# Medicaid Transformation Project Evaluation

#### **INTERIM REPORT**

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#### **Prepared for:**

Washington State Health Care Authority



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#### **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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## Medicaid Transformation Project Evaluation

Since 2017, the State of Washington has been engaged in an ambitious effort to transform its health care delivery and payment system for the state's Apple Health members. The Medicaid Transformation Project (MTP) is a five-year agreement between Washington and the Centers for Medicare and Medicaid Services under a Section 1115 Medicaid demonstration waiver. MTP aims to improve quality of care and test innovative approaches through several focused initiatives.

#### **MTP Consists of Five Initiatives**

Initiative 1: Delivery System Reform Incentive Payment (DSRIP) Program. Establishes statewide goals for payment reform and delivery system integration, and directs nine regional Accountable Communities of Health (ACHs) to collaborate with health and social services organization partners on a series of locally-led health improvement projects.

Initiative 2: Medicaid Alternative Care (MAC) and Tailored Supports for Older Adults (TSOA). Establishes new service options for older adults to remain in their homes and avoid the need for more intensive services.

**Initiative 3: Foundational Community Supports (FCS).** Establishes a statewide network of organizations connecting vulnerable adults with supportive housing and supported employment.

**Initiative 4: Substance Use Disorder (SUD) Amendment.** Expands options for federally funded treatment of substance use disorder in mental health and SUD facilities.

**Initiative 5: Mental Health Amendment.** In November 2020, Washington State received approval from CMS to amend its waiver through the addition of a fifth MTP initiative related to mental health treatment. Implementation had not yet begun at the time of this report.

The State of Washington engaged the Center for Health Systems Effectiveness at Oregon Health & Science University to conduct a comprehensive evaluation of MTP. This Interim Evaluation Report is the second in a series of three reports that will assess MTP's implementation and impacts.

The measurement period for this report spans early 2017 through December 2019, and predates the COVID-19 outbreak in Washington State. Future reports will examine whether and how the pandemic affected progress on MTP.

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Our evaluation of MTP to date found the following:

We found substantial improvements in statewide measures related to substance use disorder and chronic conditions. Changes in other domains were modest or unchanged during this period.

Racial and ethnic disparities were evident. Groups including Black and American Indian/Alaska Native beneficiaries experienced less access to or a lower quality of care on the majority of measures compared to Medicaid beneficiaries as a whole.

Early results of ACH Health Improvement Projects were mixed. We observed a variety of improvements in measures for projects to integrate behavioral and physical health care and to address the opioid crisis. There were fewer detectable improvements in analyses of other projects. Most HIPs were in an early stage of implementation with ACHs focused on developing partnerships, workforce, and infrastructure to support new interventions.

Washington State has achieved progress toward MTP goals related to value-based payment (VBP) and integrated managed care (IMC). The state achieved targets for VBP participation by MCOs through 2018 and expanded participation in VBP arrangements by primary care practices. While all regions of the state have also transitioned to IMC, this may have created unexpected challenges for other MTP efforts such as the state's Substance Use Disorder waiver priorities.

Workforce shortages were a top challenge in implementing MTP initiatives. ACHs devoted substantial effort to workforce development. Community health workers (CHWs) played an important role in regional progress toward MTP goals, but retention challenges were evident.

Stakeholders desired a statewide health information technology (HIT) and health information exchange (HIE) strategy to promote standardization and interoperability. MTP required substantial effort from partnering organizations to adopt new HIT/HIE tools, and there were concerns about the distribution of costs and effort.

Medicaid Alternative Care (MAC) and Tailored Supports for Older Adults (TSOA) may have reduced statewide utilization of traditional Medicaid long-term services and supports. Enrollment ramped up slowly, but satisfaction in the programs was high. MAC participants had fewer adverse outcomes following enrollment. One quarter of TSOA participants enrolled in Medicaid within 6 months of participation, but few used traditional Medicaid-paid long-term services and supports.

Early results from Foundational Community Supports (FCS) are promising. The FCS Supported Employment program demonstrated progress increasing employment. The impact of FCS Supportive Housing is less clear, which may be related to shortages in affordable housing. Health care access and utilization rates improved for some groups.

Access to and quality of substance use disorder treatment improved in the year following implementation of Washington's SUD waiver, and there is evidence of increased capacity for SUD treatment across the state. Despite this progress, there were implementation challenges for SUD treatment and mental health providers, some of which were unintended consequences of MTP's integrated managed care transition.

#### **Recommendations**

Specific recommendations for Washington State and the Health Care Authority arising from this interim evaluation include:

- 1 Address health disparities. Washington's Medicaid system performance through 2019 revealed persistent racial and ethnic disparities in access and quality of care. HCA should further investigate structural factors that may be driving differences. The state's managed care contracts may also present options to reduce health care disparities.
- 2 Strengthen engagement of non-clinical partners in MTP. Behavioral health and community-based partners have faced challenges engaging in MTP. Achieving the state's goal of progress on social factors such as homelessness may require strengthening collaboration between Tribes, ACHs, MCOs, providers and community-based organizations. The state should also explore how to increase housing options for FCS Supportive Housing participants.
- 3 Support the recruitment and retention of key workers necessary for MTP success. Additional efforts may be particularly needed in rural areas where difficulty recruiting for community health workers has limited ACH progress on health improvement activities, and where in-home caregiver demand is projected to increase in future years.
- 4 Provide clear guidance regarding Washington State's vision for community information exchange (CIE), including the desired financing mechanisms to support CIE platforms. Promote standardization and interoperability of HIT/HIE platforms across regions and sectors, focusing on lowering barriers to participation among behavioral health and SUD treatment providers.
- 5 Continue to monitor progress on ACH health improvement projects. ACHs' early activities focused on developing infrastructure and workforce necessary to implement new interventions. A longer period of observation and consideration of ACHs' roles in COVID-19 response and recovery will yield more robust conclusions about the impact of ACH projects.
- 6 Explore options to ensure benefit packages are clearly understood across TSOA, MAC, and traditional long-term services and supports so individuals can make the choice that best meets their needs. Stronger incentives may be needed to promote enrollment in MAC versus traditional Medicaid in-home services.
- 7 Build on early positive results from the FCS Supported Employment program. The program may play an important role in employment recovery after the COVID-19 pandemic. Further investigation may help to identify the service needs for FCS participants who enroll in both Supported Employment and Supportive Housing services.
- 8 Continue to assess the entire system of substance use prevention, treatment, and recovery, and ensure that the SUD waiver does not create incentives for unnecessary residential stays.
- 9 Monitor challenges identified in Managed Care Organization (MCO) payments made to behavioral health and SUD treatment providers, including timeliness of payments and appropriateness of prior authorization requirements. Assess whether these challenges resolve following implementation of IMC and execution of new MCO contracts in 2021, or whether these challenges persist and warrant future changes to IMC.

## **About MTP**

Washington State's Medicaid Transformation Project (MTP) is a \$1.27 billion effort spanning 2017-2021 to transform health care delivery and payment for the state's Apple Health members.

MTP is a five-year agreement between Washington State and the Centers for Medicare & Medicaid Services under a Section 1115 Medicaid demonstration waiver. Under this waiver, the State of Washington aims to improve the quality of care delivered to people enrolled in Medicaid, while testing innovative approaches to improve and transform Washington's health and wellness systems.

#### MTP consists of four initiatives:

- Initiative 1: Delivery System Reform Incentive Payment (DSRIP) Program. Establishes statewide
  goals for payment reform and delivery system integration, and directs nine regional Accountable
  Communities of Health (ACHs) to collaborate with health and social services organization partners
  on a series of locally-led health improvement projects.
- Initiative 2: Medicaid Alternative Care (MAC) and Tailored Supports for Older Adults (TSOA).
   Establishes new service options for older adults to remain in their homes and avoid the need for more intensive services.
- Initiative 3: Foundational Community Supports (FCS). Establishes a statewide network of
  organizations connecting vulnerable adults with supportive housing and supported employment.
- Initiative 4: Substance Use Disorder (SUD) Amendment. Expands options for federally funded treatment of substance use disorder in mental health and SUD facilities.
- Initiative 5: Mental Health Amendment. In November 2020, Washington State received approval from CMS to amend its waiver through the addition of a fifth MTP initiative related to mental health treatment. Implementation had not yet begun at the time of this report.

A detailed description of MTP and its initiatives can be found in the Baseline Evaluation Report delivered May 2019.

#### **About the MTP Evaluation**

In order to assess changes that may occur as a result of MTP, the State of Washington engaged the Center for Health Systems Effectiveness at Oregon Health & Science University as an Independent External Evaluator (IEE) to conduct a comprehensive evaluation of MTP.

The overarching purpose of this evaluation is to assess whether MTP, as envisioned and implemented, achieved its stated goals to transform the delivery of Washington State's health systems and improved care for people enrolled in Apple Health.

The MTP evaluation includes eight specific aims, including:

- 1 Provide an assessment of overall Medicaid system performance (related to access, quality and efficiency of care) under the Delivery System Reform Incentive Payments (DSRIP) program;
- Provide an assessment of progress toward meeting Medicaid value-based payment (VBP) adoption targets;
- 3 Provide an assessment of the impact of MTP on the development of the workforce capacity needed to support health system transformation;
- 4 Provide an assessment of the impact of MTP on provider adoption and use of appropriate health information technology;
- 5 Provide an assessment of the impact of MTP initiatives and projects at the state and ACH regional level;
- 6 Provide an assessment of the impact of Medicaid Alternative Care (MAC) and Tailored Supports for Older Adults on the need for and use of long-term services and supports;
- 7 Provide an assessment of the impact of Foundational Community Supports on health outcomes, utilization and cost; and
- 8 Provide an assessment of the impact of the Medicaid Substance Use Disorder (SUD) waiver amendment.

Our evaluation of these aims occurs throughout a series of reports. The reporting schedule of results is presented in Exhibit A.

**Exhibit A: Evaluation Aims and Reporting Schedule** 

	Evaluation Results Reporting Schedule					
Evaluation Aim	Baseline Report	Interim Report	SUD Mid-Point Assessment	Rapid Cycle Reports	Final Report	Final SUD Report
AIM 1: Medicaid System Performance Under DSRIP	X	Χ		Х	Х	
AIM 2: Value-Based Payment	Χ			Х	Х	
AIM 3: Workforce Capacity	Х			Х	Х	
AIM 4: Health Information Technology	Х			Х	Х	
AIM 5: ACH Health Improvement Projects		X			X	
AIM 6: MAC and TSOA		Х			X	
AIM 7: Foundational Community Supports		X			Χ	
AIM 8: SUD Waiver Amendment		Х	Х		Х	Х

#### **About This Report**

This report (the "Interim Evaluation Report") is the second in a series of **three evaluation reports** that will assess MTP's impacts, explore the factors underlying these impacts, and communicate lessons learned from MTP.

- 1 Baseline Evaluation Report. A prior Baseline Report (Kushner and McConnell, 2020) described Washington State's Medicaid system readiness for transformation as of 2019, when health improvement projects under Initiative 1 were first being implemented. The Baseline Report focused on Aims 1-4 and presented contextual information and preliminary findings related to the other aims.
- 2 Interim Evaluation Report. This Interim Evaluation Report describes the performance of Washington State's Medicaid system through December 2019, spanning the first three years of activities under the MTP initiative. This report presents findings from Aims 1 and 5 pertaining to MTP Initiative 1 (DSRIP), and Aims 6-8 pertaining to MTP Initiatives 2-4.
- **3 Final Evaluation Report.** A forthcoming Final Evaluation Report in 2022 will describe the performance of Washington State's Medicaid system through December 2020, spanning the first four years of the MTP demonstration.

The MTP evaluation relies on a wide variety of quantitative and qualitative data to achieve its aims. Key data sources collected and analyzed for the Interim Evaluation Report included:

- Administrative data including program enrollment and claims data provided information on health care access, quality, and utilization.
- Key informant interviews provided qualitative, contextual information on how ACHs and providers were implementing changes in care.
- Case summaries of ACH efforts, including regional health improvement projects provided another source of information about implementation efforts at the ACH and clinical level.
- Surveys of MAC and TSOA program participants documented their experiences of new programs and services.

#### **HOW TO READ THIS REPORT**

When reading this report, readers are encouraged to interpret results within the context of each MTP initiative's intended and actual implementation efforts through late 2019.

The interim report reflects a relatively early time period in the MTP demonstration. As such, many of the findings in the interim report relate to early successes and challenges in implementation.

The COVID-19 outbreak began in Washington State in early 2020, causing widespread disruption to the state's health care delivery system. However, the COVID-19 outbreak had little to no effect on Washington's delivery system during the time period described in this report (through December 2019), as this period predates the first known case of the virus in the United States. Later reports will address whether and how COVID-19 impacted progress on MTP.

# Roadmap to the Interim Report

**Section 1:** We present an interim evaluation of MTP Initiative 1. In Chapter 1 we describe the performance of Washington State's Medicaid system in 2018 and 2019, the second and third year of MTP, based on administrative data from the State of Washington. We provide an overview of Washington's nine Accountable Communities of Health (ACH) in Chapter 2, and present an interim evaluation of eight ACH Health Improvement Projects (HIPs) in Chapters 3-10. **See p. 12** 

**Section 2:** We present an interim evaluation of MTP Initiative 2, Medicaid Alternative Care (MAC) and Tailored Supports for Older Adults (TSOA). In Chapter 11 we present findings related to enrollment and participant satisfaction in these two programs. In Chapter 12 we assess MAC and TSOA participants' health care outcomes compared with participants in traditional Medicaid long-term services and supports. **See p. 120** 

Section 3: We present results of an interim evaluation of MTP Initiative 3, Foundational Community Supports (FCS). In Chapter 13, we describe the implementation of FCS and examine enrollment trends in the program's first year. Using administrative data from Washington State, we compare social and health outcomes of FCS participants before and after enrollment to a matched comparison group of Medicaid beneficiaries. See p. 139

**Section 4:** We present results of an interim evaluation of MTP Initiative 4, Washington State's Substance Use Disorder (SUD) amendment to its 1115 Medicaid waiver. In Chapter 14, we describe implementation progress during the first year following the amendment. We present changes in outcomes for Medicaid beneficiaries through July 2019, the first year following the amendment. **See p. 153** 

Section 5: We describe key conclusions and recommendations from the Interim Evaluation. In Chapter 15, we discuss overarching successes achieved to date across the demonstration, describe remaining challenges and opportunities for further action. We present recommendations to the State of Washington for the remaining years of the MTP demonstration. This section also contains technical appendices with additional descriptions of methods and data. See p. 162

## MTP Initiative 1

This section presents an evaluation of the Medicaid Transformation Project Initiative 1 – Transformation Through Accountable Communities of Health. Section One includes:

- Chapter 1, an evaluation of statewide Medicaid system performance through 2019;
- Chapter 2, an overview of the state's Accountable Communities of Health (ACHs), their approaches to health improvement projects (HIPs), and our approach to evaluating HIP progress to date:
- Chapter 3, evaluation of Project 2A: Bi-Directional Integration of Physical and Behavioral Health Through Care Transformation;
- Chapter 4, evaluation of Project 2B: Community-Based Care Coordination;
- Chapter 5, evaluation of Project 2C: Transitional Care;
- Chapter 6, evaluation of Project 2D: Diversion Interventions;
- Chapter 7, evaluation of Project 3A: Addressing the Opioid Use Public Health Crisis;
- Chapter 8, evaluation of Project 3B: Reproductive and Maternal/Child Health;
- Chapter 9, evaluation of Project 3C: Access to Oral Health Services; and
- Chapter 10, evaluation of Project 3D: Chronic Disease Prevention and Control.

#### **KEY FINDINGS**

- We found substantial improvements in statewide measures related to substance use disorder and chronic conditions; changes across other performance domains were modest or unchanged.
- Black and American Indian/Alaska Native beneficiaries experienced less access to, or a lower quality of, care on the majority of measures than Medicaid beneficiaries of other races. Asian and Hispanic beneficiaries also experienced lower quality of care on some measures than the state's Medicaid beneficiaries as a whole.
- We observed a variety of improvements for projects 2A and 3A. There were fewer detectable improvements in analyses of other HIPs. Most HIPs were in an early stage of implementation.

- The transition to integrated managed care may have created unexpected challenges for other MTP efforts such as the state's Substance Use Disorder waiver priorities (also see Chapter 15).
- Workforce shortages were cited as a top challenge in implementing MTP initiatives. ACHs devoted substantial effort to workforce development.
   Community health workers played an important role in regional progress toward MTP goals, but retention challenges were evident.
- Stakeholders desired a statewide health information technology (HIT) strategy to promote standardization and interoperability. MTP required substantial effort from partnering organizations to adopt new HIT tools, and there were concerns about the distribution of costs and effort.

#### **Recommendations**

The following recommendations relate to the evaluation results for MTP Initiative 1:

- 1 Address Health Disparities. The state should further investigate structural factors that may be driving differences among specific groups. The state's managed care contracts may also present untapped options to reduce health care disparities.
- 2 Strengthen Engagement of non-Clinical Partners in MTP. Behavioral health, human services, and other community-based partners faced particular challenges engaging in MTP. Achieving the state's goal of making progress on social factors such as homelessness, arrest rate, or unemployment may require further strengthening collaboration between the state, Tribes, ACHs, MCOs, Foundational Community Supports providers and community-based organizations. The state should also explore how to increase housing options for FCS Supportive Housing participants.
- 3 Continue to monitor progress on ACH Health Improvement Projects. ACHs' early activities focused on developing the infrastructure and workforce necessary to implement new interventions or programs. A more extended period of observation and consideration of ACHs' roles in COVID-19 response and recovery will yield more robust conclusions about the impact of ACH projects.
- 4 Support the recruitment and retention of key workers necessary for MTP success. Additional efforts may be needed in rural areas where, for example, difficulty recruiting community health worker positions may have restricted ACH progress. In-home caregiver demand is also projected to increase in future years.
- The state should provide clear guidance regarding Washington State's vision for Community Information Exchange (CIE), including the desired financing mechanisms to support CIE platforms. Promote standardization and interoperability of HIT/HIE platforms across regions and sectors, focusing on lowering barriers to participation among behavioral health and SUD treatment providers.

# Statewide Medicaid Performance Under DSRIP

#### **Overview**

In this chapter, we describe Washington State's progress toward statewide MTP milestones and performance of its Medicaid system in 2018 and 2019, representing the second year of MTP (2018) and the first year (2019) with performance incentives. We measure statewide performance on 44 metrics categorized into 10 domains.

#### **Background**

The State of Washington has engaged in substantial efforts in recent years to transform the state's Medicaid program through greater emphasis on integrating care, paying for value rather than service volume, and sharing accountability for performance with the state's providers and Medicaid managed care organizations (MCOs).

In 2015, Washington State began to establish regional Accountable Communities of Health (ACHs) using a State Innovation Model (SIM) grant from the Center for Medicare and Medicaid Services (CMS) (Washington State Health Care Authority, n.d.b). ACHs are regional entities meant to convene organizations concerned with health - including health care providers and hospitals, public health districts, and social service organizations - and align their efforts toward common goals. Core functions of ACHs include identifying health needs within their regions and implementing health improvement projects to meet those needs. The SIM grant and other resources supported planning and startup of ACHs by local health care improvement organizations across the state. Under SIM, a designated "backbone" organization supported each ACH's development and performed administrative functions like payroll.

#### MTP Approach to Change

As part of its 1115 Medicaid demonstration waiver for 2017-2021, Washington State sought approval from CMS to participate in the Delivery System Reform Incentive Payment (DSRIP) program. DSRIP is an initiative that makes federal funds available to states to transform their health care delivery systems, tying provider payments to a performance measurement framework (Gates et al., 2014). MTP Initiative 1 introduced a new statewide performance and accountability framework for Washington, with multiple levels of performance incentives and accountability for health improvement during the demonstration.

#### **Statewide Accountability**

Washington State is accountable to CMS for demonstrating progress at the statewide level toward:

- 1 Integrating physical and behavioral health care,
- Increasing adoption of value-based payments, and
- 3 Achieving improvement on 10 quality measures (see Exhibit 1.1).

Beginning in 2019 (DY3), an increasing proportion of the state's DSRIP funding is at risk in the event that performance milestones are not met. Exhibit 1.1 displays these statewide performance metrics.

#### **Exhibit 1.1: Statewide Accountability Quality Metrics**

# Metric Name All-cause ED visits per 1,000 member months Antidepressant medicaton management Asthma-related metric In 2019: Medication management for people with asthma In 2020-2021: Asthma medication ratio Comprehensive diabetes care: blood pressure control Comprehensive diabetes care: hemoglobin A1c poor control (>9%) Controlling high blood pressure (<140/90) Mental health treatment penetration (broad) Plan all-cause readmission rate (30 days) Substance use disorder (SUD) treatment penetration

Source: Delivery System Reform Incentive Program (DSRIP) Measurement Guide (October 2020)

Well-child visits in the 3rd, 4th, 5th, and 6th years of life

MTP Initiative 1 also provides incentives to Indian health care providers (IHCP) to identify and report on health improvement projects to improve the health of the populations they serve. These projects are not within the scope of the MTP evaluation.

#### **Regional Accountability**

Additional measures and incentives for certain stakeholders are nested within this larger framework of statewide accountability, including:

 Accountable Communities of Health are accountable for promoting adoption of value-based payments as well as for performance on a subset of project-related measures, with DSRIP funds at risk beginning in 2019; and • Managed care organizations (MCOs) are incentivized to achieve targets for adoption of valuebased payments that increase over the course of the demonstration.

#### Implementation of Initiative 1

Washington State engaged in a series of reforms to achieve the goals and performance improvement targets of the demonstration, including:

- Directing the state's managed care organizations to financially integrate physical and behavioral health care (i.e., IMC);
- Establishing targets and a Value-Based Payment Roadmap to increase adoption of value-based payment arrangements between managed care organizations and providers;
- Expanding the Accountable Communities of Health model statewide and developing an MTP
  Project Toolkit to guide efforts of nine ACHs to promote health and transform care delivery in
  their regions.

At the time of this report, Washington State had demonstrated substantial progress toward implementation of each of these reforms as described below.

#### **Integration of Physical and Behavioral Health Care**

To achieve the MTP goal of integrating physical and behavioral health care, Washington required its five managed care organizations to financially integrate ("carve in") behavioral health services, with those transitions happening in waves that corresponded roughly to ACH regions. This financial integration occurred in five waves as shown in Exhibit 1.2:

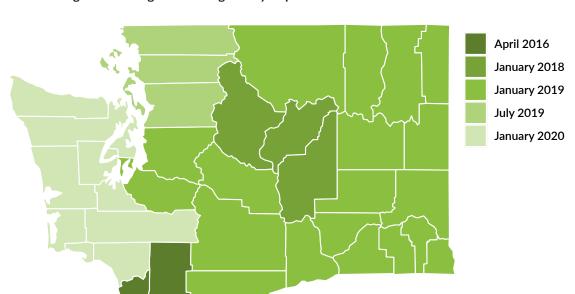


Exhibit 1.2: Integrated Managed Care Regions by Implementation Date

A study by Washington State's Research and Data Analysis Division assessed changes in the first year of IMC for group 1 (which transitioned to IMC in April 2016), compared to the rest of the state. This evaluation found IMC to be associated with improvements in mental health access, reductions in psychiatric inpatient readmissions, and improvements in diabetes screening rates for people with

serious mental illness (Bittinger, Court and Mancuso, 2019). Among people with co-occurring mental illness and substance use disorder, IMC was associated with improvements in measures of social determinants of health, including reductions in arrests and homelessness.

While all regions completed the transition to IMC by 2020, there is evidence that this transition may have impeded other MTP initiatives in unexpected ways. In Chapters 2-10, we note that ACHs encountered difficulty engaging some partnering providers in their MTP initiatives because these providers were focused on organizational changes necessary under IMC. This was particularly true for behavioral health and substance use disorder treatment providers, as we describe further in Chapter 15.

#### **Adoption of Value-Based Payments**

As reported in the Baseline Evaluation Report (Kushner and McConnell, 2020), between 2017 and 2019 Washington State also made progress toward MTP goals related to value-based payment, with evidence of widespread participation in new VBP arrangements among primary care practices, and achievement of the state's targets for VBP participation by managed care organizations. The Health Care Authority's Paying for Value survey of MCOs and providers (Washington State Health Care Authority, 2019d) found that MCOs were leading the way in VBP adoption in Washington, with 57% of 2018 Medicaid managed care payments made through arrangements that included shared gains and/or risks (classified as Category 3A or higher using the Health Care Payment Learning and Action Network's APM Framework), compared with 20 percent of commercial payments and 8 percent of Medicare Advantage payments.

#### **Improvements in Performance and Quality**

ACHs are key partners in the state's efforts to improve performance and quality and achieve its targets for accountability. To guide ACHs in supporting the state attainment of performance targets, a Project Toolkit developed at the outset of MTP defined eight health improvement project areas, each with links to ACH performance incentives and required milestones (Washington State Health Care Authority, 2019a).

As reported in the Baseline Evaluation Report, ACHs have pursued a wide range of activities within these eight project areas during the first three years of the demonstration; yet early evidence suggests that while ACHs were well positioned to address social and community-level determinants of health within their regions, the design of the MTP Project Toolkit narrowed their focus to primarily clinical partnerships and interventions during the planning stages of MTP. In Chapters 2-10 of this report, we present an update to these findings and the first round of results of our evaluation of each health improvement project.

#### A Shifting Landscape During COVID-19

In early 2020, the COVID-19 pandemic reached the United States, with the first confirmed outbreaks occurring in Washington State. The pandemic and the steps taken to respond to it caused widespread disruptions to the health care delivery system. In response to these disruptions, Washington Health Care Authority requested and received authorization from the Centers for Medicare and Medicaid Services to modify elements of MTP performance and accountability.

At the statewide level, Washington's accountability to CMS to achieve performance targets on the 10 statewide quality measures in 2020 was modified to pay-for-reporting only, and eliminated risk in

the event that the state did not achieve statewide quality targets for 2020 (Washington State Health Care Authority, 2020). Responding to changes in CMS' national VBP strategy during the COVID-19 pandemic, HCA also implemented changes to its Long-Term Value-Based Purchasing Roadmap. VBP targets for MCOs in 2021 were frozen at the 2020 target level of 85 percent rather than increasing to 90 percent.

ACHs were actively engaged in COVID-19 response and recovery at the regional level throughout 2020, while also navigating challenges related to the pandemic that disrupted implementation of regional health improvement projects. In recognition of these challenges, the Washington Health Care Authority made changes to ACHs' incentive payments in July 2020 to offer greater flexibility in meeting performance targets during the pandemic (see Chapter Two).

At the time of this report, the State of Washington was engaged in additional negotiations with CMS regarding a potential modification to its Section 1115 Medicaid Demonstration Waiver to add a sixth demonstration year and extend MTP initiatives through 2022. Among the priorities for this potential sixth year, the state articulated a formal role for ACHs in continuing COVID-19 response and recovery. No determination had yet been made.

These changes in Washington's performance accountability requirements and VBP targets occurred after the measurement period for this Interim Evaluation Report, but future reports will include examination of how Washington's Medicaid system has performed and changed during these periods.

#### **Statewide Evaluation Approach**

We analyzed 44 metrics to assess the performance of Washington State's Medicaid system through December 2019 (see Appendix A for details on these measures). These analyses serve as an assessment of the overall effects of population health efforts focused on broad themes, including, for example, behavioral health, maternal health, or oral health improvement, and do not assess the effectiveness of specific interventions or programs occurring in Washington State during this period.

The National Committee for Quality Assurance (NCQA) served as the steward of 22 of our 44 evaluation metrics. In addition to these NCQA metrics, we included measures with a variety of other stewards, including the Bree Collaborative in Washington State, the state's Department of Social and Health Services, and the Dental Quality Alliance. The 44 measures represent a blend of statewide accountability metrics and metrics which were used in pay-for-performance incentives as part of the Health Improvement Project work.

For ease of interpretation, we categorize these evaluation metrics into 10 domains. Exhibit 1.3 presents the domains and metrics that appeared in the Baseline Evaluation Report and any changes in specification of these measures that occurred prior to this Interim Evaluation Report.

We analyzed change in each metric from a baseline period (2018) to 2019. We used statistical models to adjust for observable factors, including changes in patient demographics and health status that may also drive changes in metrics. Unless otherwise noted, the study period spans calendar year 2018 and 2019 (reproductive and maternal health care measures reflect the period July 2017 - June 2018 and July 2018 - June 2019 due to a different production schedule of these measures).

Additional analyses of Initiative 1 Health Improvement Projects are presented in Chapters 2-10.

**Exhibit 1.3: Performance Metrics Used in the MTP Evaluation** 

Domain	MTP Evaluation Metrics	Changes from Baseline Report
SOCIAL DETERMINANTS OF HEALTH	<ul> <li>Homelessness<sup>P4P</sup></li> <li>Employment</li> <li>Arrest Rate<sup>P4P</sup></li> </ul>	No change
ACCESS TO PRIMARY AND PREVENTIVE CARE	<ul> <li>Children and Adolescents' Access to Primary Care Adults' Access to Primary Care</li> </ul>	No change
REPRODUCTIVE AND MATERNAL HEALTH CARE	<ul> <li>Timely Prenatal Care<sup>NCQA,P4P</sup></li> <li>Effective Contraception<sup>P4P</sup></li> <li>Long-Acting Reversible Contraceptives</li> <li>Effective Contraception Within 60 Days of Delivery<sup>P4P</sup></li> </ul>	<ul> <li>Measures in this domain are reported for the period July 2018 - June 2019 due to availability of data at time of publication</li> </ul>
PREVENTION AND WELLNESS	<ul> <li>Well-Child Visits in the First 15 Months NCQA,P4P</li> <li>Well-Child Visits Age 3 to 6 NCQA,P4P</li> <li>Immunizations for Children NCQA,P4P</li> <li>Body Mass Index Assessment for Adults NCQA</li> <li>Chlamydia Screening for WomenP4P</li> <li>Cervical Cancer Screening NCQA</li> <li>Breast Cancer Screening NCQA</li> <li>Colorectal Cancer Screening</li> </ul>	Immunizations for Children metric for 2019 was not yet available at the time of publication
MENTAL HEALTH CARE	<ul> <li>Mental Health Treatment Penetration<sup>P4P</sup></li> <li>Antidepressant Medication for Adults (12 Weeks)<sup>NCQA,P4P</sup></li> <li>Antidepressant Medication for Adults (6 Months)<sup>NCQA,P4P</sup></li> <li>Antipsychotic Medication for People with Schizophrenia<sup>NCQA</sup></li> <li>Diabetes Screening for People with Schizophrenia/Bipolar Disorder</li> <li>30-Day Follow-Up After ED Visit for Mental Illness<sup>NCQA,P4P</sup></li> <li>30-Day Follow-Up After Hospitalization for Mental Illness<sup>NCQA,P4P</sup></li> <li>30-Day Hospital Readmission for a Psychiatric Condition</li> </ul>	• No change
ORAL HEALTH CARE	<ul> <li>Preventive or Restorative Dental Services<sup>P4P</sup></li> <li>Topical Fluoride at a Medical Visit<sup>P4P</sup></li> <li>Periodontal Exam for Adults<sup>P4P</sup></li> </ul>	No change
CARE FOR PEOPLE WITH CHRONIC CONDITIONS	<ul> <li>Controller Medication for Asthma<sup>NCQA,P4P</sup></li> <li>Eye Exam for People with Diabetes<sup>NCQA,P4P</sup></li> <li>Hemoglobin A1c Testing for People with Diabetes<sup>NCQA,P4P</sup></li> <li>Nephropathy Screening for People with Diabetes<sup>NCQA,P4P</sup></li> <li>Statin Medication for Cardiovascular Disease<sup>NCQA,P4P</sup></li> </ul>	No change

Exhibit 1.3 (continued): Performance Metrics Used in Interim Evaluation

Domain	Baseline Evaluation Metrics	Change in Interim Metrics
EMERGENCY DEPARTMENT, HOSPITAL, AND INSTITUTIONAL CARE USE	<ul> <li>Emergency (ED) Department Visit Rate<sup>P4P</sup></li> <li>Acute Hospital Use Among Adults<sup>P4P</sup></li> <li>Hospital Readmission Within 30 Days<sup>P4P</sup></li> <li>Ratio of Home and Community-Based Care Use to Nursing Facility Use</li> </ul>	<ul> <li>Acute Hospital         Use is updated         to reflect new         specification         in the DSRIP         Measurement         Guide</li> </ul>
SUBSTANCE USE DISORDER CARE	<ul> <li>Substance Use Disorder (SUD) Treatment Penetration<sup>P4P</sup></li> <li>Alcohol or Other Drug (AOD) Treatment: Initiation<sup>NCQA</sup></li> <li>Alcohol or Other Drug (AOD) Treatment: Engagement<sup>NCQA</sup></li> <li>30-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence<sup>P4P</sup></li> </ul>	No change
OPIOID PRESCRIBING AND OPIOID USE DISORDER TREATMENT	<ul> <li>People with an Opioid Prescription ≥ 50mg MED<sup>P4P</sup></li> <li>People with an Opioid Prescription ≥ 90mg MED<sup>P4P</sup></li> <li>People with an Opioid Prescription Who Were Prescribed a Sedative<sup>P4P</sup></li> <li>Opioid Use Disorder Treatment Penetration<sup>P4P</sup></li> </ul>	No change

P4P: Pay-for-performance metric for at least one ACH Health Improvement Project. NCQA: National 2018 Medicaid HMO rate available from National Center for Quality Assurance (National Center for Quality Assurance, n.d.).

See DSRIP Measurement Guide for a list of all changes in measure specifications for 2019. Available at https://www.hca.wa.gov/about-hca/healthi-er-washington/medicaid-transformation-metrics

#### **Populations**

The data for this evaluation include outcomes for approximately 2.5 million Medicaid members enrolled over a three year period ending December 2019. In this chapter, we present results for all Medicaid members in Washington, as well as for specific sub-groups described in Exhibit 1.4.

**Exhibit 1.4: Subgroups of Medicaid Members** 

HEALTH CONDITION	Chronic condition	People diagnosed with at least one chronic physical health condition, such as asthma or diabetes, from a list of chronic conditions
	Serious mental illness (SMI)	People diagnosed with schizophrenia, bipolar I, major depressive disorder, or other schizophrenia spectrum or psychotic disorder
GEOGRAPHY OF RESIDENCE	Rural	People who resided in regions with a population center of less than 49,000 people
	High poverty	People who resided in ZIP codes where the median income was in the bottom fifth of Washington State's income distribution
RACE/ETHNICITY	American Indian/Alaska Native Asian Black Hawaiian or Pacific Islander Hispanic White	Race/ethnicity group from Medicaid enrollment records

#### How to Read the Results

This section describes how to interpret the tables and maps in the following sections. We use a sample of results from the Baseline Evaluation Report to illustrate.

The first table in each section presents the statewide average for each metric in 2018, the change in the rate for each metric from 2017 to 2018, and the US average for each metric, if available.

The middle column shows the change in the rate for each metric from 2017 to 2018. Shades of **blue** indicate the metric improved and shades of **orange** indicate the metric worsened. For example, Timely Prenatal Care increased by 0.7 percent from 2017 to 2018. A higher rate is better for this metric, so the change is shaded blue.

This column shows the national average for Medicaid managed care organizations in 2017 f available. Data were obtained from the National Center for Quality Assurance.

2017-2018

2017

White

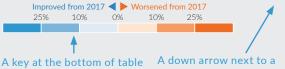
#### Statewide Rates, 2017-2018 Change, and US Comparison

Statewide rate in 2018, statewide change from 2017 to 2018, and US average in 2017

		Statewide	Change	US Average
Timely Prenatal Care	[1]	86.6 %	1.1 %	NA
Effective Contraception	[1]	28.5 %	-0.6 %	NA
Long-Acting Reversible Contraceptives	[0]	16.1 %	0.9 %	NA
Effective Contraception within 60 Days of Delivery	[1]	40.7 %	-0.1 %	NA

Lower is better [3] Projects where this metric is pay-for-performance (P4P)

2018



explains the table shading.

metric means a lower rate is better.



Numbers in brackets show the number of ACH Health Improvement Projects for which the metric is a pay-for-performance metric. For example, Effective Contraception Within 60 Days of Delivery is a P4P metric for one project.

The three remaining tables in each section present rates for subgroups of Medicaid members in 2018. The example below shows rates for three race/ethnicity groups. Shades of **blue** indicate that the rate for the subgroup was better than the state average, and shades of **orange** indicate the rate was worse for the subgroup than the state average. For example, the rate for Timely Prenatal Care (a metric where a higher rate is better) was higher among Hispanic Medicaid members than the statewide average.

#### Measures by Race and Ethnicity

Hawaiian or Pacific Islander (HI/PI), Hispanic, and White members

Timely Prenatal Care	[1]	79.8 %	88.8 %	86.9 %
Effective Contraception	[1]	24.1 %	29.2 %	29.5 %
Long-Acting Reversible Contraceptives	[0]	13.2 %	21.9 %	14.5 %
Effective Contraception within 60 Days of Delivery	[1]	33.0 %	48.1 %	40.6 %

↓ Lower is better [3] Projects where this metric is pay-for-performance (P4P)



A key at the bottom of table explains the table shading. The shading scheme is the same for the last three tables and the map in each section, and *different* from the shading scheme in the first table.

HI/PI Hispanic

#### **Results**

#### **Domain 1: Social Determinants of Health**

This domain includes the following measures:

- **Homelessness:** Percentage of members who were homeless at least one month in the year, as reported by the Washington State Department of Social and Health Services, Economic Services Administration.
- **Employment:** Percentage of members age 18 to 64 with any earnings in the year, as reported by the Washington State Employment Security Department.
- Arrest Rate: Percentage of members age 18 to 64 years of age who were arrested at least once in the year, as reported by the Washington State Patrol.

#### **KEY FINDINGS**

- Homelessness and the arrest rate were essentially unchanged from 2018 to 2019. Employment declined by 4.6 percent.
- Homelessness and the arrest rate were higher and Employment was lower among people with chronic conditions and serious mental illness. More than 10 percent of people with serious mental illness experienced homelessness.
- Homelessness was highest among American Indian/ Alaska Native and Black Medicaid members.

#### Statewide Rates, 2018-2019 Change, and US Comparison

Statewide rate in 2019, statewide change from 2018 to 2019, and US average in 2018

		2019 Statewide	2018-2019 Change	2018 US Average
Homelessness	[3] ↓	3.4 %	0.2 %	NA
Employment (Age 18 to 64)	[0]	45.1 %	-4.6 %	NA
Arrest Rate (Age 18 to 64)	[1] ↓	3.9 %	0.0 %	NA
Improved from 2018 ◀ ▶ Worsened from 2018 25% 10% 0% 10% 25%	better [3] Projects where tl	his metric is p	ay-for-performa	ance (P4P)

#### **Domain 1: Social Determinants of Health (continued)**

#### Measures by Health Condition and Geographic Area, 2019

Members with chronic illness, members with serious mental illness (SMI), members living in rural areas, and members living in high-poverty areas

		Health Condition		Geographic Are	
		Chronic	SMI	Rural	High Poverty
Homelessness	[3] ↓	7.3 %	10.6 %	2.5 %	4.1 %
Employment (Age 18 to 64)	[0]	39.8 %	33.6 %	46.0 %	47.7 %
Arrest Rate (Age 18 to 64)	[1] ↓	8.5 %	12.0 %	3.5 %	4.7 %
Better than state average   25% 10% 0% 10% 25%  25%	↓ Lower is better [3] Projects where t	this metric i	s pay-for-p	erformance	e (P4P)

#### Measures by Race and Ethnicity, 2019

American Indian or Alaska Native (AI/AN), Asian, Black, Hawaiian or Pacific Islander (HI/PI), Hispanic and White members

		AI/AN	Asian	Black
Homelessness		6.1 %	0.9 %	6.2 %
Employment (Age 18 to 64)		38.2 %	44.6 %	52.0 %
Arrest Rate (Age 18 to 64)		8.0 %	1.3 %	6.0 %
		HI/PI	Hispanic	White
Homelessness	[3] ↓	2.1 %	1.7 %	4.4 %
Employment (Age 18 to 64)	[0]	50.0 %	58.5 %	41.3 %
Arrest Rate (Age 18 to 64)	[1] ↓	2.2 %	2.5 %	4.8 %
Better than state average	ts where this m	etric is pay-fo	r-performance	e (P4P)

#### **Domain 2: Access to Primary and Preventive Services**

This domain includes the following measures:

- Children and Adolescents' Access to Primary Care: Percentage of Medicaid members age one to 19 who had at least one ambulatory or preventive care visit.
- Adults' Access to Primary Care: Percentage of Medicaid members age 20 and older who had at least one
  ambulatory or preventive care visit.

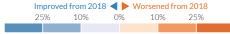
#### **KEY FINDINGS**

- Metrics in this domain were mostly unchanged from 2018 to 2019.
- Adults' access to primary care was substantially higher among people with chronic conditions and people with serious mental illness than among Medicaid members overall.
- Rural areas and high-poverty areas had access rates that were comparable to the statewide average.
- Access measures were notably lower for the Native Hawaiian/Pacific Islander subgroup than for other Medicaid members.

#### Statewide Rates, 2018-2019 Change, and US Comparison

Statewide rate in 2019, statewide change from 2018 to 2019, and US average in 2018

		2019 Statewide	2018-2019 Change	2018 US Average
Children and Adolescents' Access to Primary Care	[2]	90.8 %	0.5 %	NA
Adults' Access to Primary Care	[0]	78.4 %	0.5 %	NA



↓ Lower is better [3] Projects where this metric is pay-for-performance (P4P)

#### Measures by Health Condition and Geographic Area, 2019

Members with chronic illness, members with serious mental illness (SMI), members living in rural areas, and members living in high-poverty areas

		Health Condition		Geogra	phic Area
		Chronic	SMI	Rural	High Poverty
Children and Adolescents' Access to Primary Care	[2]	97.9 %	98.6 %	92.1 %	91.9 %
Adults' Access to Primary Care	[0]	89.4 %	94.6 %	79.4 %	78.7 %



#### **Domain 2: Access to Primary and Preventive Services (continued)**

#### Measures by Race and Ethnicity, 2019

American Indian or Alaska Native (AI/AN), Asian, Black, Hawaiian or Pacific Islander (HI/PI), Hispanic and White members

		AI/AN	Asian	Black
Children and Adolescents' Access to Primary Care			91.3 %	89.8 %
Adults' Access to Primary Care		78.6 %	77.1 %	77.7 %
		HI/PI	Hispanic	White
Children and Adolescents' Access to Primary Care	[2]	84.4 %	93.1 %	90.0 %
Adults' Access to Primary Care	[0]	73.2 %	80.6 %	78.7 %



#### **Domain 3: Reproductive and Maternal Health Care**

This section presents changes in measures of reproductive and maternal health care. These measures differ from measures in the rest of this chapter and are reported on a state fiscal year basis. Results below compare changes in a pre-period of July 2017 - June 2018 to a post period of July 2018 - June 2019.

This domain includes the following measures:

- **Timely Prenatal Care:** Percentage of deliveries with a prenatal care visit in the first trimester, on the Medicaid enrollment start date, or within 42 days of enrollment.
- **Effective Contraception:** Percentage of female Medicaid members age 15 to 44 who received a most-effective or moderately effective method of contraception.
- Long-Acting Reversible Contraceptives: Percentage of female Medicaid members age 15 to 44 who received a long-acting reversible method of contraception, defined as contraceptive implants, intrauterine devices, or intrauterine systems.
- Effective Contraception Within 60 Days of Delivery: Percentage of female Medicaid members age 15 to 44 with a live birth who received a most-effective or moderately effective method of contraception within 60 days of delivery.

#### **KEY FINDINGS**

- Metrics in this domain were essentially relatively stable between the pre and post periods.
- People with chronic conditions and people with serious mental illness had better measures of contraceptive quality relative to the state as a whole.
- Asian, Black, and Hawaiian/Pacific Islander Medicaid members had worse measures for contraceptive quality relative to the state as a whole.

#### Statewide Rates, Pre-post Change, and US Comparison

Statewide rate from July 2018-June 2019, statewide change from 2017-2018 to 2018-2019, and US average in 2018

		2018-19 Statewide	Pre-post Change	2018 US Average
Timely Prenatal Care	[1]	86.6 %	1.1 %	NA
Effective Contraception	[1]	28.5 %	-0.6 %	NA
Long-Acting Reversible Contraceptives	[0]	16.1 %	0.9 %	NA
Effective Contraception within 60 Days of Delivery	[1]	40.7 %	-0.1 %	NA

#### **Domain 3: Reproductive and Maternal Health Care (continued)**

#### Measures by Health Condition and Geographic Area, July 2018 - June 2019

Members with chronic illness, members with serious mental illness (SMI), members living in rural areas, and members living in high-poverty areas

		Health Condition		Geographic Area	
		Chronic	SMI	Rural	High Poverty
Timely Prenatal Care	[1]	85.4 %	85.3 %	87.6 %	86.4 %
Effective Contraception	[1]	31.5 %	34.6 %	30.0 %	29.3 %
Long-Acting Reversible Contraceptives	[0]	16.2 %	18.1 %	16.9 %	19.2 %
Effective Contraception within 60 Days of Delivery	[1]	43.1 %	45.0 %	44.8 %	45.8 %



↓ Lower is better [3] Projects where this metric is pay-for-performance (P4P)

#### Measures by Race and Ethnicity, July 2018 - June 2019

American Indian or Alaska Native (AI/AN), Asian, Black, Hawaiian or Pacific Islander (HI/PI), Hispanic and White members

		AI/AN	Asian	Black
Timely Prenatal Care		79.2 %	88.4 %	82.4 %
Effective Contraception		26.7 %	24.0 %	25.9 %
Long-Acting Reversible Contraceptives		13.8 %	12.8 %	14.2 %
Effective Contraception within 60 Days of Delivery			30.1 %	35.4 %
		HI/PI	Hispanic	White
Timely Prenatal Care	[1]	HI/PI 79.8 %	Hispanic 88.8 %	White 86.9 %
Timely Prenatal Care Effective Contraception	[1] [1]		·	
·		79.8 %	88.8 %	86.9 %



#### **Domain 4: Prevention and Wellness**

This domain includes the following measures:

- Well-Child Visits in the First 15 Months: Percentage of children who reached an age of 15 months in the year and who had six or more well-child visits during their first 15 months of life. This measure is presented for the period July 2018-June 2019 due to data availability.
- Well-Child Visits Age 3 to 6: Percentage of children age 3-6 who had one or more well-child visits during the year.
- **Immunizations for Children:** Percentage of children age 2 who received all vaccinations in the combination 10-vaccination set by their second birthday.
- Body Mass Index Assessment for Adults: Percentage of Medicaid members age 18 to 74 who had an outpatient visit and whose body mass index was documented within the last two years.
- **Chlamydia Screening for Women:** Percentage of women age 16 to 24 identified as sexually active who received at least one chlamydia test during the measurement year.
- Cervical Cancer Screening: Percentage of women age 21 to 64 who were screened for cervical cancer.
- Breast Cancer Screening: Percentage of women age 50 to 74 who had a mammogram to screen for breast cancer.
- Colorectal Cancer Screening: Percentage of Medicaid members age 50 to 74 who were screened for colorectal cancer.

#### **KEY FINDINGS**

- Most metrics in this domain were relatively stable between 2018 and 2019. Body Mass Index assessment exhibited the largest change (3.4 percent).
- Metrics were generally better among people with chronic conditions and serious mental illness and slightly worse among rural residents.
- American Indian/Alaska Native Medicaid members experienced substantially worse outcomes on six of seven metrics.

#### **Domain 4: Prevention and Wellness (continued)**

#### Statewide Rates<sup>1</sup>, 2018-2019 Change<sup>2</sup>, and US Comparison

Statewide rate in 2019, statewide change from 2018 to 2019, and US average in 2018

		2019 <sup>1</sup> Statewide	2018-2019 <sup>2</sup> Change	2018 US Average
Immunizations for Children	[1]	NA	NA	NA
Well-Child Visits in the First 15 Months	[1]	70.0 %	2.1 %	NA
Well-Child Visits Age 3 to 6	[1]	66.7 %	1.5 %	NA
Body Mass Index Assessment for Adults	[0]	36.3 %	3.4 %	NA
Chlamydia Screening for Women	[1]	51.0 %	-0.4 %	58.1 %
Cervical Cancer Screening	[0]	50.8 %	-0.1 %	NA
Breast Cancer Screening	[0]	50.5 %	0.0 %	58.4 %
Colorectal Cancer Screening	[0]	41.9 %	0.8 %	NA
Improved from 2018 ◀ ▶ Worsened from 2018				

↓ Lower is better [3] Projects where this metric is pay-for-performance (P4P)

Notes: 1) Well-Child Visits in the First 15 Months metric is calculated for the period July 2018-June 2019 due to data availability. 2) Well-Child Visits in the First 15 months metric is calculated to display change from the period July 2017-June 2018 to the period July 2018-June 2019.

#### Measures by Health Condition and Geographic Area, 2019

Members with chronic illness, members with serious mental illness (SMI), members living in rural areas, and members living in high-poverty areas

		<b>Health Condition</b>		Geographic Are	
		Chronic	SMI	Rural	High Poverty
Immunizations for Children		NA	NA	NA	NA
Well-Child Visits in the First 15 Months	[1]	73.6 %	NA	67.7 %	70.5 %
Well-Child Visits Age 3 to 6	[1]	73.9 %	71.1 %	68.0 %	68.3 %
Body Mass Index Assessment for Adults	[0]	44.8 %	52.2 %	30.7 %	36.8 %
Chlamydia Screening for Women	[1]	52.9 %	54.6 %	48.4 %	54.2 %
Cervical Cancer Screening	[0]	53.2 %	53.4 %	49.7 %	51.2 %
Breast Cancer Screening	[0]	54.9 %	54.1 %	48.2 %	49.9 %
Colorectal Cancer Screening	[0]	48.5 %	52.4 %	38.8 %	41.7 %

Better than state average Worse than state average 25% 10% 0% 10% 25%

#### **Domain 4: Prevention and Wellness (continued)**

#### Measures by Race and Ethnicity, 2018-2019<sup>1</sup>

American Indian or Alaska Native (AI/AN), Asian, Black, Hawaiian or Pacific Islander (HI/PI), Hispanic and White members

		AI/AN	Asian	Black
Immunizations for Children		NA	NA	NA
Well-Child Visits in the First 15 Months		55.2 %	81.1 %	69.3 %
Well-Child Visits Age 3 to 6		57.8 %	72.4 %	63.3 %
Body Mass Index Assessment for Adults		27.3 %	38.3 %	41.8 %
Chlamydia Screening for Women		51.6 %	48.5 %	58.7 %
Cervical Cancer Screening		42.6 %	55.8 %	54.3 %
Breast Cancer Screening		35.1 %	65.8 %	46.7 %
Colorectal Cancer Screening		31.8 %	52.2 %	40.6 %
		HI/PI	Hispanic	White
Immunizations for Children		HI/PI NA	Hispanic NA	White NA
Immunizations for Children Well-Child Visits in the First 15 Months	[1]	·	•	
	[1] [1]	NA	NA	NA
Well-Child Visits in the First 15 Months		NA 65.9 %	NA 74.6 %	NA 65.9 %
Well-Child Visits in the First 15 Months Well-Child Visits Age 3 to 6	[1]	NA 65.9 % 59.8 %	NA 74.6 % 71.1 %	NA 65.9 % 64.6 %
Well-Child Visits in the First 15 Months Well-Child Visits Age 3 to 6 Body Mass Index Assessment for Adults	[1] [0]	NA 65.9 % 59.8 % 39.6 %	74.6 % 71.1 % 34.6 %	NA 65.9 % 64.6 % 36.4 %
Well-Child Visits in the First 15 Months Well-Child Visits Age 3 to 6 Body Mass Index Assessment for Adults Chlamydia Screening for Women	[1] [0] [1]	NA 65.9 % 59.8 % 39.6 % 51.9 %	NA 74.6 % 71.1 % 34.6 % 53.6 %	NA 65.9 % 64.6 % 36.4 % 48.6 %



↓ Lower is better [3] Projects where this metric is pay-for-performance (P4P)

Notes: 1) Well-Child Visits in the First 15 months metric is calculated to display change from the period July 2017-June 2018 to the period July 2018-June 2019.

