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.

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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 Project Toolkit*: 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. 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 a 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 subject matter expertise. The evaluation will encompass an assessment of the impact of the Demonstration on the entire delivery system. This will include:

- **Assessment of overall Medicaid system performance under the DSRIP program** in developing community capacity to support health system transformation, based on an assessment of statewide trends in measures of:

  - Access to services
  - Quality of care
  - Reduction in use of costly inpatient or institutional care
  - Social outcomes including housing stability and employment
  - Overall Medicaid expenditures on a per capita 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. The 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.** This activity is expected to leverage provider surveys, focus groups, 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. 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. 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.

- **Rapid-cycle project implementation support (formative evaluation).** Timely implementation reports will especially be useful to inform efforts early in the project implementation process. 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. The project-level detail in Section 5 includes 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. An interrupted time-series model, or other rigorous evaluation techniques, will

be employed to determine if the initiatives undertaken through the Demonstration had the anticipated impact on statewide measures. While project-specific evaluations will focus on targeted 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 more 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.

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; 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.

Primary data collection for research questions that cannot be addressed using administrative data. Evaluation activities are expected to include key informant interviews, focus groups, and stakeholder surveys to support qualitative analysis of initiative and project design and implementation. 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.

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.

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.

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.[1] Evaluation of Transformation project impacts at the ACH level is necessary to:

- Understand variation in outcomes across ACHs,

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[1] 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.

- 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.

Project-level 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. Analyses will draw on qualitative information to help interpret the quantitative assessment of project impacts on beneficiary outcomes. Outcome metrics and measurement approaches will generally be aligned with those used for determining ACH performance payments, where feasible.

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 mitigate 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.[2]

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 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 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

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[2] 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.

identifying, selecting, and contracting with an independent evaluator, the State will act appropriately to prevent a conflict of interest with the independent evaluator. The independent 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 independent evaluator selected by CMS. To promote efficiency, consistency, and best practices, the State independent 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 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 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 state plans to provide extensive consultation and data support for the independent evaluator. The 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 evaluator will conduct ongoing analyses of these data to inform both the interim and final evaluation reports.

Budget for the independent evaluator evaluation activities. The total budget for the independent 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 evaluator selection process.

The state will also budget for sufficient state agency staff, at both HCA and DSHS, to efficiently and effectively support the external evaluation contractor. 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	Date
Draft evaluation design	State	May 9th, 2017
— Comments from CMS	CMS	60 days from receipt
— Final evaluation design	State	60 days from receipt
State progress reports	State	Include in Quarterly and Annual reports
Draft Interim Evaluation Report	State	April 1st, 2021
— CMS comments	CMS	TBD
— Final interim evaluation report	State	60 days from receipt
Draft Final Evaluation Report	State	January 30th, 2022
— CMS comments	CMS	TBD
— Final evaluation report	State	60 days from receipt

The independent 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 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.

Project 2A: Bi-Directional Integration of Care and Primary 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
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.
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).

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-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

Component	Description
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) • 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 Long Term Services and Supports

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.
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

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 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	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
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.
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

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: - 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
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.
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, 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

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
- 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: • 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
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.
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
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

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.
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
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, DSHS, RDA). 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.
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
	• 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
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: • Race/ethnicity, age and gender • Geography (ACH region, urban/rural/frontier) • Behavioral health risk factors (e.g., maternal depression, 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.
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.
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 • 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
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:
	• Race/ethnicity, age and gender
	• Geography (ACH region, urban/rural/frontier), including an assessment of regional variation in the supply of oral health providers

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
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.
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
	• 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)
	• Comprehensive Diabetes Care: Blood Pressure Control
	• Influenza Immunizations 6 months of age and older
	• Statin Therapy for Patients with Cardiovascular Disease
	• Adult Body Mass Index Assessment
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

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) • 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.
    – 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	Evaluation questions 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.
	
	Specific testable hypotheses will include:
	
	• Do caregivers show change from baseline to 12-month follow-up in survey/self-report measures of:
	  – Caregiving burden
	  – Physical/mental health status
	  – Quality of life
	• Do care receivers show change from baseline to 12-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?
	• 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?
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) 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, 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 external evaluation contractor 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 summer or fall of 2017 (shortly after program implementation), RDA will conduct a survey to rapidly 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 January 2018 and September 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 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.

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. Medicaid data are routinely collected through the operation of existing payment processes, and is generally linked into the state's integrated client data 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
- Inpatient Admissions per 1,000 Member Months
- Plan All-Cause 30-Day Readmission Rate
- Nursing facility entry rate
- Mortality

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 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.

Overall LTSS utilization and 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 (pre-Demonstration) Medicaid-paid LTSS utilization in Washington State, by detailed demographic cells defined by age, gender, race/ethnicity, and income level;

- Applying these utilization and cost rates to (1) observed changes in per cap (per user per month) costs by LTSS service modality and (2) the observed (or forecast) demographic composition of the Washington State population; 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 and changes per cap LTSS costs and 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 (ACH region, 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

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.

Target populations	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:

- 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	• 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 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?
	• 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	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.
Measures	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. 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: • 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 (ACH region, county, 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 • Institutionalized populations