

DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
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Baltimore, Maryland 21244-1850



State Demonstrations Group

February 26, 2025

Emma Sandoe
Medicaid Director
Oregon Health Authority
500 Summer Street NE, E53
Salem, OR 97301

Dear Director Sandoe:

The Centers for Medicare & Medicaid Services (CMS) completed its review of the Evaluation Design, which is required by the Special Terms and Conditions (STCs), specifically, STC 62, of the section 1115 demonstration, “Oregon Project Independence-Medicaid (OPI-M)” (Project Number 11-W-00380/10), effective through January 31, 2029. CMS has determined that the Evaluation Design, which was submitted on August 13, 2024, and most recently revised on December 31, 2024, meets the requirements set forth in the STCs and our evaluation design guidance, and therefore approves the state’s Evaluation Design.

CMS has incorporated the approved Evaluation Design into Attachment C of the demonstration’s STCs. A copy of the STCs, which includes the updated attachment, is enclosed with this letter. In accordance with 42 CFR 431.424, the approved Evaluation Design may now be posted to the state’s Medicaid website within 30 days. CMS will also post the approved Evaluation Design as a standalone document, separate from the STCs, on Medicaid.gov.

Please note that an Interim Evaluation Report, consistent with the approved Evaluation Design, is due to CMS one year prior to the expiration of the demonstration, or at the time of the extension application, if the state chooses to extend the demonstration. Likewise, a Summative Evaluation Report, consistent with this approved design, is due to CMS within 18 months of the end of the demonstration period. In accordance with 42 CFR 431.428 and the STCs, we look forward to receiving updates on evaluation activities in the demonstration monitoring reports.

We appreciate our continued partnership with Oregon on the OPI-M section 1115 demonstration. If you have any questions, please contact your CMS demonstration team.

Sincerely,

Danielle Daly
-S

A digital signature block containing the text "Digitally signed by Danielle Daly -S", "Date: 2025.02.26", and "06:19:54 -05'00'". A red scribble is visible over the signature text.

Danielle Daly
Director
Division of Demonstration Monitoring and Evaluation

cc: Nikki Lemmon, State Monitoring Lead, CMS Medicaid and CHIP Operations Group

Oregon Project Independence- Medicaid 2024-2029 1115 Demonstration Waiver

EVALUATION DESIGN

December 31, 2024

CENTER FOR HEALTH SYSTEMS EFFECTIVENESS



Prepared for:

Oregon Department of Human Services

Prepared by:

Center for Health Systems Effectiveness
Oregon Health & Science University



About us

The Center for Health Systems Effectiveness at Oregon Health & Science University is a research organization that uses economic approaches and big data to answer pressing questions about health care delivery. Our mission is to provide the analyses, evidence, and economic expertise to build a more sustainable health care system.

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Background

Oregon is experiencing a significant demographic shift with its rapidly aging population. In 2020, the percentage of adults aged 65 or older was 18%, and it is projected to increase to 24% by 2050.¹ This aging population intensifies the demand for long-term services and supports (LTSS), prompting states to seek ways to meet this growing need for Medicaid LTSS while managing costs.

Oregon Medicaid's traditional LTSS program covers access to home and community-based services (HCBS). To qualify for HCBS, Oregon Medicaid beneficiaries must meet specific financial and functional limitation criteria. Once determined eligible for HCBS, all receive cost-free HCBS through Medicaid. However, the state can reclaim a portion of HCBS costs from the estate following their death, a process known as estate recovery.^{2,3} This estate recovery requirement may discourage Medicaid beneficiaries from accessing the HCBS they would benefit from, potentially accelerating their decline and leading them to more intensive traditional LTSS, such as nursing facility care. It is also important to note that a sizable population of Oregonians who are not currently part of Medicaid are on the brink of meeting the financial and functional criteria for Medicaid HCBS. The status of this population is anticipated to deteriorate without additional support. Assisting these Oregonians to live in the community longer could potentially delay their entry into the more intensive and costly traditional Medicaid LTSS system.

To address these challenges, Oregon has been using state-funds to operate the Oregon Project Independence (OPI) program, which provides in-home services to older adults and people with disabilities who are not eligible for Medicaid. The main goal of OPI is to help individuals remain independent in their own homes for as long as possible. Key features of the OPI include in-home care services, personal care assistance, housekeeping and chore services, meal preparation, transportation assistance, and case management. OPI was designed to serve individuals who are at risk of entering more expensive long-term care facilities, helping them maintain their independence while potentially saving the state money on institutional care costs.⁴

While OPI was a state-funded program, Oregon Medicaid recently pursued a five-year Section 1115 waiver, titled "Oregon Project Independence-Medicaid (OPI-M)." Approved on February 13, 2024, OPI-M (Project Number 11-W-00380/10) will continue through January 31, 2029. Similar to OPI, the main objective of OPI-M is to deliver a limited set of HCBS for people with financial and functional limitations and their unpaid caregivers preemptively, aiming to delay or mitigate the need for more intensive and expensive traditional LTSS. However, OPI-M will be expanded from OPI under the Medicaid 1115 waiver. Eligibility for OPI-M extends to individuals aged 18 and above, with incomes up to 400 percent of the federal poverty level, encompassing both Medicaid and non-Medicaid beneficiaries. Additionally, individuals requiring assistance with activities of daily living (ADL) who do not meet the current Medicaid nursing facility level of care will qualify for HCBS under the OPI-M demonstration.