#### **Domain 5: Mental Health Care**

This domain includes the following measures:

- Mental Health Treatment Penetration: Percentage of Medicaid members age 6 and older with a mental health service need who received at least one mental health service.
- Antidepressant Medication for Adults (12 Weeks): Percentage of Medicaid members age 18 and older with depression who remained on antidepressant medication for 12 weeks.
- Antidepressant Medication for Adults (6 Months): Percentage of Medicaid members age 18 and older with depression who remained on antidepressant medication for six months.
- Antipsychotic Medication for People with Schizophrenia: Percentage of Medicaid members age 19 to 64 with schizophrenia who received and remained on an antipsychotic medication.
- **Diabetes Screening for People with Schizophrenia/Bipolar Disorder:** Percentage of Medicaid members age 18 to 64 with schizophrenia or bipolar disorder who received antipsychotic medication and had a diabetes test.
- **30-Day Follow-Up After ED Visit for Mental Illness:** Percentage of emergency department visits with a diagnosis of mental illness where the patient received a follow-up outpatient service within 30 days.
- **30-Day Follow-Up After Hospitalization for Mental Illness:** Percentage of discharges after hospitalization for mental illness where the patient received a follow-up outpatient service within 30 days.
- **30-Day Hospital Readmission for a Psychiatric Condition:** Percentage of inpatient psychiatric stays by adults that were followed by a readmission within 30 days.

#### **KEY FINDINGS**

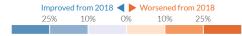
- The change in mental health metrics was mixed between 2018 and 2019, with four improving moderately, and four worsening more substantially.
   Follow-up after emergency department or hospitalization for mental health decreased by more than six percentage points. Antidepresssant medication quality measures improved by more than two percent.
- People with serious mental illness and rural residents had measures that were slightly better than the statewide average for most metrics.
- Measures were highest among white enrollees, with disparities apparent across other racial and ethnic groups. American Indian/Alaska Native and Black Medicaid experienced worse outcomes than the state average on most metrics.

#### **Domain 5: Mental Health Care (continued)**

#### Statewide Rates, 2018-2019 Change, and US Comparison

Statewide rate in 2019, statewide change from 2018 to 2019, and US average in 2018

		2019 Statewide	2018-2019 Change	2018 US Average	
Mental Health Treatment Penetration	[3]	54.9 %	0.3 %	NA	
Antidepressant Medication for Adults (12 Weeks)	[1]	53.4 %	2.6 %	53.5 %	
Antidepressant Medication for Adults (6 Months)	[1]	38.0 %	2.7 %	37.9 %	
Antipsychotic Medication for People with Schizophrenia	[0]	63.0 %	-1.6 %	59.8 %	
Diabetes Screening for People with Schizophrenia/Bipolar Disorder	[0]	79.9 %	0.4 %	NA	
30-Day Follow-Up After ED Visit for Mental Illness	[3]	67.6 %	-7.0 %	54.8 %	
30-Day Follow-Up After Hospitalization for Mental Illness	[3]	67.7 %	-6.6 %	56.8 %	
30-Day Hospital Readmission for a Psychiatric Condition	[0] ↓	14.2 %	1.4 %	NA	



↓ Lower is better [3] Projects where this metric is pay-for-performance (P4P)

#### Measures by Health Condition and Geographic Area, 2019

Members with chronic illness, members with serious mental illness (SMI), members living in rural areas, and members living in high-poverty areas

		<b>Health Condition</b>		Geograp	hic Area
		Chronic	SMI	Rural	High Poverty
Mental Health Treatment Penetration	[3]	54.6 %	73.2 %	54.9 %	56.0 %
Antidepressant Medication for Adults (12 Weeks)	[1]	52.8 %	55.1 %	53.6 %	50.9 %
Antidepressant Medication for Adults (6 Months)	[1]	37.9 %	41.4 %	38.0 %	35.4 %
Antipsychotic Medication for People with Schizophrenia	[O]	61.7 %	61.5 %	61.2 %	59.5 %
Diabetes Screening for People with Schizophrenia/Bipolar Disorder	[O]	83.4 %	85.1 %	80.5 %	79.4 %
30-Day Follow-Up After ED Visit for Mental Illness	[3]	68.3 %	70.5 %	73.9 %	68.6 %
30-Day Follow-Up After Hospitalization for Mental Illness	[3]	69.0 %	70.5 %	69.9 %	66.8 %
30-Day Hospital Readmission for a Psychiatric Condition	[0] ↓	14.3 %	14.7 %	13.2 %	15.1 %



#### **Domain 5: Mental Health Care (continued)**

#### Measures by Race and Ethnicity, 2018-2019

American Indian or Alaska Native (AI/AN), Asian, Black, Hawaiian or Pacific Islander (HI/PI), Hispanic and White members

		AI/AN	Asian	Black
Mental Health Treatment Penetration		54.4 %	47.8 %	53.2 %
Antidepressant Medication for Adults (12 Weeks)		47.2 %	52.2 %	43.9 %
Antidepressant Medication for Adults (6 Months)		31.3 %	36.6 %	28.5 %
Antipsychotic Medication for People with Schizophrenia		51.3 %	73.4 %	53.7 %
Diabetes Screening for People with Schizophrenia/Bipolar Disorder		83.5 %	75.4 %	77.3 %
30-Day Follow-Up After ED Visit for Mental Illness		59.1 %	69.2 %	63.9 %
30-Day Follow-Up After Hospitalization for Mental Illness		62.3 %	73.4 %	63.1 %
30-Day Hospital Readmission for a Psychiatric Condition		NA	NA	NA
		HI/PI	Hispanic	White
Mental Health Treatment Penetration	[3]	HI/PI 48.0 %	Hispanic 55.0 %	White 55.7 %
Mental Health Treatment Penetration Antidepressant Medication for Adults (12 Weeks)	[3] [1]			
		48.0 %	55.0 %	55.7 %
Antidepressant Medication for Adults (12 Weeks)	[1]	48.0 % 45.8 %	55.0 % 46.1 %	55.7 % 56.2 %
Antidepressant Medication for Adults (12 Weeks) Antidepressant Medication for Adults (6 Months)	[1] [1]	48.0 % 45.8 % 28.8 %	55.0 % 46.1 % 30.6 %	55.7 % 56.2 % 40.9 %
Antidepressant Medication for Adults (12 Weeks) Antidepressant Medication for Adults (6 Months) Antipsychotic Medication for People with Schizophrenia	[1] [1] [0]	48.0 % 45.8 % 28.8 % 63.8 %	55.0 % 46.1 % 30.6 % 56.3 %	55.7 % 56.2 % 40.9 % 65.6 %
Antidepressant Medication for Adults (12 Weeks) Antidepressant Medication for Adults (6 Months) Antipsychotic Medication for People with Schizophrenia Diabetes Screening for People with Schizophrenia/Bipolar Disorder	[1] [1] [0] [0]	48.0 % 45.8 % 28.8 % 63.8 % 73.1 %	55.0 % 46.1 % 30.6 % 56.3 % 77.2 %	55.7 % 56.2 % 40.9 % 65.6 % 80.7 %



Note: 30-Day Hospital Readmission for a Psychiatric Condition is suppressed due to small sample sizes.

#### **Domain 6: Oral Health Care**

This domain reflects quality of oral health care. It includes three metrics:

- Preventive or Restorative Dental Services: Percentage of Medicaid members who received preventive or restorative dental services.
- **Topical Fluoride at a Medical Visit:** Percentage of children age 5 and younger who received topical fluoride from a non-dental medical provider during a medical visit.
- **Periodontal Exam for Adults:** Percentage of Medicaid members age 30 and over with a history of periodontitis who received an oral or periodontal evaluation.

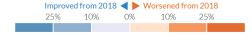
#### **KEY FINDINGS**

- People with serious mental illness and people with chronic conditions had substantially lower rates of preventive or restorative dental services, slightly lower rates of periodontal exams, and slightly higher rates of topical fluoride use.
- Enrollees in rural areas and high-poverty areas had substantially lower rates of topical fluoride at a medical visit.
- American Indian/Alaska Native Medicaid and Black Medicaid members experienced worse outcomes than the state as a whole.

#### Statewide Rates, 2018-2019 Change, and US Comparison

Statewide rate in 2019, statewide change from 2018 to 2019, and US average in 2018

		2019 Statewide	2018-2019 Change	2018 US Average
Preventive or Restorative Dental Services	[1]	48.1 %	0.9 %	NA
Topical Fluoride at a Medical Visit	[1]	4.5 %	0.1 %	NA
Periodontal Exam for Adults	[2]	51.0 %	0.3 %	NA



#### **Domain 6: Oral Health Care (continued)**

#### Measures by Health Condition and Geographic Area, 2019

Members with chronic illness, members with serious mental illness (SMI), members living in rural areas, and members living in high-poverty areas

		Health Condition		n Geographic Are	
		Chronic	SMI	Rural	High Poverty
Preventive or Restorative Dental Services	[1]	41.0 %	38.2 %	50.1 %	51.2 %
Topical Fluoride at a Medical Visit	[1]	6.4 %	NA	2.3 %	4.0 %
Periodontal Exam for Adults	[2]	50.6 %	49.9 %	49.2 %	50.3 %
Better than state average	s better [3] Projects where t	this metric i	s pay-for-p	erformance	e (P4P)

#### Measures by Race and Ethnicity, 2019

American Indian or Alaska Native (AI/AN), Asian, Black, Hawaiian or Pacific Islander (HI/PI), Hispanic and White members

		AI/AN	Asian	Black
Preventive or Restorative Dental Services  Topical Fluoride at a Medical Visit  Periodontal Exam for Adults		45.7 %	49.0 %	45.8 %
		3.9 %	4.6 %	4.4 %
		42.5 %	61.8 %	46.1 %
		HI/PI	Hispanic	White
Preventive or Restorative Dental Services Topical Fluoride at a Medical Visit	[1]	43.5 %	61.9 %	41.7 %
	[1]	5.3 %	3.6 %	5.2 %
Periodontal Exam for Adults	[2]	51.0 %	52.6 %	49.7 %
Potter than state average Werea than state average				



#### **Domain 7: Care for People with Chronic Conditions**

This domain includes the following measures:

- **Controller Medication for Asthma:** Percentage of Medicaid members age 5 to 64 with persistent asthma who had a ratio of controller medication to total asthma medications of 0.5 or greater.
- Eye Exam for People with Diabetes: Percentage of Medicaid members age 18 to 75 with diabetes who had an eye exam by an eye care professional.
- **Hemoglobin A1c Testing for People with Diabetes:** Percentage of Medicaid members age 18 to 75 with diabetes who had a hemoglobin A1c test.
- **Nephropathy Screening for People with Diabetes:** Percentage of Medicaid members age 18 to 75 with diabetes who had a nephropathy screening or evidence of nephropathy.
- Statin Medication for Cardiovascular Disease: Percentage of men age 21 to 75 and women age 40 to 75 with atherosclerotic cardiovascular disease who received a high- or moderate-intensity statin medication during the measurement year.

#### **KEY FINDINGS**

- For the state as a whole, metrics improved very modestly between 2018 and 2019.
- On three to five metrics where national data were available, Washington State performed worse than the national average.
- American Indian/Alaska Native and Black
   Medicaid members generally had worse quality
   on measures of the quality of care for people with
   chronic conditions.

#### Statewide Rates, 2018-2019 Change, and US Comparison

Statewide rate in 2019, statewide change from 2018 to 2019, and US average in 2018

		2019 Statewide	2018-2019 Change	2018 US Average
Controller Medication for Asthma	[2]	53.0 %	0.5 %	37.8 %
Eye Exam for People with Diabetes	[2]	45.9 %	0.1 %	NA
Hemoglobin A1c Testing for People with Diabetes	[2]	83.4 %	0.7 %	NA
Nephropathy Screening for People with Diabetes	[2]	84.8 %	0.1 %	NA
Statin Medication for Cardiovascular Disease	[1]	83.5 %	0.3 %	76.3 %

## **Domain 7: Care for People with Chronic Conditions (continued)**

## Measures by Health Condition and Geographic Area, 2019

Members with chronic illness, members with serious mental illness (SMI), members living in rural areas, and members living in high-poverty areas

		Health (	Condition	Geographic Area	
		Chronic	SMI	Rural	High Poverty
Controller Medication for Asthma	[2]	51.3 %	50.6 %	50.1 %	51.0 %
Eye Exam for People with Diabetes	[2]	46.9 %	46.3 %	45.7 %	45.9 %
Hemoglobin A1c Testing for People with Diabetes	[2]	83.0 %	81.0 %	85.6 %	82.9 %
Nephropathy Screening for People with Diabetes	[2]	85.4 %	87.4 %	85.4 %	85.2 %
Statin Medication for Cardiovascular Disease	[1]	83.4 %	80.7 %	82.1 %	83.9 %



↓ Lower is better [3] Projects where this metric is pay-for-performance (P4P)

## Measures by Race and Ethnicity, 2018-2019

American Indian or Alaska Native (AI/AN), Asian, Black, Hawaiian or Pacific Islander (HI/PI), Hispanic and White members

		AI/AN	Asian	Black
Controller Medication for Asthma		43.0 %	62.0 %	49.2 %
Eye Exam for People with Diabetes		41.9 %	55.5 %	41.0 %
Hemoglobin A1c Testing for People with Diabetes		78.9 %	89.9 %	78.8 %
Nephropathy Screening for People with Diabetes		84.7 %	88.1 %	83.3 %
Statin Medication for Cardiovascular Disease		73.7 %	91.4 %	79.6 %
		HI/PI	Hispanic	White
Controller Medication for Asthma	[2]	HI/PI 52.6 %	Hispanic 53.8 %	White 52.6 %
Controller Medication for Asthma  Eye Exam for People with Diabetes	[2] [2]			
		52.6 %	53.8 %	52.6 %
Eye Exam for People with Diabetes	[2]	52.6 % 44.8 %	53.8 % 48.2 %	52.6 % 45.1 %



## **Domain 8: Emergency Department, Hospital and Institutional Care Use**

This domain includes the following measures:

- Emergency Department (ED) Visit Rate: Number of ED visits, including visits related to mental health and substance use disorder, per 1,000 member months.
- Acute Hospital Use Among Adults: Number of acute inpatient discharges among Medicaid members age 18 or older per 1,000 members during the measurement year.
- Hospital Readmission Within 30 Days: Percentage of hospital stays among Medicaid members age 18 and over with unplanned readmission to the hospital within 30 days.
- Ratio of Home and Community-Based Care Use to Nursing Facility Use: Months of home and community-based services received by Medicaid members age 18 and over as a percentage of total months of long-term care received.

#### **KEY FINDINGS**

- For the state as a whole, metrics changed relatively little from 2018 to 2019. The emergency department visit rate and acute hospital use increased slightly.
- People with chronic conditions and people with serious mental illness experienced substantially worse outcomes on ED and hospital use metrics
- relative to the state average, likely reflecting their need for higher levels of care.
- American Indian/Alaska Native and Black Medicaid members experienced substantially worse outcomes on ED and hospital use metrics relative to the state average.

## Statewide Rates, 2018-2019 Change, and US Comparison

Statewide rate in 2019, statewide change from 2018 to 2019, and US average in 2018

		2019 Statewide	2018-2019 Change	2018 US Average
Emergency Department Visit Rate	[8] ↓	50.3	0.6	NA
Acute Hospital Use among Adults	[5] ↓	59.2	0.5	NA
Hospital Readmission within 30 Days	[3] ↓	13.4 %	0.7 %	NA
Ratio of Home and Community-Based Care Use to Nursing Facility Use	[0]	93.3 %	0.6 %	NA

## **Domain 8: Emergency Department, Hospital and Institutional Care Use**

## Measures by Health Condition and Geographic Area, 2019

Members with chronic illness, members with serious mental illness (SMI), members living in rural areas, and members living in high-poverty areas

		Health Condition		Geographic Area		
		Chronic	SMI	Rural	High Poverty	
Emergency Department Visit Rate	[8] ↓	108.7	190.5	48.2	62.0	
Acute Hospital Use among Adults	[5] ↓	118.3	221.7	53.6	63.8	
Hospital Readmission within 30 Days	[3] ↓	13.8 %	18.2 %	11.1 %	13.8 %	
Ratio of Home and Community-Based Care Use to Nursing Facility Use	[0]	93.0 %	92.1 %	93.5 %	93.1 %	



↓ Lower is better [3] Projects where this metric is pay-for-performance (P4P)

## Measures by Race and Ethnicity, 2018-2019

American Indian or Alaska Native (AI/AN), Asian, Black, Hawaiian or Pacific Islander (HI/PI), Hispanic and White members

		AI/AN	Asian	Black
Emergency Department Visit Rate		68.8	21.7	62.2
Acute Hospital Use among Adults		59.4	29.6	64.6
Hospital Readmission within 30 Days		14.6 %	10.4 %	15.1 %
Ratio of Home and Community-Based Care Use to Nursing Facility Use	90.3 %	95.3 %	93.5 %	
		HI/PI	Hispanic	White
				VVIIIC
Emergency Department Visit Rate	[8] ↓	41.1	47.9	53.8
Emergency Department Visit Rate Acute Hospital Use among Adults	[8] ↓ [5] ↓	41.1 53.3		
			47.9	53.8



#### **Domain 9: Substance Use Disorder Care**

This domain includes the following measures:

- Substance Use Disorder (SUD) Treatment Penetration: Percentage of Medicaid members age 12 and over with an SUD treatment need who received at least one qualifying SUD treatment.
- Alcohol or Other Drug (AOD) Treatment (Initiation): Percentage of Medicaid members age 13 and over with a new episode of AOD dependence who received treatment within 14 days of diagnosis.
- Alcohol or Other Drug (AOD) Treatment (Engagement): Percentage of members who initiated treatment and had two or more additional AOD services within 34 days of the initial visit.
- 30-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence: Percentage of emergency
  department visits among Medicaid members age 13 and over with a diagnosis of alcohol or other drug
  dependence (AOD) who had a follow-up outpatient visit for AOD within 30 days of ED visit.

#### **KEY FINDINGS**

- For the state as a whole, performance on all metrics improved between 2018 and 2019.
- Outcomes for residents of rural areas and residents of high-poverty areas were generally worse. However, differences between urban and rural areas were slight.
- Quality of substance use treatment measures were lower for Asian, Black, Hawaiian/Pacific Islander, and Hispanic Medicaid members relative to the state average.

## Statewide Rates, 2018-2019 Change, and US Comparison

Statewide rate in 2019, statewide change from 2018 to 2019, and US average in 2018

		2019 Statewide	2018-2019 Change	2018 US Average
Substance Use Disorder Treatment Penetration	[3]	37.3 %	2.9 %	NA
Alcohol or Other Drug Treatment: Initiation	[0]	38.8 %	2.0 %	42.8 %
Alcohol or Other Drug Treatment: Treatment	[0]	15.5 %	0.7 %	14.0 %
30-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	[3]	30.2 %	5.2 %	19.2 %

## **Domain 9: Substance Use Disorder Care (continued)**

## Measures by Health Condition and Geographic Area, 2019

Members with chronic illness, members with serious mental illness (SMI), members living in rural areas, and members living in high-poverty areas

		Health Condition		Geograp	hic Area
		Chronic	SMI	Rural	High Poverty
Substance Use Disorder Treatment Penetration	[3]	36.1 %	36.1 %	35.2 %	36.7 %
Alcohol or Other Drug Treatment: Initiation	[0]	39.5 %	43.8 %	38.5 %	38.6 %
Alcohol or Other Drug Treatment: Treatment	[0]	14.6 %	13.2 %	15.4 %	15.3 %
30-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	[3]	30.5 %	32.8 %	30.6 %	31.8 %



↓ Lower is better [3] Projects where this metric is pay-for-performance (P4P)

## Measures by Race and Ethnicity, 2018-2019

American Indian or Alaska Native (AI/AN), Asian, Black, Hawaiian or Pacific Islander (HI/PI), Hispanic and White members

		AI/AN	Asian	Black
Substance Use Disorder Treatment Penetration		45.1 %	29.1 %	30.4 %
Alcohol or Other Drug Treatment: Initiation		41.8 %	35.1 %	34.3 %
Alcohol or Other Drug Treatment: Treatment		19.2 %	11.6 %	10.7 %
30-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence		27.6 %	24.0 %	20.5 %
		HI/PI	Hispanic	White
Substance Use Disorder Treatment Penetration	[3]	HI/PI 30.2 %	Hispanic 32.8 %	White 38.9 %
Substance Use Disorder Treatment Penetration Alcohol or Other Drug Treatment: Initiation	[3] [0]	,		
		30.2 %	32.8 %	38.9 %



## **Domain 10: Opioid Prescribing and Opioid Use Disorder Treatment**

This domain reflects opioid use and opioid use disorder (OUD) treatment for Medicaid members with a treatment need. The domain includes four metrics:

- People with an Opioid Prescription ≥ 50mg MED: Percentage of Medicaid members prescribed chronic opioid therapy with dosage greater than or equal to 50mg morphine-equivalent dose.
- People with an Opioid Prescription ≥ 90mg MED: Percentage of Medicaid members prescribed chronic opioid therapy with dosage greater than or equal to 90mg morphine-equivalent dose.
- **People with an Opioid Prescription Who Were Prescribed a Sedative:** Percentage of Medicaid members prescribed chronic opioids who were also prescribed a chronic sedative.
- Opioid Use Disorder Treatment Penetration: Percentage of Medicaid members age 18 and over with an opioid
  use disorder treatment need who received medication-assisted treatment or medication-only treatment for
  OUD.

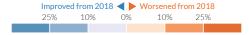
#### **KEY FINDINGS**

- Opioid measures moved in a positive direction, with decreases in prescriptions and large increases in treatment for those who needed it.
- Opioid prescriptions were slightly higher among people with chronic conditions and serious mental illness and treatment rates slightly lower.
- High-poverty areas experienced better quality measures, receiving lower rates of prescriptions and marginally higher treatment rates.
- Outcomes on three of four metrics were substantially worse for Black Medicaid enrollees.

#### Statewide Rates, 2018-2019 Change, and US Comparison

Statewide rate in 2019, statewide change from 2018 to 2019, and US average in 2018

		2019 Statewide	2018-2019 Change	2018 US Average	
People with an Opioid Prescription >= 50mg MED	[1] ↓	31.7 %	-1.3 %	NA	
People with an Opioid Prescription >= 90mg MED	[1] ↓	12.3 %	-1.8 %	NA	
People with an Opioid Prescription who were Prescribed a Sedative	[1] ↓	17.3 %	-2.1 %	NA	
Opioid Use Disorder Treatment for People with Treatment Need	[3]	58.0 %	7.0 %	NA	



## **Domain 10: Opioid Prescribing and Opioid Use Disorder Treatment (continued)**

## Measures by Health Condition and Geographic Area, 2019

Members with chronic illness, members with serious mental illness (SMI), members living in rural areas, and members living in high-poverty areas

		Health C	Condition	Geographic Are		
		Chronic	SMI	Rural	High Poverty	
People with an Opioid Prescription >= 50mg MED	[1] ↓	32.3 %	33.5 %	31.5 %	27.8 %	
People with an Opioid Prescription >= 90mg MED	[1] ↓	12.3 %	12.7 %	12.5 %	9.5 %	
People with an Opioid Prescription who were Prescribed a Sedative	[1] ↓	17.8 %	24.4 %	17.1 %	16.7 %	
Opioid Use Disorder Treatment for People with Treatment Need	[3]	56.7 %	51.4 %	57.2 %	58.6 %	



↓ Lower is better [3] Projects where this metric is pay-for-performance (P4P)

## Measures by Race and Ethnicity, 2018-2019

American Indian or Alaska Native (AI/AN), Asian, Black, Hawaiian or Pacific Islander (HI/PI), Hispanic and White members

		AI/AN	Asian	Black
People with an Opioid Prescription >= 50mg MED		28.4 %	23.6 %	37.3 %
People with an Opioid Prescription >= 90mg MED		10.0 %	10.9 %	14.3 %
People with an Opioid Prescription who were Prescribed a Sedative	14.4 %	14.5 %	13.7 %	
Opioid Use Disorder Treatment for People with Treatment Need	59.4 %	51.8 %	46.3 %	
		HI/PI	Hispanic	White
People with an Opioid Prescription >= 50mg MED	[1] ↓	HI/PI 25.8 %	Hispanic 24.1 %	White 32.1 %
People with an Opioid Prescription >= 50mg MED  People with an Opioid Prescription >= 90mg MED	[1] \ \ [1] \ \			
		25.8 %	24.1 %	32.1 %



#### **Discussion and Limitations**

In this chapter, we evaluated changes in 44 metrics across 10 domains. In general, changes across most metrics were modest. Metrics for substance use and opioid use were exceptions; these moved in the desired direction between 2018 and 2019. Improvements in the behavioral health domain were confined largely to substance use treatment; changes in mental health measures were largely mixed.

The data in this report also point to persistent racial and ethnic disparities, with the most striking differences among Black, American Indian and Alaska Native populations relative to state averages for all Medicaid members. Across 44 measures, Black Medicaid enrollees experienced lower quality in 38 of these measures; American Indian and Native Alaskan Medicaid enrollees experienced lower quality in 31 of these measures. Asian Medicaid enrollees had lower quality for 15 measures, and Hispanic enrollees had lower quality for 12 of the 44 measures.

The results presented here include several limitations. We rely on administrative data, which are limited in their ability to provide a comprehensive assessment of the experience and quality of health care and overall quality of life. The production schedule and availability of measures required us to examine maternal health measures for a different time period (July 2017 to June 2019) than for other domains (January 2018 to December 2019). In addition, while assessing changes between 2018 and 2019, we cannot directly attribute improvements to the MTP, given the wide variety of reforms and changes taking place in the health care system at this time. Similarly, although some measures showed relatively little change, we are unable to say whether those measures may have been worse in the absence of MTP.

# Overview of ACH Health Improvement Projects

In this chapter, we provide an overview of the eight health improvement projects implemented by ACHs as part of MTP Initiative 1. We describe the MTP approach to system transformation through these projects and present key findings related to how ACHs and their partners interpreted and implemented these steps.

Chapters 3-10 provide in-depth results of our evaluation of each of the eight health improvement projects.

## **MTP Approach to Change**

Under MTP Initiative 1, Washington State created nine regional Accountable Communities of Health to convene local stakeholders, identify collaboration opportunities, and coordinate health transformation efforts within each region (see Exhibit 2.1).

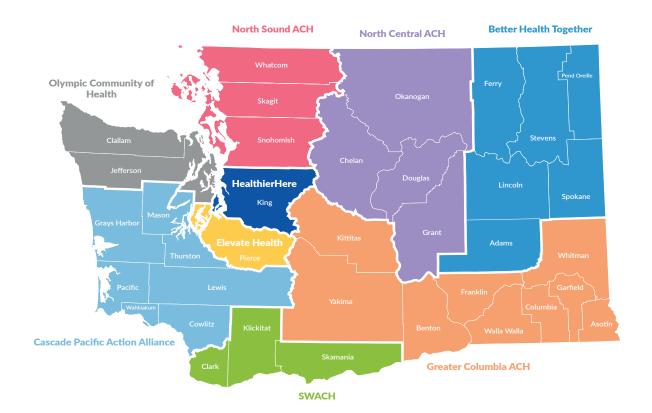


Exhibit 2.1: Washington State's Accountable Communities of Health

ACHs were tasked with pursuing projects in their regions that advanced the statewide goals of MTP in the following three areas:

- Domain 1: Health Systems and Community Capacity Building, including promoting the adoption of value-based payments, supporting the development of the health care workforce, and expanding health information technology (HIT) and health information exchange (HIE) infrastructure.
- Domain 2: Care Delivery Redesign, including supporting bidirectional integration of behavioral
  and physical health care; promoting community-based care coordination; improving transitions
  from intensive or institutional care settings; and implementing emergency department diversion
  strategies to connect medically underserved groups with primary care and social services.
- **Domain 3: Prevention and Health Promotion,** including supporting interventions to address opioid misuse; ensuring access to reproductive care; increasing access to oral health services, and enhancing health system approaches to chronic disease management.

## The MTP Project Toolkit and Health Improvement Projects

Washington State created a Project Toolkit to provide direction and guidance to ACHs in the design and implementation of their activities (Washington State Health Care Authority, 2019c).

The Project Toolkit defined the following **eight health improvement projects**, two of which required participation from all ACHs, and six of which were voluntary:

- **Project 2A:** Bi-Directional Integration of Physical and Behavioral Health Through Care Transformation [required of all ACHs]
- Project 2B: Community-Based Care Coordination
- Project 2C: Transitional Care
- Project 2D: Diversion Interventions
- Project 3A: Addressing the Opioid Use Public Health Crisis [required of all ACHs]
- Project 3B: Reproductive and Maternal/Child Health
- Project 3C: Access to Oral Health Services
- Project 3D: Chronic Disease Prevention and Control

Within each of these project areas, the Project Toolkit outlined a project objective, specific target populations, and approved evidence-based approaches from which the ACH could select.

The Project Toolkit specified **three stages** for all projects. Each project followed the same timeline, with specific milestones for each project during that stage:

- 2017 and 2018 were planning years, typically involving completion of an assessment, selection of specific evidence-based approaches from the toolkit, identification of partner organizations, and completion of an implementation plan.
- 2019 was an implementation year, involving the development of new infrastructure, policies and procedures, the engagement and training of partners, and development of plans for continuous quality improvement.

• 2020 and 2021 are "scale and sustain" years, involving expansion of piloted models, provision of ongoing support and quality improvement activities with partners, and planning for financial sustainability of interventions beyond the demonstration period.

ACHs were required to meet specific reporting and performance milestones at each phase in order to earn incentive payments in a given project area. The level of incentive payments varied across project areas (Washington State Health Care Authority, 2020).

## **Progress Toward MTP Health Improvement Projects**

The Project Toolkit required ACHs to carry out at least two health improvement projects from Domain 2 (Care Delivery Redesign) and two projects from Domain 3 (Prevention and Health Promotion) using evidence-based approaches from HCA's Project Toolkit. At the outset of MTP, ACHs completed regional health needs inventories to guide their project selection processes and selected between four and eight projects. Exhibit 2.2 presents the projects selected by each ACH.

**Exhibit 2.2: Projects Selected by ACHs** 

			Healt	h Improv	ement Proje	cts		
Accountable Community of Health	Project 2A: Bi-Directional Integration of Physical and Behavioral Health Care (Required)	Project 2B: Community-Based Care Coordination	Project 2C: Transitional Care	Project 2D: Diversion Interventions	Project 3A: Addressing the Opioid Use Public Health Crisis (Required)	Project 3B: Reproductive and Maternal or Child Health	Project 3C: Access to Oral Health Services	Project 3D: Chronic Disease Prevention and Control
Better Health Together	Х	Х			Х			Х
Cascade Pacific Action Alliance	Х	Х	Х		Х	Х		Х
Elevate Health	Х	Χ			X			Х
Greater Columbia ACH	Х		Χ		Х			Х
HealthierHere	Х		Х		Х			Х
North Central ACH	Х	Х	Х	Х	Х			Х
North Sound ACH	Х	Х	Х	Х	Х	Х	X	Х
Olympic Community of Health	Х			Х	Х	Х	Х	Х
SWACH	Х	Х			Х			Х

Key informant interviews and reviews of ACH documents during this period suggest that ACHs utilized findings from their community health needs assessments and held forums and workgroups with community partners to elicit priority areas. ACH leaders and board members also considered project feasibility (e.g., required infrastructure costs and the extent to which there was community energy and effort already underway) in their selection.

In late 2017 during ACH planning and prioritization of projects, HCA announced that funding available for MTP Initiative 1 (including ACH Health Improvement Projects) in that year would be lower than previously stated due to unforeseen budget shortfalls. Some ACHs decided to reduce their selected projects and looked for ways that community interests and priorities could still be addressed with fewer projects.

ACHs also considered performance incentive metrics and how they aligned across the eight project areas. However, as these quotes from our interviews illustrate, not all ACHs understood how to calculate and plan for greater incentive payments:

The state provided this menu of eight projects. There was back-and-forth for a while, and nobody knew: was there more financial benefit for the community if we chose all eight? If we chose six? If we chose four? What are the implications if we chose more? What about the capacity of the organization? [There was] a lot of shifting, uncertainty of calculation. (ACH 5, Participant 15)

Other ACHs that took six or eight [projects] get more money than us. That's why I'm bummed that we did [our project selection] that way. [...] We played it safe, and then we played it too safe. [...] I think it's a miss on our part. (ACH 1, Participant 19)

Some ACHs indicated that their initial concerns about overcommitting to too many projects were later replaced by regrets that they had not formally selected more projects. These ACHs ultimately committed resources and supported efforts in areas that were not part of their formal project selection. One ACH noted that project selection within MTP had served primarily to prioritize project areas that would otherwise not receive local attention. As a result, the ACH did not formally select the oral health initiative. Nonetheless, the ACH participated meaningfully in local oral health initiatives that occurred outside the scope of MTP.

## **ACH Identification of Target Populations**

ACHs were required by HCA to identify target populations in each of their chosen project areas. Some ACHs determined target populations for their health improvement projects at the regional level. Other ACHs allowed partner organizations to define target populations as part of their contract negotiations with the ACH. Variation in the approach to defining their target populations meant that within a specific project area, there were often meaningful differences in the relative sizes of the populations of people intended to benefit from projects across participating ACH regions.

#### **Partner Outreach and Contracting**

Following project selection, ACHs executed contracts with a variety of organizations to carry out work on health improvement projects. These partners included health care providers, community-based providers of social, educational, and employment services, local government entities, and Tribal nations. Exhibit 2.3 presents examples of ACH collaborations.

ACHs employed a Request for Proposal (RFP) process to identify and select contracted partners. Community partners that participated in an ACH's project prioritization and planning efforts were invited to apply during the RFP stage. Other partner outreach efforts included ACHs hosting information sessions for interested partners and attending community stakeholder coalitions and meetings. ACHs that covered larger geographic regions also leveraged more localized county groups to engage partners.

**Exhibit 2.3: Examples of ACH Collaborations** 

Collaboration Type	Example
HEALTH CARE PROVIDERS	<ul> <li>Behavioral health care provider</li> <li>Hospital</li> <li>Primary care provider</li> <li>Residential substance use disorder treatment provider</li> </ul>
COMMUNITY-BASED SOCIAL, EDUCATIONAL, AND EMPLOYMENT SERVICES PROVIDERS	<ul> <li>211 network (referral to social services)</li> <li>The Arc</li> <li>Assisted living facility</li> <li>Catholic Charities</li> <li>Church</li> <li>Homelessness services provider</li> <li>YWCA</li> </ul>
LOCAL GOVERNMENT ENTITIES	<ul> <li>Area Agency on Aging</li> <li>City fire department</li> <li>City housing authority</li> <li>County health department</li> <li>County human services department</li> <li>County sheriff</li> <li>Educational service district</li> <li>Emergency medical services</li> </ul>
TRIBAL NATIONS	<ul> <li>Confederated Tribes of the Colville Reservation</li> <li>Cowlitz Indian Tribe</li> <li>Port Gamble Sklallam Tribe</li> <li>Quinault Indian Nation</li> <li>Tulalip Tribes of Washington</li> </ul>

 ${\bf Source: ACH\ partnering\ provider\ rosters\ submitted\ to\ Washington\ State\ Health\ Care\ Authority.}$ 

ACHs considered partner readiness and the number of Medicaid beneficiaries served when prioritizing contracted partners. Some chose to contract with clinical partners before other types of partners, such as education or social service providers, since many of the incentive measures were perceived to be more easily influenced through clinical interventions. These ACHs developed contracts with community-based organizations at a later date. ACH contract terms varied in length, with some spanning multiple years and others requiring partners to update their contracts annually.

## **Planning and Launching Interventions**

ACHs were directed by HCA to require partnering providers to complete a change plan (a reporting tool that described how projects would be implemented and monitored). Change plans specified

the activities, milestones, and outcomes associated with projects, allowing ACHs and their partners to monitor progress. ACHs also conducted regular site visits with contracted partners to observe project progress and identify partner training and support needs.

The uniformity of requirements across projects varied among ACHs. ACHs typically did not approach partners on a project-by-project basis. While the Project Toolkit presented eight distinct projects, ACHs reported that community partners did not conceptualize care and service delivery this way. For example, a community partner could implement a shared care plan that not only supported Project 2A (Bidirectional Integration of Physical and Behavioral Health Care), but also could support projects related to care coordination, transitional care, diversion interventions, and chronic disease prevention and control.

ACHs varied in the level of direction they gave partners regarding the design of interventions in a given project area. While some ACHs prioritized a specific intervention that they sought to spread across their region, other ACHs gave partners flexibility to develop their own interventions or select from a list of options. For example, one ACH elicited community partner input and then chose the Collaborative Care model intervention from the list of bidirectional integration strategies in the MTP toolkit. This ACH then provided technical assistance and resources to contracted partners to support adoption and implementation of the model.

Another ACH shared all of the potential Project Toolkit strategies for a given project area with its partners, letting partners choose which strategies to adopt and whether to tailor or modify the strategies. This was motivated by a recognition that differences in partners' size or scope meant there was no suitable one-size-fits-all strategy for their region:

We're more interested in them working on their own aims and milestones and then tracking those. With the variance in our region and with the volume [differences] we're trying to meet providers where they're at. (ACH 3, Participant #126)

## **COVID-19 Disruptions**

The COVID-19 pandemic outbreak that began in Washington in January 2020 caused widespread disruptions to the state's health care delivery system. These disruptions occurred during a key point in the MTP demonstration, as 2020 marked the year when 50% of ACHs' Health Improvement Project incentive payments were slated to be determined by their achievement of project-related performance measures.

Due to these disruptions, the Washington Health Care Authority made changes to ACHs' incentive payments in July 2020 to offer greater flexibility in meeting performance targets during the pandemic. The state received approval from CMS to calculate ACHs' performance three ways, using whichever approach resulted in the highest achievement for the ACH in 2020 relative to the baseline year of 2018:

- 1 ACH performance in calendar year 2019
- 2 Statewide average in calendar year 2019
- 3 ACH performance in calendar year 2020

These changes occurred as this report was being developed. It is unclear whether or how these shifts in performance incentive design may have affected ACHs project-related efforts in 2020. This report's focus is on changes and outcomes that occurred in 2019, prior to the onset of COVID-19. Future evaluation reports will include information regarding changes ACHs made in their health improvement project activities due to COVID-19 and the related changes in performance requirements.

## **Evaluating the MTP Health Improvement Projects**

In Chapters 3-10, we present interim evaluation results for each of the eight health improvement projects. Here, we describe our approach to evaluating each project through December 2019. We consider 2019 as the first implementation year because it is defined as the first year of implementation in the Project Toolkit and represents the first year that ACHs began contracting with partnering providers for HIP implementation activities.

To evaluate the impact of the eight health improvement projects on health care utilization and outcomes, we examined relevant health measures in regions that participated in a project. We used **two analytic approaches** to reflect different levels of project adoption across regions:

- **Pre-post.** Three projects (2A, 3A, and 3D) were implemented by all nine ACHs. In the absence of a suitable comparison group, we compared outcomes in the periods leading up to the intervention year (2017 and 2018) to outcomes in the first intervention year (2019).
- **Difference-in-differences.** Five projects were implemented by some, but not all ACHs. In these cases, we conducted a difference-in-differences analysis. In this approach, we measured the change in outcomes among participating ACHs between 2017-2018 and 2019 and subtracted the change in outcomes among non-participating ACHs. This approach was designed to isolate the change that could be attributed to a project from other statewide changes that may have affected project-related performance in both participating and non-participating ACHs.

In both cases, we combined these analyses with key informant interviews and document review to identify relevant contextual factors and guide the interpretation of results.

The analyses presented here are intended to provide a broad assessment of the effect of ACH participation in each HIP. The approaches undertaken by individual ACHs varied within HIPs. We did not evaluate the merits of specific evidence-based practices or approaches that ACHs may have undertaken. Rather than measuring the success of specific tools or practices ACHs employed, our analyses should be seen as an assessment of the overall effects of population health projects focused on broad themes, including, for example, behavioral health, maternal health, or oral health improvement.

## **Analysis of Target Populations by Project**

To evaluate the impact of health improvement projects across ACH regions, we first identified target populations that were intended beneficiaries of these projects. When defining target populations, we identified two common populations across each health improvement project. We analyzed both populations by ACH region across each HIP.

This strategy was based, in part, on the fact that it was not possible to systematically identify all Medicaid enrollees who received interventions or were cared for by participating partners in an ACH region. Our approach was population-based and reflected an attempt to identify, through health care

claims data, enrollees who could have benefited from each HIP. In some cases, our target populations were likely to be an imprecise indicator of the groups who were the focus of ACHs efforts. However, our use of a common population allowed for an assessment of changes across ACHs, providing an indication of the extent to which ACH participation in a HIP may have impacted population health.

We identified target populations based on a review of the toolkits for each HIP, input from ACHs, and the data available to the study team. In some cases such as Project 2A (Bi-Directional Integration of Physical and Behavioral Health Care) there was general uniformity in the populations that ACHs targeted, with most focusing on people with behavioral health conditions or a combination of behavioral health conditions and chronic physical health conditions. In other cases such as Project 2B (Community-Based Care Coordination) there was considerable heterogeneity in target populations across ACHs. Furthermore, some ACHs identified more than one target population within a single HIP, reflecting the overlapping nature of the evidence-based models defined in the Project Toolkit.

We defined two target populations: a "broad" population and a "narrow" population (see Exhibit 2.4). The broad population was typically larger (e.g., any individual with a behavioral health condition for Project 2A or people with selected chronic conditions for Project 3D) whereas the narrow population was typically relatively smaller and more focused (e.g., people with behavioral health conditions and chronic physical conditions for Project 2A, or people with type 2 diabetes for Project 3D), although this framework applies more loosely to some projects (for example, Project 2C).

Exhibit 2.4: Target Populations for the Evaluation of Health Improvement Projects

Project	Target Population 1 (Broad)	Target Population 2 (Narrow)	Type of Analysis
Project 2A Bi-Directional Integration of Physical and Behavioral Health Care	People with any behavioral health condition	Behavioral health and physical health comorbidity	Pre-post
2B: Community-Based Care Coordination	People with behavioral health and physical health comorbidity	High-risk pregnant women	Difference-in- Difference
Project 2C: Transitional Care	People discharged from hospital and any chronic condition	People experiencing homelessness	Difference-in- Difference
Project 2D: Diversion Interventions	People with 3 or more ED visits in year prior to intervention	People with 5 or more ED visits in year prior to intervention	Difference-in- Difference
Project 3A: Addressing the Opioid Use Public Health Crisis	Adults 19-64 (for preventive measures only)	People diagnosed with opioid use disorder	Pre-post
Project 3B: Reproductive and Maternal/Child Health	Women of reproductive age	Pregnant women	Difference-in- Difference
Project 3C: Access to Oral Health Services	All beneficiaries	Pregnant women	Difference-in- Difference
Project 3D: Chronic Disease Prevention and Control	People with diabetes, asthma, COPD, cardiovascular conditions	People diagnosed with type 2 diabetes	Pre-post

## **Outcomes of Interest**

We selected specific measures for each HIP analysis from the larger list of measures for MTP Initiative 1 (see Chapter 1). We selected outcome measures including health care access and utilization that were relevant and aligned with the intent of each project area.

In the final report, we will also analyze additional measures, including changes in spending (see Exhibit 2.5).

Exhibit 2.5: Additional Evaluation Measures Planned in the Final Evaluation Report

Metric Name
Opioid Related Deaths per 100,000 Covered Lives
Timeliness of Prenatal Care
Spending: Primary Care Spending Per Member, Per Month
Spending: Other Outpatient Spending Per Member, Per Month
Spending: Inpatient Spending Per Member, Per Month
Spending: Long-Term Services and Supports (LTSS) Spending Per Member, Per Month
Spending: Pharmacy Spending Per Member, Per Month
Spending: Behavioral Health Care Spending Per Member, Per Month
Spending: Non-Behavioral Health Care Spending Per Member, Per Month
Spending: Substance Use Disorder Spending Per Member, Per Month
Total Spending Per Member, Per Month (excluding pharmacy)
Total Spending Per Member, Per Month

The **following chapters** of this report present our analysis of each of the eight health improvement projects, along with contextual information gathered from key informant interviews and document review:

- Chapter 3 presents results of Health Improvement Project 2A (see p. 54)
- Chapter 4 presents results of Health Improvement Project 2B (see p. 64)
- Chapter 5 presents results of Health Improvement Project 2C (see p. 74)
- Chapter 6 presents results of Health Improvement Project 2D (see p. 83)
- Chapter 7 presents results of Health Improvement Project 3A (see p. 90)
- Chapter 8 presents results of Health Improvement Project 3B (see p. 98)
- Chapter 9 presents results of Health Improvement Project 3C (see p. 106)
- Chapter 10 presents results of Health Improvement Project 3D (see p. 113)

## Health Improvement Project 2A

This chapter presents results of the interim evaluation of MTP Initiative 1 Health Improvement Project 2A, "Bi-Directional Integration of Primary Care and Behavioral Health Services."

We first provide background and an overview of how the MTP approach was intended to transform care in this area. We present a description of this project's implementation through 2019, including observations from key informant interviews and reviews of program documents collected during this period. We then present results of an analysis of health care claims to compare whether and how health outcomes changed for key populations under this initiative.

## **Background**

Integrated care models are intended to remove barriers to care, reduce the complexity of navigating health systems, and provide support and alignment for providers of different specialties. One model for integrating primary and behavioral health care, the Collaborative Care Model, has been shown through extensive research (including more than 80 randomized trials) to be associated with improvements in the overall quality of care and patient outcomes (Unutzer, et al., 2002; Gilbody, et al., 2006; Hunkeler, et al., 2006; O'Connor, et al., 2009; Archer, et al., 2012; Thota, et al., 2012; Woltmann, et al., 2012; Siu, et al., 2016; Miller, et al., 2013). Models that focus on the integration of physical health care into the mental health care setting (sometimes referred to as "reverse integration") have demonstrated similar findings (Druss, et al., 2001; Druss, et al., 2010; Druss, et al., 2016).

Improvements from integrated care models include, but are not limited to, reductions in depressive symptoms, greater remission and recovery, reductions in suicidal ideation, and improvements in overall quality of life. Integrated care has also been described as occurring across a spectrum with six levels of integration:

- 1 Minimal collaboration: patients referred to provider at another site; minimal communication;
- 2 Basic collaboration from a distance: providers at separate sites periodically communicate;
- **Basic collaboration onsite:** providers share the same facility but maintain separate treatment plans for patients;
- 4 Close collaboration onsite: providers share records and some system integration;
- 5 Close collaboration approaching an integrated practice: providers share space and actively seek systems solutions together; and
- **6 Full integration:** providers develop and implement treatment plans in a seamless biopsychosocial web (SAMHSA-HRSA Center for Integrated Health Solutions, 2020). .

## MTP Approach to Change

The Project Toolkit presents ACHs with **three options**: two approaches for integrating behavioral health care into primary care and one approach for integrating primary care into behavioral health:

- 1 The Collaborative Care Model was developed at the University of Washington approximately 20 years ago. This team-based model includes a behavioral health care manager and a psychiatric consultant to support primary care. The model can be either practice-based or telehealth-based, so it can be used in rural and urban areas. The model has been extended to treat a wide range of behavioral health conditions, including depression, substance use disorders, bipolar disorder, PTSD, and other conditions. It includes five principles: patient-centered team care; population-based care; measurement-based treatment to target; evidence-based care; and accountable care.
- 2 ACHs may choose to support the **Bree Collaborative**, established by Washington's legislature, to identify ways to improve health care in the state. This integrated behavioral health care standard includes eight common elements: an integrated care team; patient access to behavioral health as a routine part of care; accessibility and sharing of patient information; patient access to psychiatric services; operational systems and workflows to support population-based care; evidence-based treatments; patient involvement in care; and the use of data for quality improvement.
- A Milbank Report (Collins, et al., 2010) provides guidance for ACHs to support work to integrate primary care into behavioral health settings. For example, the Milbank report promotes the use of care managers to facilitate collaboration across settings and to use registries to track and monitor physical health outcomes (which may be overlooked in mental health settings). Integrating primary care into mental health centers should include screening for chronic diseases and conditions, such as obesity, diabetes, heart disease, and others, as well as regular review of patients who are not improving.

## **ACHs Participating in Project 2A**

Within MTP Initiative 1, Project 2A ("Bi-Directional Integration of Physical and Behavioral Health Care") is a mandatory project for all ACHs. ACHs must implement a project that includes at least one approach to integrating behavioral health into primary care settings and at least one approach from integrating primary care into the behavioral health setting (SAMHSA-HRSA Center for Integrated Health Solutions, 2020).

ACHs were required to compile a partnering provider list, assess the level of integrated care model adoption among those partners, identify a target population, and facilitate health systems capacity building by embedding value-based payment, workforce development, and population health management strategies into its 2A projects.

## **Project 2A Implementation**

Key informant interviews and reviews of program documents through 2020 indicate that integration of primary care and behavioral health services was occurring at the financial and administrative level as well as within clinics.

Washington's requirement for MCOs to financially integrate physical and behavioral health services (integrated managed care, or IMC, described in Chapter 1) provides important context for understanding ACH progress on Project 2A. While ACHs were required to help partners integrate services in the delivery system through Project 2A, Washington's five MCOs were also required to financially integrate ("carve in") behavioral health services. The IMC transition occurred in five waves, shown in Exhibit 3.1 below.

