing Chronic Disease Prevention and Control effective in achieving the goals of better care for individuals, including:*** • *Access to care,* • *Quality of care, and* • *Health outcomes?*
Project-Specific Testable Hypotheses	1.1	***Do ACH projects addressing Chronic Disease Prevention and Control improve the quality of care for chronic conditions?***
		PERFORMANCE METRICS • NCQA HEDIS® Comprehensive Diabetes Care: Eye Exam (Retinal) Performed • NCQA HEDIS® Comprehensive Diabetes Care: Medical Attention for Nephropathy • NCQA HEDIS® Medication Management for People with Asthma (MMA) • Statin Therapy for Patients with Cardiovascular Disease • Adult Body Mass Index Assessment **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.
Project-Specific Testable Hypotheses	1.2	***Do ACH projects addressing Chronic Disease Prevention and Control reduce utilization of inpatient and emergency department services?***
		PERFORMANCE METRICS • NCQA HEDIS® Inpatient Hospital Utilization (IHU) or similar state-defined alternative • NCQA HEDIS® Emergency Department Utilization (EDU) or similar state-defined alternative **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

H_2

Demonstration Hypotheses (STC 108)		**Do ACH projects reduce use of potentially avoidable intensive services and service settings, contributing to holding spending growth below national trends?**
Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***Were ACH projects addressing Chronic Disease Prevention and Control effective in achieving lower health care costs?***

Project-Specific Testable Hypotheses	2.1	***Do ACH projects addressing Chronic Disease Prevention and Control reduce potentially avoidable utilization of inpatient hospital services related to physical or behavioral health conditions?***
		PERFORMANCE METRICS • NCQA HEDIS® All-Cause 30-Day Readmission (PCR) • State-defined 30-Day Readmission psychiatric readmission measure analogous to NCQA HEDIS®PCR (see Appendix 2 for measure specification) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	2.2	***Do ACH projects addressing Chronic Disease Prevention and Control reduce ED utilization?***
		PERFORMANCE METRICS • NCQA HEDIS® Emergency Department Utilization (EDU) or similar state-defined alternative **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Project-Specific Testable Hypotheses	2.3	***Do ACH projects addressing Chronic Disease Prevention and Control reduce per-member per-month health care expenditures?***
		PERFORMANCE METRICS • State-defined measures of per-member per-month health care expenditures across physical health, mental health, substance use disorder, and LTSS service domains **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

H_3

Demonstration Hypotheses (STC 108)	**Are ACHs able to implement projects that (1) support redesigned care delivery, (2) expand health system capacity, and (3) accelerate adoption of value-based payment reform?**

Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***To what extent are ACH projects in this domain implemented with fidelity to the selected models of care?***
	Q.	***To what extent do ACH projects in this domain achieve the intended care delivery reform?***
	Q.	***To what extent do ACH projects in this domain contribute to advancements in the state's health IT ecosystem?***
	Q.	***To what extent do ACH projects in this domain contribute to adoption of value-based payment reform?***

Project-Specific Testable Hypotheses	3.1	***Do ACH projects addressing Chronic Disease Prevention and Control support redesigned care delivery?*** This includes: • Provider capacity to effectively deliver integrated care

		• Fidelity to the adopted models of care
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.
Project-Specific Testable Hypotheses	3.2	***Do ACH projects addressing Chronic Disease Prevention and Control expand health system capacity?*** HIT/HIE related capacity: • Increased use of HIT/HIE technologies • Adoption of EHRs and other IT systems • Supporting the creation, exchange, and re-use of data • Improved care coordination through use of HIT/HIE technologies • Acquisition and use of interoperable HIT/HIE technologies • Using HIT/HIE to impact quality, continuity and cost of care
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.
Project-Specific Testable Hypotheses	3.3	***Do ACH projects addressing Chronic Disease Prevention and Control expand health system capacity?*** Provider related capacity: • Increase clinical-community linkages • Increase communication flows among care team members • Adoption of integrated care coordination and care management process • Increase supply of behavioral health providers, social workers, nurse practitioners, and primary care providers • Use of telehealth • Changes in workflows to support integration of new screenings and care processes
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.
Project-Specific Testable Hypotheses	3.4	***Do ACH projects addressing Chronic Disease Prevention and Control accelerate adoption of value-based payment reform?*** This includes: • Adoption of VBP payment models to incentivize effective service delivery • Adoption of evidence-based treatment
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