The OPI-M demonstration offers a diverse range of HCBS tailored through a person-centered service plan for each beneficiary. These services include but are not limited to in-home support and personal

care services (for up to 40 hours per two-week pay period), home-delivered meals, home modifications (valued at up to \$5,000), non-medical and medical transportation services, and adult day services. Caregiver respite supports, education, and training are also included. All OPI-M demonstration services will be provided free of charge. Unlike Medicaid HCBS, OPI-M exempts participants from Medicaid estate recovery requirements for all rendered services. Furthermore, to ensure continuity of care, once individuals are deemed income-eligible for OPI-M participation, the state will guarantee 24 months of continuous eligibility regardless of any changes in circumstances during this period except in unique situations such as moving out of Oregon or death. The state anticipates that these features unique to OPI-M could incentivize people to choose OPI-M over Medicaid HCBS even if they qualify for both programs.

Oregon's approach to LTSS has been marked by innovation. The state has proactively championed HCBS as a more cost-effective alternative to nursing facility services. In 2020, HCBS expenditures accounted for 84% of the state's Medicaid LTSS spending, surpassing the national average of 62%.⁵ OPI-M further underscores Oregon's commitment to innovative LTSS solutions, holding the potential to support individuals to remain in their homes as long as possible while simultaneously delivering cost savings to the state.

Evaluation Questions and Hypotheses

Evaluation Questions

The evaluation design for the OPI-M program includes an impact analysis to assess how OPI-M affected outcomes for the populations involved and an implementation analysis to support the interpretation of findings from the impact analysis. The state of Oregon proposes the following evaluation questions and hypotheses.

Impact analyses

Evaluation Question 1: What was the impact of OPI-M participation on Medicaid enrollment, use of traditional Medicaid LTSS, and Medicaid LTSS expenditures?

Hypothesis: OPI-M participation delayed Medicaid enrollment and the use of traditional Medicaid LTSS while containing Medicaid LTSS expenditures.

- **Question 1a:** What was the impact of OPI-M participation on Medicaid enrollment?
- **Question 1b:** What was the impact of OPI-M participation on the use of traditional Medicaid LTSS?
- **Question 1c:** What was the impact of OPI-M participation on Medicaid LTSS expenditures?

Evaluation Question 2. How did OPI-M program enrollment, Medicaid HCBS use, and health outcomes change under the two-year continuous eligibility policy?

Hypothesis: The continuous eligibility policy of OPI-M reduced churn in program enrollment, delayed the use of traditional Medicaid HCBS, and maintained/improved health outcomes.

- **Question 2a:** How did enrollment in OPI-M change over time?
- **Question 2b:** How did the average enrollment length in the OPI-M program change over time?
- **Question 2c:** How did the churn rate change over time?
- **Question 2d:** How did the use of traditional Medicaid HCBS change among individuals who ever enrolled in the OPI-M program?
- **Question 2e:** How did health outcomes change among individuals who ever enrolled in the OPI-M program?

Evaluation Question 3. How did individuals choose between OPI-M and Medicaid HCBS? How did OPI-M participation affect the quality of life for beneficiaries and their informal caregivers?

- **Question 3a:** What factors influenced individuals' decisions to enroll in OPI-M versus Medicaid HCBS?
- **Question 3b:** What did individuals perceive to be the most important benefits of participating in the program (OPI-M or HCBS)?
- **Question 3c:** What were the impacts of program participation on informal caregivers?
- **Question 3d:** How did individuals' experiences of program benefits vary across regions and populations, if at all?
- **Question 3e:** What were individuals' assessments of how OPI-M participation affected their continued ability to live independently?

Implementation analyses

Evaluation Question 4. Was the OPI-M program implemented as planned?

- **Question 4a:** What were notable successes and challenges during implementation?
- **Question 4b:** What modifications, if any, were made to plans during implementation?
- **Question 4c:** How did implementation experiences vary across regions and populations, if any?

Because evaluation questions 3 and 4 will be answered qualitatively, we are not proposing hypotheses in advance. Evaluation questions will be further refined following input from involved parties early in the evaluation.

Logic Model

The following logic model outlines the path through which the OPI-M program is anticipated to affect short-term and long-term outcomes.

Inputs	Activities	Outputs	Short-term Outcomes	Long-term Outcomes
ODHS staff time Funding	ODHS provides and funds the OPI-M benefit package of HCBS, which is delivered by partnering agencies through a person-centered planning process to individuals under 400% FPL who are at risk of becoming eligible for Medicaid to access LTSS, or eligible for Medicaid but not receiving Medicaid-funded LTSS. OPI-M program participation is guaranteed for 24 months regardless of any changes in individual person's circumstances except unique situations. (These activities will be evaluated through Evaluation Question 4.)	Eligible individuals enroll in OPI-M. Once they enroll in OPI-M, they receive needed and appropriate services. (These outputs will be evaluated through Evaluation Questions 3 and 4.)	Eligible individuals can make an informed choice between OPI-M and Medicaid HCBS. (This outcome will be evaluated through Evaluation Question 3.) Eligible individuals remain enrolled in OPI-M. (This outcome will be evaluated through Evaluation Question 2.)	Compared to similar individuals not enrolled in OPI-M, OPI-M participants have lower rates of Medicaid enrollment, lower rates of traditional Medicaid LTSS use, similar or lower Medicaid LTSS expenditures. (This outcome will be evaluated through Evaluation Question 1.) Quality of life improves for OPI-M participants and family caregivers after program enrollment. (This outcome will be evaluated through Evaluation Question 3.)

Methodology

The evaluation will use a mixed-methods approach, integrating quantitative and qualitative analyses to comprehensively evaluate the OPI-M program. The design and execution of quantitative and qualitative methods supporting the evaluation will be the responsibility of Center for Health Systems Effectiveness (CHSE) in its role as the independent external evaluator (IEE), as seen in Appendix 1. Quantitative research will offer statistical rigor and generalizability, allowing for the measurement of trends and patterns across large populations. The qualitative components will provide depth and context, uncovering the underlying reasons, opinions, and motivations behind those trends. By combining both approaches, we will get a comprehensive analysis that captures both measurable outcomes and the nuanced human experiences and perceptions that drive them, giving us a fuller understanding of complex issues.