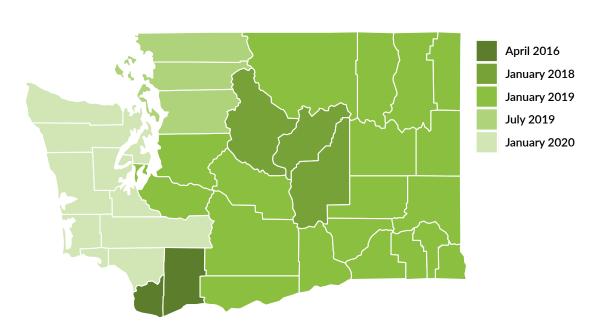


Exhibit 3.1: Implementation of Integrated Managed Care, by Region and Date

The IMC transitions corresponded roughly, but not perfectly, to ACH regions. For example, in the Southwest Washington Accountable Community of Health (SWACH) region, two counties (Clark and Skamania) moved to IMC in 2016, but Klickitat County (also in SWACH) transitioned in 2019. Regions that transitioned in waves 1-4 received financial incentives to encourage earlier IMC adoption. ACHs in wave 5 had the additional responsibility of ensuring that county commissioners, Tribal governments, managed care organizations, clinical and behavioral health provider organizations, and other critical partners convened to support the regional transition to integrated managed care.

## **Integration of Care Delivery**

ACHs interpreted Project 2A guidance from the Project Toolkit in various ways, with some adopting narrow goals for clinical quality improvement and others embarking on approaches that combined 2A efforts with other project areas.

Key informant interviews and publicly available documents indicated that ACHs implemented the following strategies to support partners with bidirectional integration in 2019:

- Provided direct or contracted support and guidance on adopting the Collaborative Care Model;
- Facilitated peer learning opportunities for partner organizations to share best practices with others:
- Provided direct or contracted support and guidance on implementing new care processes such as routinized screening (e.g., depression screening in clinical settings, blood pressure screening in behavioral health settings);
- Provided funding for population health management tools that support integrated care (e.g., patient caseload tracker used by care managers in collaborative care);
- Provided contracted support to behavioral health agencies to learn to effectively use their electronic health records (EHRs) for information sharing, reporting, and billing;
- Wave 5 ACHs convened partners and helped facilitate the transition to integrated managed care
  by convening provider readiness workgroups and participating in early warning systems to track,
  manage, and monitor potential issues.

By December 2019, the period through which we report interim evaluation results, MTP required ACHs to have engaged partnering providers in contractual agreements to implement new activities related to Project 2A. Our evaluation revealed key factors that facilitated and impeded progress in this area.

## Factors That Facilitated Project 2A Implementation

Two factors may have facilitated Project 2A implementation.

- 2A was a mandatory project and a priority for ACHs and their contracted partners. The majority of partners that ACHs contracted with participated in Project 2A. ACHs provided partners with tools, resources, and coaching and technical assistance services to implement their 2A projects.
- A number of initiatives coincided with MTP (e.g., encouragement from other payers; patient centered medical home requirements) that also garnered partner attention and spurred motivation to adopt bidirectional integrated care strategies. Many clinical partners across the state had implemented some form of bidirectional integration prior to MTP. For example, over 150 practices participated in the Healthier Washington Practice Transformation Hub. This initiative provided Washington practices with the training, coaching, technical assistance, and tools for integrating physical and behavioral health services and improving population health. These efforts may have supported readiness among participating partners to implement their 2A projects.

## Factors that Impeded Project 2A Implementation

Three factors possibly hindered the implementation of Project 2A.

 Bidirectional integrated care required hiring new workers, and some regions experienced hiring challenges. ACH regions, especially those that serve rural areas, reported that their partners struggled to recruit psychiatrists, licensed clinical social workers, and other behavioral health specialists.

- Behavioral health agencies experienced a unique set of challenges when beginning bidirectional integration. These challenges included allocating physical space and exam rooms for clinical care and the costs associated with purchasing clinical equipment. Behavioral health organizations often had less experience with activities necessary for integration, including practice transformation, reporting on clinical quality measures, conducting population health management activities, and adapting their EHRs to assist in monitoring and recording physical health measures.
- ACH regions in waves four and five of IMC were simultaneously transitioning to IMC in 2019.
  Behavioral health partners were in the midst of negotiating new contracts with MCOs, acquiring technical infrastructure, including new EHR systems and reporting systems to meet MCO reporting and billing regulations, and responding to MCOs' new licensure, credentialing, and billing requirements. While most Medicaid beneficiaries remained with the same health plan, some required additional support from partner organizations during this time to change their health plans for care continuity.

## **Evaluation Approach**

Project 2A was a requirement for all ACHs. In the absence of a strong comparison group, we assessed changes among enrollees in all ACH regions from a pre-intervention period of calendar year 2017 and 2018 to a post-intervention period of 2019.

Our regressions adjusted for regional differences in Medicaid enrollees' age, gender, race/ethnicity, urban vs. rural residence, and CDPS risk. See Appendix B for methodological details.

## **Target Populations**

Our analysis focused on **two populations** that were described by ACHs as intended beneficiaries of this project area:

- 1 People with any behavioral health condition (including mental health or substance use disorders),
- 2 People with behavioral health conditions and comorbid physical health chronic conditions.

Our focus on people with any behavioral health condition reflected the approaches taken by a variety of ACHs and the potential for integrating physical and behavioral health care to improve access to both behavioral and physical health services.

Our selection of people with comorbid behavioral and physical health conditions as a second target population reflects the potential for this group to benefit from Project 2A, as integration may provide a single site of care for overall health needs.

We defined behavioral health conditions by the psychiatric and substance use indicators in the CDPS risk adjusters. We defined chronic conditions broadly, using markers from the CMS Chronic Conditions Data Warehouse (Centers for Medicare and Medicaid Services, 2020a). Chronic conditions included acquired hypothyroidism; acute myocardial infarction; Alzheimer's disease; anemia; asthma; atrial fibrillation; benign prostatic hyperplasia; cataracts; chronic kidney disease; chronic obstructive pulmonary disease; diabetes; glaucoma; heart failure; hip or pelvic fracture; hyperlipidemia; hypertension; ischemic heart disease; osteoporosis; rheumatoid arthritis; stroke; and a variety of cancers (breast, colorectal, prostate, lung, and endometrial).

## **Interim Evaluation Results**

Results of our evaluation of Project 2A are presented below and reflect changes from a baseline period (2017 and 2018) to the first year of implementation (2019). We first present outcomes for our broadly defined target population for this project area: people with any behavioral health condition. We then present outcomes for our narrowly defined target population, people with comorbid behavioral and physical health conditions.

## How are these results impacted by COVID-19?

The COVID-19 outbreak began in Washington State in early 2020, causing widespread disruption to health services delivery across the state. This report presents data through December 2019, prior to the outbreak. It is therefore unlikely that COVID-19 had any effect on measures presented in this report, though future reporting periods may be affected.

## **Analysis 1: People with Any Behavioral Health Condition**

Exhibit 3.2 displays changes for each metric across the state for people with any behavioral health condition. See page 21 of this report for a guide to reading results.

A variety of quality measures trended in the desired direction over our period of observation. There were substantial improvements (more than four percent) in measures of follow-up after an emergency department visit for alcohol and drug disorders. We also observed notable changes (two percent or more) in treatment penetration for substance use disorder and antidepressant medication management. Modest but significant improvements occurred in initiation and engagement of alcohol and substance use treatment and some diabetes quality measures, including hemoglobin A1c testing and eye exams. Hospital utilization and emergency department visits also decreased significantly in this population.

We observed decreases in the percentage of people who were employed (3.8 percent) and reductions in Follow-Up After Hospitalization for Mental Health Conditions and Follow-Up After Hospitalization or Emergency Department Visits for Mental Health Conditions.

The improvements in follow-up after hospitalizations and emergency department visits for alcohol and drug disorders, coupled with reductions in follow-up after hospitalizations and emergency department visits for mental health conditions, suggest that hospital systems may have developed systems for managing substance use disorders – reflecting, perhaps, a response to the opioid epidemic – but that these changes have not extended to care for patients with mental health conditions. To the extent that improvements have occurred for people with mental health conditions, they appear to be restricted to the arena of the primary care clinic.

Exhibit 3.2: Change in Outcomes for People with Any Behavioral Health Condition

All-ACH rate in 2017-18, all-ACH rate in 2019, and adjusted pre-post change

	2017-18 All ACHs	2019 All ACHs	Pre-Post Adjusted Change
Homelessness ↓	7.6	8.1	0.4***
Employment (Age 18 to 64)	45.0	41.1	-3.8***
Arrest Rate (Age 18 to 64) $\downarrow$	10.5	10.4	-0.1
Children and Adolescents' Access to Primary Care	97.6	97.7	0.1*
Adults' Access to Primary Care	88.4	88.0	0.0
Chlamydia Screening for Women	53.8	53.4	-0.2
Cervical Cancer Screening	52.6	52.2	-0.1
Breast Cancer Screening	52.3	52.2	0.0
Colorectal Cancer Screening	46.7	46.5	0.0
Mental Health Treatment Penetration	62.8	62.3	0.0
Antidepressant Medication for Adults (12 Weeks)	50.9	53.4	2.7***
Antidepressant Medication for Adults (6 Months)	35.4	38.0	2.8***
Antipsychotic Medication for People with Schizophrenia	64.6	63.0	-1.0
Diabetes Screening for People with Schizophrenia/Bipolar Disorder	79.5	79.9	0.1
7-Day Follow-Up After ED Visit for Mental Illness	64.1	55.6	-8.5***
30-Day Follow-Up After ED Visit for Mental Illness	74.5	67.8	-6.8***
7-Day Follow-Up After Hospitalization for Mental Illness	59.5	48.6	-10.6***
30-Day Follow-Up After Hospitalization for Mental Illness	75.4	68.7	-6.8***
30-Day Hospital Readmission for a Psychiatric Condition $\downarrow$	6.3	7.1	1.0
Controller Medication for Asthma	50.2	50.9	1.2
Eye Exam for People with Diabetes	44.6	45.3	0.8*
Hemoglobin A1c Testing for People with Diabetes	81.4	82.2	1.1***
Nephropathy Screening for People with Diabetes	85.5	85.3	-0.1
Emergency Department Visit Rate $\downarrow$	91.7	90.0	-1.3**
Acute Hospital Use among Adults $\downarrow$	104.0	100.8	-2.9**
Hospital Readmission within 30 Days $\downarrow$	6.5	6.8	0.1
Ratio of Home and Community-Based Care Use to Nursing Facility Use	92.1	93.1	1.1***
Substance Use Disorder Treatment Penetration	36.9	39.8	2.7***
Alcohol or Other Drug Treatment: Initiation	37.2	39.2	1.9***
Alcohol or Other Drug Treatment: Treatment	15.1	15.8	0.7***
30-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	24.6	29.8	5.0***
7-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	15.3	19.9	4.6***

Shaded cells indicate a statistically significant change from 2018 to 2019. **Blue**-shaded cells indicate an improvement. **Orange**-shaded cells indicate declining performance. Results marked \* are significant at the p<.05 level. Results marked \*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level.



↓ Lower is better

Table 4 in the Data Appendix displays the change in outcomes across all nine ACHs for people with any behavioral health condition. Generally, trends across ACHs followed the statewide trends, with some variations. For example, people in the Greater Columbia ACH experienced improvements across a range of areas, including significant decreases in Hospital and Emergency Department Use and a number of measures related to substance use treatment. In contrast, we did not observe significant improvements in any measures in SWACH. There was some variability in Mental Health Treatment Penetration, with increases in this measure in the Better Health Together and Elevate Health ACHs, and decreases in Cascade Pacific Action Alliance and HealthierHere.

It is important to note that some variation across ACH regions in measures of follow-up after emergency department visits may be driven by underlying differences in ED utilization patterns across these regions, rather than changes in follow-up service. These measures calculate the percentage of ED visits that are followed by a visit with an ambulatory (non-ED) health care provider. These measures might thus be lower in regions with higher ED utilization simply because of the higher number of ED visits in these areas. As we assess smaller populations (e.g., subgroups with comorbid conditions, or ACH-specific analyses), these measures may be subject to large changes in magnitude that are an artifact of the small sample size.

#### **Analysis 2: People with Comorbid Conditions**

Exhibit 3.3 displays statewide changes for each metric for people with comorbid behavioral health and chronic physical health conditions. In many cases, the patterns observed for the first target population (people with a behavioral health condition) apply to this group as well. For example, measures of follow-up after emergency department visits for alcohol or drug disorders improved, while measures of follow-up after hospitalization or emergency department visit for mental health conditions worsened. This population of people with comorbid physical and mental health conditions also experienced improvements in a variety of quality measures, including cervical cancer screening, colorectal cancer screening, measures of diabetes care quality, and antidepressant medication management.

Table 4 in the Data Appendix displays the change in outcomes across all nine ACHs for people with comorbid behavioral health and chronic physical health conditions. Hospital use in this population declined significantly in the HealthierHere ACH. Other measures tended to follow statewide trends. Mental health treatment penetration and substance use treatment penetration were slightly higher in Better Health Together and Elevate Health. As noted above, some variation across regions in measures of follow up after emergency department visits may be driven by underlying variation in ED utilization patterns (i.e., more acutely ill members) across these regions rather than differences in follow-up efforts.

Exhibit 3.3: Change in Outcomes for People with Comorbid Behavioral and Physical Chronic Conditions

All-ACH rate in 2017-18, all-ACH rate in 2019, and adjusted pre-post change

	2017-18 All ACHs	2019 All ACHs	Pre-Post Adjusted Change
Homelessness ↓	9.2	9.3	0.3**
Employment (Age 18 to 64)	37.2	31.3	-4.6***
Arrest Rate (Age 18 to 64) $\downarrow$	10.8	9.9	-0.6***
Children and Adolescents' Access to Primary Care	99.1	99.2	0.1
Adults' Access to Primary Care	93.0	93.2	0.1
Chlamydia Screening for Women	53.8	52.2	-0.4
Cervical Cancer Screening	53.4	53.8	1.1***
Breast Cancer Screening	54.0	54.6	0.4
Colorectal Cancer Screening	50.8	52.5	1.2**
Mental Health Treatment Penetration	58.6	57.7	0.2
Antidepressant Medication for Adults (12 Weeks)	50.5	52.4	1.5**
Antidepressant Medication for Adults (6 Months)	35.7	38.2	2.1***
Antipsychotic Medication for People with Schizophrenia	63.8	64.5	0.3
Diabetes Screening for People with Schizophrenia/Bipolar Disorder	85.9	87.0	0.4
7-Day Follow-Up After ED Visit for Mental Illness	63.9	56.4	-8.0***
30-Day Follow-Up After ED Visit for Mental Illness	74.2	68.6	-6.4***
7-Day Follow-Up After Hospitalization for Mental Illness	58.7	47.5	-10.2***
30-Day Follow-Up After Hospitalization for Mental Illness	75.2	68.6	-6.6***
30-Day Hospital Readmission for a Psychiatric Condition $\downarrow$	7.2	8.6	1.3
Controller Medication for Asthma	49.6	50.4	1.6
Eye Exam for People with Diabetes	45.3	47.1	1.2**
Hemoglobin A1c Testing for People with Diabetes	81.1	82.4	1.2***
Nephropathy Screening for People with Diabetes	86.0	86.3	-0.1
Emergency Department Visit Rate $\downarrow$	149.2	148.5	0.5
Acute Hospital Use among Adults ↓	174.9	173.0	-6.2**
Hospital Readmission within 30 Days $\downarrow$	7.4	8.2	0.1
Ratio of Home and Community-Based Care Use to Nursing Facility Use	92.0	93.2	1.3***
Substance Use Disorder Treatment Penetration	32.6	35.0	3.1***
Alcohol or Other Drug Treatment: Initiation	39.4	39.5	-0.3
Alcohol or Other Drug Treatment: Treatment	13.6	13.4	0.3
30-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	26.2	29.8	3.5***
7-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	16.5	19.6	3.3***

Shaded cells indicate a statistically signficant change. **Blue**-shaded cells indicate an improvement. **Orange**-shaded cells indicate declining performance. Results marked \* are significant at the p<.05 level. Results marked \*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level.



## **Conclusions**

In 2019, all nine ACHs implemented health improvement projects that promoted integrated care (e.g., Bi-Directional Integration of Physical and Behavioral Health Care). During this period, the state was also implementing financial integration through IMC. To build partner capacity, ACHs provided direct or contracted technical assistance and support, facilitated opportunities for peer learning, and invested in health information and exchange to enhance EHR systems. Behavioral health agencies experienced a unique set of challenges, particularly in regions where IMC and bidirectional integration occurred simultaneously, but 2A projects were prioritized and launched. Project 2A maintains the largest number of partners of all nine health improvement projects.

Our findings suggest positive movement in a variety of measures – particularly those that address substance use treatment. Although we observed improvements in follow-up from emergency department visits and hospitalizations for Alcohol and drug disorders, there were decreases in follow-up for patients with emergency department visits and hospital admissions for mental health. These findings suggest that efforts to improve mental health care may have been limited to the primary care setting.

A variety of measures did not improve or showed only modest improvements. There are several potential explanations for these findings. First, as with most of the health improvement projects, change was initiated in 2019. We might not expect to see substantive impacts across large population groups within that first implementation year.

Second, our analysis focused on the Medicaid population broadly. Some ACHs and partner organizations may have made substantial changes to improve outcomes for specific patient groups. These changes may be washed out in our analysis.

The final MTP evaluation report will span years 2017 through 2020, presenting opportunities to examine outcomes later in implementation. Interviews with key stakeholders indicated that the financial component of integration – integrated managed care – created new workloads related to contracting, billing codes, and changes in EHRs. These efforts – many of which were occurring throughout 2019 – may have delayed clinical changes during our observation period.

## Health Improvement Project 2B

This chapter presents results of the interim evaluation of MTP Initiative 1 Health Improvement Project 2B, "Community-Based Care Coordination."

We first provide background and an overview of how the MTP approach was intended to transform care in this area. We present a description of this project's implementation through 2019, including observations from key informant interviews and reviews of program documents collected during this period. We then present results of an analysis of health care claims to compare whether and how health outcomes changed for target populations under this initiative.

## **Background**

Community-based care coordination models identify people with complex health and social needs and connect them to appropriate health and social services in the community. These programs exist to address the gap in care that can arise when health systems identify clients' unmet social needs but lack tools to address these needs. Health systems may be disconnected from community-based organizations operating programs to meet social needs, or may lack workflows for providers to ensure patients are able to access resources. Health systems may also lack data to be able to identify the prevalence or type of unmet social needs across the population of patients they serve. This lack of population-level social needs data can hamper health care organizations' efforts to support community-based programs to address their patients' needs.

Models of community-based care coordination such as the Pathways Community HUB model feature a central entity (often called a "hub") that provides infrastructure and coordinates care among health and social service organizations in a community (Community Care Coordination Learning Network and the Pathways Community HUB Certification Program, 2016). Elements of this model may include:

- Screenings to identify people with complex health needs in the community;
- Comprehensive assessment of people' health and social service needs;
- Referral pathways that connect clients with appropriate programs (e.g., a housing pathway connecting a client who has an unstable housing situation with a local housing authority);
- Provision of services based on the assigned pathways; and
- Monitoring clients' status within pathways to track receipt of services or other outcomes.

These activities are often performed by community health workers (CHWs) or other care coordinators employed by the hub. Early evidence of the Pathways Community HUB model showed promise in reducing low birth weights (Redding, et al., 2015), though there have been few large-scale evaluations of these approaches to date.

## MTP Approach to Change

Within MTP Initiative 1, Project 2B is an optional health improvement project for ACHs. The Medicaid Transformation Project Toolkit identified the Pathways Community HUB model as the required approach for ACHs participating in Project 2B.

The Project Toolkit described a series of planning and implementation steps that are required for ACHs participating in 2B. Required planning activities included ACH identification and contractual engagement of an organization to serve as the Pathways Community HUB for their region, and recruitment of additional community partners such as patient centered medical homes that were willing to participate in screening, navigation and information exchange with the hubs as care coordination agencies (CCAs).

The Project Toolkit outlined 2B implementation activities for ACHs that included hiring and training of HUB staff (including CHWs), selection and implementation of specific referral pathways (or service need categories) via the Pathways Community HUB Certification program, and development of the data infrastructure for care coordination and monitoring of services provided through the program.

## **ACHs Participating in Project 2B**

Within MTP Initiative 1, participation in Project 2B is voluntary, and six ACHs selected it for implementation while three did not (see Exhibit 4.1).

Olympic Community of Health

HealthierHere

Elevate Health

Cascade Pacific Action Alliance

Greater Columbia ACH

Exhibit 4.1: ACHs Participating in Project 2B, Community-Based Care Coordination

In addition to this formal participation in Project 2B, the three ACHs not formally participating in Project 2B (Greater Columbia ACH, HealthierHere, and Olympic Community Health) opted to contract with partners to implement care coordination strategies in other areas. These efforts often included elements similar to Project 2B, such as creation of care teams or provision of care coordination for other MTP projects such as 2C: Transitional Care.

## **Progress Toward Implementing Project 2B**

## **Creating Hubs and Clinical-Community Linkages**

As ACHs implemented Project 2B, key informant interviews and publicly available documents from 2019 indicated:

- All ACHs adopted the same highly structured Pathways Community HUB model.
- Five of the six ACHs opted to serve as the Pathways Community HUB in their region. Only one ACH contracted out this role to a community partner.
- ACHs selected varying target populations for the Pathways Community HUB. Two ACHs selected
  narrowly defined target populations (e.g., those transitioning from jail who had three or more
  emergency department visits within the past 12 months). The remaining four ACHs selected more
  broadly defined target populations focused, for example, on higher-risk patients such as those
  not eligible for enrollment in Health Homes or those with one or more risk factors (e.g., housing
  insecurity, recent jail admission).
- The number of community partners that ACHs contracted with as CCAs varied. ACHs
  implemented the Pathways Community HUB in partnership with CCAs that were responsible for
  service provision and coordination. The number of unique CCAs contracted with each ACH ranged
  from three to 12.

## **Launching Community HUBS**

ACHs launched their Pathways Community HUBs at varying points in time ranging from early 2017 to late 2019. By mid-2019, all six ACHs had contracted with CCAs to provide care coordination services and implemented the Pathways Community HUB model's health information technology tool (Care Coordination Systems, or CCS) to support tracking enrollment, identifying and assigning care pathways, and monitoring progress. During the project implementation period, ACHs also trained community health workers who were a key workforce supporting the Pathways model.

In 2019, all ACHs began operation of their Pathways Community HUBs for at least one of their pathways. ACHs varied in how narrowly or broadly they defined the target population for Project 2B. This resulted in variation in the numbers of people in an ACH region who were eligible to participate in the Pathways Community HUB and receive care coordination services. ACHs selecting broadly defined target populations appear to have had higher enrollment and numbers of people with completed pathways, compared with ACHs that targeted a more narrowly defined group of people.

In October 2019, the Washington Health Care Authority announced that it would prioritize a separate care coordination program – Health Homes – as the community-based care coordination approach for Medicaid beneficiaries in future years. At the time of this report, some ACHs had discontinued their Pathways Community HUB efforts.

## **Factors That Facilitated Project 2B Implementation**

Three factors may have facilitated Project 2B implementation.

- Prior experience with the Pathways Community HUB model, and preexisting relationships to support the model, may have facilitated some ACHs' implementation of Project 2B. ACHs also reported that having an established regional CHW workforce prior to MTP helped those ACHs make progress implementing their HUBs.
- ACHs varied in the extent to which care coordination services were available across their entire
  geographic region. Four out of six ACHs contracted with CCAs to serve all of their region's
  counties. This enhanced access, when paired with a more broadly defined target population, likely
  led to higher enrollment in these regions.
- The Pathways Community HUB model supported the use of the CCS information exchange platform, which allowed the organization acting as the Pathways Community HUB lead agency to closely monitor enrollment and care pathways, and share information with partners.

## **Factors That Impeded Project 2B Implementation**

Three factors may have impeded Project 2B implementation.

- A common challenge with the Pathways Community HUB model was retaining CHWs, a
  workforce experiencing high turnover that was attributed to limited career advancement, lack of
  standards, low pay, and sometimes trauma-centered work. CHWs were part of the foundation of
  the Pathways Community HUB model, and challenges retaining this workforce may have created
  challenges for ACHs maintaining Project 2B.
- Project 2B coverage was limited by the availability of CCAs with whom ACHs could contract.
   Rural ACHs expressed challenges with regional coverage of the Pathways Community HUB through CCAs and service availability, which limited their ability to reach or enroll clients in all areas. This was in contrast to regions that achieved greater geographic coverage through a larger network of CCAs and rural regions.
- The Pathways Community HUB model was not reimbursed by managed care organizations (MCOs); while not an impediment to implementation, this had implications for the programs' sustainability after MTP. ACHs were unable to establish contracts with MCOs to pay for closed pathways, with some citing the Pathways Community HUB as duplicative with the state's already established Health Homes program. ACHs aimed to avoid duplication with Health Homes, and several ACHs referenced Health Homes in their target populations in order to support those who did not qualify for Health Homes but who still had complex health service needs. One ACH who contracted out the Pathways Community HUB lead role did so with a regional Health Home. In addition, in October 2019, the HCA indicated its intent that ACHs were responsible for exploring options for payers to reimburse for Pathways Community HUB services, and for considering plans for sustainability of the model beyond the MTP demonstration period (Washington State Health Care Authority, 2019c).

## **Evaluation Approach**

Health Improvement Project 2B was an optional project for ACHs, allowing us to compare health outcomes of Medicaid enrollees in regions that did and did not participate in this project. We used a difference-in-differences approach for our quantitative analysis of Project 2B, measuring changes in outcomes in the pre-intervention period (2017 and 2018) to the post-intervention period (2019) and separately compared each of the six ACHs participating in this project to the three ACHs that did not participate in it.

We adjusted for regional differences in Medicaid enrollees' age, gender, race/ethnicity, urban and rural residence, and Chronic Illness and Disability Payment System (CDPS) risk score, that could otherwise explain observed differences across regions. See Appendix B for a complete description of methodology. Our model tests for changes among the ACHs who selected this particular HIP. Activities in other non-participating ACH regions such as the introduction of a similar program, or other interventions that drive changes in our target populations, may bias our results toward the null.

## **Target Populations and Context**

The variation in target populations identified by ACHs for their Project 2B efforts made evaluating this project particularly challenging. Our analysis focused on **two target populations** as potential beneficiaries of ACHs' Project 2B efforts:

- 1 People with co-morbid behavioral health and chronic physical health conditions.
- 2 High-risk pregnant women.

Our first study population included people with a psychiatric or substance abuse CDPS measure and physical health comorbidity (defined by the Chronic Conditions Data Warehouse) within the last 24 months. We selected this target population because it broadly reflected the target populations of participating ACHs. We note two exceptions: North Central ACH's target population consisted of people with three or more ED visits in the past 12 months. SWACH's target population also included a focus on chronic pain.

The second study population focused on pregnant women with behavioral health or substance use disorder diagnoses. Using indicators provided by Washington State's Department of Social and Health Services, we selected all enrollees who were pregnant and delivered in the second, third or fourth quarter, or who were pregnant in the second or third quarter and remained pregnant until the end of the measurement period. We further limited this population to enrollees with a psychiatric or substance abuse CDPS measure in the last 24 months.

We considered this target population because it included an important subpopulation of people with behavioral health conditions who might especially benefit from care coordination. However, we note that this study population is not well aligned with the Project 2B efforts of Better Health Together, whose Pathways program focused on people transitioning from jail, or the target population of SWACH, which focused on people experiencing homelessness.

## **Interim Evaluation Results**

Results of our evaluation of Health Improvement Project 2B, "Community-Based Care Coordination," are presented below and reflect changes from a baseline period (2017 and 2018) through a post-period, 2019. We first present outcomes for people with comorbid behavioral and physical health conditions. We then present outcomes for high-risk pregnant women. See page 21 of this report for a guide to reading results.

## How are these results impacted by COVID-19?

The COVID-19 outbreak began in Washington State in early 2020, causing widespread disruption to health services delivery across the state. This report presents analyses of claims data through December 2019, prior to the outbreak. It is therefore unlikely that COVID-19 had any effect on measures presented in this report, though future reporting periods may be affected.

## **Analysis 1: People with Comorbid Conditions**

Exhibit 4.2 (next page) presents results of our analysis for people with behavioral health conditions and comorbid physical health chronic conditions. There were relative improvements in mental health treatment penetration and follow-up after ED visits for alcohol or drug dependence (7 and 30 days). Several measures worsened in participating ACHs relative to non-participating ACHs. These measures included diabetes screening for people with schizophrenia or bipolar disorder using antipsychotic medication, the arrest rate, and the homelessness rate. Difference-in-differences estimates for other measures were not statistically significant.

The estimates of two measures (follow-up after emergency department visit for alcohol or drug dependence within 7 or 30 days) should be regarded with some caution. Some variation across ACH regions in these measures may have been driven by underlying differences in ED utilization patterns across these regions, rather than changes in follow-up service. These measures calculate the percentage of ED visits that are followed by a visit with a health care provider (outside of an ED). These measures might thus be lower in regions with higher ED utilization simply because of a higher number of ED visits in these areas. As we assessed smaller populations (e.g., subgroups with comorbid conditions, or ACH-specific analyses), these measures may have been subject to large changes in magnitude that were an artifact of the small sample size.

We next present results for people with comorbid behavioral and physical health conditions in each of the six ACHs participating in Project 2B (see Data Appendix, Table 5). Follow-up after ED visit for alcohol or drug dependence (both 7 and 30 days) increased in the Better Health Together ACH, but decreased in SWACH. Difference-in-differences estimates for mental health treatment penetration (broad version) improved moderately in three of the six ACHs participating in this project (Better Health Together, North Sound, and Elevate Health). Estimates for substance use disorder treatment penetration improved in two ACHs (Better Health Together and Elevate Health) but worsened in one (Cascade Pacific Action Alliance).

Three measures changed significantly for one ACH but not overall. These measures include relative improvements in the initiation and engagement of alcohol and other drug dependence treatment

Exhibit 4.2: Change in Outcomes for People with Comorbid Behavioral and Physical Chronic Conditions

Pre-post rates for participating ACHs, pre-post rates for comparison ACHs, and adjusted difference-in-differences estimates

	Participating ACHs		Comparison ACHs		Difference ir Differences
	Pre	Post	Pre	Post	
Homelessness ↓	8.6	8.9	10.1	9.9	0.5*
Employment (Age 18 to 64)	36.9	31.0	37.7	31.7	0.3
Arrest Rate (Age 18 to 64) $\downarrow$	10.5	9.7	11.4	10.1	0.5*
Children and Adolescents' Access to Primary Care	99.1	99.3	99.2	99.0	0.4
Adults' Access to Primary Care	93.1	93.4	92.7	92.9	-0.1
Mental Health Treatment Penetration	57.6	57.3	60.2	58.4	0.9**
Antidepressant Medication for Adults (12 Weeks)	50.9	52.5	49.9	52.2	-0.8
Antidepressant Medication for Adults (6 Months)	36.3	38.3	34.8	38.2	-1.6
Antipsychotic Medication for People with Schizophrenia	64.7	64.2	62.5	64.9	-2.7
Diabetes Screening for People with Schizophrenia/Bipolar Disorder	86.4	86.3	85.2	88.1	-2.3*
7-Day Follow-Up After ED Visit for Mental Illness	65.0	58.2	62.2	53.7	1.3
30-Day Follow-Up After ED Visit for Mental Illness	75.1	69.9	72.6	66.6	0.7
7-Day Follow-Up After Hospitalization for Mental Illness	59.8	49.3	57.3	44.8	2.4
30-Day Follow-Up After Hospitalization for Mental Illness	76.4	69.7	73.4	67.0	0.1
30-Day Hospital Readmission for a Psychiatric Condition $\downarrow$	7.3	8.7	7.1	8.5	-0.6
Controller Medication for Asthma	50.1	50.5	48.7	50.3	-0.6
Eye Exam for People with Diabetes	46.3	47.8	43.9	46.0	0.4
Hemoglobin A1c Testing for People with Diabetes	81.6	82.8	80.5	81.8	0.2
Nephropathy Screening for People with Diabetes	86.1	86.8	85.8	85.4	0.7
Emergency Department Visit Rate $\downarrow$	141.1	139.6	161.8	161.9	-1.2
Acute Hospital Use among Adults $\downarrow$	179.0	180.6	168.6	161.6	7.8
Hospital Readmission within 30 Days $\downarrow$	7.3	7.9	7.7	8.6	-0.8
Ratio of Home and Community-Based Care Use to Nursing Facility Use	92.8	93.7	90.8	92.5	-0.9
Substance Use Disorder Treatment Penetration	32.3	35.2	32.9	34.8	0.7
Alcohol or Other Drug Treatment: Initiation	39.8	40.0	38.6	38.7	-0.2
Alcohol or Other Drug Treatment: Treatment	14.6	14.3	12.2	12.1	-0.1
30-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	26.5	32.3	25.8	26.9	6.3***
7-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	17.4	22.2	15.5	16.5	5.4***

Shaded cells indicate a statistically signficant difference between ACHs that did and did not participate in the ACH Health Improvement Project. Blue-shaded cells indicate that participating ACHs improved more than comparison ACHs. Orange-shaded cells indicate participating ACHs performed worse than comparison ACHs. Results marked \* are significant at the p<.05 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level.



↓ Lower is better

measure (Better Health Together), a small improvement in the child and adolescent access to primary care measure (North Sound ACH) and a small decline in the adult access to preventive/ambulatory health services measure (North Central ACH).

As noted above, the estimates of two measures (follow-up after emergency department visit for alcohol or drug dependence, 7 and 30 days) should be regarded with some caution. The nature of these measures is such that they may shift due to underlying changes in ED utilization patterns across regions. In stratifying by ACH and focusing on a specific target population, we have also reduced our sample size, creating the potential for changes in a relatively small group of people to produce large swings in these measures.

#### **Analysis 2: High-Risk Pregnant Women**

Exhibit 4.3 (next page) displays results for our second target population, high-risk pregnant women. None of the measures exhibited statistically significant differences across ACHs. Emergency department utilization demonstrated a relatively large decrease, although this was not significant at the 5 percent level.

We next present results for high-risk pregnant women in each of the six ACHs participating in Project 2B (see Data Appendix, Table 5). There was inconsistent performance across ACHs. For example, Better Health Together demonstrated significant increases in comprehensive diabetes care (Medical Attention for Nephropathy), follow-up after ED visit for alcohol or drug dependence within 7 Days, follow-up after hospitalization for mental illness within 7 Days and all-cause 30-day psychiatric aeadmission. Cascade Pacific Action Alliance exhibited decreases in ED visits and diabetes screening for people with schizophrenia or bipolar disorder who are using antipsychotic medication.

Estimates of three of these measures (all-cause 30-day readmission after psychiatric admission and follow-up after emergency department visit for alcohol or drug dependence, 7 and 30 days) should be regarded with some caution. These measures are fairly narrowly defined; as we reduce our sample size by focusing on pregnant women and stratifying by ACH, the measures become more sensitive. Changes among a relatively small group of enrollees can produce large changes in the measure.

Exhibit 4.3: Change in Outcomes for High-Risk Pregnant Women

Pre-post rates for participating ACHs, pre-post rates for comparison ACHs, and adjusted difference-in-differences estimates

	Partio	Participating		parison	Difference in	
	Pre	CHs Post	Pre	CHs Post	Differences	
		. 551				
Homelessness ↓	8.4	8.6	8.9	9.9	-0.9	
Employment (Age 18 to 64)	51.1	49.6	49.4	46.7	1.7	
Arrest Rate (Age 18 to 64) ↓	9.2	8.5	10.1	9.7	-0.4	
Children and Adolescents' Access to Primary Care	99.6	99.4	100.0	99.7	0.3	
Adults' Access to Primary Care	97.8	97.7	97.6	97.6	-0.2	
Mental Health Treatment Penetration	54.8	54.6	55.4	54.0	0.1	
Antidepressant Medication for Adults (12 Weeks)	42.5	44.9	40.5	44.4	-2.2	
Antidepressant Medication for Adults (6 Months)	24.6	28.2	22.5	24.2	0.6	
Antipsychotic Medication for People with Schizophrenia	44.4	50.8	67.6	51.4	13.7	
Diabetes Screening for People with Schizophrenia/Bipolar Disorder	96.7	95.7	95.7	98.1	-4.7	
7-Day Follow-Up After ED Visit for Mental Illness	63.3	44.7	59.9	48.5	-12.4	
30-Day Follow-Up After ED Visit for Mental Illness	72.7	58.7	73.4	63.8	-8.1	
7-Day Follow-Up After Hospitalization for Mental Illness	45.1	38.7	44.8	37.3	5.1	
30-Day Follow-Up After Hospitalization for Mental Illness	64.1	59.8	62.9	58.7	-2.3	
30-Day Hospital Readmission for a Psychiatric Condition $\downarrow$	2.9	8.3	11.1	10.1	14.4	
Controller Medication for Asthma	32.1	39.5	36.8	39.2	2.2	
Eye Exam for People with Diabetes	39.0	39.0	39.5	36.0	4.0	
Hemoglobin A1c Testing for People with Diabetes	74.5	77.2	78.6	80.5	-0.5	
Nephropathy Screening for People with Diabetes	84.6	88.2	84.5	84.7	4.6	
Emergency Department Visit Rate $\downarrow$	173.0	163.2	203.7	208.4	-13.0	
Acute Hospital Use among Adults ↓	78.0	82.1	88.9	82.7	8.1	
Hospital Readmission within 30 Days $\downarrow$	5.0	4.3	6.4	5.7	0.9	
Ratio of Home and Community-Based Care Use to Nursing Facility Use	97.3	98.3	92.3	90.4	2.3	
Substance Use Disorder Treatment Penetration	39.4	40.1	38.5	39.8	-1.3	
Alcohol or Other Drug Treatment: Initiation	44.2	46.8	44.1	42.7	2.8	
Alcohol or Other Drug Treatment: Treatment	20.9	20.3	16.9	15.4	0.3	
30-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	30.9	34.3	26.0	33.7	-0.5	
7-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	20.9	21.8	16.3	20.0	1.3	

Shaded cells indicate a statistically signficant difference between ACHs that did and did not participate in the ACH Health Improvement Project. Blue-shaded cells indicate that participating ACHs improved more than comparison ACHs. Orange-shaded cells indicate participating ACHs performed worse than comparison ACHs. Results marked \* are significant at the p<.05 level. Results marked \*\* are significant at the p<.01 level.



↓ Lower is better

## **Conclusions**

In 2019, six ACHs implemented Pathways Community HUBs to identify and address needs or conditions (e.g., social, economic, and housing) that influence patients' health outcomes. The target populations of each ACH region were based on regional priorities (e.g., those transitioning from jail who had three or more emergency department visits within the past 12 months). ACHs, in partnership with care coordination agencies, elevated community health workers to play an integral role in connecting patients to health and social services. While the program promoted clinical-community linkages, the Pathways Community HUB model was not reimbursable by managed care organizations. Moreover, Health Homes, another community-based care coordination program, was embraced by HCA, MCOs, and ACHs as a financially sustainable alternative.

Difference-in-differences estimates for the broad target population (individuals with behavioral health conditions and comorbid physical health chronic conditions) suggested improvements for some measures during the first year. Most notably, Mental Health Treatment Penetration improved overall and was statistically significant in three ACHs. While the change was moderate, it was precisely estimated and not due to large changes in just one ACH.

Other changes were confined to one ACH and might have reflected other activities in that region. There was little evidence that the project improved measures for the narrow target population (high-risk pregnant) during the first year.

There are several potential explanations for why we did not find clearer changes in outcomes associated with this project. First, as with most of the ACH Health Improvement Projects, change strategies within Project 2B were initiated in 2019 and we did not expect to see substantive impacts across large population groups within the first implementation year. Second, sample sizes for some measures were small. We note that variability in sample sizes may have driven statistical significance of differences observed for some of these measures. Third, ACHs not officially participating in this project also engaged in care coordination activities, which could have led to changes for some outcomes among these ACHs similar to participating ACHs.

# Health Improvement Project 2C

This chapter presents results of the interim evaluation of MTP Initiative 1 Health Improvement Project 2C, "Transitional Care."

We first provide an overview of how the MTP approach was intended to transform care in this area. We present a description of this project's implementation through 2019, including observations from key informant interviews and reviews of program documents collected during this period. We then present results of an analysis of health care claims to compare whether and how health outcomes changed for key populations under this initiative.

# **Background**

When people transition between care settings, such as returning home from a hospital stay or transitioning from acute to long-term care, they can be at risk for disruptions in the continuity of care they receive. These disruptions may stem from a variety of causes ranging from communication breakdowns between care settings, unclear workflows, provision of unclear information that leads to patient or caregiver misunderstandings, or lack of clarity regarding who is accountable for the next step in an individual's care (Joint Commission, 2012). This can lead to avoidable and costly readmissions to hospital settings or reduced quality of care over time (Verhaegh, et al., 2014).

Care transition interventions aim to support people with complex care needs who are discharged from a hospital, acute care, or institutional setting in order to reduce the avoidable rehospitalization rate of these patients and ensure they are getting the right care in the right place. Research suggests that such care transition interventions can reduce hospital readmission rates (Verhaegh, et al., 2014) and build health system capacity to connect patients with appropriate resources (Ruiz, et al., 2017).

A subset of these interventions focuses specifically on people transitioning into the community following incarceration. People within this population experience high rates of chronic illness coupled with social risk factors, and are at high risk in the months following release from incarceration (Binswanger, et. al, 2007). Jail transition programs aim to increase access to care and reduce recidivism for this population; evaluation results of such programs have been mixed but suggest these programs may show promise in enhancing primary care access and reducing avoidable ED visits when those programs are initiated in correctional settings prior to a person's reentry into the community (Shavit, et al., 2017).

## MTP Approach to Change

Project 2C, "Transitional Care," was an optional ACH Health Improvement Project comprised of seven approaches to assist Medicaid beneficiaries who were discharged from intensive or institutional settings to their homes, supportive housing, and communities. Three approaches targeted Medicaid beneficiaries with physical and behavioral health needs who were reentering their communities after incarceration. These approaches to Project 2C are described below.

#### **Evidence-Based Approaches for Transitional Care**

- Interventions to Reduce Acute Care Transfers, a quality improvement program for the management of acute change in resident condition.
- Transitional Care Model, a model of transitional care for high-risk older adults that provides nurse-led in-hospital planning and in-home follow-up.
- The Care Transitions Intervention, a multidisciplinary approach incorporating physical, behavioral, and social health needs and perspectives.
- Care Transitions Interventions in Mental Health, a set of components of transitional care that can be adapted for managing transitions among persons with serious mental illness.

#### **Evidence-Informed Approaches for Transitions from Incarcerated Settings**

- Guidelines for the Successful Transition of People with Behavioral Health Disorders from Jail and Prison (Blandford and Osher, 2013).
- A Best Practice Approach to Community Re-entry from Jails for Inmates with Co-occurring Disorders: The APIC Model (Osher, Steadman and Barr, 2003)
- American Association of Community Psychiatrists' Principles for Managing Transitions in Behavioral Health Services (Sowers and Rohland, 2004).

ACHs that selected Project 2C were required to execute master services agreements for partnering providers and facilitate health systems capacity building by embedding strategies for each core capacity, including financial sustainability, workforce development, and population health management, into their work on Project 2C.

## **ACHs Participating in Project 2C**

Five ACHs selected Project 2C (Cascade Pacific Action Alliance, Greater Columbia ACH, HealthierHere, North Central ACH, and North Sound ACH) and launched care transitions programs in 2019 (see Exhibit 5.1). These ACHs often aligned Project 2C work with other selected project work (Projects 2A, 2B, 2D, and 3D) and promotion of patient-centered medical homes, as they aimed to advance whole-person integrated care.



Exhibit 5.1: ACHs Participating in Project 2C, Transitional Care

# **Project 2C Implementation**

In 2019, ACHs launched their transitional care projects. ACHs delivered health systems and capacity building (i.e., Domain 1) strategies that promoted collaborative partnerships, workforce development, and population health management systems. Key informant interviews and publicly available documents from 2019 indicate ACHs pursued the following strategies:

- **Data analysis** was provided by ACHs to support partnering providers in identifying target populations and selecting suitable transitional care models.
- Learning collaboratives were convened to facilitate networking and peer learning and to create and pilot innovative tools (e.g., interoperable health information exchanges (HIE) and shared care plans) among partnering providers.
- Training and technical assistance events were offered to support partnering providers as they
  adopted new workflows, referral processes, and quality improvement initiatives to support
  implementation.

- Workforce development opportunities (e.g., internship and training fund, promoting the use of patient navigators) were also offered to recruit and retain community health workers and licensed health professionals to assist with transitional care management and planning.
- **Health information technology** (HIT) and HIE systems (e.g., Collective Medical) were obtained to identify people at risk of an emergency department visit, rehospitalization, or reentry (jail or prison), and to communicate and coordinate care among clinical and community-based providers.
- Pathways Community HUBs and community paramedicine models (see Chapter 4), although not HCA-approved strategies for Project 2C, were embraced as strategies to reduce avoidable hospital utilization and to facilitate referrals for clinical and community-based services.

## **Factors That Facilitated 2C Implementation**

One factor was identified as potentially facilitating Project 2C implementation.

ACHs nurtured existing partnerships that were already established through previous initiatives (e.g., State Innovation Model (SIM) grants), as well as their backbone organizations (e.g., CHOICE Regional Network, Benton-Franklin Community Health Alliance, Whatcom Alliance for Health Alliance), which had longstanding presences in their communities. These relationships eased partner engagement necessary to identify regional priorities, and design and implement health improvement projects.

#### **Factors That Impeded 2C Implementation**

Two factors may have impeded Project 2C implementation.

- While statewide investments dedicated to OneHealthPort have promoted the adoption of a standard information exchange platform among health care providers, this strategy has not engaged non-traditional partners such as correctional facilities. ACHs and partnering providers reported needing community information exchanges or alternative HIT/E tools for managing care transitions involving these non-traditional partners. There was interest among stakeholders in a single statewide HIT/E strategy to reinforce coordinated and integrated care among providers.
- Stakeholders also reported difficulty encouraging clinicians to use forms that were a Project Toolkit requirement. Reports suggests that in 2019, not all partnering providers had built Physician Orders for Life-Sustaining Treatment (POLST) into their workflows, and clinicians who used POLST forms may have done so only for patients who they deemed to be at an advanced stage of illness, rather than using the forms more widely. Partnering providers reported needing technical assistance in using the form, including support for building staff awareness of the form, increasing its availability in clinical settings, and incorporating the form into EHRs.

# **Evaluation Approach**

Health Improvement Project 2C was an optional project for ACHs, allowing us to compare outcomes of Medicaid enrollees in regions that did and did not participate in this project. We used a difference-in-differences approach to measure changes in outcomes for these two groups from the pre-intervention period (2017 and 2018) to the post-intervention period (2019).

We adjusted for regional differences in Medicaid enrollees' age, gender, race/ethnicity, urban vs. rural residence, and CDPS risk, that could otherwise explain observed differences across regions. See Appendix B for a detailed description of methodology. Our model tests for changes among the ACHs who selected this particular HIP. Activities in other non-participating ACH regions such as the introduction of a similar program, or other interventions that drive changes in our target populations, may bias our results toward the null.

### **Target Populations**

Our analysis of Project 2C focused on **two populations** identified by ACHs as targeted beneficiaries of their 2C project activities:

- 1 People who have been discharged from a hospital in the last year with co-occurring behavioral and chronic physical health conditions, and
- People experiencing homelessness.

For our first population, we included members with a qualifying hospital discharge within the past calendar year. We defined co-occurring chronic conditions as the presence of physical health and behavioral health (mental health and/or substance use) conditions. We identified behavioral health conditions using psychiatric and substance use CDPS indicators. We identified chronic conditions broadly, using markers from the CMS Chronic Condition Warehouse such as for anemia, asthma, chronic obstructive pulmonary disease, or diabetes. Hospital discharges were identified as acute or non-acute inpatient stays. Hospital stays that ended in death or were related to pregnancy were excluded.

For our second population, we identified people experiencing homelessness as Medicaid beneficiaries whose living arrangement status was designated as "homeless without housing," "emergency shelter," or "battered spouse shelter" for at least one month in the previous calendar year in the Automated Client Eligibility System.

An additional population, people transitioning from jail, was identified as relevant to the evaluation; however, data were not available to support inclusion of this population for the interim report. This population may be included in subsequent reports.

## **Interim Evaluation Results**

Results of our evaluation of Health Improvement Project 2C, "Transitional Care," are presented below and reflect changes from a baseline period (2017 and 2018) through a post-implementation period, 2019. We first present outcomes for our first target population for this project area: people discharged from a hospital with a chronic condition. We then present outcomes for our second target population, people experiencing homelessness. See page 21 of this report for a guide to reading results.

## How are these results impacted by COVID-19?

The COVID-19 outbreak began in Washington State in early 2020, causing widespread disruption to health services delivery across the state. This report presents analysis of claims data through December 2019, prior to the outbreak. It is therefore unlikely that COVID-19 had any effect on measures presented in this report, though future reporting periods may be affected.

# Analysis 1: People Discharged from the Hospital with Co-Occurring Behavioral and Chronic Physical Health Conditions

Exhibit 5.2 (next page) displays changes for each metric for people discharged from a hospital with co-occurring behavioral and chronic physical health conditions (our first target population) comparing people in ACH regions participating in Project 2C with people in non-participating ACH regions.

Among ACHs that participated in this project compared to those that did not, there was a statistically significant improvement in the homelessness rate for this target population. Measures of follow up after emergency department visits for alcohol or drug dependence improved across all ACHs, but improved more in comparison ACHs. Relative to the comparison group, performance in these measures was 8 percent lower for the seven-day measure and 30-day measures. We also observed a small (2.2 percent) decrease in substance use treatment penetration and mental health penetration rates.

We next present results for each of the five ACH regions participating in Project 2C. Table 5 in the Data Appendix presents ACH-level results for people discharged from the hospital with co-occurring behavioral and chronic physical conditions. In general, we see fewer significant results due to the small populations in each of these measures. However, HealthierHere and North Sound ACH exhibited decreases in rates of follow-up after emergency department visits for alcohol or drug disorder. These measures should be interpreted with some caution, however, because changes in measures of follow-up may be driven by underlying differences in ED utilization patterns across these regions.