TABLE 9.
Initiative 3: Foundational Community Supports Program

H_1

Demonstration Hypotheses (STC 108)	**Does the provision of foundational community supports - supportive housing and supported employment - improve health outcomes for a targeted subset of the Medicaid population?**

Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***What impact does the provision of foundational community supports have on beneficiary health and quality of life?***
Initiative-Specific Testable Hypotheses	1.1	***Does participation in the Foundational Community Supports Program increase access to and engagement in treatment for mental illness and/or substance use disorders?***
		PERFORMANCE METRICS • Mental Health Service Penetration (state-defined, see Appendix 2 for measure specification) • Substance Used Disorder Treatment Penetration (state-defined, see Appendix 2 for measure specification) • NCQA HEDIS® Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (IET) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.
Initiative-Specific Testable Hypotheses	1.2	***Does participation in the Foundational Community Supports Program improve quality of care for behavioral and physical health conditions?***
		PERFORMANCE METRICS • NCQA HEDIS® Comprehensive Diabetes Care (CDC) • NCQA HEDIS® Medication Management for People with Asthma (MMA) • NCQA HEDIS® Antidepressant Medication Management (AMM) • NCQA HEDIS® Adherence to Antipsychotics for Persons with Schizophrenia (SAA) • NCQA HEDIS® Follow-Up After Hospitalization for Mental Illness (FUH) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.
Initiative-Specific Testable Hypotheses	1.3	***Does participation in the Foundational Community Supports Program reduce avoidable utilization of inpatient hospital services related to physical or behavioral health conditions?***
		PERFORMANCE METRICS • NCQA HEDIS® All-Cause 30-Day Readmission (PCR) • State-defined 30-Day Readmission psychiatric readmission measure analogous to NCQA HEDIS®PCR (see Appendix 2 for measure specification) • NCQA HEDIS® Inpatient Hospital Utilization (IHU) or similar state-defined alternative **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Initiative-Specific Testable Hypotheses	1.4	***Does participation in the Foundational Community Supports Program reduce ED utilization?***
		PERFORMANCE METRICS • NCQA HEDIS® Emergency Department Utilization (EDU) or similar state-defined alternative **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Initiative-Specific Testable Hypotheses	1.5	***Does participation in the Foundational Community Supports Program reduce utilization of nursing facility care for persons requiring LTSS services?***
		PERFORMANCE METRICS • Balance between institutional (nursing facility) and home- and community-based LTSS utilization (state-defined, see Appendix 2 for measure specification) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Initiative-Specific Testable Hypotheses	1.6	***Does participation in the Foundational Community Supports Program improve social outcome metrics (reduce homelessness, increase employment, reduce risk of criminal justice involvement)?***
		PERFORMANCE METRICS • Employment Rate (state-defined, see Appendix 2 for measure specification) • Arrest Rate (state-defined, see Appendix 2 for measure specification) • Homelessness Rate (state-defined, see Appendix 2 for measure specification) **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

H_2

Demonstration Hypotheses (STC 108)	**Does the provision of foundational community supports - supportive housing and supported employment - reduce costs for a targeted subset of the Medicaid population?**

Research Questions Identified in Domains of Focus (STC 109)	**Q.**	***Does the provision of foundational community supports provide other benefits to the Medicaid program?***

Initiative-Specific Testable Hypotheses	2.1	***Does participation in the Foundational Community Supports Program reduce per-member per-month health care expenditures?***
		PERFORMANCE METRICS • State-defined measures of per-member per-month health care expenditures across physical health, mental health, substance use disorder, and LTSS service domains **DATA SOURCES** RDA Integrated Client Databases supplemented by project data if required for attribution.

Initiative-Specific Testable Hypotheses	2.2	***Do the components of the Foundational Community Supports Program show fidelity to adopted evidence-based models of care?***
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

Initiative-Specific Testable Hypotheses	2.3	***Does the Foundational Community Supports Program use HIT to support eligibility determinations and service delivery?***
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

Initiative-Specific Testable Hypotheses	2.4	***Does the Foundational Community Supports Program use electronic health information exchange (e.g., providers' use (creation and transmission) of employment/housing assessment templates, OneHealthPort (OHP) services (e.g., registration and use of the Clinical Data Repository (CDR))?***
		PERFORMANCE METRICS • Measures, measurement instruments, sample frames, sampling strategy, and data collection strategy to be designed by the independent external evaluator **DATA SOURCES** Data collection strategy to be designed by the independent external evaluator.