Quantitative analyses

The quantitative evaluation will leverage the Oregon Medicaid claims database and the All Payer All Claims (APAC) database that includes all claims for all Oregonians regardless of their health insurance type.

More specifically, both Oregon Medicaid claims and APAC database contain information on:

- Health insurance enrollment by detailed coverage category
- Individual demographics (age, sex)
- Geographic residential location
- Health service utilization data
- Risk factors associated with chronic and acute disease conditions as known as chronic conditions data warehouse (CCW) indicators ⁶
- Claims-based frailty index as a proxy for ADL needs ⁷

Furthermore, Oregon Medicaid claims contain information on:

- Medicaid LTSS expenditure data
- Medicaid LTSS utilization data
- Client demographics (race and ethnicity)

Qualitative analyses

The qualitative evaluation will be informed by background information on LTSS programs in Oregon and other states, as well as by research literature on program implementation. Qualitative analysis will address program implementation questions such as: how the OPI-M program was implemented; what factors have facilitated or impeded success; how state agencies can better support providers

and organizations to improve care for individuals eligible for OPI-M; and what types of programmatic changes should be prioritized to achieve the goals of the OPI-M program.

As noted for evaluation questions 3 and 4, our team has specified the number of qualitative interviews, selecting appropriate populations or sample frames for participant recruitment, scheduling the timing of interviews, tailoring data collection tools to align with specific evaluation questions and hypotheses, and crafting data collection tools. Qualitative interviews will be conducted with program participants and their caregivers, providers, and state agency employees. The evaluation team will ensure a diverse sample of participants by geographic regions of the state as well as by demographic factors such as race, ethnicity, and preferred language.

Mixed-methods approach

The evaluation team will employ a convergent mixed-methods approach,⁸ conducting data collection and analysis for qualitative questions while undertaking quantitative analytical work during the evaluation period. Evaluators will meet regularly to iteratively share findings across the evaluation to inform future evaluation activities and key findings. For example, the first step of engaging key parties affected by the OPI-M program to solicit feedback on the evaluation design will not only refine the design and content of qualitative data-collection instruments but may also illuminate important aspects for interpreting program and claims-based data. Early quantitative analyses may raise questions about the populations participating in the program and indicate areas for follow-up in beneficiary interviews. Interim and final reports will bring together the two methodological approaches to provide a view of program implementation that is both objective and nuanced.

The evaluation team will obtain approval from the Oregon Health & Science University Institutional Review Board for work completed with human subjects as part of the evaluation.

Approach Overview

The table below provides the evaluation questions, proposed outcome measures, focus and comparison groups, data sources, and analytic methods for the evaluation questions listed above. Further details are given in the methods section following the table.

Evaluation Question	Outcome Measure	Focus and Comparison Groups	Data Sources	Analytic Methods
1. What was the impact of OPI-M participation on Medicaid enrollment, use of traditional Medicaid LTSS, and Medicaid LTSS expenditures?	<ul style="list-style-type: none"> Medicaid enrollment Use of traditional Medicaid LTSS (in-home services, assisted living facility/adult foster care, and nursing facility services) Medicaid LTSS expenditures 	<p>Focus: OPI-M participants</p> <p>Comparison: A matched group of individuals who did not participate in OPI-M and were not using Medicaid LTSS when the treatment occurred.</p> <p>Sub-analyses: Urban/rural area residence</p>	Medicaid claims and all-payer all-claims (APAC), informed by qualitative analysis	Event study design (i.e., difference-in-differences approach used when the treatment occurs over time)
2. How did OPI-M program enrollment, Medicaid HCBS use, and health outcomes change under the two-year continuous eligibility policy?	<ul style="list-style-type: none"> Monthly count of participants enrolled in the OPI-M program Average enrollment length Churn for OPI-M Use of traditional Medicaid HCBS Acute hospitalization, emergency department visits, 30-day readmission rates, death 	<p>Focus: OPI-M participants</p> <p>Comparison: Oregon Medicaid HCBS users and Washington's Tailored Services for Older Adults (TSOA) program participants</p> <p>Sub-analyses: Urban/rural area residence, English as primary language</p>	Medicaid claims and all-payer all-claims (APAC), informed by qualitative analysis	Descriptive quantitative analysis

Evaluation Question	Outcome Measure	Focus and Comparison Groups	Data Sources	Analytic Methods
3. How did individuals choose between OPI-M and Medicaid HCBS? How did OPI-M participation affect quality of life for beneficiaries and their informal caregivers?	<ul style="list-style-type: none"> How did beneficiaries receive information about the OPI-M program? What factors affected beneficiaries' choice of HCBS program (OPI-M or traditional Medicaid HCBS)? (e.g., cost, benefits, Medicaid estate recovery, others) How has life changed since enrolling in OPI-M? What type and amount of formal or informal HCBS, if any, did beneficiaries have before OPI-M enrollment? Did beneficiaries choose their previously unpaid (or paid out of pocket) caregivers as their OPI-M provider? What has OPI-M allowed beneficiaries and informal caregivers to do? Includes issues of independence (living situation, ADLs, financial stability), relationships (kids, grandkids, other family, friends), hobbies, and caregiver life (ability to keep working, to be home for dinner, etc.). How have OPI-M services affected beneficiaries' perceived ability to continue living independently? How could OPI-M be altered to better meet the needs of beneficiaries or their families? How has the continuous eligibility policy affected beneficiaries and caregivers? For beneficiaries and caregivers who experienced the previous, shorter eligibility policy, what are the comparative benefits and drawbacks of the continuous eligibility policy? 	<p>Focus: OPI-M beneficiaries</p> <p>Comparison: Medicaid HCBS beneficiaries ; if available, eligible community members who are screened but decline participation</p>	<p>Interviews with beneficiaries and their current/previous caregivers:</p> <p>10-20 each from OPI-M and traditional Medicaid HCBS, both in 2028-29</p> <p>Sample to be stratified by relevant variables:</p> <ul style="list-style-type: none"> Rural vs. urban residence English as primary language 	Thematic qualitative analysis
4. Was OPI-M implemented as planned?	<ul style="list-style-type: none"> Description of challenges and successes to implementation Description of unanticipated issues during implementation Description of how policy or guidance could have been clearer, more timely, targeted, or coordinated Description of how issues identified mid-implementation were handled Description of variation in implementation across regions and populations 	<p>Focus:</p> <ul style="list-style-type: none"> ODHS staff AAA case managers APD staff <p>Comparison: Not applicable</p>	<p>Interviews with program staff:</p> <ul style="list-style-type: none"> 2-4 individual or group interviews in 2024 (baseline) 20-25 interviews in 2026-27 <p>Program documentation</p>	Thematic qualitative analysis