Exhibit 5.2: Change in Outcomes for People Discharged from the Hospital with Co-Occurring Conditions

Pre-post rates for participating ACHs, pre-post rates for comparison ACHs, and adjusted difference-in-differences estimates

		Participating ACHs		Comparison ACHs	
	Pre	Post	Pre	Post	
Homelessness ↓	8.4	9.0	7.0	8.5	-0.8*
Mental Health Treatment Penetration	54.0	54.8	53.5	55.9	-2.3**
7-Day Follow-Up After ED Visit for Mental Illness	65.7	62.4	67.7	61.1	1.6
30-Day Follow-Up After ED Visit for Mental Illness	76.8	74.1	80.9	72.3	3.5
7-Day Follow-Up After Hospitalization for Mental Illness	59.0	47.6	63.4	49.4	1.8
30-Day Follow-Up After Hospitalization for Mental Illness	74.9	66.8	76.6	69.2	-1.5
30-Day Hospital Readmission for a Psychiatric Condition $\downarrow$	8.8	11.0	10.1	9.4	4.2
Emergency Department Visit Rate $\downarrow$	146.8	149.2	141.4	141.7	-0.5
Acute Hospital Use among Adults ↓	227.7	222.2	223.1	229.7	-10.5
Hospital Readmission within 30 Days $\downarrow$	10.0	11.1	10.5	11.4	-0.3
Ratio of Home and Community-Based Care Use to Nursing Facility Use	87.8	90.2	89.5	91.5	0.9
Substance Use Disorder Treatment Penetration	35.0	37.4	31.7	37.3	-2.2*
30-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	27.8	30.6	29.6	39.3	-8.5**
7-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	15.4	19.0	18.3	28.1	-8.4**

Shaded cells indicate a statistically signficant difference between ACHs that did and did not participate in the ACH Health Improvement Project. **Blue**-shaded cells indicate that participating ACHs improved more than comparison ACHs. **Orange**-shaded cells indicate participating ACHs performed worse than comparison ACHs. Results marked \* are significant at the p<.05 level. Results marked \*\* are significant at the p<.01 level. Results marked \*\*



## **Analysis 2: People Experiencing Homelessness**

Exhibit 5.3 (next page) displays changes for each metric across each state for people experiencing homelessness (second target population). The relatively small size of this population across the state makes it difficult to draw strong conclusions. Generally, we see a worsening of measures in this area among ACHs participating in Project 2C, relative to non-participating ACHs. Comparison ACHs performed better in rates of follow-up after emergency department for alcohol or drug dependence within 7 and 30 days and substance use disorder treatment penetration. There were not significant differences among other measures.

Exhibit 5.3: Change in Outcomes for People Experiencing Homelessness

Pre-post rates for participating ACHs, pre-post rates for comparison ACHs, and adjusted difference-in-differences estimates

	Participating ACHs		Comparison ACHs		Difference in Differences	
	Pre	Post	Pre	Post		
Homelessness ↓	100.0	100.0	100.0	100.0	0.0	
Mental Health Treatment Penetration	55.9	53.4	55.2	54.4	0.3	
7-Day Follow-Up After ED Visit for Mental Illness	54.6	48.2	54.4	49.9	-2.8	
30-Day Follow-Up After ED Visit for Mental Illness	64.8	59.2	67.3	62.3	-2.2	
7-Day Follow-Up After Hospitalization for Mental Illness	44.8	35.1	45.0	37.4	-2.9	
30-Day Follow-Up After Hospitalization for Mental Illness	61.4	57.1	62.8	56.3	1.3	
30-Day Hospital Readmission for a Psychiatric Condition $\downarrow$	7.9	8.0	7.7	8.6	2.3	
Emergency Department Visit Rate ↓	158.7	162.3	144.8	149.0	-2.7	
Acute Hospital Use among Adults ↓	126.8	126.9	112.2	119.2	-8.4	
Hospital Readmission within 30 Days $\downarrow$	7.4	7.8	7.6	8.7	0.9	
Ratio of Home and Community-Based Care Use to Nursing Facility Use	81.5	90.3	81.2	91.0	3.6	
Substance Use Disorder Treatment Penetration	44.5	48.5	41.8	49.4	-2.2*	
30-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	23.4	26.8	27.6	35.0	-4.9*	
7-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	13.6	17.2	18.2	25.1	-4.7*	

Shaded cells indicate a statistically signficant difference between ACHs that did and did not participate in the ACH Health Improvement Project. **Blue**-shaded cells indicate that participating ACHs improved more than comparison ACHs. **Orange**-shaded cells indicate participating ACHs performed worse than comparison ACHs. Results marked \* are significant at the p<.05 level. Results marked \*\* are significant at the p<.01 level. Results marked \*\*



↓ Lower is better

In the Data Appendix (Table 5) we present results for people experiencing homelessness in each of the five ACH regions participating in Project 2C. We see small but statistically significant declines in substance use disorder treatment penetration in Cascade Pacific Action Alliance and Greater Columbia ACH. HealthierHere demonstrated decreases in rates of follow-up after emergency department visits for alcohol or drug dependence within 7 and 30 days relative to comparison ACHs. Across ACH regions, these findings suggest mixed results in some measures for people experiencing homelessness in ACH regions participating in Project 2C.

#### **Conclusions**

Our findings suggest relatively few improvements in most measures across most ACHs participating in Project 2C. In particular, comparison ACHs performed better on measures of follow-up after ED visits for alcohol or drug dependency within 7 and 30 days.

Other results across this project were mixed or not statistically significant, which may be due to the relatively small population size of people who were discharged from the hospital with a co-occurring behavioral and chronic physical condition or who experienced homelessness.

Several ACHs described their care transitions efforts as being integrated with other project areas, and some ACHs not participating in this project area engaged in care coordination activities with similar populations. This overlap across project areas potentially muted any differences we may have otherwise observed in participating and non-participating ACHs.

In the final MTP evaluation report, we will examine health care utilization and quality outcomes through 2020, in addition to certain measures of health care spending, in order to more fully examine changes in these measures for ACHs that did and did not participate in Project 2C.

# Health Improvement Project 2D

This chapter presents the results of the interim evaluation of MTP Initiative 1 Health Improvement Project 2D, "Diversion Interventions."

We first provide background and an overview of how the MTP approach was intended to transform care in this area. We present a description of this project's implementation through 2019, including observations from key informant interviews and reviews of program documents collected during this period. We then present results of an analysis of health care claims to compare whether and how outcomes changed for target populations under this initiative.

## **Background**

An important element of person-centered care is ensuring that people with complex health care needs receive timely care in the settings that are best situated to meet their needs. Diversion interventions are intended to promote the appropriate use of emergency care services by increasing access to primary care and social services.

Diversion interventions typically focus on people who use emergency services for non-emergency conditions that could be better addressed in other care settings, as well as people who come into contact with law enforcement for reasons related to substance use disorders or serious mental illness.

There is evidence that diversion programs may reduce the time that people spend in jail and help link them to community-based services without increasing risks to public safety (Steadman and Naples, 2005; Sirotich, 2009). Systems-based diversion interventions can also reduce emergency department utilization (Morgan, Chang and Pines, 2013).

# MTP Approach to Change

Project 2D, "Diversion Interventions," is an optional health improvement project for ACHs. The Medicaid Transformation Project Toolkit provides ACHs with three potential approaches to diversion intervention: emergency department diversion, community paramedicine, and law enforcement-assisted diversion.

- Emergency department (ED) diversion approaches do not require a specific model, but ACH implementations must include two elements. First, EDs must establish linkages to primary care providers, a necessary step to notifying the primary care provider of the ED visit and establishing a care plan. Second, EDs must develop a process for identifying people who present with minor conditions and do not have a primary care provider, with a goal of establishing an appointment with a primary care provider.
- Community paramedicine models allow paramedics to function outside their customary
  emergency response and transport roles, offering new types of community-based health
  care services that bridge primary care and emergency care. ACHs implementing community

paramedicine must work with first responders, emergency providers, and primary care providers to develop protocols that may include, for example, transporting beneficiaries with non-emergency needs to urgent care centers or patient-centered medical homes, as alternatives to the emergency department.

• The LEAD model (LEAD National Support Bureau, n.d.) focuses on people who come into contact with law enforcement, offering officers an alternative to booking people into jail for criminal activity that stems from unmet behavioral health needs or poverty. ACHs implementing LEAD are directed to assess resources and assistance from the LEAD National Support Bureau. Implementation activities include engaging law enforcement and generating buy-in, including obtaining commander-level support and providing intensive case management to link diverted people to housing, vocational and educational opportunities, treatment, and community services.

ACHs that opted to participate in Project 2D were required to execute master services agreements for partnering providers and, for LEAD, establish a community advisory group that included representation from community members, health care and social services, law enforcement, and community public safety leaders. ACHs participating in 2D were also required to ensure that participating partners were provided with or had access to necessary training and technical assistance resources.

# **ACHs Participating in Project 2D**

Three ACHs selected Project 2D (North Central ACH, North Sound ACH, and Olympic Community of Health) (see Exhibit 6.1). Their health improvement projects launched in 2019. These ACHs worked to align diversion interventions with other health improvement projects that promoted coordinated care between clinical and community providers, including Projects 2B, 2C, and 3D.

Exhibit 6.1: ACHs Participating in Project 2D, Diversion Interventions



# **Progress Toward Implementing Project 2D**

ACHs launched their diversion intervention projects in 2019. Their strategies focused on enhancing population health management systems and workforce development in clinical and community settings. Key informant interviews and publicly available documents from 2019 indicated ACHs prioritized the following approaches:

- Health information technology (HIT) and health information exchange (HIE) systems (e.g., patient registries, Collective Medical, and regionally developed community information exchanges such as Health Commons) to identify and monitor Medicaid beneficiaries that frequently accessed EDs, and to communicate and coordinate care among clinical and community-based providers;
- Community paramedicine models to reduce ED utilization and non-transport calls for EMS and to coordinate with clinical and community-based partners that could treat and refer patients to appropriate services;
- Pathways Community HUBs, developed by ACHs in Project 2B for community-based care coordination, and also used by ACHs and partnering providers to facilitate referrals for clinical and community-based services.
- Trainings for providers on intervention models (e.g., Pathways), HIT/E and CIE tools (e.g., Collective Medical and Health Commons), and processes (e.g., Ambulance Documentation).

All three participating ACHs implemented evidence-informed strategies that aimed to identify frequent ED use, promote appropriate ED use, and emphasize comprehensive and coordinated care. These strategies were achieved through collaborative partnerships comprised of clinical and community-serving organizations, including hospitals, health systems, federally qualified health centers, EMS agencies, fire departments, and correctional facilities.

#### Factors That Facilitated Implementation of Project 2D

Two factors aided Project 2D implementation.

- Through State Innovation Model (SIM) grants, two of the three ACHs (North Central ACH and Olympic Community of Health) implementing Project 2D had convened and supported earlier efforts in the region. For example, staff at Olympic Community of Health noted that SIM helped them implement Natural Communities of Care (NCC), bringing together stakeholders who had not previously had an opportunity to work together. NCCs created a referral network and established collaborative service agreements that were beneficial to Project 2D.
- Participating ACHs (e.g., North Central ACH, North Sound ACH, and Olympic Community of Health) also leveraged existing population health management systems to enhance coordinated and integrated care between providers. HIT/E systems like Collective Medical and the Pathways Care Coordination System were mechanisms for connecting providers to information that could foster comprehensive care for Medicaid beneficiaries.

#### Factors That Impeded Implementation of Project 2D

We identified one factor that may have delayed Project 2D implementation. While the State Medicaid HIT Plan promoted an electronic health record (EHR) system for state hospitals to exchange data (e.g., OneHealthPort), clinical and community-based providers who were not using a certified EHR relied on a number of HIT/E systems for population health management. All three ACHs leveraged existing systems. However, these systems required financial investment and

presented their own challenges. For example, in 2019, OCH did not identify a HIPAA-covered entity who could manage Health Commons. Moreover, ACH efforts to promote HIE interoperability, a key element in sharing information between provider, were complicated by the use of multiple HIT/E systems.

# **Evaluation Approach**

Health Improvement Project 2D was an optional project for ACHs, allowing us to compare outcomes of Medicaid enrollees in ACHs that participated in 2D to those that did not. Our evaluation used a difference-in-differences approach to compare changes in outcomes from a pre-intervention period (2018) to a post-intervention period (2019). Because our analysis required a 24-month lookback period, we used only 2018 as the baseline period for this project, representing a departure from other project analyses that used a baseline period of 2017 and 2018.

We adjusted for regional differences in Medicaid enrollees' age, gender, race/ethnicity, urban vs. rural residence, and CDPS risk score. See Appendix B for methodological details. Our model tests for changes among the ACHs who selected this particular HIP. Activities in other non-participating ACH regions such as the introduction of a similar program, or other interventions that drive changes in our target populations, may bias our results toward the null.

## **Target Populations**

Our analysis focused on **two populations** that were described by ACHs as intended beneficiaries of their Project 2D efforts:

- 1 People with three or more emergency department (ED) visits in the year before the intervention.
- People with five or more ED visits in the year before the intervention.

While there was variation across the five participating ACHs in the scale or approach of their diversion interventions, each of the participating ACHs reported a focus on reducing ED utilization among people who were frequent users of emergency care services.

Another population of interest was the group of individuals who had contact with the corrections system. However, data to support this analysis were not available at the time of this publication.

#### Interim Evaluation Results

Results of our evaluation of Project 2D, Diversion Interventions, are presented below and reflect changes from the baseline period, 2018, through the post-implementation period, 2019, comparing ACHs who participated in 2D to those who did not. We first present outcomes for our broadly defined target population of people with three or more ED visits in the past year. We then present outcomes for our narrowly defined population of people with five or more ED visits in the past year. See page 21 of this report for a guide to reading results.

## How are these results impacted by COVID-19?

The COVID-19 outbreak began in Washington State in early 2020, causing widespread disruption to health services delivery across the state. This report presents analysis of claims data through December 2019, prior to the outbreak. It is therefore unlikely that COVID-19 had any effect on measures presented in this report, though future reporting periods may be affected.

## **Analysis 1: People with Three or More Emergency Department Visits**

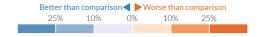
Table 6.2 displays changes for each metric for people with at least 3 ED visits in the year prior to the intervention. We did not see any statistically significant changes among these measures. Two measures, all-cause readmissions and all-cause readmissions after psychiatric hospitalization, moved in the desired direction relative to the comparison group, but these changes were not statistically significant. Overall, there was relatively little evidence of improvement in these selected metrics in 2019.

Exhibit 6.2: Change in Outcomes for People with More Than Three ED Visits

Pre-post rates for participating ACHs, pre-post rates for comparison ACHs, and adjusted difference-in-differences estimates

	Partici AC	pating Hs	Comp.		Difference in Differences
	Pre	Post	Pre	Post	
Homelessness ↓	9.3	9.8	9.3	10.0	0.0
Arrest Rate (Age 18 to 64) $\downarrow$	12.9	12.5	11.5	11.5	-0.4
Children and Adolescents' Access to Primary Care	98.1	98.3	96.7	96.9	-0.1
Adults' Access to Primary Care	92.6	93.6	90.3	91.0	0.2
Mental Health Treatment Penetration	57.3	58.2	55.9	55.9	0.6
7-Day Follow-Up After ED Visit for Mental Illness	66.5	59.5	62.9	54.7	0.7
30-Day Follow-Up After ED Visit for Mental Illness	75.9	71.3	73.6	66.8	1.9
30-Day Hospital Readmission for a Psychiatric Condition $\downarrow$	8.3	9.2	8.0	9.1	-1.3
Emergency Department Visit Rate $\downarrow$	271.2	272.7	275.0	277.9	-1.5
Acute Hospital Use among Adults ↓	182.3	192.2	189.8	195.5	4.4
Hospital Readmission within 30 Days $\downarrow$	7.7	7.5	8.0	8.7	-1.6
Ratio of Home and Community-Based Care Use to Nursing Facility Use	92.4	93.5	94.3	95.7	0.4
Substance Use Disorder Treatment Penetration	38.2	40.8	33.5	36.8	-0.6
30-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	28.4	34.5	25.6	29.7	0.5
7-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	17.9	21.5	15.9	20.0	-1.0

Shaded cells indicate a statistically significant difference between ACHs that did and did not participate in the Health Improvement Project. **Blue**-shaded cells indicate that participating ACHs improved more than comparison ACHs. **Orange**-shaded cells indicate participating ACHs performed worse than comparison ACHs. Results marked \* are significant at the p<.05 level. Results marked \*\* are significant at the p<.05 level. Results marked \*\* are significant at the p<.06 level.



↓ Lower is better

In the Data Appendix, Table 5 presents results for people with three or more ED visits in the year prior to the intervention in the three ACHs that chose Project 2D. The percentage of people in this population with arrests and those who were homeless declined slightly in North Central ACH. Olympic Community of Health experienced a decrease in substance use yreatment penetration in this population. We did not observe statistically significant changes in other measures.

#### Analysis 2: People with 5 or More ED Visits

Exhibit 6.3 displays changes for each metric for people with five or more ED visits in the year prior to the intervention. We observed a small (2.3 percent) but statistically significant decrease in hospital readmissions, with this measure decreasing slightly among ACHs who chose Project 2D and increasing across other ACHs. We also observed an improvement in mental health treatment penetration. Other measures for Project 2D among this population showed relatively little change.

In the Data Appendix, Table 5 presents results for people with five or more ED visits in the year prior to the intervention in the three ACHs that chose Project 2D. We did not observe significant changes among most measures in most ACHs for this population, and patterns generally followed

Exhibit 6.3: Change in Outcomes for People with Five or More ED Visits

Pre-post rates for participating ACHs, pre-post rates for comparison ACHs, and adjusted difference-in-differences estimates

	Particip ACI		Comparison ACHs		Difference in Differences
	Pre	Post	Pre	Post	
Homelessness ↓	12.5	13.3	12.5	13.5	-0.1
Arrest Rate (Age 18 to 64) ↓	16.5	16.0	15.0	15.2	-0.6
Children and Adolescents' Access to Primary Care	98.7	98.7	97.6	97.6	-0.1
Adults' Access to Primary Care	94.3	95.2	91.9	92.7	0.0
Mental Health Treatment Penetration	58.9	60.1	58.0	57.3	1.3*
7-Day Follow-Up After ED Visit for Mental Illness	67.9	61.2	62.0	54.5	0.4
30-Day Follow-Up After ED Visit for Mental Illness	77.2	72.5	72.9	66.7	1.3
30-Day Hospital Readmission for a Psychiatric Condition $\downarrow$	10.3	11.4	9.1	10.5	-1.2
Emergency Department Visit Rate ↓	385.4	388.6	389.5	396.6	-5.1
Acute Hospital Use among Adults ↓	229.7	246.4	239.0	248.7	4.9
Hospital Readmission within 30 Days $\downarrow$	9.0	8.9	9.5	10.5	-2.3*
Ratio of Home and Community-Based Care Use to Nursing Facility Use	92.9	94.5	94.6	96.1	0.8
Substance Use Disorder Treatment Penetration	38.7	42.0	33.8	37.5	-0.5
30-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	28.5	34.1	26.2	30.5	-0.1
7-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	17.4	21.4	16.5	20.6	-0.6

Shaded cells indicate a statistically significant difference between ACHs that did and did not participate in the ACH Health Improvement Project. **Blue**-shaded cells indicate that participating ACHs improved more than comparison ACHs. **Orange**-shaded cells indicate participating ACHs performed worse than comparison ACHs. Results marked \* are significant at the p<.05 level. Results marked \*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level.



↓ Lower is better

those seen in the population of people with three or more ED visits. The percentage of individuals in this population who were homeless, as well as hospital readmissions, declined in North Central ACH. Olympic Community of Health experienced a decline in substance use treatment penetration in this population. We did not observe statistically significant changes in other measures.

## **Conclusions**

In our selected measures, we observed relatively little change among the three ACHs who chose Project 2D, though rates of hospital readmissions decreased and mental health treatment penetration improved modestly for people with the highest rates of ED utilization. These findings may reflect the early stage of our results. Implementation efforts that occurred throughout 2019 may not yet have impacted the performance metrics we have evaluated. In addition, some efforts by ACHs such as the LEAD model focused on people who come into contact with law enforcement, a population we did not evaluate because of data limitations.

While some evidence exists to support diversion models, these efforts have a more limited evidence base than some Project Toolkit activities. Thus, ACHs may be testing models and determining the best ways to meet beneficiary and partner needs. The Final Evaluation Report will continue to examine factors that may impact the scale of these interventions and examine whether later periods in the MTP demonstration reveal emerging differences among participating and non-participating ACH regions.

# Health Improvement Project 3A

This chapter presents results from the interim evaluation of MTP Initiative 1 Health Improvement Project 3A, "Addressing the Opioid Use Public Health Crisis." Additional evaluation findings pertaining to Washington State's substance use disorder waiver amendment are presented in Chapter 15.

We first provide background and an overview of how the MTP approach was intended to transform care in this area. We present a description of this project's implementation through 2019, including observations from key informant interviews and reviews of program documents collected during this period. We then present results of an analysis of health care claims to compare whether and how health outcomes changed for key populations under this initiative.

# **Background**

Opioid use has become a particularly urgent public health issue. Nationally, fatal opioid overdose rates have quadrupled since 1999, and opioid overdoses are now a leading cause of deaths for Americans under 50 (Centers for Disease Control and Prevention, 2020a).

Reducing the deaths and adverse outcomes associated with addiction will require a multipronged effort, with a focus on prevention and treatment, including expansion in the use of FDA-approved medications (e.g., methadone, buprenorphine, naltrexone), increasing the use of evidence-based practices and policies, improving access to care, and attempting to destignatize treatment.

Medications are considered the gold standard for treating opioid use disorder, but their availability can be limited by existing regulations. For example, to prescribe buprenorphine, physicians, nurse practitioners, and physician assistants must apply for a waiver under the Drug Addiction Treatment Act of 2000. These providers are required to undergo specific addiction and pharmacology training prior to obtaining a special DEA number that is necessary for all prescriptions for buprenorphine.

Because addiction is particularly prevalent among socioeconomically disadvantaged populations, Medicaid offers significant opportunities to confront SUD generally, and the opioid epidemic specifically.

#### MEDICATIONS FOR OPIOID USE DISORDER AND OVERDOSE

Medications for addiction disorders may help address the need for better treatment. Psychiatry has been transformed by the introduction of drug therapies, but the use of medications for substance use treatment has seen slower uptake, even though medications are now seen as the gold standard for care.

There are three FDA-approved medications used for opioid dependence: methadone, naltrexone, and buprenorphine. Methadone differs slightly from other medications because it must be dispensed by an opioid treatment program. A 2009 Cochrane review concluded that methadone treatment was effective in reducing opioid use, opioid use-associated transmission of infectious disease, and crime when compared to placebo with psychosocial treatment (Mattick, Breen and Davoli, 2009).

Buprenorphine is a newer drug and easier to administer than methadone, with similar effectiveness. A 2014 Cochrane review comparing buprenorphine, methadone, and placebo found no differences in opioid-positive drug tests or self-reported heroin use when treating with methadone or buprenorphine (Mattick, et al., 2014).

Naltrexone is also a newer drug, available in oral and injectable form; the evidence base to support naltrexone as effective in the treatment for opioid use disorder is less developed than that for methadone or buprenorphine, although the injectable version appears to be more effective (Minozzi, et al., 2011; Krupitsky, et al., 2013).

The Centers for Disease Control and Prevention (CDC) recommends that patients with opioid use disorder receive evidence-based treatment (usually medication-assisted treatment with buprenorphine or methadone maintenance therapy in combination with behavioral therapies), with oral or long-acting injectable naltrexone also available for consideration for nonpregnant adults (Dowell, Haegerich, and Chou, 2016).

# MTP Approach to Change

All ACHs were required to participate in Project 3A. ACHs' strategies in this area must focus on the entire spectrum of opioid-related outcomes, including:

- Prevention of opioid use and misuse. Evidence-based approaches for prevention include
  promoting best practices for prescribing opioids for acute and chronic pain; raising awareness and
  knowledge about the possible adverse effects of opioid use (e.g., by collaborating with the Center
  for Opioid Safety Education and other partners); preventing opioid initiation and misuse, using, for
  example, school-based programs to focus on youth; and promoting safe storage and appropriate
  disposal of opioids.
- Treatment of opioid use disorder. Approaches to expanding treatment include building provider capacity to recognize signs of misuse and linking patients to treatment resources; expanding access to medications for opioid use disorders (MOUD), particularly in the criminal justice system; increasing the capacity of harm reduction programs such as syringe exchange programs; and developing programs to treat pregnant women with opioid use disorder.
- Overdose prevention. Efforts to intervene in opioid overdoses to prevent death include providing technical assistance and overdose education to providers and expanding the use of naloxone to treat overdoses.

 Recovery. Recovery is focused on promoting long-term stabilization and whole-person care, including the provision of peer and other recovery support services designed to improve treatment access and retention and support long-term recovery.

To implement 3A projects, ACHs were expected to convene partnerships encompassing mental health and SUD providers, community-based service providers, executive and clinical leadership, consumer representatives, law enforcement, criminal justice, public health, emergency medical services, and elected officials.

ACHs could build on a variety of promising practices and evidence-supported strategies described in the MTP Project Toolkit. These included the following clinical guidelines, the first two of which are primarily focused on prevention.

- 1 Agency Medicaid Directors' Group's (AMDG) Interagency Guideline on Prescribing Opioids for Pain (Washington State Agency Medical Directors' Group, 2015). The AMDG is a collaboration of state agencies that include the Washington State Health Care Authority, Department of Labor & Industries, Board of Health, Department of Health, Department of Veteran Affairs, Office of the Insurance Commissioner, and Department of Corrections.
- 2 The Centers for Disease Control and Prevention's (CDC) Guideline for Prescribing Opioids for Chronic Pain (Dowell, Haegerich, and Chou, 2016).
- 3 Washington State's Guidelines for Screening and Management for Substance Use During Pregnancy (Washington State Department of Health, n.d.).

The Project Toolkit also referenced two statewide plans, including the 2016 Washington State Interagency Opioid Working Plan (Washington State Department of Health, 2016) and the Substance Abuse Prevention and Mental Health Promotion Five-Year Strategic Plan (Washington State Prevention Enhancement Policy Consortium, 2019).

# **Project 3A Implementation**

Key informant interviews and publicly available documents indicated that approaches to Project 3A varied across regions. This variation reflected a range of activities related to opioids that existed across the state prior to MTP. In 2019, ACHs strategically focused efforts on boosting preexisting regional work and supporting key strategies from the toolkit. ACH work on Project 3A included:

- Convening partners through educational activities. This included work that the ACHs did to:
   establish rapport across the various sectors involved in addressing opioids, including primary
   care, behavioral health, community-based organizations, education, and law enforcement;
   gain community perspective on how prevention, treatment, overdose response, and recovery
   programs can be improved; and educate communities through events that aimed to increase
   awareness and reduce stigma, including annual opioid conferences and symposiums.
- Technical support for training activities to expand the treatment and recovery workforce.
   ACHs assisted with recruitment and technical support for MOUD, peer recovery coach training, and offered support to cover training costs to help expand treatment capacity in most regions.
- Implementing opioid prescribing guidelines. ACHs supported implementation of clinician
  prescribing guidelines for patients in need of pain management by making recommendations for
  guidelines, providing assistance with workflows, and continually communicating with partners
  about state or national guideline updates.

#### STATEWIDE OPIOID RESPONSE PLAN

In 2016, Governor Inslee issued an executive order designed to bring together state agencies, local public health organizations, law enforcement, Tribal governments, and other partners to act on opioids.

The Washington State Opioid Response Plan outlined the strategies and actions that state agencies would implement.

The plan included four priority goals:

- Prevent opioid misuse and abuse.
- Identify and treat opioid use disorder.
- Reduce morbidity and mortality from opioid use disorder.
- Use data and information to detect opioid misuse/abuse, monitor morbidity and mortality, and evaluate interventions.

## **Progress Toward Opioid Interventions**

By late 2019, ACH clinical project partners in all regions had implemented workflow changes in adherence to state or federal guidelines for best prescribing practices, including Washington State Opioid Prescribing Guidelines for practitioners, CDC Guidelines for Prescribing Opioids for Chronic Pain, and AMA Safe Prescribing Practices. In some regions (Cascade Pacific Action Alliance, Greater Columbia ACH, Olympic Community of Health, Southwest Accountable Community of Health), clinical partners had implemented team-based care for medication management using the University of Washington's Six Building Blocks.

Health systems, substance use disorder providers, and/or Tribal partners conducted MOUD trainings. They established relationships between community-based organizations and MOUD providers to increase referrals to treatment in most regions (Cascade Pacific Action Alliance, Elevate Health, Greater Columbia ACH, HealthierHere, North Sound ACH, Olympic Community of Health, SWACH).

Harm reduction efforts were also expanded. ACHs worked to increase naloxone availability through syringe exchange programs and by engaging community-based partners and Tribes in several regions (Better Health Together, Cascade Pacific Action Alliance, Elevate Health, North Central ACH, Olympic Community of Health, SWACH).

### **Factors That Facilitated 3A Implementation**

Two factors may have facilitated Project 3A implementation.

• Project 3A was aligned with the Washington State Interagency Opioid Working Plan. In most regions, work had already begun to reduce opioid use, expand treatment, and reduce harm through established stakeholder groups. These groups and coalitions often operated at the county level. They included cross-agency partners representing primary care, behavioral health, public health, social services, harm reduction services, educators, law enforcement, people in recovery, and families of people with opioid use disorder. Such groups contributed to Project 3A by helping ACHs identify community needs (e.g., regional care, funding, and workforce gaps) and by sharing ACH strategies with the broader community.

In ACH regions participating in Project 2B (Care Coordination), implementation of the Pathways
 Community HUB model also supported Project 3A. The Pathways Care Coordination System
 (CSS) supported care coordination for people with substance use disorders who were identified in
 community-based settings.

## **Factors That Impeded 3A Implementation**

Three factors may have impeded the implementation of Project 3A.

- Workforce shortages limited the number of available MOUD-waivered providers. Some ACH
  regions did not appear to have enough providers to meet treatment needs. ACHs also noted that
  some MOUD-waivered providers did not appear to be actively prescribing MOUD to patients who
  could benefit from this therapy. ACHs were exploring reasons for this inactivity.
- Tensions existed between stakeholders promoting substance use disorder services through
  abstinence or MOUD. ACHs needed to negotiate with providers holding different views regarding
  SUD treatment, and build trust across different advocacy and treatment groups. These activities,
  while important, may have delayed other project activities.
- ACH partners experienced challenges in accessing a consistent supply of naloxone to adequately equip staff and high-risk people. The reasons for naloxone shortages reported in 2019 were not entirely clear but may relate to funding or unstable relationships with pharmaceutical suppliers.

# **Evaluation Approach**

Participation in Project 3A was mandatory for all ACHs, removing the potential for a strong comparison group. Thus, we assessed changes among enrollees of all ACH regions from a preintervention period of 2017 and 2018 into a post-intervention period of 2019. We analyzed data at the calendar year level, adjusting for age, gender, race/ethnicity, urban vs. rural residence, and CDPS risk. See Appendix B for methodological details.

We note that interventions to address the opioid epidemic preceded the efforts by ACHs. For example, in 2012, hospitals were mandated to implement and strategically use the health information exchange then known as the Emergency Department Information Exchange (EDIE) as part of its "ER is for Emergencies" program. Beginning November 2014, emergency departments in Washington began implementing an automated prescription drug monitoring program (PDMP). In addition, the State of Washington applied for and received an amendment to the current MTP waiver to maintain and expand access to inpatient and residential treatment for substance use disorder, with that amendment becoming effective in July 2018. These interventions were coupled with regional and national efforts to raise awareness about the dangers of opioid prescriptions, addictions, and overdoses. Our current analysis does not separate out the isolated effects of changes implemented by ACHs from other longstanding regional and national efforts.

## **Target Populations**

Our analysis of Project 3A focused on **two populations** who were described by ACHs as intended beneficiaries of their work in this project area:

1 All Medicaid-enrolled adults ages 19-64. We selected this population to analyze measures that test efforts to prevent opioid misuse, including, for example, the percentage of beneficiaries who are prescribed high-dose chronic opioid therapy.

People with opioid use disorder, defined as the presence of an opioid use disorder diagnosis (ICD10 code F11.XXX) within the last 12 months. For this population, we analyzed measures related to efforts to treat OUD, including, for example, the percentage of patients with OUD who received medications.

#### **Interim Evaluation Results**

Results of our evaluation of Health Improvement Project 3A are presented below and reflect changes from a baseline period (2017 and 2018) through 2019. We first present outcomes for all Medicaid-enrolled adults ages 19-64. We then present outcomes for people with opioid use disorder. See page 21 of this report for a guide to reading results.

## How are these results impacted by COVID-19?

The COVID-19 outbreak began in Washington State in early 2020, causing widespread disruption to health services delivery across the state. This report presents an analysis of claims data through December 2019, prior to the outbreak. It is therefore unlikely that COVID-19 had any effect on measures presented in this report, though future reporting periods may be affected.

## Analysis 1: All Medicaid-Enrolled Adults Ages 19-64

Exhibit 7.1 displays changes for each metric across the state for all Medicaid-enrolled adults ages 19-64. The percentage of people prescribed high-dose chronic opioid therapy dropped by more than 1 percent for each measure and the percentage of patients prescribed chronic concurrent opioids and sedatives also dropped by slightly more than 2 percent. Opioid use disorder treatment increased by almost six percentage points in this group. Other measures exhibited small or insignificant changes.

In the Data Appendix, Table 4 displays the change in outcomes across all nine ACHs for all Medicaid-enrolled adults. Substance use disorder treatment penetration showed statistically significant increases across all ACHs, with the largest change observed in North Central ACH. The target population in Greater Columbia ACH experienced significant decreases in hospital use, while enrollees in Elevate Health experienced significant increases in hospital and emergency department use. Four ACHs (Better Health Together, Greater Columbia, HealthierHere, and North Sound) showed statistically significant reductions in the percentage of patients prescribed high-dose chronic opioid therapy (greater than 90 mg). There were also statistically significant reductions in the percentage of patients prescribed chronic concurrent opioids and sedatives in Better Health Together, Olympic Community of Health, North Central ACH, HealthierHere, and North Sound ACH, with the largest reduction occurring in Olympic Community of Health.

Exhibit 7.1: Change in Outcomes for All Medicaid-Enrolled Adults Ages 19-64

All-ACH rate in 2017-18, all-ACH rate in 2019, and adjusted pre-post change

	2017-18 All ACHs	2019 All ACHs	Pre-post Adjusted Change
30-Day Hospital Readmission for a Psychiatric Condition $\downarrow$	6.5	7.4	1.1
Emergency Department Visit Rate $\downarrow$	67.5	68.2	0.1
Acute Hospital Use among Adults ↓	60.8	61.4	-0.3
Hospital Readmission within 30 Days $\downarrow$	5.9	6.3	-0.1
Ratio of Home and Community-Based Care Use to Nursing Facility Use	93.0	94.2	1.2***
Patients Prescribed High-dose Chronic Opioid Therapy: >50 mg MED $\downarrow$	31.0	30.3	-1.6***
Patients Prescribed High-Dose Chronic Opioid Therapy: >90mg $\downarrow$	14.6	13.6	-1.8***
People with an Opioid Prescription who were Prescribed a Sedative $\downarrow$	19.4	17.3	-2.2***
Opioid Use Disorder Treatment for People with Treatment Need	51.8	58.7	5.9***

Shaded cells indicate a statistically significant change. **Blue**-shaded cells indicate an improvement. **Orange**-shaded cells indicate declining performance. Results marked \* are significant at the p<.05 level. Results marked \*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level.



## **Analysis 2: People with Opioid Use Disorder**

Exhibit 7.2 displays changes for each metric across the state for people with opioid use disorder. This population experienced significant reductions in the receipt of high-dose chronic opioid therapy, with both measures dropping by more than four percent. The percentage of patients prescribed chronic concurrent opioids and sedatives also dropped by slightly more than two percent. Substance use disorder treatment penetration increased by six percent. This group also exhibited positive changes in utilization: hospital use decreased by 10.7 visits per 1,000 members; emergency department visits decreased by 7.2 visits per 1,000 member months. The ratio of home and community-based services (HCBS) to institutional (nursing facility) services for long-term care also increased, by 2.7 percent.

In the Data Appendix, Table 4 displays the change in outcomes across all nine ACHs for people with opioid use disorder. Substance use disorder treatment penetration showed statistically significant increases across all ACHs, with the largest change observed in North Central ACH. People with OUD experienced large decreases in emergency department visits in Elevate Health; the largest reductions in hospital utilization occurred in HealthierHere. The percentage of patients prescribed high-dose chronic opioid therapy (>90 mg) demonstrated significant decreases in four ACHs, and the percentage of patients prescribed chronic concurrent opioids and sedatives decreased significantly in two ACHs. People in this population experienced significant decreases in all-cause hospital readmissions and in readmissions after psychiatric hospitalization in North Central ACH.

Exhibit 7.2: Change in Outcomes for People with Opioid Use Disorder

All-ACH rate in 2017-18, all-ACH rate in 2019, and adjusted pre-post change

	2017-18 All ACHs	2019 All ACHs	Pre-post Adjusted Change
30-Day Hospital Readmission for a Psychiatric Condition $\downarrow$	8.0	9.5	2.1
Emergency Department Visit Rate $\downarrow$	174.5	167.1	-7.2***
Acute Hospital Use among Adults ↓	189.5	179.7	-10.7**
Hospital Readmission within 30 Days $\downarrow$	8.4	9.1	0.1
Ratio of Home and Community-Based Care Use to Nursing Facility Use	90.4	93.5	2.7**
Patients Prescribed High-dose Chronic Opioid Therapy: >50 mg MED $\downarrow$	45.0	40.7	-4.8***
Patients Prescribed High-Dose Chronic Opioid Therapy: >90mg $\downarrow$	23.0	19.5	-4.1***
People with an Opioid Prescription who were Prescribed a Sedative $\downarrow$	22.4	20.5	-2.2*
Opioid Use Disorder Treatment for People with Treatment Need	60.7	67.0	6.0***

Shaded cells indicate a statistically signficant change. **Blue**-shaded cells indicate an improvement. **Orange**-shaded cells indicate declining performance. Results marked \* are significant at the p<.05 level. Results marked \*\* are significant at the p<.01 level. Results marked \*\* are significant at the p<.01 level.

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### **Conclusions**

In 2019, ACHs leveraged existing federal and state initiatives to address the opioid epidemic. With evidence-supported strategies and local coalitions, ACHs and partners implemented a multipronged approach in support of the state's goals of prevention, treatment, and recovery. Our evaluation found signs of progress in efforts to address the opioid epidemic, with encouraging patterns in how opioids were prescribed and the percentage of people who were receiving treatment for opioid use disorder. There was weaker evidence that these efforts translated directly into changes in utilization, such as emergency department use, hospitalizations, or readmissions. However, the measures presented here were relatively narrow in scope and may not have captured overall improvements in mortality and morbidity.

This analysis has an important limitation, distinct from other analyses of health improvement projects: we focused on trends for a problem that began to receive intensive federal and state attention prior to the ACH intervention. Nonetheless, the ACH efforts may be unique to or synergistic with these other efforts. We may expect to see larger changes after 2019, the first implementation year.

Our analysis examined changes in opioid-related outcomes for the Medicaid population broadly. Some ACHs focused their efforts on smaller, specific target populations. This focus was often justifiable based on data and community input. However, changes for these smaller populations may not be detectable in our analyses of the larger Medicaid population.

The final MTP evaluation report will span years 2017 through 2020, presenting opportunities to examine outcomes at a later point in implementation.

# Health Improvement Project 3B

This chapter presents results of the interim evaluation of MTP Initiative 1 Health Improvement Project 3B, "Reproductive and Maternal/Child Health."

We first provide background and an overview of how the MTP approach was intended to transform care in this area. We present a description of this project's implementation through 2019, including observations from key informant interviews and reviews of program documents collected during this period. We then present results of an analysis of health care claims that assessed whether and how health outcomes changed for target populations under this initiative.

# **Background**

The Medicaid program is an essential source of coverage for children and their parents and thus an important lever to improve their health outcomes. Nationally, Medicaid was the source of payment for 42 percent of all 2018 births (National Vital Statistics System, 2019) and Medicaid and the Children's Health Insurance Program (CHIP) provided coverage for 38 percent of all children (KFF's State Health Facts, 2019). Mothers and children in the United States have higher mortality rates than those in similar countries, and the health of lower-income mothers and children in the United States is typically worse than their higher-income counterparts. Improvements in Medicaid can thus create significant improvements in the wellbeing of these populations.

Better maternal and child health can be achieved through a variety of efforts, including improving prenatal and postpartum care, providing information about healthy pregnancies to expecting mothers and their partners, increasing the number of well-child visits, and increasing vaccination rates among children.

# MTP Approach to Change

Within MTP Initiative 1, Project 3B is optional for ACHs. The Project Toolkit specified **three potential approaches** that may be taken by ACHs opting in to this project area:

- 1 CDC-recommended strategies to improve women's and men's health and promote healthy pregnancies (Centers for Disease Control and Prevention, 2020b). These included smoking cessation or daily folic acid supplementation.
- 2 Home visiting models for high-risk pregnant women. Examples of federally recognized models included the Nurse-Family Partnership, which provides home visits from specially trained nurses to young women early in pregnancy and continues through a child's second birthday. Family Spirit, another home-visiting program developed by the Johns Hopkins Center for American Indian Health, uses a culturally specific, strengths-based curriculum specifically for American Indians.

3 Approaches to improve well-child visit rates and childhood immunization rates. The Project Toolkit identified two initiatives, Bright Futures and Stony Brooks Children's Hospital Enriched Medical Home Intervention, also known as Keeping Families Healthy. Bright Futures is a national health promotion and prevention initiative led by the American Academy of Pediatrics. The core of the initiative is a set of recommendations for child care providers that detail activities at each child care visit (e.g., vision screening, immunizations) along with guidelines for implementation of these activities. Keeping Families Healthy is a medical home intervention program launched by Stony Brook Children's Hospital in 2011. It offers free home visits by trained community health workers (CHWs) to children considered at risk of poor health outcomes. CHWs check a child's vaccination status during visits and provide educational material along with other services.

ACHs participating in Project 3B were required to compile a partnering provider list, select an evidence-based approach and target population, develop guidelines and procedures for the intervention, and offer training to participating providers.

# **ACHs Participating in Project 3B**

Three ACHs (Cascade Pacific Action Alliance, North Sound ACH, Olympic Community of Health) elected to participate in Project 3B (see Exhibit 8.1). Selection of 3B was reported to have been influenced by Regional Health Needs Inventory findings related to reproductive health needs.

Exhibit 8.1: ACHs Participating in Project 3B, Reproductive Health



# **Project 3B Implementation**

Key informant interviews and publicly available documents indicated that ACHs supported implementation of the following strategies for Project 3B in 2019:

- Technical assistance for integration of ten CDC evidence-based recommendations. This included sharing the guidelines with partners and offering support surrounding integration of best practices and strategies for primary care partner workflows.
- One Key Question training. ACHs facilitated training on the One Key Question method. One Key Question assesses women's pregnancy intentions and provides counseling accordingly, including a review of their contraception options when appropriate.
- Technical assistance for implementation of the Bright Futures program. ACHs provided funding and training assistance for primary care and pediatric partners to integrate the program's evidence-based practices into clinical workflows to improve access and engagement for children.
- Technical assistance to help build the capacity of regional Nurse-Family Partnerships. Two ACHs,
   Cascade Pacific Action Alliance and Olympic Community of Health, supported the expansion of
   established Nurse-Family Partnership programs by improving partners' awareness of and referrals
   to regional nurse home visitation programs.
- Education efforts through learning collaboratives, conferences, and webinars. ACHs provided education surrounding alignment of Project 3B goals with other MTP projects or health equity topics. Examples of ACH education topics included prevention of substance abuse and child maltreatment, promoting depression screening for pregnant and postpartum women, creating safe spaces for LGBTQ clients, and addressing adverse childhood experiences (ACEs).

# **Progress Toward Implementing Project 3B**

By late 2019, ACHs' and partners' implementation progress varied on Project 3B. The most widely implemented strategies were the CDC's 10 Recommendations and One Key Question pregnancy intention screenings. One Key Question was also connected to ACHs' efforts to develop training and organizational relationships to support patients' access to contraception, including long-acting reversible contraception (LARC). Partners in the Cascade Pacific Action Alliance and North Sound ACH regions focused on increasing access to LARC for patients by establishing cross-organization relationships for care referrals to providers trained in LARC insertion and removal.

## **Factors That Facilitated Project 3B Implementation**

Two factors may have facilitated implementation of Project 3B.

- ACH educational offerings helped project partners understand the value of reproductive, maternal, and child health strategies and may have increased partnering providers' motivations to implement improvements in this area. These educational events were informed by regional experts and frequently open to the community, which may have helped partner organizations build a network of support for their efforts that extended beyond contracted partners.
- In one region (Cascade Pacific Action Alliance), several partners contracted with the ACH
  for this project alone. This included area pediatricians, OB/GYN providers, and communitybased organizations serving children. The participation of this extended network of partner
  organizations who focused on a single project might have contributed to earlier and broader
  implementation of the project in participating ACHs.

## **Factors That Impeded Project 3B Implementation**

Two factors were identified as possibly impeding implementation of this project.

- Some partner organizations prioritized other projects over Project 3B in their region. The reasons for this low prioritization varied across ACHs, but stakeholders reported that partners perceived other MTP projects to be more urgent or visible. Some partners perceived pregnant women and children to represent a small proportion of the Medicaid population, believing that focusing on older adults or chronic conditions would target a greater number of Medicaid beneficiaries. ACHs reported needing to engage in educational efforts to overcome these perceptions before proceeding to implementation of 3B activities; this may explain why some partners had not yet proceeded with implementation of Project 3B in late 2019.
- Patients reportedly did not always understand the value of reproductive health programs. In interviews, stakeholders pointed to challenges with patient buy-in for interventions to increase child vaccinations. ACHs attempted to address this issue by increasing community outreach and by investing in social media campaigns to educate parents on the importance of vaccinations and well-child visits.

# **Evaluation Approach**

Health Improvement Project 3B was an optional project for ACHs, allowing us to compare outcomes of Medicaid enrollees among ACHs that participated in this project to those that did not. We used a difference-in-differences approach for our quantitative analysis of Project 3B, measuring changes in outcomes in the pre-intervention period (typically calendar year 2017 and 2018) to the postintervention period (typically calendar year 2019) and separately comparing each of the three ACHs participating in this project to the six ACHs that did not participate in it. Due to differences in the availability of data for some measures, contraception access measures are reported for a baseline period of July 2016 to June 2018 and a post-implementation period of July 2018 to June 2019.

We adjusted for regional differences in Medicaid enrollees' age, gender, race/ethnicity, urban vs. rural residence, and CDPS risk score. See Appendix B for a complete description of methodology. Our model tests for changes among the ACHs who selected this particular HIP. Activities in other non-participating ACH regions such as the introduction of a similar program, or other interventions that drive changes in our target populations, may bias our results toward the null.

#### **Target Populations**

Our analysis focused on the following two target populations identified as intended beneficiaries of ACHs' work in this project area:

- · Women of reproductive age, and
- Pregnant women.

To identify our first population, we defined women of reproductive age as those identified as female and between the ages of 15 and 50 in Medicaid demographic records.

Using indicators provided by Washington State's Department of Social and Health Services, we identified our second population by selecting all enrollees who were pregnant and delivered in the second, third, or fourth quarter, or who were pregnant in the second or third quarter and remained pregnant until the end of the measurement period.

We note that this approach is not perfectly aligned with all ACH target populations for their Project 3B work. For example, some ACHs described their target populations as including mothers of children ages 0-3 and children ages 0-17. However, it was not possible to identify these mother-child dyads in Medicaid claims data. See page 21 of this report for a guide to reading results.

## How are these results impacted by COVID-19?

The COVID-19 outbreak began in Washington State in early 2020, causing widespread disruption to health services delivery across the state. This report presents an analysis of claims data through December 2019, prior to the outbreak. It is therefore unlikely that COVID-19 had any effect on measures presented in this report, though future reporting periods may be affected.

## **Interim Evaluation Results**

Results of our evaluation of Health Improvement Project 3B, Reproductive and Maternal/Child Health, are presented below. We first present outcomes for our broadly defined target population for this project area: all Medicaid-enrolled women of reproductive age. We then present outcomes for our narrowly defined target population, pregnant women.

## **Analysis 1: Women of Reproductive Age**

Exhibit 8.2 displays results for our first population, women of reproductive age. Although measures of mental health treatment penetration and substance use disorder treatment penetration increased in both participating and non-participating ACH regions, the improvement was larger in nonparticipating ACHs. These differences between participating and non-participating ACHs were not statistically significant.

In the Data Appendix, Table 5 presents results for women of reproductive age in each of the three ACH regions participating in Project 3B. Relative to ACHs not participating in Project 3B, Cascade Pacific Action Alliance experienced a statistically significant decline in all-cause emergency department visits, mental health treatment penetration, and SUD treatment penetration for this population. North Sound ACH experienced a relative decline in access to contraceptive care (most and moderately effective methods) and mental health treatment penetration. Olympic Community of Health experienced a relative decline in SUD treatment penetration.

Exhibit 8.2: Change in Outcomes for Women of Reproductive Age

Pre-post rates for participating ACHs, pre-post rates for comparison ACHs, and adjusted difference-in-differences estimates

	Participating ACHs		Comparison ACHs		Difference in Differences
	Pre	Post	Pre	Post	
Timely Prenatal Care	84.8	86.3	85.8	86.8	0.5
Effective Contraception	30.2	29.4	29.2	28.8	-0.4
Long-Acting Reversible Contraceptives	12.4	13.9	16.2	17.0	0.5
Effective Contraception within 60 Days of Delivery	39.1	39.8	41.4	41.1	0.6
Chlamydia Screening for Women	49.5	48.5	52.1	52.0	-1.0
Mental Health Treatment Penetration	54.9	54.9	52.8	53.8	-1.2***
30-Day Hospital Readmission for a Psychiatric Condition $\downarrow$	5.4	6.7	6.1	6.7	0.7
Emergency Department Visit Rate $\downarrow$	71.3	70.2	70.8	70.7	-1.4
Acute Hospital Use among Adults ↓	42.8	43.2	42.7	42.5	0.0
Hospital Readmission within 30 Days $\downarrow$	4.3	4.7	4.8	5.5	0.7
Substance Use Disorder Treatment Penetration	41.6	43.2	34.0	38.6	-2.1***

Shaded cells indicate a statistically signficant difference between ACHs that did and did not participate in the ACH Health Improvement Project. Blue-shaded cells indicate that participating ACHs improved more than comparison ACHs. Orange-shaded cells indicate participating ACHs performed worse than comparison ACHs. Results marked \* are significant at the p<.05 level. Results marked \*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level.