APPENDIX 2

State Developed Specification Definitions

Arrest
Measure Definition (ARREST)

December 27, 2016
Medicaid Version 1.1

Description

The percentage of Medicaid enrollees who were arrested at least once in the measurement year. These specifications are derived from a measure developed by the Washington State Department of Social and Health Services, in collaboration with Medicaid delivery system stakeholders, as part of the 5732/1519 performance measure development process.

Eligible Population

Ages	18 – 64
Minimum Medicaid enrollment	A minimum of 7 months of Medicaid enrollment is required in the measurement year.
Anchor date	December 31 of the measurement year for calendar-year reporting
Identification window for Behavioral Health Service Needs	January 1 of the year prior to the measurement year through December 31 of the measurement year (24 months) for calendar-year reporting. For quarterly reporting a comparable 24-month period is used, anchored to the end of quarterly reporting period.
Benefit	Medicaid
Service contracting entity attribution	For Behavioral Health Organization (BHO), Area Agency on Aging (AAA) and Managed Care Organization (MCO) reporting, members must meet the additional attribution criteria defined below: • BHO Mental Health populations must reside in the BHO catchment area for at least 7 months in the measurement year, and must meet the denominator mental health need criteria specified in the Mental Health Service Penetration metric. • BHO Substance Use Disorder (SUD) populations must reside in the BHO catchment area for at least 7 months in the measurement year, and must meet the denominator SUD criteria specified in the SUD Treatment Penetration metric. • AAA populations must reside in the AAA catchment area for at least 7 months in the measurement year, and must receive Home- or Community-Based long-term services and supports in at least 7 months in the measurement year. • MCO populations must be enrolled with the MCO in at least 7 months in the measurement year.
Claim status for service contracting entity attribution	Include only final paid claims or accepted encounters for BHO attribution.

Denominator

Include in the measure denominator all individuals in the eligible population for the service contracting entity. In particular, note that persons who are dually eligible for Medicare or with Third-Party Liability (coverage) are included in the measure population.

Numerator

Include all denominator-eligible members with at least one arrest in the measurement year recorded in the Washington State Identification System (WASIS) arrest database maintained by the Washington State Patrol. The database is comprised of arrest charges for offenses resulting in fingerprint identification. The database provides a relatively complete record of felony and gross misdemeanor charges, but excludes some arrest charges for misdemeanor offenses that are not required to be reported.

Employment Rate
Measure Definition (EMP)

December 27, 2016
Medicaid Version 1.2

Description

The percentage of Medicaid enrollees with any earnings reported in Employment Security Department (ESD) employment data in the measurement year.

These specifications are derived from a measure developed by the Washington State Department of Social and Health Services, in collaboration with Medicaid delivery system stakeholders, as part of the 5732/1519 performance measure development process.

Eligible Population

Ages	Separate reporting for age groups 18 – 64 and 65+
Minimum Medicaid enrollment	A minimum of 7 months of Medicaid enrollment is required in the measurement year.
Anchor date	December 31 of the measurement year for calendar-year reporting
Identification window for Behavioral Health Service Needs	January 1 of the year prior to the measurement year through December 31 of the measurement year (24 months) for calendar-year reporting. For quarterly reporting a comparable 24-month period is used, anchored to the end of quarterly reporting period.
Benefit	Medicaid
Service contracting entity attribution	For Behavioral Health Organization (BHO), Area Agency on Aging (AAA) and Managed Care Organization (MCO) reporting, members must meet the additional attribution criteria defined below: • BHO Mental Health populations must reside in the BHO catchment area for at least 7 months in the measurement year, and must meet the denominator mental health need criteria specified in the Mental Health Service Penetration metric.

	• BHO Substance Use Disorder (SUD) populations must reside in the BHO catchment area for at least 7 months in the measurement year, and must meet the denominator SUD criteria specified in the SUD Treatment Penetration metric. • AAA populations must reside in the AAA catchment area for at least 7 months in the measurement year, and must receive Home- or Community-Based long-term services and supports in at least 7 months in the measurement year. • MCO populations must be enrolled with the MCO in at least 7 months in the measurement year.
Claim status for service contracting entity attribution	Include only final paid claims or accepted encounters for BHO attribution.

Denominator

Include in the measure denominator all individuals in the eligible population for the service contracting entity. In particular, note that persons who are dually eligible for Medicare or with Third-Party Liability (coverage) are included in the measure population.

Numerator

Include all members with at least one quarter in the measurement year with positive earnings recorded in ESD quarterly wage data. Note that ESD reported earnings data do not include self-employment, federal employment, or unreported earnings.