Evaluation feedback from relevant parties

Methodological Design

To ensure that the evaluation is effective and covers all relevant aspects of program implementation, we will solicit feedback from individuals who have knowledge of how HCBS is delivered in Oregon and ways in which OPI-M program could affect service delivery and outcomes. While not formal evaluation data, this feedback will be used as contextual information to guide analysis and interpretation of results.

During the first six months of the evaluation, we will meet with relevant parties to solicit feedback on the design of the evaluation. They may include, for example, Type A and Type B Area Agencies on Aging (AAAs), Medicaid case managers, HCBS providers, and consumer advocates. Recruitment will occur through website searches for relevant agencies, community-based organizations, and provider organizations, as well as referrals from ODHS personnel. The evaluation team will aim to engage with a total of 20-30 individuals through these consultations, ensuring representation from all categories of interested parties.

When possible, the CMS-approved evaluation design will be presented at group meetings to reach as many people as possible in an efficient manner. Questions will include, but not be limited to:

- Are there outcomes not currently included in the plan that should be assessed?
- What other types of stakeholders should we speak to or gather information from?
- Are there any confounding factors we should account for in looking at effects of OPI-M?

Input sessions will last about 1 hour and will be conducted by CHSE staff via video phone or onsite with at least one staff person taking notes. Presentations will not be recorded, and no identifiable information will be collected. Information obtained during these meetings will be used only for preparatory work for the evaluation design and will not be analyzed or reported in the results.

Methodological Limitations

Despite efforts by the evaluation team to reach a comprehensive sample of involved parties for input on the evaluation design, it is possible that not all perspectives will be included at this stage. It is also possible that factors that are important for the evaluation design will not be apparent at this early stage of input. If important factors emerge later, they will be incorporated into qualitative interview guides for subsequent data collection and noted during interpretation and reporting of quantitative data.

Evaluation Question 1: What was the impact of OPI-M participation on Medicaid enrollment, use of traditional Medicaid LTSS, and Medicaid LTSS expenditures?

Hypothesis: OPI-M participation delayed Medicaid enrollment and the use of traditional Medicaid LTSS while maintaining Medicaid LTSS expenditures.

Methodological Design

We will conduct a quantitative analysis of claims.

Focus and Comparison Populations

The focus population includes individuals who participated in OPI-M. The comparison group includes a matched group of individuals at least 18 years old who did not participate in OPI-M and were not using Medicaid LTSS at the time the treatment occurred. Both the focus and comparison populations include Medicaid and non-Medicaid enrollees.

Evaluation Period

We propose to analyze data from January 1, 2023, to June 30, 2028, if claims data for CY 2028 will be available on January 1, 2030.

Evaluation Measures

We propose to use the following list of outcome measures:

Evaluation Question	Outcome measures used to address the evaluation question	Data sources
What was the impact of OPI-M participation on Medicaid enrollment?	Enrollment in Medicaid (yes/no) <i>Note: We will not measure this outcome for OPI-M participants and comparison populations who were already enrolled in Medicaid.</i>	Oregon Medicaid claims
What was the impact of OPI-M participation on the use of traditional LTSS, including home-based, community-based, and nursing-facility services?	<ul style="list-style-type: none">• Use of Medicaid home-based services (yes/no)• Use of Medicaid community-based services (yes/no)• Use of Medicaid nursing facility services (yes/no)	Oregon Medicaid claims
What was the impact of OPI-M participation on Medicaid LTSS expenditures?	<ul style="list-style-type: none">• Medicaid LTSS expenditures (\$)• Medicaid HCBS expenditures (\$)• Medicaid long-term nursing facility expenditures (\$)	Oregon Medicaid claims

Data Sources

We will use Oregon Medicaid claims and the APAC database for these analyses.

Analytic Methods

We will create cohorts of focus and comparison populations. The focus group will consist of OPI-M participants. We will use a propensity score matching method to identify a “comparison” group that 1) looks like the focus group in their demographics and other characteristics during the quarter preceding focus group’s OPI-M enrollment, 2) did not participate in OPI-M, and 3) was not using Medicaid LTSS at the time the treatment occurred. More specifically, our matching will be:

- 1:5 matching without replacement
- Based on age, sex, county of residence, Medicare enrollment status, Medicaid enrollment status, 40 chronic conditions data warehouse indicators, frailty index, and other additional factors suggested by Oregon Department of Human Services
- Conducted using the R package *designmatch* to implement risk-set matching, which is designed for time-varying observational studies
- Aligned with the timing of OPI-M enrollment across individuals (For example, if Person A enrolled in OPI-M in the 2nd quarter of 2024, we will then search for Person B, who did not enroll in OPI-M during the study period, was not using Medicaid LTSS in the 2nd quarter of 2024, and had characteristics closely resembling those of Person A in the 1st quarter of 2024.)