Note: 1) The following measures are reported on a State Fiscal Year basis of July to June rather than January to December due to the availability of data: Timely Prenatal Care, Effective Contraception, Long-Acting Reversible Contraceptives, and Effective Contraception Within 60 Days of Delivery.



#### **Analysis 2: Pregnant Women**

Exhibit 8.3 displays changes for our second study population, pregnant women (inclusive of women who delivered during the measurement period). We observed no statistically significant differences between the group of ACHs who participated in 3B and those who did not participate.

In the Data Appendix, Table 5 displays results for pregnant women in specific ACH regions participating in Project 3B. In the Cascade Pacific Action Alliance region, all-cause ED visits and substance use disorder treatment penetration declined among pregnant women relative to nonparticipating ACHs. North Sound ACH exhibited an increase in rates of contraceptive care (most and moderately effective methods). None of the estimates for the other ACHs were statistically significant.

Exhibit 8.3: Change in Outcomes for Pregnant Women

Pre-post rates for participating ACHs, pre-post rates for comparison ACHs, and adjusted difference-in-differences estimates

		Participating ACHs			Difference in Differences
	Pre	Post	Pre	Post	
Timely Prenatal Care	85.8	86.0	86.0	86.1	-0.1
Effective Contraception	35.1	38.2	37.6	37.2	2.9
Long-Acting Reversible Contraceptives	11.7	11.4	15.1	12.7	2.1
Effective Contraception within 60 Days of Delivery	33.4	33.7	36.2	35.6	0.4
Chlamydia Screening for Women	73.0	73.9	74.5	76.1	-0.8
Mental Health Treatment Penetration	48.0	48.7	45.7	45.9	-1.5
30-Day Hospital Readmission for a Psychiatric Condition $\downarrow$	1.7	6.4	6.2	9.7	-14.3
Emergency Department Visit Rate $\downarrow$	116.0	116.8	120.9	123.1	-2.8
Acute Hospital Use among Adults $\downarrow$	50.3	53.2	47.4	47.6	1.6
Hospital Readmission within 30 Days $\downarrow$	3.0	3.1	4.3	4.1	-0.1
Substance Use Disorder Treatment Penetration	37.9	39.2	32.3	33.6	-1.7

Shaded cells indicate a statistically signficant difference between ACHs that did and did not participate in the ACH Health Improvement Project. Blue-shaded cells indicate that participating ACHs improved more than comparison ACHs. Orange-shaded cells indicate participating ACHs performed worse than comparison ACHs. Results marked \* are significant at the p<.05 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level.

Note: 1) The following measures are reported on a State Fiscal Year basis of July to June rather than January to December due to the availability of data: Timely Prenatal Care, Effective Contraception, Long-Acting Reversible Contraceptives, and Effective Contraception Within 60 Days of Delivery.



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## **Conclusions**

Generally, our evaluation of Project 3B found limited evidence that this project had meaningfully advanced into an implementation phase by the end of 2019, which was partly attributed to community misperceptions that maternal and reproductive health care offered fewer opportunities to impact performance measures or Medicaid program costs relative to initiatives focused on chronic disease or SUD.

Consistent with this finding, we also see few differences for our two study populations when comparing ACH regions participating in this project to other ACH regions. Relative declines in mental health treatment penetration and substance use treatment penetration among women of reproductive age in participating ACH regions should continue to be monitored, although these changes are small in magnitude and reflect slower improvement rather than absolute declines in ACHs participating in the initiative compared to corresponding increases in ACHs not participating in the initiative.

We note one limitation of this analysis: We were only able to observe measures of contraceptive access midway through 2019 (six months after the beginning of the Project 3B implementation phase) due to the availability of data for some measures. A longer observation period is warranted before drawing conclusions about the impact of Project 3B on contraceptive access.

The final MTP evaluation report will present opportunities to examine Project 3B outcomes through 2020, a later point in MTP implementation when changes between participating and nonparticipating ACH regions may be more apparent.

# Health Improvement Project 3C

This chapter presents results of the interim evaluation of MTP Initiative 1 Health Improvement Project 3C, "Access to Oral Health Services."

We first provide background and an overview of how the MTP approach was intended to transform care in this area. We present a description of this project's implementation through 2019, including observations from key informant interviews and reviews of program documents collected during this period. We then present the results of an analysis of health care claims to compare whether and how health outcomes changed for target populations under this initiative.

# **Background**

Medicaid is the predominant means for providing dental insurance coverage for families and people with limited financial resources, a group that has traditionally received substantially less dental care than the rest of the population (U.S. Government Accountability Office, 2000; Haley, Kenney and Pelletier, 2016).

Dental disease is highly prevalent among people with lower incomes. According to the U.S. General Accounting Office Oral Health Report (U.S. General Accounting Office, 2000) about 48 percent of low-income adults had untreated caries (cavities), compared to 18 percent of adults with higher incomes. A similar pattern is prevalent in children (Dye, et al., 2007).

Unfortunately, dental insurance does not necessarily translate to access to oral health services. Medicaid beneficiaries have routinely faced difficulties obtaining recommended care (Soni, 2011). For example, nationally, almost two-thirds of children on Medicaid receive no annual dental services (U.S. Government Accountability Office, 2010). One barrier to access is the capacity and ability of the dental workforce to meet the demand for dental care. Historically, low reimbursement rates have affected dentist participation in Medicaid (U.S. Government Accountability Office, 2012; Warner and Edelstein; 2017).

Oral health integration is one strategy for improving access. Integration may provide an opportunity for people who are reluctant to visit a traditional dentist office to obtain some oral health services in the primary care setting; many people make visits to their primary care physician in the course of a year but do not visit a dentist. Access may also be improved by bringing dental services into the community through non-traditional approaches.

## MTP Approach to Change

Within MTP Initiative 1, Project 3C was an optional project for ACHs. ACHs that participated in Project 3C were expected to select evidence-based approaches from the Project Toolkit that included 1) integrating oral health referral into primary care settings and 2) the creation of mobile dental units to improve access to care.

The Project Toolkit suggested a phased approach to planning to integrate oral health into primary care services, beginning with preventive screening of patients in primary care settings, identification of people at high risk, and development of structured referral processes for dentistry. Additional elements of integration included the provision of fluoride varnish for pediatric patients and high-risk adults in primary care settings, and the establishment of clinical guidelines that incorporated five elements of oral health delivery:

- A written or verbal assessment of symptoms that might indicate risk of oral disease;
- A clinical assessment of signs that might indicate oral health risk or disease;
- Determining the needed response;
- Acting by delivering preventive interventions or appropriate referral;
- Documenting findings in structured data so that quality can be managed.

ACHs implementing mobile dental services could begin with the National Maternal and Child Health Resource Center, which provided a manual to guide the planning and implementation of mobile dental units and portable dental care equipment. ACHs were expected to identify potential locations for mobile dental units in areas where Medicaid beneficiaries access housing, transportation, or other community-based supports, as well as locating potential sites serving rural communities, migrant worker locations, and Native American reservations. Implementation also required the securing of necessary permits and licenses required by the state or locality and the establishment of referral relationships with primary care providers, dental providers, and other specialists as needed.

# **ACHs Participating in Project 3C**

Two ACHs - North Sound ACH and Olympic Community of Health - selected Project 3C (see Exhibit 9.1). Some ACHs did not select this project, but still reported implementing oral health strategies in the context of other MTP projects, or supporting other regional oral health efforts. These types of activities were reported by Better Health Together, Cascade Pacific Action Alliance, Elevate Health, and Greater Columbia ACH.

Exhibit 9.1: ACHs Participating in Project 3C, Access to Oral Health Services



# **Project 3C Implementation**

Key informant interviews and publicly available documents indicated that ACHs supported the following oral health strategies for Project 3C in 2019:

- Technical assistance to integrate oral health preventive services into primary care. ACHs provided assistance in implementing screenings in primary care settings to identify people at high risk for oral disease. They also provided training in the provision of preventive oral health services such as fluoride, varnishing, or sealants in primary care settings. Participating ACHs helped partners establish referral systems from primary care to dental providers through communication agreements or expanded health information technology (HIT) infrastructure. ACHs also trained partners to use Dentist Link. This free service connected patients to dentists based on need, location, and insurance status.
- Establishing partnerships to offer mobile school-based care. ACHs connected education service districts and oral health provider partners in order to increase children's access to preventive oral health care through school programs. The strategy also targeted children living in rural areas with limited or no access to oral health services.
- Support for building a dental health aide therapist (DHAT) workforce on Native American reservations. Although not fully implemented, ACHs had begun to explore opportunities for technical assistance to regional Tribes to offer DHATs on reservations.

By late 2019, ACH partners focused on identifying high-risk populations for oral disease through screenings implemented in primary care and behavioral health settings. ACH partners also established local communication agreements across organizations or through shared electronic health records to coordinate care between primary and dental care providers. In Olympic Community of Health, medical assistants were trained to provide preventive care, including fluoride varnishing. In North Sound ACH, project partners began making patient and client referrals to dental care providers using Dentist Link. Partners in both regions launched mobile dental services and established schedules for dental hygienists to visit school settings.

# **Factors That Facilitated Project 3C Implementation**

Two factors may have facilitated ACHs implementation of Project 3C.

- Work to promote oral health was already underway before MTP in the North Sound ACH region, particularly within Federally Qualified Health Centers. North Sound ACH designed its Project 3C activities to complement, leverage, and expand this work. North Sound ACH also absorbed a regional Baby and Child Dentistry program established by its backbone organization, Whatcom Alliance for Health Advancement. This program coordinated the region's school-based oral health project.
- Project 3C work was supported by funding and planning efforts from Arcora Foundation, which provided additional start-up funds and technical assistance to 3C project partners. These funds supported medical-dental integration, including practice coaches who trained medical assistants to provide fluoride treatments, oral health education, and referrals to dental care, as needed. Dentist Link, the program used for oral health care referrals by ACH partners, was also funded and operated by the Arcora Foundation. Some ACHs that did not participate in Project 3C (e.g., Better Health Together, Cascade Pacific Action Alliance, and Elevate Health) also worked with the Arcora Foundation to improve dental care in their regions.

# **Factors That Impeded Project 3C Implementation**

Two factors may have impeded implementation of Project 3C.

- Stakeholders reported that patients were deferring dental care, sometimes due to difficulties scheduling and attending dental appointments. Delaying or deferring care may have been particularly common for non-emergency dental care.
- Medicaid was not widely accepted by dentists in some regions. Stakeholders reported that many dentists operated private practices and had historically not accepted insurance payments for dental care. A lack of provider willingness to accept Medicaid may have limited the potential reach of ACHs' oral health strategies for its target populations.

# **Evaluation Approach**

Health Improvement Project 3C was an optional project for ACHs, which allowed us to compare outcomes of Medicaid enrollees in ACHs that participated in this project to those that did not. Our evaluation used a difference-in-differences approach to compare changes in health outcomes for these two groups from a pre-intervention period (2017 and 2018) to a post-intervention period (2019).

We adjusted for regional differences in Medicaid enrollees' age, gender, race/ethnicity, urban vs. rural residence, and Chronic Illness and Disability Payment System (CDPS) risk score. See Appendix B for methodological details. Our model tests for changes among the ACHs who selected this particular HIP. Activities in other non-participating ACH regions such as the introduction of a similar program, or other interventions that drive changes in our target populations, may bias our results toward the null.

# **Target Populations**

Our analysis of Project 3C focused on two populations that were described by ACHs as intended beneficiaries of their 3C efforts:

- All Medicaid beneficiaries, and
- Pregnant women.

Our selection of the first population for this analysis reflected efforts to improve the oral health of the Medicaid population as a whole.

Our second population, pregnant women, was selected because poor oral health may adversely affect pregnant women and their babies (Radnai, et al., 2006; Xiong, et al., 2006; Albert, et al., 2011). Pregnant women and women of reproductive age were identified as priority populations for ACHs participating in this project. Using indicators provided by Washington State's Department of Social and Health Services, we selected all enrollees who were pregnant and delivered in the second, third, or fourth quarter, or who were pregnant in the second or third quarter and remained pregnant until the end of the measurement period.

## Interim Evaluation Results

Results of our evaluation of Health Improvement Project 3C, "Oral Health Access," are presented below. We first present outcomes for all Medicaid beneficiaries, followed by results for pregnant women. See page 21 of this report for a guide to reading results.

# How are these results impacted by COVID-19?

The COVID-19 outbreak began in Washington State in early 2020, causing widespread disruption to health services delivery across the state. This report presents an analysis of claims data through December 2019, prior to the outbreak. It is therefore unlikely that COVID-19 had any effect on measures presented in this report, though future reporting periods may be affected.

# Analysis 1: All Medicaid-enrolled beneficiaries

Exhibit 9.2 displays changes for each metric in the two ACHs that chose 3C as a focus area. The use of dental services increased in these ACHs by 1 percent relative to comparison ACHs. In contrast, use of topical fluoride decreased at a greater rate among these two ACHs, although the decrease was relatively small (0.4 percent). Other measures, including periodontal evaluation and emergency department and hospital utilization, remained unchanged.

In the Data Appendix, Table 5 displays ACH-level results for all Medicaid-enrolled beneficiaries in the two regions participating in Project 3C. Both ACHs exhibited relative increases in the utilization of dental services, and Olympic Community of Health increased its rate of periodontal evaluation in adults with chronic periodontitis. North Sound ACH experienced a small but significant decrease in the use of topical fluoride. Across ACH regions, these findings suggest that access to dental health services modestly improved in 3C-participating regions relative to other ACH regions.

#### Exhibit 9.2: Change in Outcomes for All Medicaid Beneficiaries

Pre-post rates for participating ACHs, pre-post rates for comparison ACHs, and adjusted difference-in-differences estimates

	Participating ACHs		Comparison ACHs		Difference in Differences
	Pre	Post	Pre	Post	
Preventive or Restorative Dental Services	44.8	46.6	47.9	48.5	1.1***
Topical Fluoride at a Medical Visit	3.4	3.2	4.7	4.8	-0.4**
Periodontal Exam for Adults	52.9	53.6	50.2	50.4	0.4
Emergency Department Visit Rate $\downarrow$	47.4	47.6	50.6	51.4	-0.7
Acute Hospital Use among Adults $\downarrow$	55.9	57.1	59.4	59.7	0.4

Shaded cells indicate a statistically signficant difference between ACHs that did and did not participate in the ACH Health Improvement Project. Blue-shaded cells indicate that participating ACHs improved more than comparison ACHs. Orange-shaded cells indicate participating ACHs performed worse than comparison ACHs. Results marked \* are significant at the p<.05 level. Results marked \*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.001 level.



## **Analysis 2: Pregnant Women**

Exhibit 9.3 (next page) displays changes for each metric across each state for our second study population, pregnant women. Among the two ACHs participating in this project, the percentage of pregnant women with chronic periodontitis who received periodontal evaluation improved relative to non-participating ACHs, although this was not significant. Other measures did not exhibit statistically significant changes.

The Data Appendix Table 5 presents results for pregnant women in the two ACH regions participating in Project 3C. We did not observe statistically significant changes for individual ACHs in this target population for these measures.

## **Exhibit 9.3: Change in Outcomes for Pregnant Women**

Pre-post rates for participating ACHs, pre-post rates for comparison ACHs, and adjusted difference-in-differences estimates

	Participating ACHs		Comparison ACHs		Difference in Differences	
	Pre	Post	Pre	Post		
Preventive or Restorative Dental Services	38.7	40.7	40.1	40.3	1.4	
Topical Fluoride at a Medical Visit	NA	NA	NA	NA	NA	
Periodontal Exam for Adults	62.3	67.4	61.9	61.1	5.9	
Emergency Department Visit Rate $\downarrow$	111.9	116.4	121.2	122.4	2.7	
Acute Hospital Use among Adults ↓	47.9	55.6	48.4	47.9	7.1	

Shaded cells indicate a statistically signficant difference between ACHs that did and did not participate in the ACH Health Improvement Project. Blue-shaded cells indicate that participating ACHs improved more than comparison ACHs. Orange-shaded cells indicate participating ACHs performed worse than comparison ACHs. Results marked \* are significant at the p<.05 level. Results marked \*\* are significant at the p<.01 level. Results marked \*\* are significant at the p<.01 level.



↓ Lower is better

# **Conclusions**

In the two ACHs that chose Project 3C, we observed a small increase in utilization of dental services relative to the comparison ACHs. In Olympic Community of Health there was a significant increase in periodontal evaluation in adults with chronic periodontitis. These findings suggest some improvement in the first year of implementation, though this was not consistent across all quality measures (particularly for topical fluoride, which appeared to decrease in North Sound ACH), and we did not observe significant changes in the target population of pregnant women.

While our analysis suggested improvements in access to dental care among participating ACHs, the changes might be seen as moderate. Several reasons might explain why changes were not stronger. First, as with most of the health improvement projects, change was initiated in 2019 and we may not expect to see substantive impacts across large population groups within the first implementation year.

Second, although the analysis focuses on two ACHs who officially selected Project 3C as an area of focus, the comparison group is imperfect. Qualitative data revealed that other ACHs also made efforts to improve oral health, even if they did not officially adopt this health improvement project. Thus, our difference-in-differences estimates may be biased toward the null.

The final MTP evaluation report will present opportunities to examine outcomes through 2020, a later point in MTP implementation, which may reveal more substantial differences emerging among participating ACHs.

# Health Improvement Project 3D

This chapter presents the results of the interim evaluation of MTP Initiative 1 Health Improvement Project 3D, "Chronic Disease Prevention and Control."

We first provide background and an overview of how the MTP approach was intended to transform care in this area. We present a description of this project's implementation through 2019, including observations from key informant interviews and reviews of program documents collected during this period. We then present results of an analysis of health care claims to compare whether and how outcomes changed for target populations under this initiative.

# **Background**

Approximately 60 percent of Americans have at least one chronic condition, and 42 percent have multiple chronic conditions (Buttorff, Ruder and Bauman, 2017). Uncontrolled chronic disease is the leading cause of avoidable hospitalizations, driving an estimated 498,000 preventable adult inpatient stays and more than \$4.9 billion in avoidable costs within Medicaid in 2017 (McDermott and Jiang, 2017).

To address chronic conditions, health systems need to adopt multidisciplinary services, care coordination, and population health management strategies. Advances in health information technology can be leveraged to screen and identify people at high risk of new chronic disease and monitor them over time (Andrieni, 2016). Interventions that prevent and treat chronic disease may also help control the cost of care by reducing avoidable hospitalization and emergency department visits.

There are a variety of interventions that can improve outcomes for patients with chronic conditions. For example, self-management support provides patients with educations and an array of activities they can engage in to effectively manage their health on a day-to-day basis. These programs have been associated with significant improvements in patient outcomes, particularly for patients with diabetes or hypertension (Reynolds, et al., 2018). A variety of other approaches - including delivery system redesigns and decision supports - have been widely tested and have been associated with improved outcomes; however, success often depends on the specifics of the implementation and may be limited to a narrow of conditions or outcomes (Reynolds, et al., 2018).

# MTP Approach to Change

Within MTP Initiative 1, Project 3D was an optional project. The Project Toolkit identified the Chronic Care Model (MacColl Institute for Healthcare Innovation, 1998) as the primary evidencebased model ACHs should draw from when working in this area. The Project Toolkit further outlined several change strategies for ACHs to consider:

- Self-management support strategies, such as patient motivational interviewing, action plans, chronic disease education, and home monitoring, to equip people to monitor and manage their chronic conditions:
- Delivery system redesign strategies to promote interdisciplinary, team-based care and enhance care planning and care management activities;
- Decision support strategies, such as the development of new workflows or clinical guidelines, training on evidence-based practices, or access to new tools such as guidelines and prompts embedded within electronic health record systems;
- Clinical information systems strategies to facilitate population health management, including tools such as automated reminders, patient registries, information exchanges, and reports;
- Community-based strategies, such as community paramedicine, local collaborations on tobacco cessation, food access, and physical activity; and
- Health care organization strategies, including quality improvement processes, leadership engagement, and financial alignment of payments and performance.

# **ACHs Participating in Project 3D**

Although Project 3D was an optional project within the toolkit, all nine ACHs elected to participate. ACHs participating in Project 3D were required to outline strategies, identify and engage partners through contracts, provide technical assistance, and train and monitor partners' efforts over time.

# **Project 3D Implementation**

Key informant interviews and publicly available documents indicate the following activities were employed by ACHs in 2019 to support their implementation of Project 3D:

- Behavior-focused self-management strategies. Self-management programs ACHs primarily chose to focus on were Chronic Disease Self-Management (Cascade Pacific Action Alliance, Greater Columbia ACH, North Sound ACH, SWACH) and the Diabetes Prevention Program (Cascade Pacific Action Alliance, Greater Columbia ACH, HealthierHere, North Sound ACH, Olympic Community of Health, SWACH). These peer-led, community-based strategies supported ongoing education and behavior change for people with chronic disease. ACHs worked to increase primary care and behavioral health partners' knowledge of these programs to increase patient referral rates from clinical settings.
- Technical support for adopting the Chronic Care Model. Several ACHs (Cascade Pacific Action) Alliance, Better Health Together, HealthierHere, and Olympic Community of Health) provided support to adopt the Chronic Care Model. Their efforts included educating clinical partners on the model during learning collaboratives, encouraging adoption of some or all model components appropriate for a given partner's capacity for change or clinical environment, and assisting with the development of quality improvement processes.

- Training support for community paramedical technicians. Five ACHs (Cascade Pacific Action Alliance, Elevate Health, Greater Columbia ACH, North Sound ACH, Olympic Community of Health) helped to establish training for paramedics and emergency medical technicians to operate in expanded community paramedicine roles. These roles were reimagined to better address the needs of people who frequently used emergency services, including those with chronic health conditions.
- Technical support for disease-specific interventions. Less commonly adopted project strategies included two disease-specific interventions: the Diabetes Self-Management Program (North Sound ACH) and Million Hearts Campaign (Cascade Pacific Action Alliance, HealthierHere).

# **Progress Toward Chronic Disease Prevention and Control**

In 2019, Project 3D partners made progress toward implementing screenings for chronic conditions in behavioral health settings and increasing the use of registries in primary care settings to identify and track patients with chronic conditions. Primary care partners increased referrals to communitybased programs, including the Diabetes Prevention Program, Chronic Disease Self-Management, and Diabetes Self-Management Support. With technical assistance from their ACHs, health systems and universities in some regions began to implement training programs to expand the workforce needed for these community-based programs.

Key informant interviews revealed momentum surrounding the Community Paramedicine Program. However, implementation required partnerships with fire and rescue departments. ACHs had varying success establishing these partnerships, which led to county-level variability in Project 3D progress.

#### Factors That Facilitated Implementation of 3D

Two factors may have facilitated the implementation of Project 3D.

- Project 3D included several metrics and toolkit strategies that aligned with other project areas. Partners took advantage of opportunities to align efforts for 3D with other projects, identifying shared target populations or implementing shared strategies. ACHs also leveraged other projects' health information exchange work to support Project 3D. For example, the Pathways Care Coordination System (CSS) from Project 2B was also used to coordinate care for patients with chronic conditions.
- ACHs supported cross-sector collaboration for Project 3D through learning collaboratives and workgroups that educated and convened primary care, behavioral health, and substance use providers. These learning collaboratives included education and discussion of opioid use disorder as a chronic disease, chronic disease management in behavioral health settings, and diabetes and mental health.

#### Factors That Impeded Implementation of 3D

Three factors were identified as possibly having hindered the implementation of Project 3D.

 Two Project 3D strategies were reliant on workforce development, including 1) communitybased self-management programs, which were led by certified peer trainers, and 2) Community Paramedicine, which required the development of new skill sets in the existing workforce. Workforce shortages, particularly in rural areas, limited the potential of such programs in some regions.

- While ACHs promoted self-management programs through partnering clinics, regional care coordination HUBs (see Project 2B), and social marketing, the success of self-management programs hinged on patient participation. Some programs required substantial time commitment from patients. For example, the Diabetes Prevention Program required a one-year commitment and group participation, introducing the potential for inconvenient scheduling options. ACH informants indicated that patients sometimes registered for self-management classes but did not always attend or complete these courses.
- Project 3D required health information technology to share patient information across clinical and community-based organizations. This functionality was not widely available in 2019, which may have limited two-way communication about referrals, monitoring of patient engagement, or measurement of the effectiveness of self-management programs.

# **Evaluation Approach**

All nine ACHs opted to participate in 3D, eliminating potential comparison ACH groups. Thus, we assessed changes in outcomes for all ACHs from a pre-intervention period of 2017 and 2018 to a post-intervention period of 2019. Our regressions adjusted for age, gender, race/ethnicity, urban vs. rural residence, and Chronic Illness & Disability Payment System (CDPS) risk. See Appendix B for methodological details.

#### **Target Populations**

Our analysis of Project 3D focused on two target populations identified as intended beneficiaries of ACHs' 3D efforts:

- People with any physical chronic condition, and
- People with type 2 diabetes.

For the first population, we selected Medicaid beneficiaries with diagnoses in the prior 24 months for the following conditions: type 2 diabetes, asthma, chronic obstructive pulmonary disease, or cardiovascular disease. We used CMS' Chronic Condition Warehouse (CCW) definitions to identify any claims with this diagnosis code in any care settings. We note that SWACH also included a focus on chronic pain in the population they prioritized for their 3D work, but our analysis did not capture this population.

For our second study population, people with type 2 diabetes, we identified people based on the presence of a CDPS flag for type 2 diabetes within the past 24 months. We focused our analysis on the population with type 2 diabetes because, while there was variation across ACHs in their activities, most ACHs identified this group as the intended beneficiaries of their activities.

#### Interim Evaluation Results

Results of our evaluation of Health Improvement Project 3D, "Chronic Disease Prevention and Control," are presented below and reflect changes from a baseline period, 2017 and 2018, through 2019. We first present outcomes for people with a chronic health condition. We then present outcomes for people with type 2 diabetes. See page 21 of this report for a guide to reading results.

# How are these results impacted by COVID-19?

The COVID-19 outbreak began in Washington State in early 2020, causing widespread disruption to health services delivery across the state. This report presents an analysis of claims data through December 2019, prior to the outbreak. It is therefore unlikely that COVID-19 had any effect on measures presented in this report.

# **Analysis 1: People with Any Physical Chronic Condition**

Exhibit 10.1 displays changes for each metric across each region for people with any chronic health condition. Changes in quality measures in this domain were generally mixed. There were significant reductions in measures of acute hospitalization and emergency department utilization. Acute hospitalizations fell by more than 16 visits per 1,000 members from a baseline rate of 176 visits per 1,000 member months. Emergency department use decreased by approximately 3.2 visits per 1,000 member months. There was also a notable improvement (3.6 percent) in adult body mass index screening rate, and a small 1.4 percent change in asthma management (asthma medication ratio). We did not observe significant improvements in measures of diabetes care and management (e.g., eye exams or medical attention for nephropathy) or all-cause readmission rates after a hospitalization.

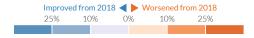
In the Data Appendix, Table 4 displays changes in outcomes across all nine ACHs for people with any chronic health condition. Broadly, trends for individual ACHs were similar to statewide trends. However, we observed some differences; North Central ACH showed the largest improvement in acute hospital use with a decrease of 29 visits per 1,000 members.

Exhibit 10.1: Change in Outcomes for People with Any Physical Chronic Condition

All-ACH rate in 2017-18, all-ACH rate in 2019, and adjusted pre-post change

	2017-18 All ACHs	2019 All ACHs	Pre-post Adjusted Change
Body Mass Index Assessment for Adults	47.6	51.5	3.6***
30-Day Hospital Readmission for a Psychiatric Condition $\downarrow$	7.5	8.6	1.9
Controller Medication for Asthma	52.7	54.0	1.4*
Eye Exam for People with Diabetes	47.7	48.3	0.4
Nephropathy Screening for People with Diabetes	89.0	89.1	0.0
Statin Medication for Cardiovascular Disease	83.2	83.5	0.4
Emergency Department Visit Rate $\downarrow$	127.3	123.8	-3.2***
Acute Hospital Use among Adults $\downarrow$	176.0	163.0	-16.1***
Hospital Readmission within 30 Days ↓	7.3	8.1	0.0

Shaded cells indicate a statistically significant change. Blue-shaded cells indicate an improvement. Orange-shaded cells indicate declining performance. Results marked \* are significant at the p<.05 level. Results marked \*\* are significant at the p<.01 level. Results marked \*\* are significant at the p<.01 level.



↓ Lower is better

# **Analysis 2: People with Type 2 Diabetes**

Exhibit 10.2 displays statewide changes in measures for people with type 2 diabetes. Generally, we observed small changes across most outcomes for this population. The adult body mass index screening rate increased (3.3 percent). Although the changes were not statistically significant, acute hospitalizations and emergency department utilization worsened slightly. This suggests that decreases in utilization observed in the broader target population occurred among members with chronic conditions other than type 2 diabetes.

In the Data Appendix, Table 4 displays the change in outcomes for people with type 2 diabetes across the nine ACH regions. Nearly all ACHs exhibited significant improvement in adult body mass index assessments including a 6 percent improvement in one ACH region, Better Health Together. We detected relatively few changes in other metrics, a finding that may be due to the relatively small number of people with this condition in any one individual ACH region.

Exhibit 10.2: Change in Outcomes for People with Type 2 Diabetes

All-ACH rate in 2017-18, all-ACH rate in 2019, and adjusted pre-post change

	2017-18 All ACHs	2019 All ACHs	Pre-post Adjusted Change
Body Mass Index Assessment for Adults	53.9	57.4	3.3***
30-Day Hospital Readmission for a Psychiatric Condition $\downarrow$	8.9	10.0	0.2
Controller Medication for Asthma	49.7	51.5	2.0
Eye Exam for People with Diabetes	46.5	46.7	0.1
Nephropathy Screening for People with Diabetes	85.6	85.7	-0.1
Statin Medication for Cardiovascular Disease	87.9	88.3	0.6
Emergency Department Visit Rate $\downarrow$	109.6	112.0	2.4
Acute Hospital Use among Adults ↓	185.8	188.6	1.9
Hospital Readmission within 30 Days ↓	8.7	8.8	-0.6

Shaded cells indicate a statistically signficant change. Blue-shaded cells indicate an improvement. Orange-shaded cells indicate declining performance. Results marked \* are significant at the p<.05 level. Results marked \*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level.



#### **Conclusions**

Our findings suggest relatively modest changes in most measures across most ACHs in Project 3D. However, a notable drop in acute hospitalizations and emergency department utilization for people with chronic conditions is promising. Most outcomes associated with management of a specific chronic disease, such as medical attention for nephropathy for patients with diabetes, showed no significant movement.

There are two potential explanations for these findings. First, as with most health improvement projects, the majority of implementation activities for Project 3D began in 2019, and we may not expect to see substantive changes across population groups within the first implementation year. Second, our analysis looks at the population broadly. Some ACHs and partner organizations may have made substantial changes to improve outcomes for their specific patients, and these changes may be washed out in our analysis focusing on the broad population.

The final MTP evaluation report will span the years 2017 through 2020, presenting opportunities to examine outcomes at a later point in implementation. Key factors for examination will include the maturation of ACHs' strategies for specific chronic conditions, and the degree to which these strategies are reflected in measures of disease management.

# MTP Initiative 2

# Medicaid Alternative Care and Tailored Supports for Older Adults

This section presents an evaluation of the Washington Medicaid Transformation Project Initiative 2 -Long-Term Services and Supports (LTSS). Initiative 2 consists of two programs, Medicaid Alternative Care (MAC) and Tailored Supports for Older Adults (TSOA), both of which provide support to older adults and their family caregivers. Section 2 includes the following chapters:

- Chapter 11 presents findings from surveys and key informant interviews related to MAC/TSOA implementation and program participants' satisfaction with the programs.
- Chapter 12 presents a comparison of health care utilization and health outcomes in older adults who received MAC/TSOA services versus in-home services (traditional Medicaid LTSS).

## **KEY FINDINGS**

Our evaluation of MTP Initiative 2 found the following:

- Enrollment in MAC and TSOA has been slow to ramp up in the early years of the programs. There appears to be more interest in TSOA than in MAC.
- Satisfaction with both programs was high among care recipients and caregivers alike. Participants reported that the program contributed to independence and was beneficial to physical and mental health.
- Early evidence suggests that MAC participants had fewer adverse health outcomes following enrollment. These changes were comparable to results for traditional in-home service users.
- Only a small proportion of MAC and TSOA participants used traditional LTSS within six months of MAC and TSOA enrollment, suggesting that both programs delayed the utilization of traditional LTSS.

# **Recommendations**

- Additional outreach efforts may be needed for the MAC and TSOA programs to reach people who could potentially benefit from these programs, given low enrollment observed in the programs' early years.
- 2 Ensure benefit packages are clearly understood across MAC, TSOA and traditional long term services and supports so that participants can choose benefits that best meet their needs. The similarity in eligibility criteria for both programs creates a disincentive for participants to select the MAC program's less intensive level of services.
- 3 The state should explore options to improve service scheduling and communication between MAC and TSOA program participants and service providers. Despite overall satisfaction with MAC and TSOA programs, multiple program participants reported concerns in these areas.

The Interim Evaluation Report focuses on health care use and outcomes of MAC and TSOA program participants. The Final Evaluation Report will expand these analyses to provide additional information about MTP Initiative 2, including:

- Changes in health care costs (including LTSS and acute care costs) for MAC and TSOA program participants;
- Forecasts of LTSS costs, in addition to use, through 2030; and
- Assessment of how program participation shifted during the COVID-19 outbreak in 2020.

# Tailored Supports for Older Adults and Medicaid Alternative Care

Washington State's population is aging; the state will be home to more than 1.8 million people age 65 and older by 2040. State estimates suggest that one-fifth of these adults may experience difficulty or need assistance with activities of daily living (Washington State Health Care Authority, 2017b). The majority of long-term care for people in Washington is provided by unpaid family caregivers. These caregivers may experience high rates of mental or physical stress related to their caregiving roles.

State Medicaid programs are required to cover nursing facility care, and have the option to also cover home and community-based services (assisted living, adult family home, adult residential care, in-home services, and other types of services) through Medicaid waivers and amendments to their Medicaid state plans. To become eligible for these Long-Term Services and Supports (LTSS), older adults must demonstrate both financial and functional eligibility. Individuals whose assets and incomes fall below the threshold are eligible for LTSS through Medicaid. Individuals with incomes and assets above the threshold may still receive LTSS; the participant is responsible for a portion of their participation costs based on their income, while the state pays the remainder. In these cases, the state may seek to recover its portion of costs from an individual's estate following that person's death (i.e., estate recovery) (Centers for Medicare and Medicaid Services, 2020b).

Washington State has a history of promoting use of home and community-based services (HCBS) as an alternative to more intensive and costly forms of LTSS. In 2016, HCBS spending accounted for 68 percent of Washington State's Medicaid LTSS spending, compared to a national average of 57 percent (Eiken, et al., n.d.). The State of Washington has also focused on supporting unpaid family caregivers, an essential workforce in long-term care. For example, in 2000, the state established the Family Caregiver Support Program to fund a range of services and supports for unpaid caregivers. An evaluation of the program by the Washington State Institute for Public Policy showed an estimated savings of \$1.67 million in the program's first year (Miller, 2012).

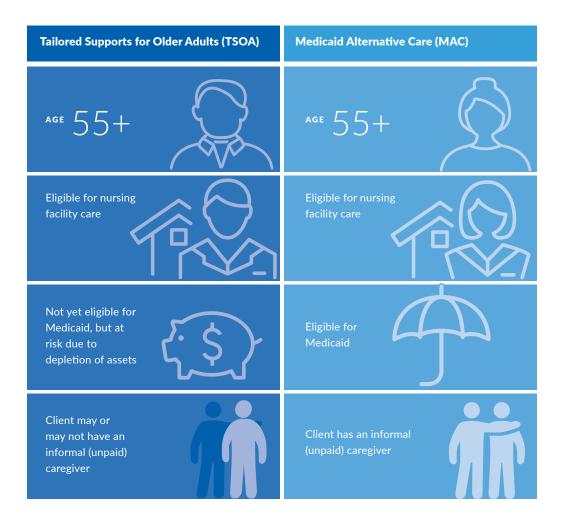
# MTP Initiative 2 Approach to Change

Building on the promising results from its Family Caregiver Support Program, Washington State's Medicaid Transformation Project created two alternatives to traditional LTSS for older adults and their caregivers. The Tailored Supports for Older Adults (TSOA) and Medicaid Alternative Care (MAC) programs, created in September 2017, provide supportive services for informal caregivers of people who need LTSS but are not yet using traditional Medicaid-paid LTSS (see Exhibit 11.1). These supportive services include caregiver training and education, counseling on adapting to the role of a caregiver, and respite care or home-delivered meals to relieve caregiver burden. In addition to providing support to older adults and their informal caregivers, the TSOA program is also available to people without an informal caregiver and who are not yet using Medicaid-paid LTSS. Eligibility is reassessed every six months.

Unlike traditional LTSS, neither MAC nor TSOA require participation costs or potential estate recovery from beneficiaries. The goal of the TSOA and MAC program is to provide a limited set of supportive services for people with functional limitations and their unpaid caregivers in order to delay or avoid the need for more intensive and costly Medicaid-funded LTSS. Specifically:

- Medicaid Alternative Care (MAC) is intended for people who are already financially eligible for or enrolled in Medicaid.
- Tailored Supports for Older Adults (TSOA) is intended for people who, despite having a functional need for services, do not meet the financial qualifications for LTSS despite being at risk of improverishment.

Exhibit 11.1: Who Is Eligible for MAC and TSOA?



The services available to MAC and TSOA beneficiaries are similar. Exhibit 11.2 describes the types of supportive services provided by TSOA and MAC.

Exhibit 11.2. Types, Recipients, and Dollar Limits of MAC and TSOA Services

	MAC	TSOA
TYPE OF SUPPORTIVE SERVICES PROVIDED	<ul> <li>Caregiver assistance services including help with housework, errands, or yardwork; respite care; home-delivered meals; or minor home repairs.</li> <li>Training and education to help caregivers gain skills and knowledge through support groups, consultation, or group trainings.</li> <li>Specialized medical equipment and supplies (e.g., assistive technology, emergency response systems, or durable medical equipment).</li> <li>Health maintenance and therapy supports, including adult day centers, exercise programs, or counseling.</li> </ul>	<ul> <li>TSOA provides the same services as are available in MAC.</li> <li>TSOA also provides Personal Assistance Services to individuals without an informal caregiver. These include, for example, personal care, home-delivered meals, limited transportation, and nursing delegation.</li> </ul>
PRIMARY RECIPIENT OF SUPPORTIVE SERVICES	Adult unpaid caregivers of MAC participants	<ul> <li>TSOA participants with adult unpaid caregivers</li> <li>TSOA participants without unpaid caregivers</li> </ul>
DOLLAR LIMIT FOR SUPPORTIVE SERVICES	<ul> <li>Step 1: Up to \$250 (lifetime limit)</li> <li>Step 2: Up to \$500 annually</li> <li>Step 3: Up to \$4,362 in a six-month period (an average of \$727 per month)</li> </ul>	<ul> <li>Step 1: Up to \$250 (lifetime limit)</li> <li>Step 2: Up to \$500 annually</li> <li>Step 3: Up to \$4,362 in a six-month period (an average of \$727 per month)</li> </ul>

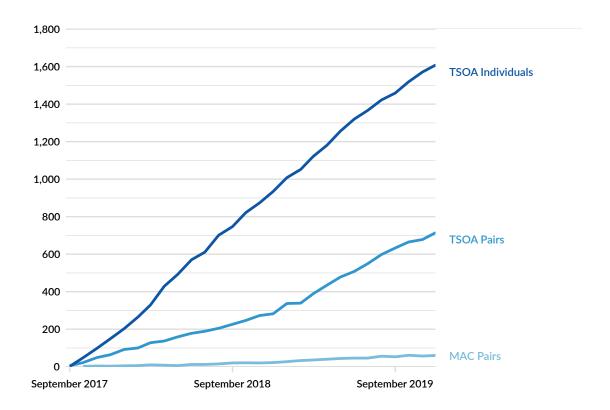
Source: Washington State Health Care Authority, 2017b; Columbia Legal Services, 2017. Note: Dollar limits are as of October 2020 and may change in future periods.

# **Progress Toward Implementing Initiative 2**

## **Enrollment**

The MAC and TSOA programs were formally launched in September 2017. Early program documents reflect that Washington State intended to enroll up to 2,500 people in MAC and TSOA in the first year, ramping up to a caseload of 5,000 in year two and 7,500 in year three of the program (Washington State Health Care Authority, 2017b). However, early enrollment in the two programs was lower than these targets, with the two programs enrolling a combined 3,364 people by September 2019. Enrollment in MAC has been lower than anticipated (see Exhibit 11.3).

Exhibit 11.3. Enrollment in TSOA has been substantially higher than enrollment in MAC since the two programs launched.



Source: MAC and TSOA enrollment obtained from Washington State's ProviderOne data system.

Stakeholders reported that MAC enrollment may have been lower than expected because Medicaid beneficiaries were not financially incentivized to enroll in MAC when more intensive LTSS were available without cost through Medicaid in-home services.

In contrast, demand for and enrollment into the TSOA program may have been higher because TSOA provides services prior to a person's impoverishment to help keep people in their homes. People could access services without participation costs or risk of estate recovery they would have otherwise incurred, as this quote illustrates:

I think it's been exciting that we have been able to help people access services that have never been able to access services before. Either they didn't qualify for long-term care, their income is too high or their assets are too high, or they're unable to pay the participation for long-term care. This program has made it possible for people to get services who just haven't been able to access services before. That's probably the most exciting thing. - Participant #167, 2019

Despite higher enrollment in TSOA, informants in 2019 reported challenges reaching family members that filled unpaid care obligations but did not always identify themselves as a caregivers or know that services existed to support them. One informant stated:

We are doing a lot of work right now around dyads, which is the caregiver, care receiver... How do we get them to recognize themselves as caregivers? Who are the right community partners to engage with to help us? [...] That's a heavy lift. It's not like they're out there saying, "I'm a caregiver, so I need help." I just don't think that's something we recognize in our system, because it's not something we typically highlight, that "Hey you might need help too if you're helping somebody else." - Participant #99, 2019

In addition, while stakeholders reported high demand for LTSS across the state, not all applicants who sought services met the eligibility criteria for LTSS. Providers rerouted applicants who did not qualify for LTSS to other resources through a region's network of aging services. One stakeholder noted that while these clients may have ultimately benefited from these referrals to alternative services, these referrals were not reflected in the enrollment numbers for MAC or TSOA:

There has been an unanticipated opportunity to provide even more information and assistance to people looking to access services that may not necessarily be [TSOA or MAC]. What we have found overall is that about one in four to one in five of the referrals that we get for MAC or TSOA actually [enroll in MAC or TSOA]. If they don't [enroll], we help them access other services in our aging network. - Participant #167, 2019

# MAC and TSOA Recipient Satisfaction

We next present results from three surveys conducted with individuals enrolled in MAC or TSOA (see Exhibit 11.4). These surveys were designed to measure care recipients' satisfaction with the programs and were administered by the Washington State Department of Social and Health Services in fall 2019.

**Exhibit 11.4: Surveys of Care Recipients** 

Survey	Description
MAC CARE	<ul> <li>This survey was administered to people participating in the MAC program</li></ul>
RECIPIENTS	who had an informal caregiver.
TSOA (DYAD) CARE	<ul> <li>This survey was administered to TSOA program participants with an informal</li></ul>
RECIPIENTS	caregiver.
TSOA (INDIVIDUAL)	<ul> <li>This survey was administered to targeted TSOA program participants without</li></ul>
CARE RECIPIENTS	a caregiver.

Survey responses were tabulated separately for the five surveys conducted. Respondents who indicated they had not yet received services from the MAC or TSOA program were excluded from the analysis related to service satisfaction.

# **MAC Recipients (those with informal caregivers)**

A total of 22 MAC care recipients participated in the MAC Care Recipient Survey. Approximately 60 percent responded that their child or spouse was their main caregiver and 20 percent reported a non-family member as their caregiver.

A substantial portion of MAC care recipients had significant care needs. These included:

- Help with at least one activity of daily living (77 percent), such as bathing (50 percent), walking (50 percent), dressing (46 percent), and getting out of bed/chair (36 percent).
- About 23 percent had a fall that caused injuries, or three or more falls, during the last six months.
- About 25 percent reported that they or their family had concerns about their memory, thinking, or ability or make decisions.
- About 18 percent had considered moving to a nursing home or assisted living facility; 36 percent had considered moving to other housing.

MAC care recipients expressed high satisfaction with the application process.

- About 85 percent of respondents found it easy to apply for the MAC program.
- All respondents reported that the staff who helped them apply for the program listened to them. Ninety-three percent reported that staff explained things clearly and that they had a say in what kind of services they would receive.

MAC care recipients also expressed high satisfaction with MAC services provided.

- Ninety percent responded that the MAC providers treated them with courtesy and respect, 95 percent reported that staff listened to what they said, and 85% reported that staff explained things clearly. Eight-five percent responded that the MAC program helped them as quickly as they needed.
- About 90 percent of respondents were satisfied with the MAC program. About 75 percent thought the MAC program would help keep them from moving to a nursing home or adult family home.

When asked about the benefits of the MAC program, respondents typically mentioned:

- Physical health benefits (e.g., increased hygiene, being able to navigate health issues such as chronic conditions or recovery from accidents that interfered with activities of daily living), and
- Mental health benefits (e.g., receiving support from MAC providers who exhibited kindness and flexibility and were willing to listen and offer companionship).

When asked how the MAC program could be improved, most respondents expressed their satisfaction and did not provide any suggestions for improving the program. Among those who identified opportunities for improvement, two areas for improvement emerged:

- Scheduling and availability of MAC agency providers. Some respondents had difficulty keeping track of appointments for services or tracking who would be delivering the services once appointments were made. In some cases, these challenges were attributed to communication breakdowns with MAC providers. In other cases, challenges were framed as requests for additional program resources such as providing calendars or appointment reminders. Other respondents described that they could use additional hours of support beyond what they or their family members received from the MAC program.
- Continuity of service providers over time. Some respondents described that it was challenging to
  receive MAC services from different MAC providers over time, because respondents had to repeat
  information about their needs when a new provider was engaged. Lack of continuity in MAC
  providers made it more difficult to receive help in specific areas, including tracking appointments
  or medications over time.

## **TSOA** Recipients (those with informal caregivers)

A total of 218 TSOA care recipients participated in the TSOA Dyad Care Recipient Survey. Approximately 70 percent responded that a child or spouse was their main caregiver.

A substantial portion of TSOA program participants with a caregiver had significant care needs.

- Most TSOA participants needed help with at least one activity of daily living (77 percent), such as bathing (44 percent), walking (66 percent), and getting out of bed/chair (29 percent).
- About 30 percent had a fall that caused injuries, or three or more falls, during the last six months.
- About 40 percent reported that they or their family had concerns about their memory, thinking, or ability to make decisions.
- About 20 percent had considered moving to a nursing home or assisted living facility, and 33% had considered moving to other housing.

TSOA participants with a caregiver expressed high satisfaction with the TSOA application process.

- About 80 percent of respondents found it easy to apply for TSOA.
- About 95 percent reported that staff who helped them apply for the program listened to them, approximately 90 percent reported that staff explained things clearly, and 85 percent responded that they had a say in what kind of services they would receive.

TSOA care recipients also expressed high satisfaction with the TSOA services provided.

- Almost 100 percent responded that the TSOA providers treated them with courtesy and respect,
   95 percent reported that staff listened to what they said, and 92 percent reported that the staff explained things clearly.
- Most TSOA participants (85 percent) responded that the TSOA program helped them as quickly as they needed.
- About 90% of respondents were satisfied with the TSOA program and 86 percent thought the TSOA program would help keep them from moving to a nursing home or adult family home.

When asked about the benefits of the TSOA program, respondents typically mentioned the following:

- Service benefits. Respondents described appreciating the support TSOA providers provided in the home, including making meals, household chores, cleaning, and general organization.
- Caregiver attributes. Respondents commented on the general "feel-good" experience they had with their caregivers and the flexibility of the caregivers' skills. They reported that what TSOA providers did on a week-to-week basis was an incredibly valuable aspect of the TSOA program. Respondents used words like "dependable," "cooperative," "patient," and "generous" to describe their TSOA providers. Many respondents compared their relationships with TSOA providers to that of a family member.
- Other benefits. Respondents reported that the TSOA program generally helped them in many facets of their lives. Some reported how the TSOA program allowed them the option to stay in their home.

When asked how the TSOA program could be improved, more than half (57 percent) of respondents did not provide any suggestions for improving the program. Opportunities for TSOA program improvement included:

- Scheduling. Respondents wanted more time with TSOA providers or for the program to send a substitute when assigned staff did not show up. Some respondents reported issues with providers showing up late or not showing up at all.
- Response times. Respondents wanted the TSOA program agency to have a faster callback-time, particularly when providers could not come.

# **TSOA Care Recipients (those without informal caregivers)**

A total of 325 care recipients participated in the TSOA Individual Care Recipient Survey.

Survey results suggested that a substantial portion of these unpaired TSOA care recipients had significant care needs.

- Most TSOA participants needed help with at least one activity of daily living (72 percent), such as bathing (39 percent), walking (59 percent), and getting out of bed/chair (18 percent).
- About 30 percent had a fall that caused injuries during the last six months.
- More than a third (38 percent) reported that they or their family had concerns about their memory, thinking, or ability to make decisions.

Overall, care recipients expressed high satisfaction with the TSOA application process.

- About 83 percent of respondents found it easy to apply for the TSOA program.
- About 90 percent reported that staff who helped them apply for the program listened to them and explained things clearly, and 83 percent responded that they had a say in what kind of services they would get.

Care recipients also expressed high satisfaction with the TSOA services provided.

- More than 90 percent responded that the TSOA providers treated them with courtesy and respect, listened to what they said, and explained things clearly. Most TSOA participants (80 percent) responded that TSOA helped them as quickly as they needed.
- About 90 percent of respondents were satisfied with the TSOA program and thought the TSOA program would help keep them from moving to a nursing home or adult family home.

Questions asked about the benefits of the TSOA program received positive responses. Care recipients most commonly described these **benefits of the TSOA program**:

- Service benefits. TSOA provided assistance with laundry, household chores, and doctor appointments. Because of this, respondents said they were able to stay in their homes. One respondent explained how the service benefits allowed them to stay out of a rehabilitation facility. Another respondent said the service felt personal and met their needs.
- Caregiver attributes. Respondents reported feeling they had things in common with their caregivers and their care was a "person-first" experience. Respondents liked that caregivers asked them what they needed and solicited input in how they wanted their care provided. Respondents used words like "trust," "wonderful," and "godsend" to describe the bedside manner of their caregivers. Many reported that the caregivers alleviated stress.