Homelessness Broad and Narrow Measure Definitions (HOME-N and HOME-B)

December 27, 2016
Medicaid Version 1.2

Description

The percentage of Medicaid enrollees who were homeless in at least one month in the measurement year. These specifications are derived from a measure developed by the Washington State Department of Social and Health Services, in collaboration with Medicaid delivery system stakeholders, as part of the 5732/1519 performance measure development process.

Eligible Population

Ages	Separate reporting for age groups 0-17, 18 – 64 and 65+
Minimum Medicaid enrollment	A minimum of 7 months of Medicaid enrollment is required in the measurement year.
Anchor date	December 31 of the measurement year for calendar-year reporting
Identification window for	January 1 of the year prior to the measurement year through December 31 of the measurement year (24 months) for calendar-year reporting. For quarterly reporting a

Behavioral Health Service Needs	comparable 24-month period is used, anchored to the end of quarterly reporting period.
Benefit	Medicaid
Service contracting entity attribution	For Behavioral Health Organization (BHO), Area Agency on Aging (AAA) and Managed Care Organization (MCO) reporting, members must meet the additional attribution criteria defined below: • BHO Mental Health populations must reside in the BHO catchment area for at least 7 months in the measurement year, and must meet the denominator mental health need criteria specified in the Mental Health Service Penetration metric. • BHO Substance Use Disorder (SUD) populations must reside in the BHO catchment area for at least 7 months in the measurement year, and must meet the denominator SUD criteria specified in the SUD Treatment Penetration metric. • AAA populations must reside in the AAA catchment area for at least 7 months in the measurement year, and must receive Home- or Community-Based long-term services and supports in at least 7 months in the measurement year. • MCO populations must be enrolled with the MCO in at least 7 months in the measurement year.
Claim status for service contracting entity attribution	Include only final paid claims or accepted encounters for BHO attribution.
Data source for identifying homelessness	The DSHS Economic Services Administration's Automated Client Eligibility System (ACES); used by caseworkers to record information about client self-reported living arrangements and shelter expenses when determining eligibility for cash, food, and medical assistance.

Denominator

Include in the measure denominator all individuals in the eligible population for the service contracting entity. In particular, note that persons who are dually eligible for Medicare or with Third-Party Liability (coverage) are included in the measure population.

Numerator – Narrow

Include all denominator-eligible members with at least one month with a living arrangement status of "Homeless without Housing", "Emergency Shelter" or "Battered Spouse Shelter" recorded in the ACES eligibility data system.

Numerator – Broad

Include all denominator-eligible members with at least one month with a living arrangement status of "Homeless with Housing", "Homeless without Housing", "Emergency Shelter" or "Battered Spouse Shelter" recorded in the ACES eligibility data system.

Mental Health Service Penetration – Broad Measure Definition (MH-B)

July 25, 2017
Medicaid Version 1.8

Description

The percentage of members with a mental health service need who received mental health services in the measurement year.

These specifications are derived from a measure developed by the Washington State Department of Social and Health Services, in collaboration with Medicaid delivery system stakeholders, as part of the 5732/1519 performance measure development process.

NOTE: Measure specification is currently undergoing revision to account for delivery system changes resulting from BHO and FIMC implementation.

Eligible Population

Ages	Separate reporting for age groups 6 – 17, 18 – 64 and 65+
Continuous enrollment	Applied only to the measurement year
Allowable gap	Member may not have more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months [60 days] is not considered continuously enrolled).
Anchor date	December 31 of the measurement year
Identification window	January 1 of the year prior to the measurement year through December 31 of the measurement year (24 months)
Benefit	Medicaid-only and dual eligibles excluding Part C enrollees Exclude persons with third-party liability (coverage)
Data sources	Medicaid MCO encounters and HCA-paid claims RSN/BHO encounter data and DBHR-paid behavioral health services Medicare Parts A and B claims and Medicare Part D encounters
Event/diagnosis	Members meeting the mental health service need criteria defined below
Claim status	Include only final paid claims or accepted encounters in measure calculation

Mental Health Service Need Definition

Mental health service need is identified by the occurrence of any of the following conditions:

1. Receipt of any mental health service meeting the numerator service criteria in the 24-month identification window
2. Any diagnosis of mental illness (not restricted to primary) in any of the categories listed in MH-Dx-value-set.xlsx in the 24-month identification window. These categories include:
    a. Psychotic Diagnosis Set 101
    b. Mania/Bipolar Diagnosis Set 102

c. Depression Diagnosis Set 103
d. Anxiety Diagnosis Set 104
e. ADHD Diagnosis Set 105
f. Disruptive/Impulse/Conduct Diagnosis Set 106
g. Adjustment Diagnosis Set 107