Once we have produced matched samples, we will conduct our regression analysis. Our unit of observation will be person-quarter. We will conduct an event study design (i.e., a difference-in-differences approach used when the treatment occurs over time) to understand the association of OPI-M participation with the aforementioned outcomes.

We will compare outcomes for OPI-M participants before and after their enrollment in OPI-M to those of a comparison group that did not enroll in OPI-M during the same period. The pre-treatment period will be the last four quarters before OPI-M enrollment (index quarter), and the post-treatment period will be the third to 10th quarter following the index quarter. The pre-treatment and post-treatment periods vary for each OPI-M participant and their matched comparison group, depending on the timing of their enrollment in the OPI-M program. For example, for individuals who enroll in OPI-M during the first quarter of 2024, the pre-treatment period will include all quarters of 2023, and this same pre-treatment period will apply to their matched comparison group.

We will include OPI-M participants who enroll in the later years of the OPI-M demonstration and follow them as long as possible, up to the limits of available data. However, to ensure consistency in our analyses, we will require all OPI-M participants and their matched comparison groups to have at least eight quarters of post-treatment data. Participants or comparison group members without the full eight quarters of post-treatment data will be excluded from the analysis. The only exception is beneficiaries who die or start hospice care. In these cases, we will include them in our analyses up to the quarter of the event but exclude their observations starting from the quarter following the event.

The regression equation is written as follows:

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

where Y_{it} is the outcome of interest for individual i during quarter t , $Treat_i$ is an indicator equal to one if individual i is in the focus (vs comparison) group, $Post_t$ is an indicator equal to one for the post-intervention period, X_{it} is individual-person characteristics (age, sex, county of residence, Medicare enrollment status, Medicaid enrollment status, 40 chronic conditions data warehouse indicators, frailty index as a proxy for ADL needs⁷), ϵ_{it} is the error term, and the parameter of interest is δ .

To the extent possible, we will consider conducting sub-analyses by residence in rural vs urban county.

In addition, to evaluate the effect of OPI-M program on the fiscal sustainability of the state's Medicaid program, we will follow these procedures.

- Regression Analysis: As described above, we will employ regression models to estimate the effect of OPI-M participation on Medicaid LTSS expenditures per person-quarter.
- Aggregate Savings Estimation: The per person-quarter savings identified through regression will be multiplied by the total number of OPI-M participants to estimate aggregate Medicaid LTSS savings attributable to the program.
- Cost Assessment: We will obtain detailed records of the OPI-M program's implementation from the CMS-64 report and separately obtain administrative costs.
- Cost-Benefit Comparison: By comparing the total estimated Medicaid LTSS savings with the program's total costs, we will assess the net financial impact of the OPI-M program on the state's Medicaid budget.

Special Considerations

- We will consider alternative specifications of the pre-intervention and post-intervention period to address outcome changes around OPI-M participation.
- We will monitor changes in OPI-M participation that might be related to program changes (e.g., any changes in the amount of personal needs allowance for traditional LTSS users).
- We will make sure that adjusted outcomes move in parallel during the pre-treatment period between OPI-M participants and comparison groups. If this assumption is violated, we will consider adjusting for linear outcome trends or applying an honest DID approach.⁹
- It is expected that a total of 9,263 individuals will participate in OPI-M program over the next five years (total: 9,263, urban area residents: 6,206 and rural area residents: 3,057). We will conduct a power analysis to assess if our sub-analyses have sufficient sample sizes to detect statistically significant differences.
- We will have access to administrative records of specific services delivered to people enrolled in OPI-M (e.g., personal care visits, caregiver support), and will consider conducting an additional analysis to explore how the impact of the OPI-M program differs by the type of services OPI-M program participants receive.

Methodological Limitations

- Our main data source – claims – lacks information about key quality domains, including measures of care satisfaction, care experience, and caregivers' experience. This limitation will be mitigated by inclusion of qualitative input from beneficiaries and caregivers.

- We will use a matching method to identify a “comparison” group that looks similar to the target group in their demographics and other characteristics, but the identified comparison group may still differ in unobservable characteristics, particularly those that are correlated with OPI-M participation and dependent variables. If this were the case, our results would be biased.

Evaluation Question 2: How did OPI-M program enrollment, Medicaid HCBS use, and health outcomes change under the two-year continuous eligibility policy?

Hypothesis: OPI-M's continuous eligibility policy reduced churn in program enrollment, delayed the use of Medicaid traditional HCBS, and maintained/improved health outcomes.

Methodological Design

We will conduct a quantitative analysis of claims.

Focus and Comparison Populations. The focus population includes individuals who participated in OPI-M. We have two comparison groups: 1) individuals who participated in Oregon's traditional Medicaid HCBS and 2) individuals who participated in Washington's Tailored Services for Older Adults (TSOA) program. Like Oregon's OPI-M, Washington's TSOA program provides a limited range of long-term care services for non-Medicaid enrollees to delay or avoid Medicaid enrollment and use of Medicaid LTSS, but TSOA does not include a two-year continuous eligibility feature.

Evaluation Period

We propose to analyze data from January 1, 2023, to June 30, 2028, if claims data for CY 2028 will be available on January 1, 2030.