When asked how the TSOA program could be improved, approximately half of respondents did not offer any suggestions for improving the program. One area of opportunity for TSOA program improvement included:

• Scheduling and service hours. TSOA program participants requested more service hours, more frequent follow-up visits, and more timely communication with the TSOA agency. Some respondents were unsure what options would be available for them after surgery or if their financial situation changed. The TSOA experience could be improved through a more thorough explanation of benefits, including opportunities for surgical post-care help.

We compared these responses in the final survey with those in the interim survey, conducted in the fall of 2018. Most responses did not change in statistically meaningfully ways between the interim and final survey, with a few exceptions. One exception included an increase in the percentage of respondents satisfied with the TSOA program, moving from 84 percent to 91 percent.

# **Caregiver Satisfaction**

We next present the results of two surveys conducted with the informal caregivers of individuals enrolled in MAC or TSOA (see Exhibit 11.5). These surveys were designed to understand caregiver satisfaction with the programs. These surveys were also administered by Washington State Department of Social and Health Services in fall 2019.

**Exhibit 11.5: Surveys of Caregivers** 

Survey	Description
MAC CAREGIVERS	This survey targeted the informal caregivers of MAC program participants.
TSOA CAREGIVERS	This survey targeted informal caregivers of TSOA program participants.

# **MAC Caregivers**

A total of 24 informal caregivers of MAC enrollees participated in the survey. Survey results suggested that some MAC caregivers had significant health care needs of their own, and struggled with the care they provided.

- About 30 percent described their overall physical health as either fair or poor, 17 percent described overall mental or emotional health as fair, and 21 percent felt that their quality of life was fair.
- Consistent with MAC care recipient survey results, many MAC caregivers reported the person they were caring for needed help with at least one activity of daily living (88 percent), including bathing (59 percent), walking (59 percent), getting out of bed/chair (33 percent), and dressing (38 percent); About 20 percent of MAC caregivers reported the person they were taking care of had a fall that caused injuries or three or more falls during the last six months.
- About 67 percent reported that the person they were caring for had a family member or friend who helped them if needed. Approximately 30 percent of respondents felt overwhelmed or stressed because of the care they provided.
- About half of MAC caregivers reported that they or their family had concerns about the memory, thinking, or the ability of the person they were caring for to make decisions.

Overall, MAC caregivers expressed high satisfaction with the MAC application process.

- About 85 percent of respondents found it easy to apply for the MAC program.
- All caregivers reported that staff who helped them apply for the program listened to them. Almost 100 percent responded that staff explained things clearly (95 percent), and 80 percent responded that they had a say in the kind of services they would get.

MAC caregivers also expressed high satisfaction with the MAC services provided.

- All responded that the MAC providers treated them with courtesy and respect and listened to what they said, 85 percent reported that staff explained things clearly. Three quarters of MAC participants indicated that the MAC program helped them as quickly as they needed.
- Eight-five percent of respondents were satisfied with the MAC program. However, only 30 percent thought the MAC program would help keep their care recipient from moving to a nursing home or assisted living facility.

When asked about the benefits of the MAC program, MAC caregivers typically mentioned:

- Service benefits. Respondents indicated that the MAC program filled an important need for help with their family member's tasks, including meal preparation and home cleaning. Respondents appreciated having options for meeting these needs.
- Mental health benefits. MAC caregivers also described an increased peace of mind, knowing that a family member was receiving needed supports and would be treated with respect.

# **TSOA Caregivers**

A total of 430 informal caregivers of TSOA enrollees participated in the survey. Survey results suggested that some TSOA caregivers had significant health care needs of their own and struggled to provide care to others.

- About 30 percent described their overall physical health as either fair or poor.
- Consistent with TSOA care recipient survey results, many TSOA caregivers reported the person they were caring for needed help with at least one activity of daily living (86 percent), including bathing (65 percent), walking (69 percent), getting out of bed/chair (42 percent), and dressing (45 percent). About 35 percent of TSOA caregivers reported the person they were caring for had a fall that caused injuries or three or more falls during the last six months.
- About 65 percent reported that the person they were caring for had a family member or friend who could help them if needed. Approximately half of respondents felt overwhelmed or stressed by their care responsibilities.
- About 70 percent of TSOA caregivers reported that they or their family had concerns about the memory, thinking, or ability of the person they were caring for to make decisions.

Overall, TSOA caregivers expressed high satisfaction with the TSOA application process.

- About 85 percent of respondents found it easy to apply for the TSOA program.
- Most caregivers (95 percent) reported that staff who helped them apply for the program listened to them and 90 percent responded that staff explained things clearly. Approximately 80 percent of respondents indicated that they had a say in the kind of services they would receive.

TSOA caregivers also expressed high satisfaction with the TSOA services provided.

- Most (95 percent) responded that TSOA providers treated them with courtesy and respect. About 90 percent of respondents reported that staff listened to what they said and that staff explained things clearly. About 80 percent TSOA participants responded TSOA program helped them as quickly as they needed.
- Eight-five percent of respondents were satisfied with the TSOA program and 67 percent thought the TSOA program would help keep their care recipient from moving to a nursing home or assisted living facility.

When asked about the benefits of the TSOA program, respondents typically mentioned:

 Mental health benefits. Respondents commented on how the TSOA program allowed them time to take care of themselves and to have respite from caregiving. Respondents often reported feeling relief, mentally and physically, because of the TSOA program. Other respondents, although they weren't receiving the care, commented on how the TSOA providers also helped them by being reliable and doing service-related things around the home.

## **Opportunities for TSOA program improvement included:**

- Agency issues. Respondents desired more hours of TSOA program help and indicated that sometimes communication was not clear between TSOA providers, the care recipient, and the informal caregiver. Other respondents requested TSOA providers that could speak additional languages (e.g., "It would be good to have more Laotian-speaking workers").
- Other issues. One respondent wished they had received TSOA services sooner than they did (e.g., "We were in real desperate need of help right away."). A few respondents felt that the TSOA program benefits were too limited and wished for improved benefits to get more medically necessary services. A handful of respondents also reported being unhappy with the types of agencies HCA is contracting with to provide TSOA services. Other respondents wanted HCA to send the same TSOA provider each week. A few commented that living in a rural area created an obstacle to receiving some TSOA services.

#### Conclusion

In general, these results suggest that both programs have successfully targeted people with high needs for support care, and satisfaction with both programs has been similarly high. However, enrollment in MAC may have been low due to weak incentives for participants to select this program in lieu of traditional LTSS. In contrast, incentives to enroll in TSOA appear to have been stronger.

Overall, TSOA and MAC care recipients and caregivers reported being satisfied with the program application process, and with services provided by the program. Care recipients indicated that these programs helped them avoid moving to a nursing home or assisted living facility.

TSOA and MAC caregivers reported that the program provided them with a respite, reducing the physical and mental toll of caregiving. However, TSOA and MAC caregivers were less likely than care recipients to believe that these programs would help prevent the need for more intensive support in a nursing home or assisted living facility.

Both TSOA and MAC care recipients and caregivers reported opportunities to improve the program, including improvements to scheduling, service hours, and communication with the agency and TSOA/ MAC program staff.

# TSOA and MAC Program **Participant Outcomes**

To understand how MAC program participation was associated with changes in adverse health outcomes and future use of traditional LTSS, we descriptively assessed adverse health outcomes (e.g., hospitalization, emergency visit, and readmission rates) among MAC participants at the start of and six months after their enrollment in the MAC program, as well as with the initiation of any traditional LTSS within six months after their MAC program enrollment.

We could not similarly assess adverse health outcomes for TSOA enrollees; TSOA participants are not enrolled in Medicaid, and therefore we could not use Medicaid claims to examine their health care utilization and outcomes. Thus, we present alternative analyses: We assessed traditional LTSS utilization among a group of TSOA program participants who later enrolled in Medicaid within six months after their TSOA program enrollment. We also conducted a similar analysis for users of Medicaid in-home services, one type of traditional LTSS. Medicaid in-home service users potentially had similar characteristics to MAC and TSOA program participants.

We used Medicaid medical/LTSS and Medicare claims between September 2017 and December 2019 to examine the outcome measures displayed in Exhibit 12.1.

## Exhibit 12.1: Outcome Measures Included in Initiative 2 Evaluation

#### Measures

- Outpatient emergency department visits per 1,000 member months (NCQA HEDIS or similar state-defined alternative).
- Inpatient admissions per 1,000 member months (NCQA HEDIS IHU or similar state-defined alternative).
- Plan all-cause 30-day readmission rates (NCQA HEDIS PCR).
- Initiation of in-home service use (derived from LTSS claim data currently integrated into the state's ICDB).
- Assisted living facility entry (derived from LTSS claim data currently integrated into the state's ICDB).
- Nursing facility entry rates (state-defined measure derived from nursing home claim data currently integrated into the state's ICDB).
- Mortality rates (state-defined measure derived from death certificate records currently integrated into the state's ICDB).
- Medicaid enrollment among TSOA program participants.

Our analysis included people who began to receive MAC, TSOA, or Medicaid in-home services between September 2017 (when MAC/TSOA were implemented) and June 2019 (six months prior to the end of our dataset). We restricted our study population to MAC and Medicaid in-home service users who were enrolled in Medicaid for at least six months before their enrollment in MAC and inhome services. We excluded people who were initially placed in "presumptive eligibility" status for MAC or TSOA but later determined to be ineligible for services.

#### Results

Our study population included 48 MAC participants, 879 TSOA participants with an informal caregiver, 2,056 TSOA participants without an informal caregiver, and 43,976 Medicaid in-home service recipients. Our sample also included four people who switched between TSOA and MAC during the study period; these individuals were included in our MAC study population.

Exhibit 12.2 compares the demographic characteristics and health status of MAC and Medicaid inhome service users prior to receipt of services. Compared to in-home service program participants, MAC participants were older (71 vs. 64 years old), more likely to be female (73 percent vs. 65 percent), live in rural areas (25 percent vs. 15 percent), and have Medicaid coverage only without dual Medicare coverage (37 percent vs. 30 percent).

Exhibit 12.2: MAC Participants' Demographics at Baseline, Compared with People Receiving Medicaid In-Home Services

MAC participants (N = 48)	TSOA participants with an informal caregiver	TSOA participants without an informal caregiver	Individuals receiving Medicaid in-home services (N = 43,976)
71(11.5)	Not available	Not available	64(19.4)
13(27)	Not available	Not available	15,604(35)
35(73)	Not available	Not available	28,652(65)
12(25)	Not available	Not available	6,746(15)
36(75)	Not available	Not available	36,951(85)
30(63)	Not available	Not available	30,861(70)
18(37)	Not available	Not available	13,115(30)
	participants (N = 48)  71(11.5)  13(27)  35(73)  12(25)  36(75)  30(63)	MAC participants with an informal caregiver  71(11.5) Not available  13(27) Not available  35(73) Not available  12(25) Not available  36(75) Not available  30(63) Not available	MAC participants with an informal caregiver  71(11.5)  Not available  Not available  13(27)  Not available  Not available  12(25)  Not available  Not available  Not available  Not available  36(75)  Not available  Not available  Not available  Not available  Not available  Not available

Source: Demographics and MAC and Medicaid in-home service enrollment status obtained from Washington's ProviderOne data system. TSOA participants are not enrolled in Medicaid.

Exhibit 12.3 compares health care utilization of MAC participants and traditional in-home service users, before and after their receipt of services. At baseline, MAC participants' rate of emergency department visits (125 per 1,000 member months), hospitalizations (59 per 1,000 member months) and readmission rates (26 percent) in the previous six months were relatively high, indicating that they had significant health care needs. These rates were higher than corresponding emergency department visit rates (93 per 1,000 member months), hospitalization rates (30 per 1,000 member months) and readmission rates (17 percent) among in-home service program participants.

We examined health care utilization among MAC and in-home service users again at six months after their enrollment in each program. In these analyses, we further restricted our study population to those who were enrolled in Medicaid for at least six months after the program participation, to allow enough time to measure program participants' outcomes.

In general, rates of emergency department visits, hospitalizations and readmissions tended to decrease from baseline across both service types after six months of program participation.

Exhibit 12.3: MAC Participants' Utilization of Health Services Before and After Program Enrollment, compared with Individuals Receiving Medicaid In-home Services

compared with marviduals recei	ving integrated in			
Baseline Health Care Utilization	MAC participants (N= 48)	TSOA participants with an informal caregiver	TSOA participants without an informal caregiver	People receiving Medicaid in-home services (N= 43,976)
Emergency department visits (per 1,000 member months)	125	NA	NA	93
Hospitalizations (per 1,000 member months)	59	NA	NA	30
30-day readmissions rate (%)	26	NA	NA	17
Health Care Utilization Within 6 Months of Program Enrollment	MAC participants (N = 37)	TSOA participants with an informal caregiver	TSOA participants without an informal caregiver	Individuals receiving Medicaid in-home services (N = 34,372)
Emergency department visits (per 1,000 member months)	81	NA	NA	73
Hospitalizations (per 1,000 member months)	9	NA	NA	22
30-day readmission rate (%)	0	NA	NA	15

Source: Medicaid claims and program enrollment status for MAC and Medicaid in-home services recipients obtained from Washington's ProviderOne data system. TSOA participants are not enrolled in Medicaid.

Because one of the goals of the MAC and TSOA programs is to prevent the need for more intensive LTSS, we examined whether MAC and TSOA program participants went on to use traditional LTSS within six months of their program participation (see Exhibit 12.4). To protect confidentiality due to small numbers, we present aggregated traditional LTSS use across MAC and TSOA program participants.

Within six months of MAC and TSOA program participation, only 2 percent of MAC and TSOA program participants started to use in-home services. We observed that 0.5 percent of MAC and TSOA participants moved to an assisted living facility within six months of receiving services; this rate was similar to the rate for recipients of traditional in-home services (0.2 percent). A slightly higher percentage of MAC and TSOA participants (2 percent) moved to a nursing facility within six months of participating in the programs than recipients of traditional in-home services (1 percent).

Exhibit 12.4: MAC and TSOA Participants' Use of Traditional LTSS and Mortality Rate Within 6 months of Program Enrollment, Compared with Individuals Receiving Medicaid In-Home Services

	MAC and TSOA participants (N = 2,983)	Individuals receiving Medicaid in-home services (N = 43,976)
Initiated In-Home Services, N(%)	62(2)	NA
Assisted Living Facility Entry, N(%)	15(0.5)	82(0.2)
Nursing Facility Entry, N(%)	56(2)	614(1)
Death, N(%)	53(2)	1,301(3)

Source: MAC, TSOA and Medicaid in-home service enrollment status and Medicaid claims for receipt of Long-Term Services and Supports were obtained from Washington's ProviderOne data system. MAC and TSOA results are aggregated to protect confidentiality due to small numbers.

We observed differences in the average number of months participants received services. Exhibit 12.5 compares these program enrollment characteristics for MAC, TSOA, and traditional in-home service users. We observed that the use of MAC and TSOA services was typically shorter in duration than the use of in-home services. MAC program participants were enrolled in the program for, on average, 11 months, and TSOA program participants were enrolled in the program for about 14 months. In contrast, in-home service program participants used services for a longer period, on average 26 months.

The state allowed that participants could enroll in MAC or TSOA with a presumptive status while awaiting a final eligibility determination. Twenty-seven percent of MAC program participants and more than half of TSOA program participants enrolled with presumptive status. The length of presumptive status prior to switching to official participation status was about six months for MAC and three months for TSOA.

Another goal of the TSOA program is to prevent participants from needing to spend down financial assets and receiving traditional Medicaid LTSS. Approximately one-third of TSOA participants went on to enroll in Medicaid within six months of TSOA participation (see Exhibit 12.5). Informal caregivers appeared to play a role in this dynamic: 24 percent of TSOA participants with an informal caregiver became enrolled in Medicaid within six months of their TSOA program participation, compared to 35 percent of TSOA participants without an informal caregiver.

Exhibit 12.5: MAC and TSOA Participants' Program Enrollment, Compared with Individuals Receiving **Medicaid In-Home Services** 

	MAC participants (N = 48)	TSOA participants with an informal caregiver (N = 879)	TSOA participants without an informal caregiver (N = 2,056)	Individuals receiving Medicaid in-home services (N = 44,256)
Length of program enrollment (in months), mean(sd)	11.4(4.7)	13.5(6.6)	14.6(6.2)	25.7(4.0)
People beginning with presumptive status, N(%)	13(27)	520 (56)	1195(55)	Not applicable
Length of presumptive status prior to switching to official participation status (mo) (mean(sd))	5.8(2.3)	3.2(2.6)	3.1(2.5)	Not applicable
TSOA enrollees who later enrolled in Medicaid, N(%)	Not applicable	215(24)	715(35)	Not applicable

Source: MAC, TSOA, and Medicaid in-home service enrollment status obtained from Washington State's ProviderOne data system.

# Conclusion

In summary, we found that MAC participants had high rates of emergency department visits, hospitalizations and readmission rates before enrollment in the program, indicating that the program had successfully targeted Medicaid beneficiaries with significant health care needs.

After six months of program participation, emergency department visit, hospitalization and readmission rates dropped among MAC program participants, suggesting that MAC program participation may have reduced the occurrence of adverse health outcomes. Similar reductions occurred among traditional Medicaid-paid in-home service users, suggesting the MAC program was similarly effective to traditional Medicaid-paid LTSS in reducing adverse health outcomes. Additional evaluation is needed to determine the extent to which these changes for MAC program participants can be attributed to the MAC program or to other factors.

While 25-35% of TSOA program participants enrolled in Medicaid within 6 months of their TSOA program enrollment, only a small percentage used traditional LTSS. Likewise, only a small percentage of MAC participants used traditional LTSS within 6 months of MAC program enrollment. Taken together, these findings suggest MAC and TSOA program participation appears to help delay or avoid the use of more intensive traditional Medicaid LTSS

# MTP Initiative 3

This section presents an evaluation of the Washington State Medicaid Transformation Project Initiative - Foundational Community Supports (FCS). Initiative 3 consists of two programs, FCS Supportive Housing and FCS Supported Employment. Both programs provide support to Medicaid beneficiaries with complex care needs who are at high risk of homelessness or unemployment.

#### Chapter 13 includes:

- FCS program launch and implementation findings from our qualitative analyses;
- Analysis of social outcomes (including homelessness, arrest rates, and employment) for participants who received FCS housing services, FCS employment services, or both; and
- Analysis of health care access and utilization measures for FCS participants receiving supportive housing, supported employment, or both types of services.

#### **KEY FINDINGS**

Our evaluation of MTP Initiative 3 found the following:

- The network of FCS service providers has gradually increased since the launch of the program in 2018. However, service providers reported challenges in finding affordable housing or services for participants in some regions.
- Rates of employment increased strongly for Medicaid enrollees who participated in FCS Supported Employment relative to a matched comparison group. These changes were evident in the months following receipt of FCS employment services, suggesting the program successfully integrated participants into the labor force.
- Rates of homelessness did not improve for Medicaid enrollees who participated in FCS Supportive Housing relative to the comparison group. Lack of improvement on housing measures may have reflected a lack of affordable housing in some regions.
- Employment and homelessness rates did not improve for FCS recipients enrolled in both supportive housing and supported employment.

# Recommendations

The following recommendations relate to our evaluation of MTP Initiative 3, Foundational Community Supports:

- The Health Care Authority and the Aging and Long-Term Support Administration should continue to monitor evidence of positive effects of the FCS Supported Employment program and consider ways to expand access to this program, particularly in rural areas. The program may play an important role in employment stability for Medicaid enrollees during and after the COVID-19 pandemic.
- 2 The state should explore how to expand affordable housing options for the Medicaid population eligible for FCS Supportive Housing. A lack of housing and shelter resources will likely remain a limiting factor in this program's effectiveness in the absence of further action.
- 3 The state should investigate whether different or more intensive supports are needed for the population of people eligible for both the FCS housing and employment programs. This population's unique needs may warrant modifications to the program's design.

# Foundational Community Supports

Among Medicaid beneficiaries, there is a subset of people with complex physical and behavioral health conditions who have high social support needs (Mann, 2013). People in this group can be at increased risk of homelessness and substance use disorder and experience barriers to employment. This population is historically underserved by health systems that may be unequipped to meet their needs through traditional models of physical health care. Thus, this population may have recurring episodes of institutionalization or emergency care and may experience substantial barriers to receiving preventive or comprehensive health services. For example, previous research in Washington found that roughly a third of people released from inpatient mental health treatment and half of people released from residential SUD treatment experienced homelessness in the 12 months following their release (Shah, et al., 2012).

While many models exist that aim to address the needs of this population, two models are of particular interest for health systems:

- Supportive housing, and
- Supported employment.

Supportive housing models combine housing services (e.g., providing assistance with finding housing or financial support for obtaining housing) with health care services such as behavioral health treatment. Its effectiveness is supported by a large number of studies. Supported employment programs provide services to people who may need assistance to find or remain in a job. These services may include assistance with job placement or providing job skills coaching for people with developmental disabilities or serious mental illness (Substance Abuse and Mental Health Services Administration, 2009).

# MTP Approach to Change

As part of the larger Medicaid Transformation Project, Washington designed Foundational Community Supports (FCS), a new program for Medicaid enrollees with complex health needs at high risk of housing instability or barriers to employment. The FCS program is a collaboration between the Washington Health Care Authority and the Department of Social and Health Services' Aging and Long-Term Support Administration (ALTSA). FCS was established to create a statewide network of providers of supportive housing and supported employment services and connect eligible Medicaid beneficiaries with new housing and employment supports.

Medicaid beneficiaries who have both a functional need for services and also exhibit certain risk factors are eligible for FCS Supportive Housing services, Supported Employment services, or both (Washington State Health Care Authority, 2018). Exhibit 14.1 displays risk and needs-based eligibility criteria for housing or employment services through FCS.

Exhibit 14.1: Groups Eligible for FCS Supportive Housing and Supported Employment Services

	Supportive Housing	Supported Employment
Risk Criteria (must meet at least one)	<ul> <li>Chronic homelessness</li> <li>Frequent institutional contacts or multiple instances of residential care</li> <li>Frequent turnover of caregiver</li> <li>Predictive Risk Intelligence (PRISM) score of 1.5 or higher</li> </ul>	<ul> <li>Unable to obtain or maintain employment due to age, physical or mental disability or impairment</li> <li>Frequent episodes of SUD treatment</li> <li>Mental health or SUD diagnosis at risk of deterioration</li> </ul>
Needs- based Criteria (must meet at least one)	<ul> <li>Need for improvement, stabilization or prevention of deterioration of function due to a mental illness or a long-continuing or indefinite complex physical condition</li> <li>Outpatient SUD treatment</li> <li>Assistance with activities of daily living (ADL)</li> </ul>	<ul> <li>Need for improvement, stabilization or prevention of deterioration of function due to a mental illness</li> <li>Outpatient SUD treatment</li> <li>Assistance with ADL</li> <li>Physical impairments requiring assistance with basic work-related activities</li> </ul>

Source: Amerigroup, 2018

#### **Supportive Housing**

The FCS Supportive Housing program allows the state to reimburse contracted providers a per diem rate for services that include assistance in finding or applying for housing or negotiating with landlords. In most cases, participants could receive up to 30 days of supportive housing services in a 6-month period, with options for reauthorization or more intensive services for participants with exceptionally high needs (Washington State Health Care Authority, n.d.a). Of note, the FCS Supportive Housing benefit was not designed to provide direct rent assistance or replace other housing supports that Medicaid beneficiaries may have been eligible to receive.

## **Supported Employment**

The FCS Supported Employment program is based on the Individual Placement and Support (IPS) model for people with serious mental illness (IPS Employment Center, 2020). The model emphasizes the integration of employment and health services in community settings, with competitive employment as a goal. The program does not provide or supplement wages directly to participants. FCS services include vocational assessments and job coaching, assistance with job seeking or job placement, and skill building for employment retention (Washington State Health Care Authority, 2017a). The FCS Supported Employment benefit allows for participants to receive up to 30 hours of services in a six month period, with options for reauthorization or higher levels of support for participants deemed to have exceptional needs (Washington State Health Care Authority, n.d.a).

# **Initiative 3 Implementation**

The FCS program officially launched in January 2018, when the first participants were screened and enrolled in the program. Amerigroup was selected as a third-party administrator to contract with FCS providers, assess potential clients' program eligibility, authorize provision of services to eligible clients and process payments to providers. The program provided multiple points of entry for eligible people. Those who were receiving long-term services and supports through Washington State's Aging and Long-Term Support Administration (ALTSA) could apply for FCS through ALTSA. Other

Medicaid enrollees with qualifying physical or behavioral health conditions could access the FCS program via Washington's Health Care Authority (HCA) or through self-referral.

# **Building the FCS Network**

Interviews with stakeholders in 2019 revealed that the FCS program encountered early implementation challenges, including difficulty establishing a network of contracted FCS providers and limited availability of resources such as affordable housing. Early challenges included engaging potential FCS service providers, particularly in rural areas. Among the service providers who joined the FCS network, many lacked prior experience with Medicaid billing. They required technical assistance to navigate benefit rules and regulations. Some organizations lacked fee-for-service billing infrastructure to support the addition of FCS services to their work. One key informant described these challenges as follows:

For providers who'd never contracted with Medicaid before, never done a fee-for-service type of structure before, it's a pretty big shift. You're going from a model where you're getting private or public grants to fund a position, and [...] now you have to build a caseload and figure out how to manage that caseload and bill for services. There's a learning curve to figure out how to structure that successfully financially. So, a lot of providers reported initially, their first month, losing money on FCS, and having to supplement FCS with other resources. – Participant #26, 2019

Building network capacity to support sustainable FCS caseloads was reported to be particularly challenging in rural areas. Lack of affordable housing stock that could be paired with FCS housing services was cited as a limiting factor in the program's expansion of caseloads. FCS housing providers could assist clients with locating and applying for affordable housing when it was available, and maintaining housing if they were already housed, but there were limited options for providers working with clients who were unhoused. As one interviewee noted:

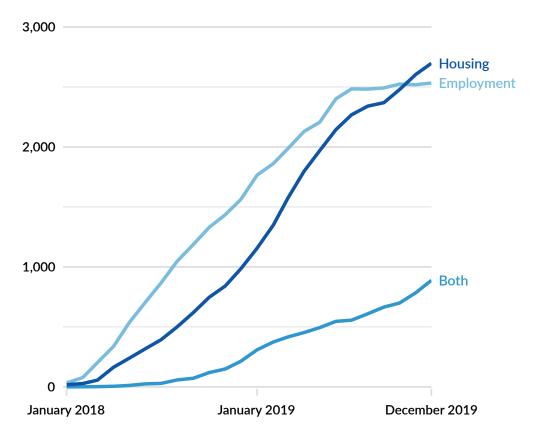
The lack of housing resources is probably one of the bigger challenges I've observed... we have hundreds of people who could benefit. The non-supplantation rules through Medicaid have, I think, slowed this down... it's harder to build a caseload [...] you have just one or two openings a month in your housing, and therefore, because of supplantation rules, you only have a caseload of three people because you have no other housing resources to pair with the FCS services. When you're billing for an encounter that's not going to generate enough revenue to sustain a staff member... That's been a structural challenge. – Participant #26, 2019

While provider engagement was initially slow, the network of contracted FCS providers gradually increased. As of November 2020, there were 458 FCS sites serving most counties in Washington State, including 46 sites with supportive housing providers, 83 sites with supported employment providers, and 329 sites providing both types of services.

#### **Enrollment of FCS Clients**

Exhibit 14.2 depicts how FCS program enrollment has grown since the program's launch. Program enrollment in FCS Supportive Housing and FCS Supported Employment steadily increased throughout 2018 and 2019. The number of Medicaid beneficiaries who were simultaneously enrolled in both programs also increased to about 1,000 by the end of 2019 (see Data Appendix, Table 8 for details).

Exhibit 14.2. Enrollment in Foundational Community Supports has steadily increased since December 2019 for FCS housing, FCS employment, and for simultaneous enrollment in both.



Source: Enrollment data for Foundational Community Supports provided by Washington State Health Care Authority and Washington State Department of Social and Health Services

# **Evaluation Approach**

Our evaluation of Initiative 3 employed a difference-in-differences approach that compared outcomes for FCS enrollees before and after enrollment in FCS to outcomes of a similar comparison group that did not enroll in FCS during the same time period. We measured changes for FCS enrollees from a pre-intervention period (the last two quarters before first FCS enrollment) to a post-intervention period (the third and fourth quarter following first FCS enrollment). We compared these changes for FCS enrollees to a matched comparison group, adjusting estimates to account for differences in patient characteristics that could affect the trajectory of outcomes over time.

We identified FCS enrollees as all Medicaid beneficiaries who received any FCS service in 2018. We limited our analysis to those enrolled in 2018 in order to allow sufficient time in our pre- and post-intervention quarters to observe all outcomes of interest. We distinguished between FCS beneficiaries who (i) enrolled in supportive housing; (ii) enrolled in supported employment; and (iii) enrolled in both programs.

For each individual in these FCS program groups (housing, employment, or both), we identified a comparable person not enrolled in FCS but with similar demographic and health risk characteristics, using a matching approach similar to the one specified in a preliminary evaluation report of the FCS conducted by Washington State's DSHS (Danielson, et al., 2020). We selected FCS participants and matched Medicaid beneficiaries who were fully enrolled in Medicaid during the four quarters preceding and following first FCS enrollment.

Unlike Danielson et al. (2020), we did not match on prior utilization measures for our main analysis (see Appendix for a more detailed discussion of these two approaches). Instead, we assessed trends over time for all groups to examine whether trends for FCS beneficiaries and their matched comparison group were similar before they began receiving FCS services. We also performed a matching approach with key utilization measures as a sensitivity check. In most cases, results of these sensitivity analyses were similar to the main analyses. We note important differences in results below where these were apparent.

Exhibit 14.3: Demographic Characteristics of FCS Enrollees and a Matched Comparison Group

	FCS Housing (N = 757)	Housing Comparison (N = 757)	FCS Employment (N = 1,295)	Employment Comparison (N = 1,295)	FCS Both (N = 268)	Both Comparison (N = 268)
Mean Age (years)	47.9	48.1	41.3	41.6	40.7	41.1
Gender (% female)	55.4	55.4	50.1	50.1	47.0	47.0
Race						
• % AI/AN	5.3	5.3	3.0	3.0	6.3	6.3
• % Asian	NA	NA	1.2	1.2	NA	NA
• % Black	8.2	8.2	8.3	8.3	7.5	7.5
• % Hispanic	8.7	8.7	8.0	8.0	8.6	8.6
• % Other Race	5.7	5.7	5.3	5.3	5.2	5.2
% Hawaiian or Pacific Islander	NA	NA	NA	NA	NA	NA
• % White	77.3	77.3	77.1	77.1	77.2	77.2
Mean CDPS Risk Score	2.6	2.6	1.7	1.7	1.9	1.9
Rate of SUD Diagnosis	27.5	27.5	17.8	17.8	39.2	39.2

Note: FCS Both indicates FCS participants who were simultaneously enrolled in FCS Housing and FCS Employment services. NA indicates small numbers are suppressed to protect confidentiality. Source: Demographic data obtained from Washington's ProviderOne data system. FCS program enrollment data obtained from Washington State Health Care Authority and Department of Social and Health Services.

For each of the three FCS program groups, we further stratified our analysis by system affiliation, separating ALTSA-affiliated people from other Medicaid beneficiaries served through the Health Care Authority (i.e., "HCA-affiliated"). We identified ALTSA-affiliated beneficiaries as Medicaid enrollees who received a Comprehensive Assessment Reporting Evaluation (CARE) within 15 months prior to first FCS service receipt. All other FCS enrollees were considered to be HCA-affiliated.

#### **Evaluation Results**

Our final study population included 757 people who received housing services, 1,295 people who received employment services, and 268 people who received both services. At baseline, FCS beneficiaries and our comparison groups had similar demographic characteristics and health status for those fields on which matching was performed (age; gender; race, CDPS risk score, and rate of SUD diagnosis (see Exhibit 14.3). As expected, characteristics and outcomes not included in the matching approach (e.g., employment rate) were different between the two groups at baseline (see Exhibits 14.5, 14.7 and 14.8).

Below we present results of our difference-in-difference analyses. We first present results for enrollees in FCS Supportive Housing, followed by results for enrollees in FCS Supported Employment, as well as for enrollees participating in both types of services.

Our analyses broadly examine changes in two types of outcomes for each program:

- Social outcomes, including employment, arrests, and homelessness, and
- Health care utilization and quality.

We provide disaggregated results for ALTSA clients and other clients.

#### **People Receiving FCS Supportive Housing Services**

Exhibit 14.4 displays changes in all outcomes for people who received FCS Supportive Housing services, relative to a comparison group who did not receive FCS housing services. See page 21 of this report for a guide to reading results.

Rates of homelessness, arrests, and employment did not change for FCS housing beneficiaries relative to their matched comparison group between the pre- and post period. Homelessness for FCS housing beneficiaries increased slightly before program start and then decreased afterwards (see Exhibit 14.5). However, levels of homelessness remained unchanged from the last two quarters before enrollment to the third and fourth quarter following enrollment.

Employment rates declined in a similar manner for both groups. In sensitivity analysis that used an alternative matching approach, we found a relative decline in employment for FCS housing beneficiaries. This appeared to be driven by improvements in employment for the matched comparison group. We observed similar lack of change in homelessness, arrest, or employment for FCS housing beneficiaries who were ALTSA-affiliated and those who were HCA-affiliated (data not shown; see Data Appendix, Table 9).

Acute hospital utilization decreased among FCS housing beneficiaries (see Exhibit 14.4). In sensitivity analyses using an alternative matching approach, hospital utilization did not change, and a variety of other quality measures worsened. This discrepancy suggests that our results may be sensitive to trends among FCS housing beneficiaries that are unrelated to FCS services.

Other health care utilization measures did not change significantly. Acute hospital utilization declined among ALTSA-affilitated but not HCA-affiliated FCS housing beneficiaries (data not shown; see Data Appendix, Table 9). ALTSA-affiliated FCS housing beneficiaries also experienced a relative decline in initiation of alcohol and other drug abuse or dependence treatment, while HCA-affiliated FCS housing beneficiaries did not experience significant changes in health care utilization.

Exhibit 14.4: Change in Outcomes for Participants in FCS Supportive Housing Services

Pre-post rates for FCS housing enrollees, pre-post rates for matched comparison group of Medicaid beneficiaries, and adjusted

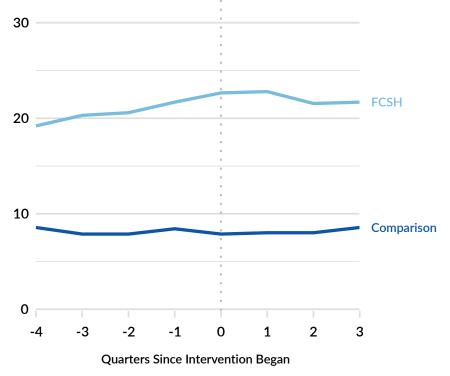
difference-in-differences estimates

difference-in-differences estimates	FCS Housing Participants		Compar Grou		Difference in Differences	
	Pre	Post	Pre	Post		
Homelessness ↓	21.8	22.5	8.2	8.5	0.4	
Employment (Age 18 to 64)	18.8	16.1	24.1	21.5	-0.1	
Arrest Rate (Age 18 to 64) $\downarrow$	15.5	13.6	9.9	7.2	0.7	
Adults' Access to Primary Care	94.9	95.9	91.4	92.0	0.4	
Antidepressant Medication for Adults (12 Weeks)	62.8	53.0	53.3	44.6	-1.0	
Antidepressant Medication for Adults (6 Months)	49.8	37.8	43.9	30.9	0.4	
Antipsychotic Medication for People with Schizophrenia	60.0	62.9	66.7	81.8	-12.7	
Diabetes Screening for People with Schizophrenia/Bipolar Disorder	88.4	88.8	75.5	75.7	0.4	
7-Day Follow-Up After ED Visit for Mental Illness	80.4	83.1	81.4	88.5	3.6	
30-Day Follow-Up After ED Visit for Mental Illness	86.9	90.8	84.8	95.8	-1.4	
7-Day Follow-Up After Hospitalization for Mental Illness	69.8	63.0	59.8	51.6	-4.0	
30-Day Follow-Up After Hospitalization for Mental Illness	85.8	82.1	84.3	83.7	-7.3	
30-Day Hospital Readmission for a Psychiatric Condition $\downarrow$	NA	NA	NA	NA	NA	
Controller Medication for Asthma	NA	NA	NA	NA	NA	
Eye Exam for People with Diabetes	40.7	39.8	43.8	49.4	-6.2	
Hemoglobin A1c Testing for People with Diabetes	76.2	75.1	77.3	76.6	-0.5	
Nephropathy Screening for People with Diabetes	91.6	91.0	91.0	91.5	-0.9	
Statin Medication for Cardiovascular Disease	81.2	86.0	73.9	74.3	-0.4	
Emergency Department Visit Rate $\downarrow$	33.7	33.5	15.0	15.8	-1.1	
Acute Hospital Use among Adults ↓	25.8	23.1	15.4	20.8	-8.0**	
Hospital Readmission within 30 Days $\downarrow$	9.4	11.5	6.8	7.0	-0.7	
Ratio of Home and Community-Based Care Use to Nursing Facility Use	92.4	91.8	86.0	87.2	-1.3	
Substance Use Disorder Treatment Penetration	38.0	43.3	52.7	54.6	1.3	
Alcohol or Other Drug Treatment: Initiation	44.3	41.5	44.0	49.5	-9.1	
Alcohol or Other Drug Treatment: Treatment	14.1	11.8	19.4	20.1	-4.2	
30-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	34.6	36.6	27.6	52.7	-15.9	
7-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	23.9	27.1	24.1	46.0	-10.2	
Patients Prescribed High-dose Chronic Opioid Therapy: >50 mg MED $\downarrow$	31.8	31.6	42.1	30.8	2.2	
Patients Prescribed High-Dose Chronic Opioid Therapy: >90mg $\downarrow$	7.3	8.7	24.3	19.6	1.9	
Opioid Use Disorder Treatment for People with Treatment Need	40.2	44.6	64.3	66.1	-1.1	



Shaded cells indicate a statistically signficant difference between the change in outcomes for FCS Housing participants and the change for the comparison group. Blue shaded cells indicate that FCS Housing participants' outcomes improved more than the comparison group. Orange-shaded cells indicate the change in FCS Housing participants outcomes was worse than the change in the comparison group. Results marked \* are significant at the p<.05 level. Results marked \*\* are significant at the p<.01 level. Results marked \*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.001 level.

Exhibit 14.5. The percentage of people experiencing homelessness was unchanged for FCS Supportive Housing beneficiaries in the quarters after enrollment in FCS. The trend was similar for the comparison group.



Source: FCS Housing enrollment status obtained from Washington State Health Care Authority and Department of Social and Health Services. Homelessness data obtained from Washington's Automatic Client Eligibility System (ACES).

In sensitivity analyses that used an alternative matching approach and stratified by ALTSA and HCA affiliation, the FCS program was associated with worse performance on some outcomes.

#### **People Receiving FCS Supported Employment Services**

Exhibit 14.6 displays changes in outcomes for people who received FCS Supported Employment services, relative to a comparison group who did not receive FCS employment services.

FCS beneficiaries enrolled in supported employment experienced a substantial improvement in their employment rate relative to their matched comparison group (see Exhibit 14.7). Employment decreased slightly for FCS participants before the receipt of FCS services, increasing noticeably after enrollment. In contrast, employment rates for the comparison group exhibited a steady decline.

Both ALTSA- and HCA-affiliated FCS Supported Employment beneficiaries experienced an increase in employment, with the increase being higher for those who were HCA-affiliated (data not shown; see Data Appendix, Table 9). Arrest rates declined for HCA-affiliated FCS employment participants but not ALTSA-affiliated FCS employment participants or both groups combined.

The rate of homelessness did not decline for FCS Supported Employment beneficiaries overall or in sub-analyses of HCA or ALTSA-affiliated enrollees. Results of our sensitivity analysis using an alternative matching approach were mostly consistent with these findings, with two exceptions. First, ALTSA-affiliated FCS employment participants did not experience improvement in employment (these results might be influenced by non-parallel trends). Second, the arrest rate did not decline for HCA-affiliated FCS employment participants.

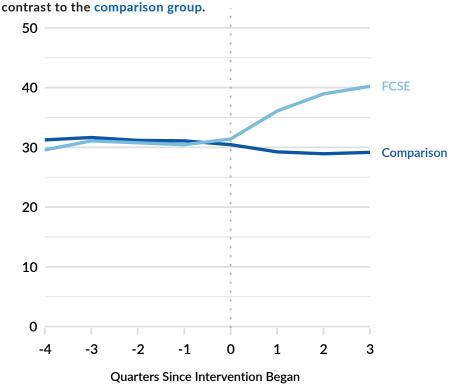
Exhibit 14.6: Change in Outcomes for Participants in FCS Supported Employment Services

Pre-post rates for FCS employment enrollees, pre-post rates for matched comparison group of Medicaid beneficiaries, and adjusted difference-in-differences estimates

adjusted difference-in-differences estimates	FCS (both)		Comparison		Difference in	
	Partici		Grou		Differences	
	Pre	Post	Pre	Post		
Homelessness ↓	9.6	9.1	7.7	7.1	0.1	
Employment (Age 18 to 64)	30.7	39.5	30.9	28.9	10.7***	
Arrest Rate (Age 18 to 64) $\downarrow$	11.3	8.4	9.4	8.1	-1.6	
Adults' Access to Primary Care	93.2	94.4	89.2	90.6	-0.2	
Antidepressant Medication for Adults (12 Weeks)	57.3	56.2	56.0	56.0	-1.0	
Antidepressant Medication for Adults (6 Months)	43.6	43.6	40.3	44.4	-2.8	
Antipsychotic Medication for People with Schizophrenia	63.0	80.1	63.0	71.2	9.1	
Diabetes Screening for People with Schizophrenia/Bipolar Disorder	78.0	80.0	80.4	77.8	4.6	
7-Day Follow-Up After ED Visit for Mental Illness	84.5	85.9	80.6	69.3	10.3	
30-Day Follow-Up After ED Visit for Mental Illness	90.0	93.2	80.6	83.3	1.4	
7-Day Follow-Up After Hospitalization for Mental Illness	50.4	69.6	56.2	66.0	12.8	
30-Day Follow-Up After Hospitalization for Mental Illness	72.8	86.9	84.1	89.4	10.0	
30-Day Hospital Readmission for a Psychiatric Condition $\downarrow$	NA	NA	NA	NA	NA	
Controller Medication for Asthma	55.1	63.6	48.6	44.8	7.2	
Eye Exam for People with Diabetes	52.5	48.2	52.3	50.7	-3.2	
Hemoglobin A1c Testing for People with Diabetes	76.4	75.0	81.5	79.7	0.2	
Nephropathy Screening for People with Diabetes	85.7	86.7	86.5	90.8	-3.4	
Statin Medication for Cardiovascular Disease	81.6	69.7	59.5	53.5	-6.5	
Emergency Department Visit Rate $\downarrow$	14.2	13.3	14.3	14.2	-0.9	
Acute Hospital Use among Adults ↓	10.3	9.4	11.0	12.1	-2.0	
Hospital Readmission within 30 Days $\downarrow$	5.9	8.7	5.3	5.6	6.1	
Ratio of Home and Community-Based Care Use to Nursing Facility Use	98.0	99.1	95.0	94.7	1.1	
Substance Use Disorder Treatment Penetration	37.2	44.6	44.8	46.6	4.2*	
Alcohol or Other Drug Treatment: Initiation	35.5	42.3	40.2	38.2	7.6	
Alcohol or Other Drug Treatment: Treatment	13.3	16.6	14.9	14.6	3.0	
30-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	34.7	35.4	29.6	31.1	-5.3	
7-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence		25.6	27.2	17.3	12.6	
Patients Prescribed High-dose Chronic Opioid Therapy: >50 mg MED $\downarrow$		14.2	39.0	39.1	3.2	
Patients Prescribed High-Dose Chronic Opioid Therapy: >90mg $\downarrow$		NA	NA	NA	NA	
Opioid Use Disorder Treatment for People with Treatment Need	47.6	52.7	57.2	62.7	0.9	
Better than comparison  See 10% 0% 10% 25%						
Alcohol or Other Drug Treatment: Initiation Alcohol or Other Drug Treatment: Treatment 30-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence 7-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence Patients Prescribed High-dose Chronic Opioid Therapy: >50 mg MED ↓ Patients Prescribed High-Dose Chronic Opioid Therapy: >90mg ↓ Opioid Use Disorder Treatment for People with Treatment Need	35.5 13.3 34.7 15.3 16.2 NA	42.3 16.6 35.4 25.6 14.2 NA	40.2 14.9 29.6 27.2 39.0 NA	38.2 14.6 31.1 17.3 39.1 NA	7.6 3.0 -5.3 12.6 3.2 NA	

Shaded cells indicate a statistically signficant difference between the change in outcomes for FCS Housing participants and the change for the comparison group. Blue shaded cells indicate that FCS Housing participants' outcomes improved more than the comparison group. Orange-shaded cells indicate the change in FCS Housing participants outcomes was worse than the change in the comparison group. Results marked \* are significant at the p<.05 level. Results marked \*\* are significant at the p<.01 level. Results marked \*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.001 level.

Exhibit 14.7: The percentage of people who were employed increased steadily for FCS Supported Employment beneficiaries in the quarters following enrollment, in



Source: FCS Employment enrollment status obtained from Washington State Health Care Authority and Department of Social and Health Services. Employment status obtained from Washington Employment Security Department.

Substance use disorder treatment penetration improved for FCS employment participants relative to the comparison group, while there were no differences in other measures of health care utilization (see Exhibit 14.6). When stratifying the sample by ALTSA and HCA affiliation, we found that one measure improved for ALTSA-affiliated FCS employment beneficiaries (substance use disorder treatment penetration), and three measures improved for HCA-affiliated FCS employment beneficiaries (follow-up after emergency department visit for alcohol and other drug abuse or dependence, 7 days; and follow-up after emergency department visit for mental illness, 7 and 30 days) (data not shown; see Data Appendix, Table 9).

Results for health care utilization measures were broadly robust to the alternative matching approach, with some differences in the measures that improved for the HCA-affiliated population. Results for most of these measures should be interpreted with caution because they were based on small sample sizes that did not always exhibit similar trends prior to receipt of services.

#### People Receiving Both FCS Supportive Housing and Supported Employment Services

Exhibit 14.8 displays changes in outcomes for people who simultaneously received both FCS Supported Employment and Supportive Housing services, relative to a comparison group of Medicaid enrollees who did not receive either type of FCS services.

Beneficiaries enrolled in both housing and employment did not experience improvements in rates of homelessness, arrests, or employment, relative to the comparison group. Rates of homelessness, employment, and arrests also remained unchanged for ALTSA- and HCA-affiliated FCS housing and employment beneficiaries (data not shown; see Data Appendix, Table 9).

Exhibit 14.8: Change in Outcomes for Participants in both FCS Employment and Housing Services

Pre-post rates for FCS housing and employment enrollees, pre-post rates for matched comparison group of Medicaid beneficiaries, and adjusted difference-in-differences estimates

	FCS (both) Participants		Comparison Group		Difference in Differences
	Pre	Post	Pre	Post	
Homelessness ↓	26.1	30.7	8.5	10.0	3.0
Employment (Age 18 to 64)	36.7	36.7	32.3	27.6	4.7
Arrest Rate (Age 18 to 64) ↓	27.7	26.3	14.7	13.5	-0.2
Adults' Access to Primary Care	89.4	97.0	90.8	91.9	6.5**
Antidepressant Medication for Adults (12 Weeks)	46.5	45.3	61.4	52.5	11.6
Antidepressant Medication for Adults (6 Months)	36.0	32.6	56.8	38.8	9.9
Antipsychotic Medication for People with Schizophrenia	54.7	79.7	72.7	62.2	42.9***
Diabetes Screening for People with Schizophrenia/Bipolar Disorder	85.1	82.9	93.1	87.9	3.1
7-Day Follow-Up After ED Visit for Mental Illness	86.7	73.9	60.0	75.8	-23.4
30-Day Follow-Up After ED Visit for Mental Illness	90.6	84.5	60.0	90.9	-30.8*
7-Day Follow-Up After Hospitalization for Mental Illness	NA	NA	NA	NA	NA
30-Day Follow-Up After Hospitalization for Mental Illness	97.7	83.8	77.1	75.3	-7.4
30-Day Hospital Readmission for a Psychiatric Condition $\downarrow$	NA	NA	NA	NA	NA
Controller Medication for Asthma	NA	NA	NA	NA	NA
Eye Exam for People with Diabetes	37.5	43.5	38.0	49.4	-4.7
Hemoglobin A1c Testing for People with Diabetes	78.6	72.6	90.1	77.9	7.7
Nephropathy Screening for People with Diabetes	89.3	87.1	93.0	85.7	7.5
Statin Medication for Cardiovascular Disease	NA	NA	NA	NA	NA
Emergency Department Visit Rate $\downarrow$	26.1	23.7	16.5	16.9	-2.8
Acute Hospital Use among Adults ↓	15.0	12.9	11.9	12.9	-3.1
Hospital Readmission within 30 Days $\downarrow$	NA	NA	NA	NA	NA
Ratio of Home and Community-Based Care Use to Nursing Facility Use	91.5	98.2	87.2	90.9	7.8
Substance Use Disorder Treatment Penetration	49.2	59.6	59.7	63.5	5.7
Alcohol or Other Drug Treatment: Initiation	43.3	44.9	44.5	46.1	2.7
Alcohol or Other Drug Treatment: Treatment	14.8	26.3	19.5	17.4	13.3*
30-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	48.1	55.4	41.4	42.7	10.1
7-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	NA	NA	NA	NA	NA
Patients Prescribed High-dose Chronic Opioid Therapy: >50 mg MED $\downarrow$		NA	NA	NA	NA
Patients Prescribed High-Dose Chronic Opioid Therapy: >90mg $\downarrow$		NA	NA	NA	NA
Opioid Use Disorder Treatment for People with Treatment Need	42.7	58.6	65.1	76.8	8.2
Better than comparison  25% 10% 0% 10% 25%  ↓ Lower is better					

Shaded cells indicate a statistically signficant difference between the change in outcomes for FCS Housing participants and the change for the comparison group. **Blue** shaded cells indicate that FCS Housing participants' outcomes improved more than the comparison group. Orange-shaded cells indicate the change in FCS Housing participants outcomes was worse than the change in the comparison group. Results marked \* are significant at the p<.05 level. Results marked \*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.001 level.

Several quality measures improved for FCS participants who received both housing and employment services (see Exhibit 14.8). Improvements included adult access to primary care; engagement in alcohol and other drug abuse or dependence treatment; and adherence to antipsychotic medications for individuals with schizophrenia. Among FCS participants, 30-day follow up visits after an ED visit for mental illness was significantly worse. These results were sensitive to the alternative matching approach. Specifically, while adult access to primary care still improved, one measure (all-cause ED visits) worsened. Other healthcare utilization measures did not change in our sensitivity analyses.