3. Receipt of any psychotropic medication listed in MH-Rx-value-set.xlsx in the 24-month identification window. These medications comprise the following drug therapy classes:
    a. Antianxiety Rx
    b. Antidepressants Rx
    c. Antimania Rx
    d. Antipsychotic Rx
    e. ADHD Rx
4. Any claim with a service procedure code in the following set: 90791, 90792, 90801, 90802, 90804, 90805, 90806, 90807, 90808, 90809, 90810, 90811, 90812, 90813, 90814, 90815, 90816, 90817, 90818, 90819, 90821, 90822, 90823, 90824, 90825, 90826, 90827, 90828, 90829, 90832, 90833, 90834, 90836, 90837, 90838, 90839, 90840, 90845, 90846, 90847, 90849, 90853, 90857, 90862, 90889, H0023, H0025, H0027, H0030, H0031, H0032, H0035, H0036, H0037, H0038, H0039, H0040, H0046, H1011, H2011, H2012, H2013, H2014, H2015, H2016, H2017, H2018, H2019, H2020, H2021, H2022, H2023, H2027, H2030, H2031, H2033, M0064, Q5008, S9480, S9482, S9484, S9485, T1025, T1026, T2038, T2048, 96101, 96102, 96103, 96110, 96111, 96116, 96118, 96119, 96120
5. Any psychiatric inpatient stay in the following facility types: Community Psychiatric Hospital, Evaluation & Treatment Center, Child Long-Term Inpatient, Child Study Treatment Center, Eastern and Western State Hospital
6. A tribal mental health encounter paid through ProviderOne

Denominator

Include in the denominator all individuals in the eligible population with a mental health service need in the 24-month identification window.

Numerator

Include in the numerator all individuals receiving at least one mental health services meeting at least one of the following criteria in the 12-month measurement year:

TABLE 1.
Numerator Service Criteria

Criterion	Value Sets
Mental health service modality from RSN/BHO encounter data	• Brief intervention treatment • Care coordination services • Child family team meeting • Co-occurring treatment • Crisis services • Day support • Engagement & outreach • Family treatment

	• Group treatment services • High intensity treatment • Housing and Recovery Through Peer Support (HARPS) • Individual treatment services • Intake evaluation • Medication management • Medication monitoring • Mental health clubhouse • Residential treatment services • Peer support • Psychological assessment • Offender Reentry Community Safety Program (ORCSP) • Rehabilitation case management • Special population evaluation • Stabilization services • Supported employment • Therapeutic psychoeducation • Community transition • Community based wraparound services Note: Classification of outpatient or residential BHO services is based on procedure code and modifier field values defined in the applicable BHO Service Encounter Reporting Instructions (SERI)
Tribal mental health encounter	A tribal mental health encounter paid through ProviderOne
Mental health provider taxonomy	Primary diagnosis code is a valid value in the MH-Dx-value-set.xlsx set AND Servicing provider taxonomy code is in the set: 101Y00000X, 101YM0800X, 101YP2500X, 103G00000X, 103T00000X, 103TB0200X, 103TC0700X, 103TC1900X, 103TC2200X, 103TF0000X, 103TH0100X, 103TP0016X, 103TP0814X, 103TP2700X, 103TP2701X, 103TR0400X, 104100000X, 1041C0700X, 106H00000X, 163WP0809X, 2080P0006X, 2084A0401X, 2084F0202X, 2084N0400X, 2084N0402X, 2084N0600X, 2084P0015X, 2084P0800X, 2084P0802X, 2084P0804X, 2084P0805X, 2084S0012X, 2084V0102X, 251S00000X, 261QM0801X, 273R00000X, 283Q00000X, 323P00000X, 363LP0808X, 364SP0808X
Mental health procedure code	90791, 90792, 90801, 90802, 90804, 90805, 90806, 90807, 90808, 90809, 90810, 90811, 90812, 90813, 90814, 90815, 90816, 90817, 90818, 90819, 90821, 90822, 90823, 90824, 90825, 90826, 90827, 90828, 90829, 90832, 90833, 90834, 90836, 90837, 90838, 90839, 90840, 90845, 90846, 90847, 90849, 90853, 90857, 90862, 90889, H0004, H0023, H0025, H0027, H0030, H0031, H0032, H0035, H0036, H0037, H0038, H0039, H0040, H0046, H1011, H2011, H2012, H2013, H2014, H2015, H2016, H2017, H2018, H2019, H2020, H2021, H2022, H2023, H2035, H2027, H2030, H2031, H2033, M0064, Q5008, S9480, S9482, S9484, S9485, T1025, T1026, T2038, T2048, 96101, 96102, 96103, 96110, 96111, 96116, 96118, 96119, 96120
Mental health condition	Primary diagnosis code is a valid value in the MH-Dx-value-set.xlsx set AND