Evaluation Measures

We propose to use the following list of outcome measures:

Evaluation Question	Outcome measures	Data sources
How did enrollment in OPI-M change over time?	Count of participants enrolled in the OPI-M program, measured each month	Oregon and Washington Medicaid claims
How did average enrollment length in the OPI-M program change over time?	Average enrollment length (in months) in the program, measured each year	Oregon and Washington Medicaid claims
How did the churn rate change over time?	<p>Rate of temporary loss of coverage each year.</p> <ul style="list-style-type: none">▪ Numerator: The number of people who experienced temporary loss of coverage (i.e., individuals who experience a coverage gap and re-enroll within 365 days) each year▪ Denominator: The number of program enrollees each year	Oregon and Washington Medicaid claims

Evaluation Question	Outcome measures	Data sources
How did the use of traditional Medicaid HCBS change among individuals who ever enrolled in the OPI-M program?	<p>Rate of traditional Medicaid HCBS use within 365 days of disenrolling from the program each year</p> <ul style="list-style-type: none"> Numerator: The number of people who started using traditional Medicaid HCBS within 365 days of disenrolling from the program in a given year Denominator: The number of program enrollees in that same year <p><i>Example:</i> For the year 2024, the rate would be calculated as follows:</p> <ul style="list-style-type: none"> Numerator: The number of people who disenrolled from the program during 2024 and subsequently started using traditional Medicaid HCBS within 365 days (i.e., during 2025) Denominator: The total number of program enrollees for the year 2024 <p><i>Note: We will not measure this outcome for the first comparison group, individuals who participated in Oregon's traditional Medicaid HCBS.</i></p>	
How did health outcomes change among OPI-M program enrollees?	<p>Rates of acute hospitalizations each year</p> <ul style="list-style-type: none"> Numerator: The number of hospitalizations Denominator: The number of program enrollees-months <p>Ambulatory emergency department utilization per 1,000 MM each year (NCQA)</p> <ul style="list-style-type: none"> Numerator: The number of emergency department visits Denominator: The number of program enrollees-months <p>30-day all-cause readmissions each year (NCQA)</p> <ul style="list-style-type: none"> Numerator: The number of unplanned readmissions with 30 days of index hospitalizations Denominator: The number of hospitalizations <p>Rates of death each year</p> <ul style="list-style-type: none"> Numerator: The number of people who died Denominator: The number of program enrollees 	Oregon and Washington Medicaid claims; APAC

Data Sources

We will use Oregon and Washington Medicaid claims and the APAC database for these analyses.

Analytic Methods

We will descriptively compare all outcome measures each month or each year throughout the evaluation period for OPI-M participants (focus population) and comparison groups. To the extent

possible, we will conduct sub-analyses by residence in urban county (yes or no) and use of English as primary language (yes or no).

Special Considerations

The state expects that a total of 9,263 individuals will participate in the OPI-M program over the next five years (total: 9,263; urban area residents: 6,206 and rural area residents: 3,057; English as primary language: 8,337 and non-English as primary language: 926).

Methodological Limitations

Washington's TSOA program is similar to OPI-M in that it provides a limited amount of long-term care services for non-Medicaid enrollees. However, the two programs differ in multiple aspects beyond the presence of a two-year continuous eligibility policy, including the maximum hours of long-term care services provided. As a result, we will not be able to draw definitive conclusions about the effectiveness of OPI-M's continuous eligibility based on our analyses.

Evaluation Question 3: How did individuals choose between OPI-M and Medicaid HCBS? How did OPI-M participation affect the quality of life for beneficiaries and their informal caregivers?

Methodological Design

Semi-structured qualitative interviews with thematic analysis

Focus Populations

To answer questions about program participants' experiences with OPI-M, the evaluation team will conduct interviews with individuals receiving services, as well as with Medicaid members who have been offered the option to enroll in the OPI-M program but have chosen instead to enroll or continued with traditional Medicaid HCBS.

We will recruit between 10 and 20 individuals from each category, primarily by working through intermediaries such as AAAs and consumer advocacy groups for older individuals and people with disabilities.

The team will develop a semi-structured interview guide informed by input received from key informants during the initial engagement phase with key parties. Some questions will be specific to individuals participating in OPI-M, while others will apply to both groups. Exact questions will be tailored in response to input, but we expect to include the following topical areas:

For both groups, OPI-M and traditional HCBS beneficiaries and caregivers:

- How did you learn about LTSS options (source, format of information, timing)?
- What factors affected beneficiaries' choice of HCBS program (OPI-M or traditional Medicaid HCBS)? Cost? Benefits? Medicaid estate recovery? Others?
- How has the continuous eligibility policy affected beneficiaries and caregivers? For the beneficiaries and caregivers who experienced the previous, shorter eligibility policy, what are the comparative benefits and drawbacks of the continuous eligibility policy?

For OPI-M program participants and caregivers:

- How has life changed since enrolling in OPI-M?
- What type and amount of formal or informal HCBS, if any, did beneficiaries have before OPI-M enrollment?
- Did beneficiaries choose their previously unpaid (or paid out-of-pocket) caregivers as their OPI-M provider?
- What has OPI-M allowed beneficiaries and informal caregivers to do? Ask about independence (living situation, ADLs, financial stability), relationships (kids, grandkids, other family, friends), hobbies, and caregiver life (ability to keep working, to be home for dinner, etc.).
- How could OPI-M be altered to better meet the needs of beneficiaries or their families?

To align with the quantitative analyses, we will stratify interview sampling and analysis by two primary variables:

- Rural versus urban residence
- Use of English versus another language as primary language

The evaluation team will consider additional stratified sampling if feedback from key parties or emerging data about program participation strongly suggest them. These could include:

- Eligibility due to age versus disability
- Medicaid LTSS eligibility versus OPI-M eligibility only
- Caregiver circumstance (presence of informal caregiver versus absence of informal caregiver)

The evaluation will also ensure that interviewed beneficiaries reflect the racial and ethnic demographics of the Oregon Medicaid population, partnering with culturally specific community organizations as needed. We will engage a research translation service to translate information and consent documents into additional languages and to assist with completing interviews with beneficiaries for whom English is not a native language. Based on Oregon Medicaid demographics, we will focus on Spanish-speaking beneficiaries initially and include other language groups as feasible.