We do not report interim evaluation results stratified by ALTSA or HCA affiliation for participants in both FCS housing and employment services because of small sample sizes for these groups.

#### **Conclusions**

Our evaluation of the Foundational Community Supports program found strong improvement in the employment rate for FCS beneficiaries (both ALTSA- and HCA-affiliated clients) enrolled in supported employment within three to four quarters after receipt of FCS services.

In contrast, we observed no statistically significant improvement in the rate of homelessness among FCS beneficiaries enrolled in supportive housing. These findings are generally consistent with our qualitative data, which highlighted that FCS benefits were designed to be paired with housing resources in the community, but were not designed in a way that could overcome shortages in affordable housing. Locating housing for clients enrolled in FCS was reported to be a particular challenge for FCS service providers, which may explain why outcomes related to homelessness did not improve for participants after receipt of FCS housing services. We note one limitation of these findings: this measure of homelessness does not reflect other changes in housing status of FCS housing beneficiaries, and alternative measures such as those reported in Danielson, Mancuso and Felver (2020) may detect different types of changes. A trend of declining employment for the FCS housing group appears to have begun prior to FCS enrollment, which may be indicative that FCS engagement tended to follow periods of relative crisis for participants.

Neither employment nor housing rates improved for FCS beneficiaries enrolled in both supportive housing and supported employment. However, we observed promising improvement for these FCS participants in measures of health care quality. It is possible that people who need both FCS housing and employment supports have different and more intensive housing and employment support needs than the populations eligible for employment, or housing, but not both services. These trends should be monitored over time.

Our sensitivity analyses used an alternative matching approach that aimed to more directly control for trends in risk factors or utilization measures. In most cases, this alternate matching approach yielded similar results. Where results differed, we interpret these differences as suggestive that some improvements may be driven by temporary changes in outcomes that are unrelated to FCS.

Our results were based on FCS beneficiaries enrolled in 2018 (the first year of the FCS program) and therefore might reflect initial difficulties in implementing the housing program. Large changes in measures (particularly health outcome measures) shown here should be viewed with caution, as they may have been driven by small sample sizes making results less reliable. The final evaluation report will examine outcomes for FCS participants through a later date, allowing for the inclusion of a larger study population.

## MTP Initiative 4

This section presents an evaluation of the Medicaid Transformation Project Initiative 4 - Washington State's substance use disorder waiver. Initiative 4 allows the state to receive federal payments for residential and inpatient services and includes a broad set of milestones that are designed to support evidence-based treatment for SUD.

Chapter 14 presents findings from interviews and quantitative analyses focused on SUD outcomes.

Additional detail from this analysis is reported in the Mid-Point Assessment of Washington's SUD waiver.

#### **KEY FINDINGS**

Our evaluation of MTP Initiative 4 found the following:

- Access to and quality of substance use treatment improved in the first year following implementation of Washington's SUD waiver. There were substantial improvements in, for example, measures of Initiation of Alcohol and Other Drug Dependence Treatment, and Access to Preventive Services for Individuals with Substance Use Disorders.
- A variety of measures pointed to increased capacity for providers authorized to prescribe medications for opioid use disorders and the number of patients receiving substance use treatment.
- Despite this progress, there were implementation challenges, particularly in the state's transition to integrated managed care. According to providers, the transition created delays in payment and adversely affected provider organizations' financial stability. As managed care organizations took on financial risk for residential services, disagreements emerged between payers and providers about the role of residential care in SUD treatment.

#### **Recommendations**

1 Although the 1115 SUD waiver emphasizes the role of IMDs, the Health Care Authority (HCA) should continue to assess the entire system of substance use prevention, treatment, and recovery, with IMDs and residential services serving as part of the continuum of care. HCA will need to ensure that the waiver does not create incentives for unnecessary residential stays; however, we see no evidence that this is currently occurring. HCA should continue to monitor data on admissions, length of stay, and the use of outpatient services.

- 2 While the SUD waiver increased the availability of IMDs to receive FFP beyond 15 days, the transition to IMC appears to have created unintended consequences. These may be short-term transitional challenges, but will be important for HCA to monitor:
  - Providers indicated that the IMC transition negatively impacted the timeliness of payment for claims. In 2020, the state released a new Request for Proposals (RFP) designed to add MCOs to service areas with fewer than five MCOs and where medical and behavioral providers had indicated support for additional MCOs in the IMC program. The new changes are set to be executed in 2021. HCA should assess the extent to which issues around the timeliness of payments are resolved.
  - The IMC transition also created additional barriers to treatment or challenges for residential treatment facilities, including new preauthorization requirements. HCA should monitor the extent to which providers and MCOs have adapted to these requirements and patient needs.
  - There may be regional capacity issues that restrict access to withdrawal and detoxification services. Given the urgency of these services and their role in preventing overdose deaths, HCA should consider an assessment of the availability of these services across regions and identify options to reduce bottlenecks.

Although not part of the formal evaluation design, three important contextual factors deserve consideration for future state planning:

- The COVID-19 epidemic resulted in an expansion of telehealth, including services that expanded to SUD. Although the epidemic creates a separate set of challenges around access and utilization, telehealth's increased availability appears beneficial. The state should assess how telehealth and SUD services can be continued in the future. In particular, telehealth for SUD may improve access in rural areas or increase the ability to provide medications through a combination of mail and telehealth.
- A recent report identified a sharp increase in fentanyl overdoses on the West Coast, with the number of fentanyl-involved deaths in King County increasing from 33 in 2017 to 112 in 2019 and a projected number of 174 in 2020 (Shover, et al., 2020). Confronting the potential for greater fentanyl use may require adjustments from providers and payers. For example, a review of the standard prescribed dose of naloxone may be warranted, because overdoses from fentanyl may require larger doses of naloxone to reverse the effects.
- While the focus of our evaluation and the IMD waiver is primarily a response to the opioid epidemic, methamphetamines represent a significant and growing challenge. While deaths from opioids have been relatively stable between 2015 and 2018 (with deaths per 100,000 individuals rising slightly from 9.9 to 10.4), deaths from methamphetamines have been increasing, rising from 4.9 deaths per 100,000 individuals in 2015 to 7.1 deaths per 100,000 individuals in 2018 (University of Washington Alcohol and Drug Abuse Institute, 2020). Unlike for opioids, we have not developed effective medications to treat methamphetamine addiction, creating additional challenges to treatment. HCA may be able to improve patient outcomes by explicitly acknowledging the growing importance of methamphetamine and by supporting evidence-based treatments and therapies for methamphetamine addiction.

# Washington's Substance Use Disorder Waiver Amendment

In July 2018, the Centers for Medicare and Medicaid Services (CMS) amended Washington State's 1115 Medicaid demonstration waiver to authorize changes in how the state could provide and pay for care for substance use disorders (Centers for Medicare and Medicaid Services, 2018).

This chapter presents interim findings from our evaluation of the Substance Use Disorder (SUD) waiver. We examine how SUD diagnoses, treatment, and treatment capacity changed during the first year of the waiver (through June 2019) and place these findings in the context of the planning and implementation activities occurring across the state during this period.

Washington is one of 26 states to apply for and receive an SUD waiver between 2015 and 2019. Thus, findings from this evaluation have implications for understanding how SUD waivers may impact Medicaid populations broadly.

#### **Background**

Institutions for mental disease (IMDs) are facilities (including hospitals, nursing care facilities, or residential treatment facilities) with more than 16 beds that focus primarily on the treatment of behavioral health disorders (including substance use disorders). Since 1965, federal exclusions have typically prohibited the use of Medicaid funds to pay for the treatment of adults aged 21-64 in IMDs (Medicaid and CHIP Payment and Access Commission, 2020).

Despite this prohibition, for several years, Washington State had federal approval via a 1915(b) Home and Community-Based Services waiver to use federal Medicaid funds to pay for SUD services provided in IMD facilities for managed care beneficiaries, in lieu of providing those services in non-IMD settings.

Washington's approval to use federal funds to pay for SUD services in IMDs was temporarily revoked in July 2017. With the implementation of the 2016 Managed Care Final Rule, these federal funds, also known as Federal Financial Participation (FFP) payments, were prohibited for IMD stays greater than 15 days (see Figure 1). As a result, Washington was constrained to pay for treatment in IMDs beyond 15 days using only state funding. These changes may have restricted the supply of IMD beds while also reducing the state's ability to fund other SUD-related services.

In July 2018, Washington received an amendment to its 1115 waiver, with the amendment designed to maintain and expand access to residential and inpatient SUD treatment. The amendment authorized Washington "to receive federal financial participation for the provision of all Medicaid state plan services - including a continuum of services to treat addictions to opioids and other substances - for Medicaid enrollees primarily diagnosed with opiate use disorder (OUD) and/or other SUDs who are short-term residents in residential and inpatient treatment facilities that meet the

definition of an institution for mental diseases (IMD)" (Centers for Medicare and Medicaid Services, 2018).

Exhibit X: Policy Changes Affecting Washington State Federal Financial Participation for IMD Stays



#### MTP Approach to Change

In addition to allowing Washington State to use FFP payments for residential and inpatient services, the SUD waiver also outlined a broad set of milestones that included:

- Increasing access to critical levels of care for opioid use disorder (OUD) and other SUDs;
- Achieving widespread use of evidence-based, SUD-specific patient placement criteria;
- 3 Using nationally recognized, evidence-based SUD program standards to set residential treatment provider qualifications;
- 4 Achieving sufficient provider capacity at each level of care, including providers authorized to prescribe medications for opioid use disorder;
- 5 Implementing comprehensive treatment and prevention strategies to address opioid abuse and OUD; and
- Improving care coordination and transitions between levels of care.

The SUD waiver amendment also addressed some inconsistencies in how different age groups were treated. Whereas federal IMD regulations allowed FFP payments for SUD treatment in IMDs for individuals older than 65 and younger than 21, Washington's amendment also allowed FFP for services to Medicaid beneficiaries aged 21-64.

#### **Progress Toward Implementing the SUD Waiver**

#### **Increasing IMD Capacity**

Before the waiver, many residential treatment facilities had limited their capacity to 16 beds as a mechanism for avoiding the IMD regulations. In some cases, a single provider might own multiple smaller, separately licensed facilities. However, these smaller facilities were inefficient and costly to operate. There is some expectation that the IMD waiver might prompt the owners of multiple 16-bed entities to consolidate their operations and become larger IMDs.

The SUD waiver amendment became effective on July 1, 2018. At that time, Washington had 1,643 beds across 118 facilities (not all of which were IMDs) that accepted Medicaid enrollees and billed for SUD services for adults. Between July 1, 2018, and June 30, 2019, Washington added one SUD residential IMD with a total of 210 additional licensed beds. Washington also added four mental health hospital IMDs, totaling 398 new licensed beds ("licensed" beds do not necessarily reflect actual bed capacity, as facilities may be licensed for more beds than they are staffed for). By June 2019, state licensing data reflected that Washington State had a total of 36 licensed IMD facilities, consisting of eight mental health hospital IMDs, four mental health rvaluation and treatment IMDs, 22 SUD residential IMDs, and two mental health residential IMDs.

Although the waiver has increased the potential capacity of IMDs, interviewees described other challenges in access to withdrawal or detoxification services. Some early challenges - related to preauthorization requirements from managed care organizations – appear to have been resolved by the Health Care Authority. However, capacity may be constrained in some regions, leading to continued concerns about access to these services.

#### Competing Priorities and Tensions Between Providers and Managed Care Organizations

At the time of Washington's implementation of its SUD waiver, the state was also making a transition to integrated managed care (IMC, see Chapter 3 for additional details). Under IMC, managed care organizations (MCOs) moved from responsibility for physical health to responsibility for both physical and behavioral health care. Although the move to IMC was intended to improve access to and treatment for behavioral health, it produced some unintended consequences. In interviews, key informants reported that IMC was associated with new administrative processes, requirements for prior authorization, challenges in obtaining authorization, and severe payment delays. These changes adversely affected the financing and sustainability of residential treatment facilities. According to several providers we interviewed, some residential SUD facilities - particularly smaller facilities came close to the brink of closure because of cash flow shortfalls and the need to make investments in their administrative and data infrastructure.

The transition to IMC also exposed philosophical differences between MCOs and behavioral health providers. Providers saw themselves as treating complex social-behavioral disorders and described IMDs and residential treatment as an opportunity to remove patients from potentially destructive environments so they could focus on learning new behaviors. In particular, providers viewed 30-day residential or inpatient stays as the minimum appropriate treatment for patients with longer-term substance use disorders.

In contrast, MCOs considered eligibility for residential treatment through a narrow lens of American Society of Addiction Medicine (ASAM) criteria and medical necessity, despite acknowledging the limitations of this lens. Whereas MCOs placed weight on the ASAM criteria as necessary for

determining who should be admitted, providers were sensitized to social factors and the potential for a 30-day stay to serve as an essential step in recovery and treatment. These philosophical differences between providers and MCOs may have hindered progress toward expanding IMD-based treatment options.

#### **Evaluation Approach**

Our evaluation focused on the ways in which the demonstration may have increased access to and utilization of SUD treatment services. The primary focus of our evaluation is adults enrolled in Medicaid with a substance use disorder diagnosis (see Data Appendix, Table 7).

Because Washington's SUD waiver was approved by CMS six months later than the other MTP initiatives (which began January 2018), the evaluation of MTP Initiative 4 includes a baseline (preimplementation) period of July 2017 - June 2018 (i.e., "SUD Year 2018") and a post-implementation period of July 2018 - June 2019 ("SUD Year 2019"). See page 21 of this report for a guide to reading results.

#### How are these results impacted by COVID-19?

The COVID-19 outbreak began in Washington State in early 2020, causing widespread disruption to health services delivery across the state. This chapter presents analyses of claims data through June 2019, prior to the outbreak. It is therefore unlikely that COVID-19 had any effect on measures presented in this report, though future reporting periods may be affected.

#### Results

Exhibit 15.1 displays statewide changes in key metrics related to access and quality of care. The majority of these measures were calculated on an SUD year basis. The analyses compared a baseline period of July 2017 - June 2018 to a post-SUD waiver period of July 2018 - June 2019. The one exception was the measure adult access to preventive/ambulatory services for Medicaid beneficiaries with substance use disorder, which was calculated on a calendar year basis due to differences in availability of data. For this measure, we excluded 2018 as a "washout" year and calculated results comparing calendar years 2017 to 2019.

The majority of measures of substance use prevention treatment and quality moved in the desired direction. For example, substance use disorder treatment penetration increased by more than 2 percent; access to preventive services for individuals with substance use disorder increased by 4.4 percent; and measures of follow-up after emergency department visit for alcohol or drug dependence (7 day and 30 day) both exhibited statistically significant increases.

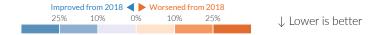
The measure Foundational Community Supports beneficiaries with inpatient or residential SUD service(s) increased by more than three percent. Initiation and engagement of alcohol and other drug dependence treatment also increased. The percentage of patients prescribed chronic concurrent opioids and sedatives, and patients prescribed high-dose chronic opioid therapy (greater than 90mg) decreased significantly. The average length of stay in IMDs did not change.

Exhibit 15.1: Change in Access and Quality of Care for People with Substance Use Disorder

Statewide rate June 2017 to July 2018, statewide rate July 2018 to June 2019, and adjusted pre-post change

	2017-18 Statewide	2018-19 Statewide	Adjusted Change
30-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	23.9 %	26.2 %	2.2***
30-Day Follow-Up After ED Visit for Mental Illness	73.6 %	71.1 %	-2.1***
7-Day Follow-Up After ED Visit for Alcohol/Drug Abuse/Dependence	14.9 %	16.2 %	1.3**
7-Day Follow-Up After ED Visit for Mental Illness	63.3 %	59.8 %	-3.2***
Access to Preventive/Ambulatory Health Services for People with SUD	83.7 %	89.4 %	4.4***
Alcohol or Other Drug Treatment: Engagement	12.9 %	14.8 %	1.8***
Alcohol or Other Drug Treatment: Initiation	34.2 %	37.5 %	3.1***
All-Cause Emergency Department Visits per 1000 Beneficiaries	49.0	51.0	-0.7
Average Length of Stay in IMDs	19.5	20.3	0.3
Continuity of Pharmacotherapy for Opioid Use Disorder	60.0 %	56.2 %	-4.2***
FCS Beneficiaries with Inpatient or Residential SUD Service(s)	0.5 %	4.0 %	3.5***
Inpatient Admissions for Substance Use Disorder per 1000 Beneficiaries	18.6	19.8	0.2
Overdose Deaths (count)	567	NA	NA
Overdose Deaths (rate)	0.03 %	NA	NA
People with an Opioid Prescription >90mg MED $\downarrow$	17.4 %	16.4 %	-1.4***
People with an Opioid Prescription who were Prescribed a Sedative $\downarrow$	21.4 %	19.0 %	-2.6***
Readmissions Among Beneficiaries with SUD	17.8 %	17.5 %	-0.2

Note: Shaded cells indicate a statistically signficant change. Blue shaded cells indicate an improvement. Orange-shaded cells indicate declining performance. Results marked \* are significant at the p<.05 level. Results marked \*\* are significant at the p<.01 level. Results marked \*\* are significant at the p<.001 level. Adult access to preventive/ambulatory health services for Medicaid beneficiaries with substance use disorder was calculated on a calendar year basis due to differences in availability of data. All other measures are presented on a July to June basis.



We also examined measures of health services utilization, as specified by the state's evaluation design (see Exhibit 15.2). These measures assessed simple changes in utilization; we do not present statistically adjusted differences. After the introduction of the SUD waiver, the number of individuals who received some form of SUD treatment increased by 5,691, relative to the prior year. Furthermore, in the first year of the SUD waiver, 7,647 more individuals received medications for substance use disorders, and the number of providers who billed for medications increased by 367. Finally, we saw increases in the number of beneficiaries receiving services for substance use disorders, including early interventions, outpatient services, residential and inpatient services, and withdrawal management.

A small number of measures did not move in the anticipated or desired direction. Follow-up after emergency department visit for mental illness (30-day and 7-day measures) decreased slightly, and continuity of pharmacotherapy for opioid use disorder also decreased. In addition, the number of unique Medicaid beneficiaries treated in an IMD for an SUD decreased slightly in the first year after the waiver.

Exhibit 15.2: Change in Health Services Utilization for People with Substance Use Disorder

Statewide rate June 2017 to July 2018, statewide rate July 2018 to June 2019, and pre-post change

	2017-18 Statewide	2018-19 Statewide	Change
Any SUD Treatment	64,601	70,292	5,691
Early Intervention	1,482	1,740	258
Medicaid Beneficiaries Treated in an IMD for SUD	6,861	6,838	-23
Medicaid Beneficiaries with an SUD diagnosis	170,587	168,505	-2,082
Medications for Addiction Treatment	30,251	37,898	7,647
Outpatient Services	37,854	39,729	1,875
Residential and Inpatient Services	9,823	11,156	1,333
Withdrawal Management	8,697	9,548	851

Note: Shaded cells indicate a statistically signficant change. **Blue** shaded cells indicate an improvement. **Orange**-shaded cells indicate declining performance. Results marked \* are significant at the p<.05 level. Results marked \*\* are significant at the p<.01 level. Results marked \*\*\* are significant at the p<.01 level.



Our final report will include information on changes in overdose deaths and the overdose rate that occurred after the SUD waiver. These data were not available at the time this interim report was created. In the year prior to the SUD waiver, the state recorded 567 overdose deaths in the Medicaid program, resulting in an overdose death rate of .03 percent.

#### **ACH-Level Results**

Our evaluation included analysis of SUD measures across each ACH (see Data Appendix, Table 7). Many of these changes mirror statewide changes. For example, access to preventive services for individuals with substance use disorder increased in each ACH. Better Health Together, in particular, showed considerable progress, demonstrating statistically significant changes in 10 out of 16 measures. In contrast, relatively few measures changed in SWACH, and follow-up after emergency department visits for alcohol or drug dependence decreased significantly for this ACH. Substance use disorder treatment penetration increased in seven of the nine ACHs, with the largest increases in Better Health Together and Elevate Health.

#### **Conclusions**

Overall, these results suggest that, across many domains, the state has improved its ability to provide substance use treatment to Medicaid enrollees. Among 24 measures, 18 improved, and six demonstrated no change or slightly worse performance. These findings point to significant progress in expanding access and provider capacity, increasing treatment and treatment availability, and improving care coordination.

These findings have important limitations. For example, our ability to measure the quality of life, addiction need, and changes in mortality, morbidity, or addiction severity are limited in administrative data. In addition, the SUD waiver represents one piece of a larger statewide and

national effort to address the opioid epidemic. We cannot attribute the positive changes in this study to the SUD waiver alone. Furthermore, while the quantitative trends are promising, qualitative data suggest ongoing challenges with reimbursement and coordination between MCOs and residential treatment facilities. There is some tension between providers who view residential treatment and appropriate for certain populations, whereas MCOs have concerns about managing utilization. Furthermore, while integrated managed care might improve access to SUD treatment over the longer run, the shift to integrated managed care may have introduced a new level of administrative burden that has introduced challenges for reimbursement.

Future reports will provide additional information on the changes occurring in subsequent years, with some increased ability to discern mortality and overdose trends.

# Interim Evaluation Conclusions and Recommendations

Washington's Medicaid Transformation Project (MTP) is an ambitious effort to improve care and outcomes for a wide range of Medicaid beneficiaries, including children, mothers, adults with chronic disease, individuals with mental health and substance use disorders, and people with complex health and social service needs.

- MTP funds Accountable Communities of Health (ACHs), regional entities designed to align health care and social-service sectors and address social determinants of health (SDOH).
- MTP initiatives encompass foundational factors in the performance of the health system, including value-based payment (VBP), health care workforce capacity, and health information technology (HIT).
- MTP initiatives support informal caregivers, with the goal of slowing the transition to use of traditional long-term services and supports (LTSS). MTP also funds housing and employment supports for the most vulnerable Medicaid beneficiaries.
- MTP includes efforts to maintain and expand access to inpatient and residential treatment for substance use disorders.

Three years into MTP, Washington State has demonstrated progress toward its goal of transforming care. Key findings and recommendations of the Interim Evaluation are summarized below.

#### **Statewide Medicaid System Performance Under DSRIP**

With regard to Washington's overall Medicaid system performance under the Delivery System Reform Incentive Program (DSRIP), we found substantial improvements in measures related to substance use disorder and chronic conditions. Changes across other performance measure domains were modest or unchanged during this period (see Chapter 1 for details).

Racial and ethnic disparities were evident, and additional effort is needed to achieve equity in the state's transformation of care. Black and American Indian/Alaska Native beneficiaries experienced less access to, or a lower quality of, care on the majority of measures than Medicaid beneficiaries of other races. Asian and Hispanic beneficiaries also experienced lower quality of care on some measures relative to other Medicaid beneficiaries. However, these differences were less pronounced than for Black and American Indian/Alaska Native members.

#### In summary:

- Substance Use Disorder Care improved meaningfully across the state for all performance measures. Quality measures were lower for most communities of color and for higher-poverty
- Opioid Prescribing and Opioid Use Disorder Treatment exhibited improvements across the state, including decreases in opioid prescriptions and improvements in access to treatment.
- Care for People with Chronic Conditions measures improved modestly from 2018 to 2019, although most measures. American Indian/Alaska Native and Black beneficiaries experienced significant disparities in the quality of care in this domain.
- Mental Health measures demonstrated mixed performance for Medicaid members as a whole; some measures were slightly better than average for people with serious mental illness and rural residents than for all Medicaid beneficiaries.
- Social Determinants of Health measures were largely unchanged from prior years. High rates of homelessness persisted among people with serious mental illness and American Indian/Alaska Native and Black Medicaid beneficiaries.
- Access to Primary and Preventive Services measures were mostly unchanged. Rates of access were similar for urban and rural areas but lower among Native Hawaiian and Pacific Islanders.
- Oral Health Care measures were largely unchanged. Some populations, such as people in rural and high-poverty areas and American Indian/Alaska Native and Black beneficiaries, continued to be served at lower rates than the state as a whole.
- Reproductive and Maternal Health Care measures were stable. Disparities were evident for Asian, Black, and Hawaiian/Pacific Islander beneficiaries.
- Prevention and Wellness measures were also relatively stable. American Indian/Alaska Native beneficiaries had lower rates of preventive screenings and well visits relative to other Washington Medicaid members.
- ED, Hospital, and Institutional Care Use measures did not change substantially for the state as a whole. Utilization of these services was higher among people with chronic conditions or serious mental illness.

- Structural factors may drive differences in access and quality for specific racial and ethnic groups. These factors may occur at local, regional, or statewide levels. These may include, for example, differences in primary care, behavioral health, or SUD treatment provider availability across neighborhoods, different rates of provider dismissals of patients (e.g., "firing" patients), or beneficiary experiences of racism and discrimination. The state should seek to identify the specific structural issues that may be driving differences in access and quality of care for Medicaid members.
- 2 The state's managed care contracts may present untapped options to further promote equity. Performance measures or shared risk arrangements that incentivize health equity may be an additional mechanism for the state to prioritize health equity and steer resources appropriately.

- 3 The state should assess the potential for additional collaboration with Tribes to identify strategies to improve access to and quality of care for Washington's American Indian Medicaid beneficiaries.
- 4 ACH partnerships with community-based organizations may present opportunities to better reach Washington's American Indian/Alaska Native, Black, and other racial and ethnic minority members. In particular, ACHs' role in supporting Washington State's COVID-19 response and recovery may be an important mechanism for reducing the pandemic's disproportionate harm to communities of color.
- 5 More explicit promotion of MTP's emphasis on social determinants of health may be necessary. The state should explore opportunities to directly engage ACHs and managed care organizations (MCOs) in targeted regional efforts to decrease racial and ethnic disparities in homelessness, arrest rates, and unemployment.

#### **Value-Based Payment**

Washington State has demonstrated progress toward MTP goals related to value-based payment, including:

- Achieving targets for VBP participation by MCOs; and
- Expanding participation in VBP arrangements by primary care practices.

As noted in Chapter 1, a 2019 survey conducted by the Health Care Authority (HCA) found that Washington State's MCOs have made particular progress toward the adoption of shared savings and shared risk arrangements. More than half of MCO payments to Medicaid providers in 2018 were made through arrangements that included shared savings and shared risk, compared with 20 percent of commercial payments and 8 percent of Medicare Advantage payments (Washington State Health Care Authority, 2019d).

This topic will be explored in further detail in the MTP Final Evaluation Report, including results from the second round of surveys examining VBP arrangements.

#### Washington's Health Care Workforce

The interim evaluation includes several findings on the development of workforce capacity:

- Workforce shortages were cited as one of the top challenges in implementing MTP initiatives.
   Specific examples included psychiatrists or clinical social workers to support Health Improvement Project 2A (bi-directional integration), providers eligible to become certified to prescribe medications for addiction treatment in support of Project 3A (opioid interventions), and rural health care providers or first responders who ACHs could engage in implementing chronic disease interventions.
- ACHs devoted substantial effort to regional workforce development as part of Health Improvement Project (HIP) work. Planning and early implementation of HIPs often required retraining existing workers for new clinical activities ACHs sought to promote, such as new screening protocols. ACHs also recruited new employees to serve in care coordination or patient navigator roles necessary for project implementation.

 Community health workers (CHWs) played an important role in ACH and regional progress toward HIP implementation. Recruitment of CHWs was critical for the implementation of projects such as care coordination hubs, and regions with established CHW workforces at the beginning of the MTP demonstration reported fewer challenges with project rollout. Retention of CHWs was cited as a challenge that hindered implementation progress across multiple areas (see Chapter 4).

This topic will be explored in further depth in upcoming Rapid Cycle Reports and the MTP Final Evaluation Report, including additional findings from surveys and interviews with provider organizations and other stakeholders.

#### Recommendations

- 1 The state should assess the potential for supporting the expansion of the community health worker workforce. Workforce shortages may limit ACH efforts to "scale and sustain" progress made toward HIPs. Difficulty recruiting for these positions may limit ACH progress on care coordination or care transitions.
- 2 The state should explore opportunities to identify and address factors contributing to turnover in key workforce roles related to MTP projects, such as care coordination. There may be opportunities to engage MTP stakeholders in more targeted efforts to address common retention challenges across regions. Recruiting and retaining a diverse workforce may also be important for addressing health disparities.

#### **Health Information Technology**

A goal of MTP is to promote provider adoption and use of health information technology (HIT) and interoperable health information exchange (HIE) platforms. Our interim evaluation of MTP has found the following to date:

- ACHs leveraged care coordination platforms developed for Project 2B (Community-Based Care Coordination) to support a wide range of health promotion activities, including all projects within Domain 2 (Care Delivery Redesign) and most projects in Domain 3 (Prevention and Health Promotion). Once in place, a shared HIT infrastructure could be leveraged to support mutually reinforcing activities that were applicable to most HIPs.
- MTP required substantial effort from partnering organizations to participate in new HIT/ HIE tools. Stakeholders noted that HIT/HIE platforms may be most easily adopted by medical providers with prior experience with electronic health record systems or OneHealthPort. Behavioral health providers or human service organizations may bear a higher burden to join projects that involve information exchange. As detailed in Chapter 5, ACHs reported the need for community information exchanges or alternative HIT/E tools for these partners.
- Stakeholders expressed a desire for a statewide HIT/HIE strategy to promote standardization and interoperability. The diversity of HIT/HIE platforms used across regions and between various types of partnering providers was identified as a challenge for regional coordination or implementation of closed-loop referral networks.
- There were concerns about the distribution of HIT/HIE costs and effort related to MTP. Behavioral health providers incurred new costs to acquire electronic health records and reporting systems to meet MCO billing requirements under Integrated Managed Care (IMC). ACHs

expressed concerns regarding the sustainability of the Community Information Exchange (CIE) infrastructure developed for HIPs, citing a lack of renewable funding streams to support that work.

#### Recommendations

- The state should lead efforts to promote standardization of HIT/HIE platforms across regions and sectors, with particular attention to lowering barriers to adoption among behavioral health providers.
- 2 The state should consider the potential benefits from a single, standardized CIE that would facilitate information transfer across regions and avoid fragmentation that could arise with multiple CIEs. The diversity of potential approaches and tools across sectors and regions will hinder locally led efforts to achieve interoperability. ACHs also need clear guidance regarding the state's vision for the financing mechanism that should support CIE.

#### **ACH Performance Through Health Improvement Projects**

We evaluated the impact of eight health improvement projects (HIPs) implemented by ACHs, as detailed in Chapters 2-10. These results were based on data from the first year of implementation and most HIPs were in an early stage of implementation at the time of this analysis. ACHs focused on developing the partnerships, workforce, and HIT infrastructure necessary to support new interventions.

We observed a variety of improvements in outcome measures for target populations in projects 2A (e.g., bi-directional integration of physical and behavioral health care) and 3A (e.g., addressing the opioid crisis). There were fewer significant or detectable improvements in analyses of other HIPs.

#### **Care Delivery Redesign Projects**

Our results suggest that ACH Health Improvement Projects in Domain 2, "Care Delivery Redesign," are underway, with improvements in some measures during this period. Specifically:

- All ACHs participated in projects to integrate physical and behavioral health care (2A). We observed improvements in a number of measures related to mental health treatment in primary care settings and prevention and treatment of substance use disorders.
- Six ACHs implemented Pathways Community HUBs to support care coordination and information exchange in their regions (2B). Measures of mental health treatment penetration and follow-up after emergency department visits for substance use disorders improved in participating ACHs relative to non-participating regions.
- Five ACHs participated in transitional care projects for people exiting from intensive or institutional care settings to their homes, supportive housing, or communities (2C). For this project, participating ACHs demonstrated poorer performance among some measures than those ACHs that did not select this project.
- Three ACHs engaged in projects to intervene and redirect Medicaid beneficiaries from correctional settings or emergency departments to primary care, behavioral health, or SUD care when appropriate (2D). Among high emergency department utilizers (>5 visits per year), rates of mental health penetration improved and hospital readmissions declined in participating ACH regions. However, we observed few other differences across ACHs.

#### **Prevention and Health Promotion Projects**

Like Domain 2, a variety of efforts are underway for projects in Domain 3, "Prevention and Health Promotion," with improvements in some areas in the first year of implementation. Specifically:

- Opioid prescribing rates and opioid use disorder (OUD) treatment rates improved during this period. All ACH regions participated in projects to address OUD, emphasizing provider education, training in opioid prescribing approaches, and OUD treatment (3A).
- Three ACHs participated in projects that addressed reproductive and maternal/child health, focusing on providing technical assistance to providers to implement evidence-based programs for pregnant and postpartum women (3B). Relative to ACHs who did not participate in 3B, we did not observe improvements in quality measures related to reproductive health.
- Two ACHs participated in Project 3C, focused on improving oral health access and integration of dental services into primary care. There were modest improvements in the utilization of some dental services in participating ACHs relative to non-participating ACHs.
- All ACHs participated in efforts to promote chronic disease prevention and control, promoting partner implementation of screenings and disease self-management programs (3D). We observed promising improvements in hospitalization rates and emergency department utilization among people with chronic conditions. However, there were relatively few improvements in quality measures related to specific chronic diseases during this period.

Generally, we found few indications of change in measures that could be attributed to ACH Health Improvement Projects to date. However, projects were at an early stage of implementation at the time of this analysis. Measurable impacts of these efforts may not appear in the first year. A lack of measurable change may also reflect the prioritization of effort. For example, ACHs may have placed a lower priority on addressing reproductive, maternal and child health because they believed that these efforts would not change in performance measures. The MTP Final Evaluation Report will examine these measures later in time, providing a more complete picture of the impact of ACH projects on targeted Medicaid beneficiaries.

- Assessing ACHs' role in the COVID-19 response may be important for understanding the overall impact of ACH infrastructure and workforce investments on health system transformation during the demonstration, particularly in light of disruptions to health improvement projects.
- 2 The state should continue to monitor performance across ACHs. The COVID-19 pandemic may delay or reverse improvements in performance due to disruptions to the health care delivery system. A more extended period of observation that includes years beyond the pandemic will yield more robust conclusions about the impact of each project.
- 3 Additional outreach may be needed from HCA to raise awareness among provider organizations and community partners about drivers of Medicaid program costs and service utilization. Our evaluation identified misconceptions among stakeholders about certain characteristics of Washington's Medicaid population. For example, there may be opportunities to raise awareness that maternal health care - including delivery and postpartum care - is a substantial component of Medicaid expenditures (Renfro, et al., 2018).

#### **MAC and TSOA**

We examined Medicaid Alternative Care (MAC) and Tailored Supports for Older Adults (TSOA) program participants' satisfaction with the program, health outcomes, and use of traditional LTSS. As described in Chapters 11 and 12, we found:

- Enrollment in both MAC and TSOA ramped up slowly, but satisfaction in both programs was high. There appears to have been more interest and incentive to enroll in TSOA than in MAC. Care recipients and their informal (unpaid) caregivers expressed high satisfaction with the two programs. Participants reported that the programs contributed to independence and were beneficial to physical and mental health.
- MAC participants had fewer adverse health outcomes following enrollment. These changes were comparable to outcomes for traditional in-home service users and reflected a relatively early period in the program's implementation.
- Only a small proportion of MAC and TSOA participants went on to use traditional LTSS within six months of MAC and TSOA enrollment, suggesting the program may have succeeded in deferring the need for more intensive services among participants.

- 1 The state should explore options to ensure benefit packages are clearly understood across TSOA, MAC, and traditional long-term services and supports so individuals can make the choice that best meets their needs. Low enrollment during their initial years suggests additional outreach efforts may be needed for the MAC and TSOA programs to reach people who could benefit from these programs. In addition, the service eligibility criteria for MAC and traditional Medicaid in-home services are similar, creating a potential disincentive for participants to select the MAC program's less intensive level of services.
- 2 The state should explore options for improvement in scheduling and communication between MAC and TSOA clients, agency staff and service providers. Despite high overall satisfaction with the programs, several participants reported concerns in these areas.

#### **Foundational Community Supports**

Our evaluation of the Foundational Community Supports program, or MTP Initiative 3, found promising early results for Medicaid members who participated in supported employment services, but little evidence of change from participation in supportive housing. As described in Chapter 13, our findings show:

- Washington has successfully established a statewide network of FCS providers, but gaps in services remain. The network of FCS service providers has gradually increased since the program launched in 2018. It now covers most counties in the state. Engagement of service providers in rural areas has been challenging, however. Stakeholders also noted that a lack of housing resources in many regions meant that participants had limited options.
- FCS Supported Employment demonstrated progress increasing employment. Rates of employment increased strongly for Medicaid enrollees who participated in FCS Supported Employment, relative to a matched comparison group. These changes were clearly evident in the months following receipt of FCS employment services.
- The impact of FCS Supportive Housing is less clear. Rates of homelessness did not improve for Medicaid enrollees who participated in FCS Supportive Housing. Stakeholders noted that FCS housing services typically need to be paired with other housing resources. A lack of affordable housing options limited FCS service providers' ability to connect participants with housing after they had enrolled in FCS.
- Participants who engaged in both FCS housing and FCS employment did not experience improvement in rates of employment or homelessness. This population may have unique service needs not well addressed by current program design.
- Measures of health care access and utilization improved for some beneficiary groups. For example, engagement in primary care and SUD treatment improved for participants who received both types of FCS services. However, these results are based on small sample sizes and should be interpreted with caution.

- 1 The FCS Supported Employment program may play an important role in employment stability for Medicaid enrollees during and after the COVID-19 pandemic. The Health Care Authority and the Aging and Long-Term Support Administration should continue to monitor the program for evidence of positive effects and consider ways to expand access, particularly in rural areas.
- 2 Lack of housing and shelter resources will likely remain a limiting factor in the FCS Supportive Housing program's effectiveness in the absence of further action. The state should explore how to expand affordable housing options for the Medicaid population that is eligible for this service.
- 3 The population of people eligible for both FCS Supportive Housing and Supported Employment may need different types of employment services than FCS participants who only enroll in supported employment (without enrolling in housing). The state should investigate options for better meeting the needs of this subpopulation, which did not exhibit improvements after receipt of employment services.

#### Substance Use Disorder

Our assessment of the impact of the Medicaid Substance Use Disorder (SUD) amendment to Washington State's 1115 demonstration waiver (described in Chapter 14) found:

- Access to and quality of substance use disorder treatment improved in the first year of Washington's SUD waiver. For example, there were substantial improvements in measures of initiation of alcohol and other drug dependence treatment and access to preventive services for individuals with SUDs. The number of patients receiving substance use treatment increased.
- There was evidence of increased capacity for providers authorized to prescribe medications for opioid use disorders and increases in the number of linstitutions for mental disease (IMD) billing for SUD treatment.
- Despite this progress, there were implementation challenges. The transition to integrated managed care (IMC) appears to have created unintended consequences for SUD treatment providers, including negatively impacting the timeliness of payment for claims to behavioral health providers and adversely affected provider organizations' financial stability.
- The IMC transition also created challenges for residential treatment facilities, including new prior authorization requirements. As managed care organizations (MCOs) took on financial risk for residential services, disagreements emerged between payers and providers about the role of residential care in SUD treatment.

The results of our interim evaluation of Washington State's SUD waiver are documented in detail in a separately published Mid-Point Assessment that includes additional information on progress toward key milestones and budget neutrality. Future evaluation activities will continue to monitor progress toward the SUD waiver goals, allowing further opportunity to observe changes in performance.

- The state should continue to assess the entire system of substance use prevention, treatment, and recovery, considering IMDs and residential services as one part of the continuum of care. To ensure that the waiver does not create incentives for unnecessary residential stays, the state should continue to monitor trends in admissions, length of stay, and the use of outpatient services.
- 2 The state should continue to monitor issues around the timeliness of behavioral health and SUD claims payments and whether these issues may be resolved as MCO contract changes are executed in 2021.
- 3 The state should monitor the extent to which providers and MCOs have adapted to new prior authorization requirements for services in IMDs.
- 4 There may be regional capacity issues that restrict access to withdrawal and detoxification services. Given the urgency of these services and their role in preventing overdose deaths, HCA should consider assessing the availability of these services across regions and identifying options to reduce bottlenecks.

#### **SUMMARY OF RECOMMENDATIONS**

Specific recommendations for Washington State and the Health Care Authority arising from this interim evaluation include:

- Address health disparities. Our analysis of Medicaid system performance through 2019 revealed progress on some measures, as well as persistent racial and ethnic disparities in access and quality of care. HCA should further investigate structural factors that may drive differences among specific groups. The state's managed care contracts may also present options to reduce health disparities.
- Strengthen the engagement of non-clinical partners in MTP. Behavioral health, human services, and other community-based partners have faced particular challenges engaging in MTP. Achieving the state's goal of making progress on social factors such as homelessness, encounters with corrections, or unemployment may require further strengthening collaboration between the state, Tribes, ACHs, MCOs, Foundational Community Supports providers, and community-based organizations. The state should also explore how to increase housing options for FCS Supportive Housing participants.
- Support the recruitment and retention of key workers necessary for MTP success. Additional efforts may be needed in rural areas where, for example, difficulty recruiting community health worker positions may have restricted ACH progress. In-home caregiver demand is also projected to increase in future years.
- Provide guidance regarding Washington's vision for community information exchange (CIE), including the desired financing mechanisms to support CIE platforms. Promote standardization and interoperability of HIT/HIE platforms across regions and sectors, focusing on barriers to participation among behavioral health and SUD treatment providers.
- Continue to monitor progress on ACH Health Improvement Projects. ACHs' early activities focused on developing the infrastructure and workforce necessary to implement new interventions. A longer period of observation, and consideration of ACHs' roles in COVID-19 response and recovery, will yield more robust conclusions about the impact of ACH projects.
- Ensure benefit packages are clearly understood across MAC, TSOA and traditional long term services and supports so that participants can choose benefits that best meet their needs. Stronger incentives may be needed to promote enrollment in MAC versus traditional Medicaid in-home services.
- Build on early positive results from the FCS Supported Employment program. The program may play an important role in employment recovery after the COVID-19 pandemic. Further investigation is needed for whether additional or different employment services are needed for FCS participants who enroll in both supported employment and supportive housing services.
- Continue to assess the entire system of substance use prevention, treatment, and recovery, and ensure that the SUD waiver does not create incentives for unnecessary residential stays.
- Monitor challenges identified in MCO payments made to behavioral health and SUD treatment providers, including timeliness of payments and appropriateness of prior authorization requirements. Assess whether these challenges gradually resolve following the implementation of integrated managed care and the execution of new MCO contracts in 2021, or whether these challenges persist over time and warrant future changes to IMC.

#### **Evaluation Next Steps**

This report documents interim progress toward the MTP demonstration goals, focusing primarily on activities occurring through early 2020 and outcomes observed through late 2019.

Evaluation of MTP is ongoing, with additional data collection and analysis slated to occur, including:

- Interviews with state, ACH, provider organization, and community partner stakeholders to assess implementation progress, challenges, and successes through the end of the demonstration;
- A statewide survey of provider organizations and hospitals to assess VBP adoption and experiences later in the demonstration;
- Ongoing analysis of health care claims and other administrative data to assess changes in performance measures through the end of the demonstration;
- New analyses of measures related to health care costs across all four MTP initiatives;
- Consideration for how COVID-19 affected the trajectory and implementation progress of MTP initiatives in 2020 and beyond.

Interim findings will continue to be reported in quarterly Rapid Cycle Reports. At the time of this report, Washington State was engaged in negotiations with CMS regarding a potential one-year extension of MTP that would add a sixth year to the evaluation; no determination had been made at the time of publication. A Final Evaluation Report is currently planned in January 2022 that will present summative evaluation findings for the demonstration.

#### **Conclusion**

Washington State's Medicaid Transformation Program set ambitious goals for improving care delivery and promoting health for Washington's 1.9 million Medicaid beneficiaries between 2017 and 2021. By early 2020, the state had achieved important milestones for structural change. These include transforming payment mechanisms for behavioral health; introducing new options for meeting needs for supportive housing, LTSS, and supported employment; accelerating adoption of value-based payments; and spurring regional action on a range of population health efforts led by Accountable Communities of Health.

There are early signs of success. There have been meaningful improvements in substance use disorder treatment, care for people with chronic conditions, and in some measures of mental health quality and utilization. New employment supports for people with complex needs show early signs of success increasing employment and improving health outcomes. New, less intensive LTSS options for older adults appear to be achieving health outcomes similar to traditional Medicaid in-home services.

Initiatives focused on social determinants of health, homelessness, or health promotion have not yet shown strong evidence of change. ACHs have made investments in workforce and other infrastructure necessary to implement interventions in these areas. Additional efforts will be necessary to address the structural factors that currently limit access to and the quality of care for underserved groups, and more substantial improvements in these outcomes may take longer to emerge.

As Washington State transitions to the final years of the MTP demonstration, the full impact of the COVID-19 outbreak on the state's Medicaid population is not yet known. Monitoring and understanding the pandemic's effects on the Medicaid program and the state's progress in improving quality, controlling costs, and achieving equity will be important areas of focus for the final evaluation.

### References

Albert, D. A., Begg, M. D., Andrews, H. F., Williams, S. Z., Ward, A., Lee Conicella, M., Rauh, V., Thomson, J. L., & Papapanou, P. N. (2011). An Examination of Periodontal Treatment, Dental Care, and Pregnancy Outcomes in an Insured Population in the United States. American Journal of Public Health, 101(1), 151-156.

Amerigroup. (2018). Foundational Community Supports Third-Party Administrator Quick Reference Guide. https://www.hca.wa.gov/assets/program/fcs-referral-quick-reference-guide.pdf

Andrieni, J. D. (2016). Population health management: The lynchpin of emerging healthcare delivery models. In America's Healthcare Transformation: Strategies and Innovations (pp. 113-127). Rutgers University Press.

Archer, J., Bower, P., Gilbody, S., Lovell, K., Richards, D., Gask, L., Dickens, C., & Coventry, P. (2012). Collaborative care for depression and anxiety problems. The Cochrane Database of Systematic Reviews, 10, CD006525.

Association of State and Territorial Dental Directors. (2007). Mobile-Portable Dental Manual. https:// www.mobile-portabledentalmanual.com/

Athena Forum. (2018). Prevention Priorities. https://www.theathenaforum.org/prevention-priorities

Binswanger, I. A., Stern, M. F., Deyo, R. A., Heagerty, P. J., Cheadle, A., Elmore, J. G., & Koepsell, T. D. (2007). Release from Prison—A High Risk of Death for Former Inmates. The New England Journal of Medicine, 356(2), 157.

Bittinger, K., Court, B., & Mancuso, D. (2019). Evaluation of Integrated Managed Care for Medicaid Beneficiaries in Southwest Washington: First Year Outcomes. Washington State Department of Social and Health Services.

Blandford, A. M., & Osher, F. (2013). Guidelines for the Successful Transition of People with Behavioral Health Disorders from Jail and Prison. SAMHSA's GAINS Center for Behavioral Health and Justice Transformation.

Borkan, J. (1999). Immersion/Crystallization. In B. Crabtree & W. Miller (Eds.), Doing Qualitative Research (2nd ed., pp. 179-194). Sage Publications.

Buttorff, C., Ruder, T., & Bauman, M. (2017). Multiple Chronic Conditions in the United States. RAND Corporation.

Centers for Disease Control and Prevention. (2020a). Prescription Opioid Data. https://www.cdc.gov/ drugoverdose/data/prescribing.html

Centers for Disease Control and Prevention. (2020b). Planning for Pregnancy. https://www.cdc.gov/ preconception/planning.html

Centers for Medicare and Medicaid Services. (2018). Washington State Medicaid Transformation Project: Special Terms and Conditions. https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/wa/medicaid-transformation/wa-medicaidtransformation-CMS-amendment-request-apprvl-07172018.pdf

Centers for Medicare and Medicaid Services. (2020a). Chronic Conditions Data Warehouse. https:// www2.ccwdata.org/web/guest/home/

Centers for Medicare and Medicaid Services. (2020b). Estate Recovery. https://www.medicaid.gov/ medicaid/eligibility/estate-recovery/index.html

Center of Excellence for Integrated Health Solutions. (2020). National Council for Behavioral Health. https://www.thenationalcouncil.org/integrated-health-coe/

Collins, C., Levis Hewson, D., Munger, R., & Wade, T. (2010). Evolving models of behavioral health integration in primary care. Milbank Memorial Fund.

Columbia Legal Services. (2017). Questions and Answers on the Tailored Supports for Older Adults (TSOA) and Medicaid Alternative Care (MAC) Programs. https://www.hca.wa.gov/assets/program/tsoaand-mac-q&a.pdf

Community Care Coordination Learning Network and The Pathways Community HUB Certification Program. (2016). Pathways Community HUB Manual: A Guide to Identify and Address Risk Factors, Reduce Costs, and Improve Outcomes (15(16)-0070-EF; Issue 15(16)-0070-EF). https://innovations. ahrq.gov/sites/default/files/Guides/CommunityHubManual.pdf.

Danielson, T., Mancuso, D., & Felver, B. (2020). The Foundational Community Supports Program: Preliminary Evaluation Findings. Washington State Department of Social and Health Services.

Dartmouth Atlas Data. (2020). Primary Care Service Area. https://www.nber.org/research/lectures

Dowell, D., Haegerich, T., & Chou, R. (2016). CDC Guideline for Prescribing Opioids for Chronic Pain. MMWR. Recommendations and Reports, 65(RR-1), 1–49.

Druss, B. G., Rohrbaugh, R. M., Levinson, C. M., & Rosenheck, R. A. (2001). Integrated medical care for patients with serious psychiatric illness: A randomized trial. Archives of General Psychiatry, 58(9), 861-868.

Druss, Benjamin G., von Esenwein, S. A., Compton, M. T., Rask, K. J., Zhao, L., & Parker, R. M. (2010). A randomized trial of medical care management for community mental health settings: The Primary Care Access, Referral, and Evaluation (PCARE) study. The American Journal of Psychiatry, 167(2), 151-159.

Druss, Benjamin G., von Esenwein, S. A., Glick, G. E., Deubler, E., Lally, C., Ward, M. C., & Rask, K. J. (2017). Randomized Trial of an Integrated Behavioral Health Home: The Health Outcomes Management and Evaluation (HOME) Study. The American Journal of Psychiatry, 174(3), 246–255.

Dye, B. A., Tan, S., Smith, V., Lewis, B. G., Barker, L. K., Thornton-Evans, G., Eke, P. I., Beltrán-Aguilar, E. D., Horowitz, A. M., & Li, C.-H. (2007). Trends in oral health status: United States, 1988-1994 and 1999-2004. Vital and Health Statistics. Series 11, Data from the National Health Survey, 248, 1-92.

Eiken, S., Sredl, K., Burwell, B., & Amos, A. (2018). Medicaid Expenditures for Long-Term Services and Supports in FY 2016. IBM Watson Health.