management in primary care	Procedure code is in the set: 99201-99215 (Office), 99241-99255 (Consultation), or 99441-99444 (telephonic or online) AND (for Medicaid claims/encounters) Servicing provider taxonomy code is in the set: 101YA0400X, 101YM0800X, 101YP2500X, 103T00000X, 103TC0700X, 103TP0016X, 104100000X, 1041C0700X, 106H00000X, 163W00000X, 163WH0200X, 163WP0807X, 163WP0808X, 163WP0809X, 163WW0101X, 193200000X, 193400000X, 207LA0401X, 207LP2900X, 207P00000X, 207Q00000X, 207QA0000X, 207QA0401X, 207QA0505X, 207QG0300X, 207QH0002X, 207QS1201X, 207R00000X, 207RA0000X, 207RA0401X, 207RC0000X, 207RC0001X, 207RC0200X, 207RE0101X, 207RG0100X, 207RG0300X, 207RH0000X, 207RH0002X, 207RH0003X, 207RI0001X, 207RI0008X, 207RI0011X, 207RI0200X, 207RN0300X, 207RP1001X, 207RR0500X, 207RS0010X, 207RS0012X, 207RT0003X, 207RX0202X, 207V00000X, 207VC0200X, 207VG0400X, 207VM0101X, 207VX0000X, 207VX0201X, 208000000X, 2080A0000X, 2080H0002X, 2080P0006X, 2080P0008X, 2080P0201X, 2080P0202X, 2080P0204X, 2080P0205X, 2080P0206X, 2080P0207X, 2080P0208X, 2080P0210X, 2080P0214X, 2080P0216X, 2083P0901X, 2084A0401X, 2084F0202X, 2084N0400X, 2084N0402X, 2084P0015X, 2084P0800X, 2084P0802X, 2084P0804X, 2084P0805X, 208800000X, 208D00000X, 208M00000X, 208VP0000X, 208VP0014X, 251S00000X, 261Q00000X, 261QD1600X, 261QF0400X, 261QM0801X, 261QM1300X, 261QP0904X, 261QP0905X, 261QP2300X, 261QR0200X, 261QR0400X, 261QR0405X, 261QR1300X, 261QU0200X, 273R00000X,282N00000X, 282NC0060X, 282NC2000X, 282NR1301X, 283Q00000X, 320800000X, 324500000X, 363LA2100X, 363LA2200X, 363LC1500X, 363LF0000X, 363LG0600X, 363LP0200X, 363LP0808X, 363LP1700X, 363LP2300X, 363LW0102X, 363LX0001X, 363LX0106X, 364S00000X, 364SF0001X, 364SP0808X, 367A00000X For Medicare paid claims, allow any servicing provider taxonomy code under this criterion

Substance Use Disorder Treatment Penetration Measure Definition (AOD)

December 27, 2016
Medicaid Version 1.3

Description

The percentage of members with a substance use disorder treatment need who received substance use disorder treatment in the measurement year.

These specifications are derived from a measure developed by the Washington State Department of Social and Health Services, in collaboration with Medicaid delivery system stakeholders, as part of the 5732/1519 performance measure development process.

NOTE: Measure specification is currently undergoing revision to account for delivery system changes resulting from BHO and FIMC implementation.

Eligible Population

Ages	Separate reporting for age groups 12 – 17, 18 – 64 and 65+

Continuous enrollment	The measurement year
Allowable gap	Member may not have more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months [60 days] is not considered continuously enrolled).
Anchor date	December 31 of the measurement year
Identification window	January 1 of the year prior to the measurement year through December 31 of the measurement year (24 months)
Benefit	Medicaid-only and dual eligibles excluding Part C enrollees Exclude persons with third-party liability (coverage)
Data sources	Medicaid MCO encounters and HCA-paid claims RSN/BHO encounter data and DBHR-paid behavioral health services CARE assessment diagnoses for identification of SUD treatment need Medicare Parts A and B claims and Medicare Part D encounters
Event/diagnosis	Members meeting the substance use disorder treatment need criteria defined below
Claim status	Include only final paid claims or accepted encounters in measure calculation