Potential program participants and caregivers will receive information about the study via electronic mail, postal-system mail, or both, and will also receive a verbal introduction to the evaluation as part of obtaining consent for the interview. Interviews will follow a semi-structured interview guide and will last 30-45 minutes. Depending on the beneficiary's living situation, interviews may occur with the beneficiary alone, the beneficiary with a caregiver, or the caregiver alone. Interviews will be conducted via video or phone (per the respondent's preference), transcribed, and analyzed for key themes. Identifying information will be removed from all transcribed materials and beneficiary responses will be anonymized in all evaluation reporting. Beneficiaries and caregivers participating in interviews will receive a \$50 gift card in appreciation of their time and participation.

Evaluation Period

Two to four implementation-focused interviews with program staff will be conducted during the first quarter of 2025. Remaining interviews will take place during the fifth and sixth years from the program initiation (from the second quarter of 2028 through the third quarter of 2029).

Analytic Methods

Interviews will be semi-structured, using an interview guide, and will last about 60 minutes each. They will be conducted via video or phone (per the respondent's preference). The evaluation team will monitor interview responses as interviews proceed to ensure that saturation (the point at which further interviews yield no further major themes) is reached.

Interviews will be transcribed and uploaded to an industry-standard qualitative analysis software package, Atlas.ti. A minimum of two qualitative analysts will code transcripts for themes related to program implementation. Analysts will reconcile code interpretations until intercoder reliability is achieved. When coding is completed, at least two analysts will independently analyze coded output to identify key implementation themes.

If feasible, the evaluation team will share a summary of interview findings with a subset of respondents for feedback as part of a qualitative validation process known as "member checking." This validation process provides additional confirmation and nuance to interview findings before they are incorporated into the interim report.

Special Considerations

The evaluation team will confer with ODHS to determine how to incorporate beneficiaries' informal caregivers in data collection for this evaluation question.

Methodological Limitations

Despite efforts by the evaluation team to ensure a diverse sample of informants, it is possible that OPI-M participants who agree to complete interviews will not be representative of the overall program population, leading to bias. Participants may be uncomfortable sharing some aspects of their enrollment decision processes or experiences with the OPI-M and Medicaid HCBS programs, leading these to be omitted from our account. To mitigate these potential biases, the evaluation team will seek to use multiple channels for soliciting informants and will partner with community organizations where needed to facilitate broad participation. The team will also ensure that interview questions will feel comfortable to informants by vetting them in advance with individuals who have received services like OPI-M services or who have worked with those receiving services.

Evaluation Question 4: Was the program implemented as planned?

Methodological Design

Semi-structured qualitative interviews with thematic analysis

Focus Populations

We will conduct between two to four baseline interviews with ODHS or other state and regional staff who have been closely involved with planning the OPI-M program. Baseline interviews will occur within the first eight months of program initiation. These interviews, in combination with a review of available program documents, will establish a baseline understanding of the state's objectives for the OPI-M program, communication plans, implementation strategies, and anticipated challenges.

Subsequently, approximately two years into the program implementation (2026-27), we will interview a larger group of 20-25 key informants who have in-depth knowledge of processes involved with implementing the OPI-M program. We will select program staff and case managers, including at least one staff person in each unit of ODHS, in the state's AAAs, and in a selection of Aging and People with Disabilities (APD) offices determining eligibility for OPI-M enrollment. These interviews will seek to understand the progress of program implementation and assess factors that have either supported or hindered realization of the program's goals.

Interview questions will include, but not be limited to:

- What were the challenges and successes to program implementation you or your partners experienced?
- What unanticipated questions or issues arose during implementation?
- How could policies or guidance have been clearer, more timely, better targeted, or better coordinated?
- How were issues identified mid-implementation handled?
- What variations did staff and program partners perceive in OPI-M implementation between different regions of the state and different subpopulations of potential program participants?

Evaluation staff will also review and analyze relevant program documentation (both publicly available and provided by the ODHS team) to understand program details and communications from the agency to partners such as AAAs involved in OPI-M implementation. If appropriate, a member of the evaluation team will also attend any ongoing OPI-M-related meetings (such as meetings of AAAs focused on OPI-M implementation, or meetings of program staff with OPI-M program participants) to take notes on topics that arise during implementation, which may be important to the evaluation.

Evaluation Period

Interviews will assess implementation activities between the start of the program (mid-2024) and two years into the program (late 2026 and early 2027).

Analytic methods

Interviews will be semi-structured, using an interview guide, and will last about 60 minutes each. They will be conducted via video or phone (per the respondent's preference). The evaluation team will monitor interview responses as interviews proceed to ensure that saturation (the point at which further interviews yield no further major themes) is reached.⁸

Interviews will be transcribed and uploaded to an industry-standard qualitative analysis software package, Atlas.ti. A minimum of two qualitative analysts will code transcripts for themes related to program implementation. Analysts will reconcile code interpretations until intercoder reliability is achieved. When coding is completed, at least two analysts will independently analyze coded output key to identify key implementation themes.

If feasible, the evaluation team will share a summary of interview findings with a subset of respondents for feedback as part of a qualitative validation process known as “member checking.” This validation process would provide additional confirmation and nuance to interview findings before they are incorporated into the interim report.

Special considerations

The evaluation team will monitor interview responses for areas emerging since the initial round of input from interested parties and will adapt the interview guide if needed to include new topics.

Methodological Limitations

The broader group of interviews for this evaluation area are scheduled to occur in 2026-2027, approximately 28 months after implementation of the first phase of the program begins. It is possible that later experiences with program roll-out will distort key informants' recollection of the earliest stages of implementation, leading to a positive or negative bias in assessment of initial roll-out. To mitigate this limitation, the evaluation team will collect and preserve program documentation (saving an ongoing record of implementation activities). During interviews, the team will also ask informants to reflect on their experiences at different timepoints during the evaluation, which may promote recollection of earlier perceptions.

References

- 1 Oregon legislative policy and research office. Older Oregonians. 2023. <https://storymaps.arcgis.com/stories/508023e1a676447e8e1ca6ee6ec41e83>
- 2 O'Brien R. Selective Issues in Effective Medicaid Estate Recovery Statutes. *Catholic University Law Review*. 2016;65(1):27-78.
- 3 Kapp MB. Medicaid planning, estate recovery, and alternatives for long-term care financing: identifying the ethical issues. *Care Manag J*. 2006;7(2):73-78. doi:10.1891/cmaj.7.2.73
- 4 Oregon Department of Human Services. Oregon Project Independence. 2024. Accessed August 7, 2024. <https://www.oregon.gov/odhs/providers-partners/community-services-supports/pages/opi.aspx>
- 5 Murray C, Eckstein M, Lipson D, Wysocki A. Medicaid Long Term Services and Supports Annual Expenditures Report: Federal Fiscal Year 2020.; 2023. <https://www.medicaid.gov/sites/default/files/2023-10/Itssexpenditures2020.pdf>
- 6 Chronic Conditions Data Warehouse. 30 CCW Chronic Conditions Algorithms. 2023. <https://www2.ccwdata.org/web/guest/condition-categories-chronic>
- 7 Kim DH, Schneeweiss S, Glynn RJ, Lipsitz LA, Rockwood K, Avorn J. Measuring Frailty in Medicare Data: Development and Validation of a Claims-Based Frailty Index. *The Journals of Gerontology: Series A*. 2018;73(7):980-987. doi:10.1093/gerona/glx229
- 8 Fetters MD, Curry LA, Creswell JW. Achieving integration in mixed methods designs-principles and practices. *Health Serv Res*. 2013;48(6 Pt 2):2134-2156. doi:10.1111/1475-6773.12117
- 9 Rambachan A, Roth J. A More Credible Approach to Parallel Trends. *The Review of Economic Studies*. 2023;90(5):2555-2591. doi:10.1093/restud/rdad018

Attachment 1: Independent External Evaluator

For the OPI-M 1115 Waiver evaluation, the Oregon Department of Human Services selected Oregon Health & Science University (OHSU) as an independent external evaluator (IEE). OHSU 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 included:

- An understanding of and experience with the Medicaid program and populations.
- Experience in conducting comprehensive, multi-dimensional evaluations of large-scale health services programs.

Potential evaluation entities were assessed on their relevant work experience, staff expertise, data management and analytic capacity, experience working with state agency program and research staff, proposed resource levels and availability of key staff, track record of related publications in peer-reviewed journals, and the overall quality of their proposal. Proposed deliverables must meet all standards of leading academic institutions and academic journal peer review. In the process of identifying, selecting, and contracting with an IEE, the state acted appropriately to prevent a conflict of interest with the IEE.

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

Attachment 2:

Evaluation Budget

Table A presents a breakdown of the costs (inclusive of staff, administrative, and other) by deliverable and anticipated date of deliverable delivery.

Table A. OPI-M Evaluation Proposed Budget

Phase	Deliverable (IEE responsible)	Other milestone (ODHS or CMS responsible)	Due date	Payment	
Evaluation design	Evaluation design draft		~August 1, 2024	\$500,000	
		ODHS submits draft to CMS	August 13, 2024		
		CMS comments	60 days from receipt		
		ODHS submits final to CMS	60 days from receipt of CMS comments		
Interim report	Gather input from interest parties on evaluation design (email confirmation of completion)		~August 31, 2025	\$245,771	
	Draft quantitative and qualitative analytic plan		~February 28, 2026	\$245,771	
	Conduct interviews on implementation for interim report (email confirmation of completion)		~January 31, 2027	\$245,771	
	Interim report draft	CHSE submits draft to ODHS	~November 30, 2027	\$245,771	
		ODHS submits draft to CMS	January 31, 2028		
		CMS comments	60 days from receipt		
		ODHS submits final to CMS	60 days from receipt of CMS comments		
	Presentation of interim report findings to ODHS leadership and stakeholders		December 31, 2028	\$245,771	
	Summative report	Conduct interviews on outcomes for summative report (email confirmation of completion)		~March 31, 2029	\$245,771
		Summative report draft	CHSE submits draft to ODHS	~May 31, 2030	\$245,771
ODHS submits draft to CMS			July 31, 2030		
CMS comments			60 days from receipt		
ODHS submits final to CMS			60 days from receipt of CMS comments		
Presentation of summative report findings to ODHS leadership and stakeholders			June 30, 2031	\$245,771	
TOTAL				\$2,466,168	

Attachment 3: Evaluation Timeline and Milestones

The OPI-M waiver was approved in February 2024. Figure A presents the waiver period, planned implementation timeline, evaluation periods for the outlined research questions, and estimated due dates for draft evaluation reports.

Year	2024				2025				2026				2027				2028				2029				2030																	
Qtr	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4														
	Waiver period																																									
	Phased implementation																																									
				IRB & DUA																																						
	Evaluation plan																																									
				Input on evaluation plan from interested parties																																						
				Implementation interviews & analysis for EQ4					Implementation interviews & analysis for EQ4																																	
																	Beneficiary & caregiver interviews & analysis for EQ3																									
											Claims analysis for EQ1 (impact on health outcomes and expenditures)								Claims analysis for EQ1 (impact on health outcomes and expenditures)																							
											Claims analysis for EQ2 (OPI-M enrollment)								Claims analysis for EQ2 (OPI-M enrollment)																							
																	X									X																

X = Draft interim and summative evaluation reports due to ODHS; EQ: evaluation question