Substance Use Disorder Treatment Need

Substance use disorder treatment need is identified by the occurrence of any of the following in the identification window:

1. Diagnosis of a drug or alcohol use disorder in any health service event (SUD-Tx-Pen-Value-Set-1.xlsx)
2. Receipt of a substance use disorder treatment service meeting numerator criteria:
    a. Procedure, DRG, revenue and related codes: SUD-Tx-Pen-Value-Set-2.xls
    b. NDC codes: SUD-Tx-Pen-Value-Set-3.xlsx
3. Receipt of brief intervention (SBIRT) services (SUD-Tx-Pen-Value-Set-4.xlsx)
4. Receipt of medically managed detox services (SUD-Tx-Pen-Value-Set-5.xlsx).

Denominator

Include in the denominator all individuals in the eligible population with a substance use disorder treatment need.

Numerator

Include in the numerator all individuals receiving at least one substance use disorder treatment service meeting at least one of the following criteria in the 12-month measurement year (SUD-Tx-Pen-Value-Set-2.xlsx and SUD-Tx-Pen-Value-Set-3.xlsx):

1. Inpatient or residential substance use disorder treatment services
2. Outpatient substance use disorder treatment services
3. Methadone opiate substitution treatment services
4. Other medication-assisted treatment using medications indicated in SUD-Tx-Pen-Value-Set-3.xlsx

Classification of BHO services is based on procedure code and modifier field values defined in the applicable Service Encounter Reporting Instructions (SERI).

Emergency Department Utilization Measure Definition (ED)

July 25, 2016
Medicaid Version 1.1

Description

Outpatient Emergency Department (ED) Visits per 1,000 Member Months

These specifications are derived from a measure developed by the Washington State Department of Social and Health Services, in collaboration with Medicaid delivery system stakeholders, as part of the 5732/1519 performance measure development process.

Eligible Population

Ages	Separate reporting for age groups 10 – 17, 18 – 64 and 65+
Medicaid enrollment	Continuous Medicaid coverage in the 6 months up to and including the denominator-compliant member month
Anchor date	December 31 of the measurement year
Identification window	January 1 of the year prior to the measurement year through December 31 of the measurement year (24 months)
Benefit	Full benefit Medicaid-only and dual eligibles excluding Part C enrollees Exclude persons with third-party liability (coverage)
Data sources	Medicaid MCO encounters and HCA-paid claims RSN/BHO encounter data and DBHR-paid behavioral health services CARE assessment diagnoses for identification of mental illness and substance use disorder Medicare Parts A and B claims and Medicare Part D encounters Long-term care service data for AAA affiliation
Service contracting entity attribution	For Behavioral Health Organization (BHO), Area Agency on Aging (AAA) and Managed Care Organization (MCO) reporting, members must meet the additional attribution criteria defined below: • Resided in the BHO service area continuously in the 6 months up to and including the qualifying service month AND presented an indication of a mental health treatment need in the 24 months leading up to and including the denominator-compliant member month • Resided in the BHO service area continuously in the 6 months up to and including the qualifying service month AND presented an indication of a substance use disorder treatment need in the 24 months leading up to and including the denominator-compliant member month • Resided in the AAA service area continuously in the 6 months up to and including the qualifying service month AND received ALTSA-funded in-home personal care services continuously in the 6 months up to and including the denominator-compliant member month • Enrolled with the MCO continuously in the 6 months up to and including the denominator-compliant member month
Event	Outpatient ED visits meeting the numerator criteria defined below
Claim status	Include only final paid claims or accepted encounters in measure calculation

Denominator

Medical coverage months in the eligible population in the measurement year.

Numerator

Outpatient ED visits during medical coverage months in the eligible population in the measurement year.

ED visits are defined by the following criteria:

- Claim or encounter is a hospital outpatient claim type AND
- One or more of the following criteria is met:
  - Revenue code in the set ('0450', '0451', '0452', '0456', '0459')
  - Procedure code in the set ('99281' ,'99282' ,'99283' ,'99284' ,'99285', '99288')
  - Place of service code = Emergency Department

Measure is expressed as a rate per 1,000 denominator member months in the measurement year.

Home- and Community-Based Long Term Services and Supports Use Measure Definition (HCBS)

July 25, 2016
Medicaid Version 1.1

Description

Proportion of months receiving long-term services and supports (LTSS) associated with receipt of services in home- and community-based settings during the measurement year.

These specifications are derived from a measure developed by the Washington State Department of Social and Health Services, in collaboration with Medicaid delivery system stakeholders, as part of the 5732/1519 performance measure development process.

Eligible Population

Ages	Separate reporting for age groups 18 – 64 and 65+
Medicaid enrollment	Enrolled in Medicaid coverage in the denominator-compliant member month
Anchor date	December 31 of the measurement year
Identification window for Behavioral Health Risk factors	January 1 of the year prior to the measurement year through December 31 of the measurement year (24 months)
Benefit	Full benefit Medicaid-only and dual eligibles excluding Part C enrollees Exclude persons with other third-party liability (coverage)
Data sources	Medicaid MCO encounters and HCA-paid claims RSN/BHO encounter data and DBHR-paid behavioral health services CARE assessment diagnoses for identification of mental illness and substance use disorder Medicare Parts A and B claims and Medicare Part D encounters Long-term care service data

Service contracting entity attribution	• For Behavioral Health Organization (BHO), Area Agency on Aging (AAA) and Managed Care Organization (MCO) reporting, members must meet the additional attribution criteria defined below: • Resided in the BHO service area in the qualifying service month AND presented an indication of a mental health treatment need in the 24 months leading up to and including the denominator-compliant member month • Resided in the BHO service area in the qualifying service month AND presented an indication of a substance use disorder treatment need in the 24 months leading up to and including the denominator-compliant member month • Resided in the AAA service area in the denominator-compliant member month • Enrolled with the MCO in the denominator-compliant member month
LTSS service criteria	Receipt of any one or more of the following service modalities in the index month: • Home- and community-based services – In-home personal care services – Adult family home services – Adult residential care services – Assisted living services • Nursing home services
Claim status	Include only final paid claims or accepted encounters in measure calculation

Denominator

Person-months associated with receipt of LTSS services by persons in the eligible population in the measurement year (includes HCBS and nursing home services).

Numerator

Person-months associated with receipt of home- and community-based LTSS by persons in the eligible population in the measurement year (excludes nursing home services).

Measure may be expressed as a rate per 1,000 member months or, equivalently, as a percentage of denominator-compliant member months.

Psychiatric Inpatient Readmissions – Medicaid Measure Definition (PCR-P)

Description

For members 18 years of age and older, the proportion of acute inpatient psychiatric stays during the measurement year that were followed by an acute psychiatric readmission within 30 days. Data are reported in the following categories:

1. Count of Index Hospital Stays (IHS) (denominator).
2. Count of 30-Day Readmissions (numerator).

NOTE: Measure specification is currently undergoing revision to account for delivery system changes resulting from BHO and FIMC implementation.

Definitions

IHS	Index hospital stay. An acute psychiatric inpatient stay with a discharge on or between January 1 and December 1 of the measurement year. Include stays that meet the inclusion criteria in the denominator section. A client may have multiple qualifying discharges in the measurement period.
Index Admission Date	The IHS admission date.
Index Discharge Date	The IHS discharge date. The index discharge date must occur on or between January 1 and December 1 of the measurement year.
Index Readmission Stay	An acute psychiatric inpatient stay with an admission date within 30 days of a previous Index Discharge Date.
Index Readmission Date	The admission date associated with the Index Readmission Stay.
Classification Period	365 days prior to and including an Index Discharge Date.

Eligible Population Administrative Specification

Denominator	The eligible population.
Step 1	Identify all acute inpatient psychiatric stays with a discharge date on or between January 1 and December 1 of the measurement year. Include only acute admissions to behavioral healthcare facilities, as identified in Table 1 below.
Step 2	Acute-to–acute transfers: Keep the original admission date as the Index Admission Date, but use the transfer's discharge date as the Index Discharge Date.
Step 3	Exclude hospital stays where the Index Admission Date is the same as the Index Discharge Date.
Step 4	Exclude stays with discharges for death from the observation set.
Step 5	Calculate continuous enrollment and determine whether the observation meets continuous enrollment criteria.

Table 1. Eligible Acute Inpatient Psychiatric Events

Event	Source
Community Psychiatric Hospital Admissions	ProviderOne
Evaluation & Treatment Center Admissions	ProviderOne, supplemented by DBHR Consumer Information System
Child Long-Term Inpatient Admissions	DBHR Consumer Information System
Child Study Treatment Center Admissions	DBHR Consumer Information System

Eastern and Western State Hospital Admissions	DBHR Consumer Information System

Numerator

At least one acute readmission for any diagnosis within 30 days of the Index Discharge Date from the facilities identified in Table 1.