Fred Osher, Henry Steadman, & Heather Barr. (2003). A Best Practice Approach to Community Reentry From Jails for Inmates with Co-Occurring Disorders: The Apic Model. Crime & Delinquency, 49(1), 18.

Gates, A., Rudowitz, R., & Guyer, J. (2014). An Overview of Delivery System Reform Incentive Payment (DSRIP) Waivers (Issue Brief). Kaiser Family Foundation.

Gilbody, S., Bower, P., Fletcher, J., Richards, D., & Sutton, A. J. (2006). Collaborative care for depression: A cumulative meta-analysis and review of longer-term outcomes. Archives of Internal Medicine, 166(21), 2314-2321.

Goodman, D. C., Mick, S. S., Bott, D., Stukel, T., Chang, C., Marth, N., Poage, J., & Carretta, H. J. (2003). Primary Care Service Areas: A New Tool for the Evaluation of Primary Care Services. Health Services Research, 38(1 Pt 1), 287-309.

Haley, J. M., Kenney, G. M., & Pelletier, J. (2008). Access to Affordable Dental Care: Gaps for Low-Income Adults. Urban Institute.

Hummel, J., Phillips, K., Holt, B., & Hayes, C. (2015). Oral Health: An Essential Component of Primary Care [White Paper]. Qualis Health.

Hunkeler, E. M., Katon, W., Tang, L., Williams, J. W., Kroenke, K., Lin, E. H. B., Harpole, L. H., Arean, P., Levine, S., Grypma, L. M., Hargreaves, W. A., & Unützer, J. (2006). Long term outcomes from the IMPACT randomised trial for depressed elderly patients in primary care. BMJ (Clinical Research Ed.), 332(7536), 259-263.

IPS Employment Center. (2020). What is IPS? https://ipsworks.org/index.php/what-is-ips/

Joint Commission. (2012). Transitions of Care: The need for a more effective approach to continuing patient care (Hot Topics in Health Care).

KFF's State Health Facts. (2019). Health Insurance Coverage of Children 0-18-Timeframe: 2019.

Krupitsky, E., Nunes, E., Ling, W., Gastfriend, D., Memisoglu, A., & Silverman, B. (2013). Injectable extended-release naltrexone (XR-NTX) for opioid dependence: Long-term safety and effectiveness. Addiction, 108(9), 1628-1637.

Kushner, J., & McConnell, K. J. (2020). Medicaid Transformation Project Evaluation Baseline Report. Center for Health Systems Effectiveness.

LEAD National Support Bureau. (n.d.). *LEAD Fact Sheet*. Retrieved December 4, 2020, from https://56ec6537-6189-4c37-a275-02c6ee23efe0.filesusr.com/ugd/6f124f 6c348a0648d045508966dceb187e9fb8.pdf?index=true

MacColl Institute for Healthcare Innovation. (1998). *The Chronic Care Model*. http://www.improvingchroniccare.org/

Mann, C. (2013). Targeting Medicaid Super-Utilizers to Decrease Costs and Improve Quality (CMCS Informational Bulletin). Centers for Medicare and Medicaid Services.

Mathematica. (2020). Medicaid Section 1115 Substance Use Disorder Demonstrations: Technical Specifications for Monitoring Metrics (Manual 3.0).

Mattick, R. P., Breen, C., Kimber, J., & Davoli, M. (2003). Methadone maintenance therapy versus no opioid replacement therapy for opioid dependence. *Cochrane Database of Systematic Reviews*, 2.

Mattick, R. P., Breen, C., Kimber, J., & Davoli, M. (2014). Buprenorphine maintenance versus placebo or methadone maintenance for opioid dependence (Review). *Cochrane Database of Systematic Reviews*, 2.

McDermott, K. W., & Jiang, H. J. (2020). Characteristics and Costs of Potentially Preventable Inpatient Stays, 2017. In *Healthcare Cost and Utilization Project (HCUP) Statistical Briefs* (Statistical Brief #259). Agency for Healthcare Research and Quality (US).

Medicaid and CHIP Payment and Access Commission. (2020). Payment for services in institutions for mental diseases (IMDs). https://www.macpac.gov/subtopic/payment-for-services-in-institutions-formental-diseases-imds/

Miller, C. J., Grogan-Kaylor, A., Perron, B. E., Kilbourne, A. M., Woltmann, E., & Bauer, M. S. (2013). Collaborative chronic care models for mental health conditions: Cumulative meta-analysis and metaregression to guide future research and implementation. *Medical Care*, 51(10), 922–930.

Miller, M. (2012). Did Expanding Eligibility For The Family Caregiver Support Program Pay for Itself by Reducing The Use of Medicaid-Paid Long-Term Care? (No. 12-11–3901). Washington State Institute for Public Policy.

Minozzi, S., Amato, L., Vecchi, S., Davoli, M., Kirchmayer, U., & Verster, A. (2011). Oral naltrexone maintenance treatment for opioid dependence. *The Cochrane Database of Systematic Reviews*, 2.

Morgan, S. R., Chang, A. M., Alqatari, M., & Pines, J. M. (2013). Non-emergency department interventions to reduce ED utilization: A systematic review. *Academic Emergency Medicine*, 20(10), 969–985.

National Vital Statistics System. (2020). Key Birth Statistics, 2018. https://www.cdc.gov/nchs/nvss/births.htm

O'Connor, E. A., Whitlock, E. P., Beil, T. L., & Gaynes, B. N. (2009). Screening for depression in adult patients in primary care settings: A systematic evidence review. *Annals of Internal Medicine*, 151(11), 793–803.

Olympic Community of Health. (2019). Natural Communities of Care. https://www.olympicch.org/ncc

Osher, F., Steadman, H., and Barr, H. (2003). A Best Practice Approach to Community Reentry From Jails for Inmates with Co-Occurring Disorders: The Apic Model. *Crime & Delinquency*, 49(1), 18. https://doi.org/10.1177/0011128702239237

Radnai, M., Gorzó, I., Urbán, E., Eller, J., Novák, T., & Pál, A. (2006). Possible association between mother's periodontal status and preterm delivery. *Journal of Clinical Periodontology*, 33(11), 791–796.

Redding, S., Conrey, E., Porter, K., Paulson, J., Hughes, K., & Redding, M. (2015). Pathways Community Care Coordination in Low Birth Weight Prevention. *Maternal and Child Health Journal*, 19(3), 643–650.

Renfro, S., Lindner, S., & McConnell, K. J. (2018). Decomposing Medicaid Spending During Health System Reform and ACA Expansion: Evidence From Oregon. *Medical Care*, 56(7), 589–595.

Reynolds, R., Dennis, S., Hasan, I., Slewa, J., Chen, W., Tian, D., Bobba, S., & Zwar, N. (2018). A systematic review of chronic disease management interventions in primary care. *BMC Family Practice*, 19(1), 11.

Ruiz, D., McNealy, K., Corey, K., Simmerman, J., Zurovac, J., McLaughlin, C., Barna, M., & Mleczko, M. (2017). *Evaluation of the Community-Based Care Transitions Program* (Final Evaluation Report No. 2246-000/HHSM-500-T0006). Econometrica, Inc.

SAMHSA-HRSA Center for Integrated Health Solutions. (2020). Standard Framework for Levels of Integrated Care. https://www.thenationalcouncil.org/wp-content/uploads/2020/01/CIHS\_Framework\_Final\_charts.pdf?daf=375ateTbd56

Shah, M. F., Black, C., & Felver, B. (2012). The Housing Status of Individuals Discharged from Behavioral Health Treatment Facilities. Washington State Department of Social and Health Services.

Shavit, S., Aminawung, J. A., Birnbaum, N., Greenberg, S., Berthold, T., Fishman, A., Busch, S. H., & Wang, E. A. (2017). Transitions Clinic Network: Challenges And Lessons In Primary Care For People Released From Prison. *Health Affairs*, 36(6), 1006–1015.

Shover, C. L., Falasinnu, T. O., Dwyer, C. L., Santos, N. B., Cunningham, N. J., Freedman, R. B., Vest, N. A., & Humphreys, K. (2020). Steep increases in fentanyl-related mortality west of the Mississippi River: Recent evidence from county and state surveillance. *Drug and Alcohol Dependence*, 216, 108314.

Sirotich, F. (2009). The criminal justice outcomes of jail diversion programs for persons with mental illness: A review of the evidence. *The Journal of the American Academy of Psychiatry and the Law*, 37(4), 461–472.

Siu, A. L., & US Preventive Services Task Force (USPSTF). (2016). Screening for Depression in Adults: US Preventive Services Task Force Recommendation Statement. *JAMA*, 315(4).

Soni, A. (2011). *Children's Dental Care*: Advice and Checkups, Ages 2-17, 2008 (Statistical Brief No. 326). Agency for Healthcare Research and Quality.

Sowers, W. E., & Rohland, B. (2004). American Association of Community Psychiatrists' Principles for Managing Transitions in Behavioral Health Services. *Psychiatric Services*, 55(11), 1271–1275.

Steadman, H., & Naples, M. (2005). Assessing the effectiveness of jail diversion programs for persons with serious mental illness and co-occurring substance use disorders. *Behavioral Sciences & the Law*, 23(2).

Substance Abuse and Mental Health Services Administration. (2009). *Supported Employment: Building Your Program* (SMA-08-4364; Evidence Based Practices Kit: Knowledge Informing Transformation).

Thota, A. B., Sipe, T. A., Byard, G. J., Zometa, C. S., Hahn, R. A., McKnight-Eily, L. R., Chapman, D. P., Abraido-Lanza, A. F., Pearson, J. L., Anderson, C. W., Gelenberg, A. J., Hennessy, K. D., Duffy, F. F., Vernon-Smiley, M. E., Nease, D. E., Williams, S. P., & Community Preventive Services Task Force. (2012). Collaborative care to improve the management of depressive disorders: A community guide systematic review and meta-analysis. *American Journal of Preventive Medicine*, 42(5), 525–538.

University of California, San Diego. (n.d.). Chronic Illness and Disability Payment System (6.0).

University of Washington Alcohol and Drug Abuse Institute. (2020). Methamphetamine Trends Across Washington State: Insights from Mortality, Treatment and Crime Lab Data. https://adai.washington.edu/WAdata/methamphetamine.htm

Unützer, J., Katon, W., Callahan, C. M., Williams, J. W., Hunkeler, E., Harpole, L., Hoffing, M., Della Penna, R. D., Noël, P. H., Lin, E. H. B., Areán, P. A., Hegel, M. T., Tang, L., Belin, T. R., Oishi, S., Langston, C., & IMPACT Investigators. Improving Mood-Promoting Access to Collaborative Treatment. (2002). Collaborative care management of late-life depression in the primary care setting: A randomized controlled trial. *JAMA*, 288(22), 2836–2845.

- U.S. General Accounting Office. (2000). Factors Contributing to Low Use of Dental Services by Low-Income Populations (HEHS-00-149; Oral Health).
- U.S. Government Accountability Office. (2010). Efforts Under Way to Improve Children's Access to Dental Services, but Sustained Attention Needed to Address Ongoing Concerns (GAO-11-96; Oral Health).
- U.S. Government Accountability Office. (2012). Medicaid: States Made Multiple Program Changes, and Beneficiaries Generally Reported Access Comparable to Private Insurance (GAO-13-55).

Verhaegh, K. J., MacNeil-Vroomen, J. L., Eslami, S., Geerlings, S. E., de Rooij, S. E., & Buurman, B. M. (2014). Transitional Care Interventions Prevent Hospital Readmissions For Adults With Chronic Illnesses. *Health Affairs*, 33(9), 1531–1539.

Warder, C. J., & Edelstein, B. L. (2017). Evaluating levels of dentist participation in Medicaid: A complicated endeavor. *The Journal of the American Dental Association*, 148(1), 26-32.e2.

Washington State Agency Medical Directors' Group. (2015). *Interagency Guideline on Prescribing Opioids for Pain* (3rd Edition).

Washington State Department of Health. (n.d.). Guidelines for Screening and Management for Substance Use During Pregnancy.

Washington State Department of Health. (2016). 2016 Washington State Interagency Opioid Working Plan. https://www.doh.wa.gov/Portals/1/Documents/1000/140-182-StateOpioidResponsePlan.pdf

Washington State Health Care Authority. (n.d.a). *Foundational Community Supports (FCS) Reimbursement Rates* (Effective July 1, 2020–12/31/2021). Retrieved December 4, 2020, from https://www.hca.wa.gov/assets/fcs-reimbursement-rate.pdf

Washington State Health Care Authority. (n.d.b). State Innovation Model Contractual Guidelines for Accountable Communities of Health (HCA 82-023 716; Healthier Washington).

Washington State Health Care Authority. (n.d.c). Washington State Medicaid Transformation Project (MTP) demonstration Section 1115 Waiver Quarterly Report (DY4 Q1).

Washington State Health Care Authority. (2017a). Foundational Community Supports (Healthier Washington FAQ). https://www.hca.wa.gov/assets/program/foundation-community-supports-faq.pdf

Washington State Health Care Authority. (2017b). Long Term Services and Supports (Healthier Washington FAQ). https://www.hca.wa.gov/assets/program/mtd-i2-faq.pdf

Washington State Health Care Authority. (2017c). *Medicaid Transformation Project Demonstration Evaluation Design*. https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/wa/medicaid-transformation/wa-medicaid-transformation-appvd-eval-dsgn-10262017.pdf

Washington State Health Care Authority. (2018). *Healthier Washington Medicaid Transformation:* Foundational Community Supports (Healthier Washington - The Facts). https://www.hca.wa.gov/assets/program/medicaid-demonstration-i3-factsheet.pdf

Washington State Health Care Authority. (2019a). *Healthier Washington: Medicaid Transformation Project Toolkit*. https://www.hca.wa.gov/assets/program/project-toolkit-approved.pdf

Washington State Health Care Authority. (2019b). *Changes coming to Washington Apple Health* (HCA 19-0025). https://www.hca.wa.gov/assets/free-or-low-cost/19-0025.pdf

Washington State Health Care Authority. (2019c). HCA's Position on ACH Implementation of the Pathways Community-Based Care Coordination Model.

Washington State Health Care Authority. (2019d). 2019 Paying for Value Survey Results: Washington State providers and health plans report on their value-based purchasing experiences.

Washington State Health Care Authority. (2020). Delivery System Reform Incentive Payment (DSRIP) Measurement Guide: How Accountability is measured for Washington State, Medicaid Managed Care Organizations, and Accountable Communities of Health throughout Medicaid Transformation. (2020). Dental Disease is a Chronic Problem Among Low-Income Populations (HEHS-00-72; Oral Health). U.S. General Accounting Office.

Washington State Prevention Enhancement Policy Consortium. (2019). State of Washington Substance Use Disorder Prevention and Mental Health Promotion: Five Year Strategic Plan 2017-2022 (HCA 82-0123).

Woltmann, E., Grogan-Kaylor, A., Perron, B., Georges, H., Kilbourne, A. M., & Bauer, M. S. (2012). Comparative effectiveness of collaborative chronic care models for mental health conditions across primary, specialty, and behavioral health care settings: Systematic review and meta-analysis. The American Journal of Psychiatry, 169(8), 790-804.

Xiong, X., Buekens, P., Fraser, W. D., Beck, J., & Offenbacher, S. (2006). Periodontal disease and adverse pregnancy outcomes: A systematic review. BJOG: An International Journal of Obstetrics and Gynaecology, 113(2), 135-143.

## Appendix A: Evaluation Measures

This appendix provides detailed information regarding the measures presented in this report. Measures are listed in alphabetical order below.

Please note that some measures are produced multiple times throughout this report for different populations of interest or for different measurement periods. The measurement period and the approach used to construct study populations for each analysis are described in detail in the relevant chapters of this report. See Appendix B of this report for a detailed description of quantitative methods.

#### 1 Access to Preventive/Ambulatory Health Services for Adult Medicaid Beneficiaries with SUD

This measure appears in Chapter 14 of this report.

Description: The percentage of Medicaid beneficiaries, 20 years of age and older, with a diagnosed substance use disorder who had an ambulatory or preventive care visit in the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA (modified)

#### 2 Acute Hospital Utilization per 1,000 Members

This measure appears in Chapters 1, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12 of this report.

Description: The rate of Medicaid beneficiaries, 18 years of age and older, with acute hospital discharges. Metric is expressed as a rate per 1,000 members during the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

#### 3 Adherence to Antipsychotic Medications for Individuals with Schizophrenia

This measure appears in Chapters 1, 3, 4 and 13 of this report.

Description: Assesses adults 19-64 years of age who have schizophrenia and were dispensed and remained on an antipsychotic medication for at least 80% of the treatment period.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

## 4 Adult Access to Preventive/Ambulatory Health Services

This measure appears in Chapters 1, 3, 4, 6, and 13 of this report.

Description: The percentage of Medicaid beneficiaries, 20 years of age and older, who had an ambulatory or preventive care visit in the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

#### Adult Body Mass Index Assessment

This measure appears in Chapters 1 and 10 of this report.

Description: The percentage of members 18-74 years of age who had an outpatient visit and whose body mass index (BMI) was documented during the measurement year or the year prior to the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

#### All-Cause Emergency Department Visits, per 1,000 Member Months

This measure appears in Chapters 1, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, and 14 of this report.

Description: The rate of Medicaid beneficiaries with visits to an emergency department, including visits related to mental health and substance use disorder. Metric is expressed as a rate per 1,000 denominator member months in the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: RDA

#### 7 Antidepressant Medication Management (Acute Phase Treatment)

This measure appears in Chapters 1, 3, 4, and 13 of this report.

Description: The percentage of Medicaid beneficiaries 18 years of age and older who were treated with antidepressant medication, had a diagnosis of major depression, and who remained on an antidepressant medication treatment for at least 84 days (12 weeks).

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

#### **Antidepressant Medication Management (Continuation Phase Treatment)**

This measure appears in Chapters 1, 3, 4, and 13 of this report.

Description: The percentage of Medicaid beneficiaries 18 years of age and older who were treated with antidepressant medication, had a diagnosis of major depression, and who remained on an antidepressant medication treatment for at least 180 days (6 months).

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

#### 9 Any Substance Use Disorder (SUD) Treatment

This measure appears in Chapter 14 of this report.

Description: The number of Medicaid beneficiaries enrolled for at least one month during the measurement year who received any substance use disorder treatment service in the measurement period.

Source: ProviderOne Medicaid claims/encounter data

Steward: CMS

#### 10 Assisted Living Utilization

This measure appears in Chapter 12 of this report.

Description: The number of one beneficiaries who enrolled in Tailored Supports for Older Adults (TSOA), Medicaid Alternative Care (MAC), and/or Medicaid in-home services who also entered an assisted living facility, as measured by approved claim, within the first six months of initiation of services. Medicaid beneficiaries were continuously enrolled in Medicaid for at least 6 months preceding initiation of program services (MAC or IHS).

Source: ProviderOne Medicaid claims/encounter data

Steward: CHSE

#### 11 Asthma Medication Ratio

This measure appears in Chapters 1, 3, 4, 10, and 13 of this report.

Description: The percentage of Medicaid beneficiaries, 5-64 years of age, who were identified as having persistent asthma and had a ratio of controller medication to total asthma medications of 0.50 or greater during the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

#### 12 Average Length of Stay in Institutions for Mental Disease (IMD)

This measure appears in Chapter 14 of this report.

Description: The average length of stay for Medicaid beneficiaries enrolled for at least one month during the measurement year and discharged from an IMD residential treatment facility for substance use disorder.

Source: ProviderOne Medicaid claims/encounter data

Steward: CMS

## 13 Breast Cancer Screening

This measure appears in Chapters 1 and 3 of this report.

Description: Assesses women 50–74 years of age who had at least one mammogram to screen for breast cancer in the past two years.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

#### 14 Cervical Cancer Screening

This measure appears in Chapters 1 and 3 of this report.

Description: Assesses women 21–64 years of age who were screened for cervical cancer using either of the following criteria: 1) Women age 21–64 who had cervical cytology performed every 3 years, or 2) women age 30–64 who had cervical cytology/human papillomavirus (HPV) cotesting performed every 5 years.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

#### 15 Children's and Adolescents' Access to Primary Care Practitioners

This measure appears in Chapters 1, 3, 4, and 6 of this report.

Description: The percentage of Medicaid beneficiaries 12 months to 19 years of age who had an ambulatory or preventive care visit in the measurement year. This includes, but is not limited to, general medical exams and well-child visits.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA (modified)

#### 16 Chlamydia Screening in Women

This measure appears in Chapters 1, 3, and 8 of this report.

Description: The percentage of female Medicaid beneficiaries, 16-24 years of age, identified as sexually active and who had at least one test for chlamydia during the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

#### 17 Colorectal Cancer Screening

This measure appears in Chapters 1 and 3 of this report.

Description: Assesses adults age 50-75 who had appropriate screening for colorectal cancer with any of the following tests: Annual fecal occult blood test, flexible sigmoidoscopy every five years, colonoscopy every 10 years, computed tomography colonography every five years, or stool DNA test every three years.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

#### 18 Comprehensive Diabetes Care: Eye Exam (Retinal) Performed<

This measure appears in Chapters 1, 3, 4, 10, and 13 of this report.

Description: The percentage of Medicaid beneficiaries, 18-75 years of age, with diabetes (type 1 and type 2) who had a retinal or dilated eye exam by an eye care professional during the measurement year, OR a negative retinal exam (no evidence of retinopathy) in the 12 months prior to the measurement year, OR a bilateral eye enucleation during the measurement year

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

#### 19 Comprehensive Diabetes Care: Hemoglobin A1c Testing

This measure appears in Chapters 1, 3, 4, and 13 of this report.

Description: The percentage of Medicaid beneficiaries, 18-75 years of age, with diabetes (type 1 and type 2) who received a Hemoglobin A1c (HbA1c) test during the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

#### 20 Comprehensive Diabetes Care: Medical Attention for Nephropathy

This measure appears in Chapters 1, 3, 4, and 13 of this report.

Description: The percentage of Medicaid beneficiaries, 18–75 years of age, with diabetes (type 1 and type 2) who had a nephropathy screening test or evidence of nephropathy during the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

#### 21 Continuity of Pharmacotherapy for Opioid Use Disorder

This measure appears in Chapters 1, 3, 4, 10 and 13 of this report.

Description: The percentage of Medicaid beneficiaries 18 years of age and older with pharmacotherapy for opioid use disorder who have at least 180 days of continuous treatment.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

#### 22 Contraceptive Care - Long Acting Reversible Contraception

This measure appears in Chapters 1 and 8 of this report.

Description: The percentage of female Medicaid beneficiaries, 15–44 years of age, at risk of unintended pregnancy that are provided a long-acting reversible method of contraception (provision of contraceptive implants, intrauterine devices or systems [IUD/IUS]).

Source: ProviderOne Medicaid claims/encounter data

Steward: U.S. Department of Health and Human Services

#### 23 Contraceptive Care - Most and Moderately Effective Methods

This measure appears in Chapters 1 and 8 of this report.

Description: The percentage of female Medicaid beneficiaries, 15–44 years of age, at risk of unintended pregnancy that are provided a most effective (i.e., sterilization, implants, intrauterine devices or systems [IUD/IUS]) or moderately effective (i.e., injectables, oral pills, patch, ring, or diaphragm) FDA-approved method of contraception.

Source: ProviderOne Medicaid claims/encounter data

Steward: U.S. Department of Health and Human Services

#### 24 Contraceptive Care - Postpartum

This measure appears in Chapters 1 and 8 of this report.

Description: The percentage of female Medicaid beneficiaries, 15–44 years of age, who had a live birth that are provided a most effective (i.e., sterilization, implants, intrauterine devices or systems [IUD/IUS]) or moderately effective (i.e., injectables, oral pills, patch, ring, or diaphragm) FDA approved method of contraception within 60 days of delivery.

Source: ProviderOne Medicaid claims/encounter data

Steward: U.S. Department of Health and Human Services

## 25 Diabetes Screening for People with Schizophrenia or Bipolar Disorder Who Are Using **Antipsychotic Medication**

This measure appears in Chapters 1, 3, 4, and 13 of this report.

Description: Assesses adults 18-64 years of age with schizophrenia or bipolar disorder, who were dispensed an antipsychotic medication and had a diabetes screening test during the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

#### **26** Early Intervention

This measure appears in Chapter 14 of this report.

Description: The number of Medicaid beneficiaries enrolled for at least one month during the measurement year, who were screened for substance use disorder using the Screening, Brief Intervention, and Referral to Treatment (SBIRT) during the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: CMS

#### 27 Emergency Department Utilization for SUD per 1,000 Medicaid Beneficiaries

This measure appears in Chapter 14 of this report.

Description: The rate of Medicaid beneficiaries who visited the emergency department for a substance use disorder during the measurement year. Results are reported as a rate per 1,000 members.

Source: ProviderOne Medicaid claims/encounter data

Steward: CMS

#### 28 Engagement in Alcohol and Other Drug Abuse or Dependence Treatment

This measure appears in Chapters 1, 3, 4, 14, and 15 of this report.

Description: The percentage of Medicaid beneficiaries 13 years of age and older with a new episode of alcohol and other drug abuse or dependence who initiated treatment and had two or more additional AOD services or medications for addiction within 34 days of the initiation visit.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

## 29 FCS Beneficiaries with Inpatient or Residential SUD Service(s)

This measure appears in Chapter 14 of this report.

Description: The percentage of Medicaid beneficiaries, 12 years of age and older, with a substance use disorder treatment need identified within the past two years, who received at least one qualifying substance use disorder treatment during the measurement year and participated in the Foundational Community Supports (FCS) program.

Source: ProviderOne Medicaid claims/encounter data

## 30 Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence (30 days)

This measure appears in Chapters 1, 3, 4, 5, 14, and 15 of this report.

Description: The percentage of emergency department (ED) visits for Medicaid beneficiaries, 13 years of age and older, with a principal diagnosis of alcohol or other drug (AOD) abuse or dependence, who had a follow up visit for AOD within 30 days of the ED visit (31 total days).

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

## 31 Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence (7 days)

This measure appears in Chapters 3, 4, 5, 14, and 15 of this report.

Description: The percentage of emergency department (ED) visits for Medicaid beneficiaries, 13 years of age and older, with a principal diagnosis of alcohol or other drug (AOD) abuse or dependence, who had a follow up visit for AOD within 7 days of the ED visit (8 total days).

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

#### 32 Follow-up after Emergency Department Visit for Mental Illness (30 Days)

This measure appears in Chapters 1, 3, 4, 5, 6, 14, and 15 of this report.

Description: The percentage of emergency department (ED) visits for Medicaid beneficiaries, 6 years of age and older, with a principal diagnosis of mental illness or intentional self-harm, who had a follow up visit for mental illness within 30 days of the ED visit (31 total days).

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

#### 33 Follow-up after Emergency Department Visit for Mental Illness (7 Days)

This measure appears in Chapters 3, 4, 5, 6, 14, and 15 of this report.

Description: The percentage of emergency department (ED) visits for Medicaid beneficiaries, 6 years of age and older, with a principal diagnosis of mental illness or intentional self-harm, who had a follow up visit for mental illness within 7 days of the ED visit (8 total days).

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

#### 34 Follow-Up After Hospitalization for Mental Illness (30 Days)

This measure appears in Chapters 1, 3, 4, 5, and 13 of this report.

Description: The percentage of discharges for eligible Medicaid beneficiaries 6 years of age and older who were hospitalized for treatment of selected mental illness or intentional self-harm diagnoses and who had a follow-up visit with a mental health practitioner within 30 days after discharge.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

#### 35 Follow-Up After Hospitalization for Mental Illness (7 Days)

This measure appears in Chapters 3, 4, 5, and 13 of this report.

Description: The percentage of discharges for eligible Medicaid beneficiaries 6 years of age and older who were hospitalized for treatment of selected mental illness or intentional self-harm diagnoses and who had a follow-up visit with a mental health practitioner within 7 days after discharge.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

#### 36 In-Home Services Utilization

This measure appears in Chapter 12 of this report.

Description: The number of Tailored Supports for Older Adults (TSOA), Medicaid Alternative Care (MAC) and Medicaid in-home service beneficiaries who received at least one qualifying in-home service within the first six months of initiation of services. Medicaid beneficiaries were continuously enrolled in Medicaid for at least 6 months preceding initiation of program services (MAC or IHS).

Source: ProviderOne Medicaid claims/encounter data

Steward: CHSF

#### 37 Initiation of Alcohol and Other Drug Abuse or Dependence Treatment

This measure appears in Chapters 1, 3, 4, 14, and 15 of this report.

Description: The percentage of Medicaid beneficiaries 13 years of age and older with a new episode of alcohol and other drug abuse or dependence who initiated treatment within 14 days of diagnosis.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

## 38 Inpatient Admissions for Substance Use Disorder per 1,000 Members

This measure appears in Chapter 14 of this report.

Description: The rate of Medicaid beneficiaries who had an inpatient stay for a substance use disorder during the measurement year. Results are reported as a rate per 1,000 members.

Source: ProviderOne Medicaid claims/encounter data

Steward: CMS

#### 39 Long Term Services and Supports (not Assisted Living or Nursing Facility)

This measure appears in Chapter 12 of this report.

Description: The number of beneficiaries who received Medicaid Alternative Care (MAC), Tailored Supports for Older Adults (TSOA), or Medicaid in-home services, who also had at least one approved claim for qualifying long-term services and supports (not including Assisted Living or Nursing Facility services) within the first six months of initiation of services. Medicaid beneficiaries were continuously enrolled in Medicaid for at least 6 months preceding initiation of program services (MAC or IHS).

Source: ProviderOne Medicaid claims/encounter data

Steward: CHSF

#### 40 Medicaid Beneficiaries Treated in an IMD for SUD

This measure appears in Chapter 14 of this report.

Description: The number of Medicaid beneficiaries enrolled for at least one month during the measurement year, who received residential treatment for a substance use disorder in an IMD during the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: CMS

## 41 Medicaid Beneficiaries with SUD Diagnosis (annually)

This measure appears in Chapter 14 of this report.

Description: The number of Medicaid beneficiaries enrolled for at least one month during the measurement year, with a substance use disorder diagnosis and a substance use disorder related service during the measurement year and/or in the 12 months before the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: CMS

#### 42 Medicaid Beneficiaries with SUD Diagnosis (monthly)

This measure appears in Chapter 14 of this report.

Description: The number of Medicaid beneficiaries enrolled during the measurement month with a substance use disorder diagnosis and a substance use disorder related service during the measurement month and/or the previous 11 months.

Source: ProviderOne Medicaid claims/encounter data

Steward: CMS

#### 43 Medications for Addiction Treatment

This measure appears in Chapter 14 of this report.

Description: The number of Medicaid beneficiaries enrolled for at least one month during the measurement year, who received medication for treatment for substance use disorder during the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: CMS

#### 44 Mental Health Treatment Penetration (Broad Version)

This measure appears in Chapters 1, 3, 4, 5, 6, 8, and 13 of this report.

Description: The percentage of Medicaid beneficiaries, 6 years of age and older, with a mental health service need identified within the past two years, who received at least one qualifying service during the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: RDA

## 45 Nursing Facility Utilization

This measure appears in Chapter 12 of this report.

Description: The number of Tailored Supports for Older Adults (TSOA), Medicaid Alternative Care (MAC) and Medicaid in-home service beneficiaries who entered a nursing facility, as measured by approved claim, within six months of initiation of services. Medicaid beneficiaries were continuously enrolled in Medicaid for at least 6 months preceding initiation of program services (MAC or IHS).

Source: ProviderOne Medicaid claims/encounter data

Steward: CHSE

#### **46 Outpatient Services**

This measure appears in Chapter 14 of this report.

Description: The number of Medicaid beneficiaries enrolled for at least one month during the measurement year, who used outpatient services for substance use disorder during the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: CMS

#### 47 Overdose Deaths (count)

This measure appears in Chapter 14 of this report.

Description: The number of overdose deaths among Medicaid beneficiaries during the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: CMS

#### 48 Patients Prescribed Chronic Concurrent Opioids and Sedatives

This measure appears in Chapters 1, 7, and 15 of this report.

Description: The percentage of Medicaid beneficiaries prescribed chronic opioids and a concurrent chronic sedative prescription, among beneficiaries prescribed chronic opioids.

Source: ProviderOne Medicaid claims/encounter data

Steward: Bree Collaborative

#### 49 Patients Prescribed High-Dose Chronic Opioid Therapy (>50 mg)

This measure appears in Chapters 1, 7, and 13 of this report.

Description: The percentage of Medicaid beneficiaries without a cancer diagnosis who were prescribed chronic opioid therapy greater than or equal to 50mg morphine equivalent dosage for at least 60 consecutive days during the calendar quarter.

Source: ProviderOne Medicaid claims/encounter data

Steward: Bree Collaborative

#### 50 Patients Prescribed High-Dose Chronic Opioid Therapy (>90mg)

This measure appears in Chapters 1, 7, 14, and 15 of this report.

Description: The percentage of Medicaid beneficiaries without a cancer diagnosis who were prescribed chronic opioid therapy greater than or equal to 90mg morphine equivalent dosage for at least 60 consecutive days during the calendar quarter.

Source: ProviderOne Medicaid claims/encounter data

Steward: Bree Collaborative

#### 51 Percent Arrested

This measure appears in Chapters 1, 3, 4, 6, and 13 of this report.

Description: The percentage of Medicaid beneficiaries, 18 to 64 years of age, who were arrested at least once during the measurement year.

Source: ProviderOne Medicaid enrollment data (for identification of Medicaid eligibility);

Washington State Identification System (WASIS) arrest database

Steward: RDA

#### **52** Percent Employed

This measure appears in Chapters 1, 3, and 13 of this report.

Description: Percentage of Medicaid members age 18 to 64 with any earnings in the year, as reported by the Washington State Employment Security Department.

Source: ProviderOne Medicaid enrollment data (for identification of Medicaid eligibility); earnings as reported by the Washington State Employment Security Department

Steward: RDA (modified)

## 53 Percent Homeless (Narrow Definition)

This measure appears in Chapters 1, 3, 4, 5, 6, and 13 of this report.

Description: The percentage of Medicaid beneficiaries who were homeless in at least one month during the measurement year. Definition excludes "homeless with housing" living arrangement code from the Automated Client Eligibility System (ACES)

Source: ProviderOne Medicaid enrollment data (for identification of Medicaid eligibility); DSHS Economic Services Administration's Automated Client Eligibility System (ACES) living arrangement data

#### 54 Periodontal Evaluation in Adults with Chronic Periodontitis

This measure appears in Chapters 1 and 9 of this report.

Description: The percentage of Medicaid beneficiaries, 30 years of age and older, with history of periodontitis who received a comprehensive or periodic oral evaluation or a comprehensive periodontal evaluation within the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: Dental Quality Alliance®

#### 55 Plan All-Cause 30-Day Readmission

This measure appears in Chapters 1, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, and 13 of this report.

Description: The percentage of acute inpatient stays of Medicaid beneficiaries, 18 years of age and older, during the measurement year that were followed by an unplanned acute readmission for any diagnosis within 30 days.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA (modified)

#### 56 Providers Enrolled in Medicaid who Billed for Medications for OUD

This measure appears in Chapter 14 of this report.

Description: Number of providers enrolled in Medicaid that billed for MOUD services during the measurement period.

Source: ProviderOne Medicaid claims/encounter data

Steward: CMS

#### 57 Psychiatric Inpatient Readmissions (30 days)

This measure appears in Chapters 1, 3, 4, 5, 6, 7, 8, 10, and 13 of this report.

Description: Percentage of hospital psychiatric stays among members age 18 and over with readmission for a psychiatric diagnosis within 30 days.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

## 58 Ratio of Home and Community-Based Long-Term Services and Support Use to Institutional (Nursing Facility) Utilization

This measure appears in Chapters 1, 3, 4, 5, 6, 7, and 13 of this report.

Description: Months of home and community-based services (HCBS) received by Medicaid members age 18 and over as a percentage of total months of long-term care received. HCBS includes assisted living services, adult residential care services, adult family homes, and in-home personal care services. Total long-term care includes HCBS and nursing home services.

Source: Medicaid enrollment and claims/encounters data, Division of Behavioral Health Services behavioral health services data, CARE assessment diagnoses for mental illness and substance use disorder, Medicare claims/encounters data, and long-term care service data

#### 59 Readmissions Among Beneficiaries with SUD

This measure appears in Chapters 15 of this report.

Description: The percentage of acute inpatient stays of Medicaid beneficiaries with a substance use disorder, 18 years of age and older, during the measurement year that were followed by an unplanned acute readmission for any diagnosis within 30 days.

Source: ProviderOne Medicaid claims/encounter data

Steward: CMS

#### **60** Residential and Inpatient Services

This measure appears in Chapter 14 of this report.

Description: The number of Medicaid beneficiaries enrolled for at least one month during the measurement year, who used inpatient or residential services for substance use disorder during the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: CMS

#### 61 Statewide Deaths due to Drug Overdoses

This measure appears in Chapter 14 of this report.

Description: The number of fatal drug overdoses in the state of Washington, not restricted to Medicaid beneficiaries.

Source: Washington State death certificates

Steward: Washington State Center for Health Statistics

#### 62 Statin Therapy for Patients with Cardiovascular Disease (Prescribed)

This measure appears in Chapters 1, 10, and 13 of this report.

Description: The percentage of males, 21-75 years of age, and females, 40-75 years of age, who were identified as having clinical atherosclerotic cardiovascular disease (ASCVD) and were dispensed at least one high-intensity or moderate-intensity statin medication during the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

#### 63 Substance Use Disorder Treatment Penetration

This measure appears in Chapter 14 of this report.

Description: The percentage of Medicaid beneficiaries, 12 years of age and older, with a substance use disorder treatment need identified within the past two years, who received at least one qualifying substance use disorder treatment during the measurement year.

Source: ProviderOne Medicaid claims, encounter and enrollment data; RSN/BHO encounter data and DBHR-paid behavioral health services for non-integrated managed care regions; Medicare Parts A and B claims and Medicare Part D encounters for dual eligibles.

#### **64** Substance Use Disorder Treatment Penetration (Opioid)

This measure appears in Chapters 1, 7, and 12 of this report.

Description: The percentage of Medicaid beneficiaries, 18 years of age and older, with an opioid used disorder treatment need identified within the past two years, who received medication for an opioid use disorder (MOUD) during the measurement year

Source: ProviderOne Medicaid claims/encounter data

Steward: RDA

#### 65 Tailored Supports for Older Adults Beneficiaries who Enroll in Medicaid Within Six Months

This measure appears in Chapter 12 of this report.

Description: The number of Tailored Supports for Older Adults beneficiaries who enrolled in Medicaid within 6 months of initiation of services in the TSOA program.

Source: ProviderOne Medicaid claims, encounter and enrollment data; RSN/BHO encounter data and DBHR-paid behavioral health services for non-integrated managed care regions; Medicare Parts A and B claims and Medicare Part D encounters for dual eligibles.

Steward: RDA

#### 66 Timeliness of Prenatal Care

This measure appears in Chapter 1 of this report.

Description: The percentage of live birth deliveries that received a prenatal care visit in the first trimester, on or before the enrollment start date or within 42 days of enrollment.

Source: ProviderOne Medicaid claims/encounter data; Vital statistics records.

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA

#### 67 Topical Fluoride Application Delivered by Non-Dental Health Professional

This measure appears in Chapters 1 and 9 of this report.

Description: The percentage of Medicaid beneficiaries, 5 years of age and younger, who received a topical fluoride application by a non-dental medical provider during any medical visit.

Source: ProviderOne Medicaid claims/encounter data

Steward: HCA

#### **68** Utilization of Dental Services

This measure appears in Chapters 1 and 9 of this report.

Description: The percentage of Medicaid beneficiaries of all ages who received preventative or restorative dental services in the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: Dental Quality Alliance

#### 69 Well-Child Visits in the First 15 Months of Life

This measure appears in Chapter 1 of this report.

Description: The percentage of Medicaid beneficiaries who turned 15 months old during the measurement year and who had six or more well-child visits during their first 15 months of life.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA (modified)

#### 70 Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life

This measure appears in Chapter 1 of this report.

Description: The percentage of Medicaid beneficiaries, 3 - 6 years of age, who had one or more well-child visits during the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: HEDIS(R) Technical Specifications for Health Plans, NCQA (modified)

#### 71 Withdrawal Management

This measure appears in Chapter 14 of this report.

Description: The number of Medicaid beneficiaries enrolled for at least one month during the measurement year, who used withdrawal management services for substance use disorder during the measurement year.

Source: ProviderOne Medicaid claims/encounter data

Steward: CMS

# Appendix B: Quantitative Methods

In this appendix, we provide detailed information about the measures presented in this report, the data sources we used to calculate these measures, the Medicaid population and subgroups we analyzed, and the statistical methods for conducting those analyses.

## **Initiative 1: Statewide Measures (Chapter 1)**

#### **Metric Selection**

We selected 44 metrics from two sets:

- Pay for Performance (P4P) metrics: Metrics used by the Washington Health Care Authority (HCA) to award ACHs and their partners for improving outcomes, listed in HCA's Project Toolkit (Washington State Health Care Authority, 2019a).
- Metrics from the state's Evaluation Design: Metrics listed in Appendix 1 of Washington State's Evaluation Design for use evaluating each Domain 2 and 3 health improvement project, and Initiative 3 (Washington State Health Care Authority, 2017c).

Refer to Appendix 1 of this report for a list of the expert organization (or steward) that developed the specifications for each metric.

The specific data source for individual measures varied and is identified in Appendix A. The metrics we reported in Chapter 1 were calculated by the State of Washington. We received quarterly records showing whether each Medicaid member met the criteria for each metric (e.g., whether a person had a primary care visit or a recommended test or screening) in the corresponding measurement year. In addition, we received Medicaid enrollment records that included information about each person's demographics, and Medicaid claims/encounters records that identify diagnoses and services each person received. This information enabled us to identify subgroups of Medicaid members and present performance metrics for Accountable Community of Health (ACH) regions and subgroups as described below.

To help understand the performance of Washington State's Medicaid system, we included 2019 US rates for 20 metrics available from the National Centers for Quality Assurance in our presentation of results.

#### **Medicaid Populations and Subgroups**

To calculate P4P metrics, Washington State included outcomes for only those Medicaid members with comprehensive physical and behavioral health care benefits and excluded members who were dually eligible for Medicare and Medicaid or had primary insurance other than Medicaid (Washington State Health Care Authority, 2020). We used inclusion flags in the performance metrics data we received to restrict metrics to this population, hereinafter called MTP Medicaid members.

To report metrics for members in each ACH region, we used inclusion flags provided in the data we received to identify MTP Medicaid members who resided in each ACH in each month. Importantly,

when reporting metrics for ACH regions we did not include or exclude members based on the number of months they resided in the regions and qualified for Medicaid. ACH attribution is reported quarterly for each member but if a member moves mid-year they could contribute to different measures for different ACHs.

When reporting statewide metrics, we included or excluded members based on the number of months they resided in the state and qualified for Medicaid. The State of Washington included a member's outcomes in calculating most metrics if the member resided in an ACH region for 11 of 12 months of the measurement year. The state included a member's outcomes in calculating some metrics if the member resided in the region for only seven of 12 months, allowing a less residentially stable population to count in the metric

We identified MTP Medicaid members in subgroups using the following methods:

- Medicaid enrollment data: We used information from Medicaid claims/encounters records to
  identify members by race/ethnicity group, age group, sex, rural or urban geography of residence
  (identified using the University of Washington's Rural-Urban Commuting Area designations, a
  crosswalk applied at the ZIP code level), and residence in high-poverty or non-high-poverty areas
  (defined as ZIP codes in which the median income was in the bottom quintile of Washington
  State's income distribution according to the American Community Survey in 2017).
- Medicaid claims/encounters data: We used information on diagnoses and services from Medicaid claims/encounters data to identify members with chronic conditions, severe mental illness (SMI), and substance use disorder (SUD). For chronic conditions, we identified a person as having a chronic condition in a given month if he or she received at least one diagnosis for a chronic condition, as defined by the Center for Medicare & Medicaid Services Chronic Conditions Warehouse (CCW), within a designated lookback period. We used claims from any place of service (e.g., inpatient, outpatient, or professional setting) to identify chronic conditions.
- Serious mental illness (SMI): We identified a person as having SMI in a given month if he or she received at least one of the following diagnoses within the last year: schizophrenia, bipolar disorder, major depression, cyclothymic disorder, post-traumatic stress disorder (PTSD), or obsessive-compulsive disorder (OCD). For schizophrenia, bipolar disorder, depression, and PTSD, we used diagnosis codes from the CCW. For cyclothymic disorder and OCD, we translated ICD-9 codes used to identify people with SMI for CHSE's Oregon Medicaid waiver evaluation into ICD-10 codes, as shown in Exhibit A.1.
- Substance use disorder (SUD): We identified a person as having SUD in a given month if he or she received at least one diagnosis for alcohol or drug use within the last year.

## **Statistical Analyses**

We presented changes in measures between 2018 and 2019. These changes were simple differences in means and were not adjusted for any covariates or changes in population demographics.

Exhibit A.1. Diagnosis Codes Used to Identify People with Severe Mental Illness (SMI)

Diagnosis	ICD Code Name	ICD-9	ICD-10	
Cyclothymic disorder	Cyclothymic disorder	301.13	F34.0	
	Schizotypal personality disorder	301.22	F21	
	Other specific personality disorders	301.11	F60.89	
	Borderline personality disorder	301.83	F60.3	
Obsessive-compulsive disorder	Mixed obsessional thoughts and acts	300.3	F42.2	
	Hoarding disorder	300.3	F42.3	
	Other obsessive-compulsive disorder	300.3	F42.8	
	300.3	F42.9		

## **Initiative 1: Health Improvement Projects (Chapters 3-10)**

#### **Metric Selection**

We selected 44 metrics for evaluating the health improvement projects. These metrics are listed in Appendix 1 of Washington State's Evaluation Design for use evaluating each Domain 2 and 3 health improvement project and Initiative 3 (Washington State Health Care Authority, 2017c). Each project used a different set of measures; these are described in more detail in Chapter 2. For example, analyses of Project 2A tested outcomes across 29 measures, while analyses of Project 3C tested outcomes across six measures. Appendix A of this report lists the expert organization that developed the specifications for each metric.

The specific data source for individual measures varied and is identified in Appendix A. The metrics we used in Chapters 3-10 were calculated by the State of Washington. We received quarterly records showing whether each Medicaid member met the criteria for each metric (e.g., whether a person had a primary care visit or a recommended test or screening) in the corresponding measurement year. In addition, we received Medicaid enrollment records that included information about each person's demographics, and Medicaid claims/encounters records that identified diagnoses and services each person received. This information enabled us to identify target populations of Medicaid members and present performance metrics for Accountable Community of Health (ACH) regions and target populations as described below.

#### **Statistical Analyses**

As noted in Chapter 2, to evaluate the impact of the eight health improvement projects on health care utilization and outcomes, we examined relevant health measures in regions that participated in a project.

We used two approaches to reflect different levels of project adoption across regions:

- **Pre-post.** Three projects (2A, 3A, and 3D) were implemented by all nine ACHs. In the absence of a suitable comparison group, we compared outcomes in the periods leading up to the intervention year (2017 and 2018) to outcomes in the first intervention year (2019).
- **Difference-in-differences.** Five HIPs were implemented by some, but not all ACHs. In these cases, we conducted a difference-in-differences analysis. In this approach we calculated the change in outcomes among participating ACHs between 2017-2018 and 2019 and subtracted the change in outcomes among the remaining ACHs. This approach is designed to isolate effects that can be attributable to the HIP rather than other statewide changes.

## **Pre-Post Regressions**

The pre-post analysis takes the following form:

$$Y_{it} = b_0 + b_1 *PostTransformation_t + a*X_{it} + e_{it}$$
 (1)

where  $Y_{it}$  is the outcome of interest for individual i in calendar year t,  $PostTransformation_t = 1$  if the observation occurs after Medicaid Transformation, and 0 otherwise;  $X_{it}$  is a vector of demographic covariates and risk adjusters, and  $e_{it}$  is a random error term associated with the unmeasured variation in the outcome of interest. The coefficient of interest,  $b_1$ , estimates how much the outcome variable changed with Medicaid Transformation.

For computational ease and interpretability, we generally used ordinary least squares. We estimated equation (1) separately for each ACH.

## **Difference-in-Differences Regressions**

In its simplest form, the model estimated the average change in outcomes of interest for the treated group, subtracted by the average change in outcomes for a comparison group. In this approach, we measured the change in outcomes among participating ACHs between 2017-2018 and 2019 and subtracted the change in outcomes among non-participating ACHs. Model (2) presents this simple model in a linear regression framework:

Outcome<sub>it</sub> = 
$$\alpha_0 + \alpha_1^*$$
Treated<sub>it</sub> +  $\alpha_2^*$ Post<sub>it</sub> +  $\alpha_2^*$ Post<sub>it</sub>\*Treated<sub>it</sub> +  $\pi X_{it} + e_{it}$  (2)

where i indexes the individual, and t the time period (our default unit of observation will be the person calendar year). The dependent variable  $Outcome_{it}$  represents the outcome variable, measured at, e.g., the person calendar year level. The variable  $X_{it}$  represents a vector of individual-level variables (including age, gender, risk adjusters, and regional variables such as urban or rural residence).

In general, we treated 2019 and following years as the *Post* period. We defined *Treated* as an indicator variable taking a value if the beneficiary was in an ACH that implemented the project in question (e.g., BHT for Project 2B), and 0 otherwise. The coefficient  $\alpha_2$  is the coefficient of interest.

We also estimated equation (2) separately for each ACH that participated in the health improvement project, with the comparison group of ACHs remaining constant.

#### **Covariates**

We used the following covariates in our pre-post and difference-in-differences models: sex (female, male, and unknown), age groups (under 18, 18-24, 25-34, 35-44, 45-54, 55-64, 65 and older), race (a single identifier for Alaskan Native, American Indian, Asian, Black, Hawaiian, Not Provided, Other, or Pacific Islander), ethnicity (Hispanic or non-Hispanic), risk adjuster indicators based on the Chronic Illness and Disability Payment System (CDPS), indicators of chronic conditions based on the Chronic Conditions Warehouse, indicators of serious mental illness (based on the definition above), high poverty ZIP code (defined as mean income for the ZIP code below 20 percent of the statewide median income), and residential population density (urban and non-urban ZIP codes as defined by the Rural-Urban Commuting Area Codes). All demographic covariates were defined based on the member's last month of enrollment in the measurement year.

#### **Clustering of Standard Errors**

We adjusted our regressions by clustering at the level of the Primary Care Service Area (PCSA). PCSAs are groups of ZIP codes that were originally developed and validated by previous research to represent natural markets of primary care (Dartmouth Atlas Data, 2020; Goodman, et al., 2003).

## Initiative 3: Foundational and Community Supports (FCS) (Chapter 13)

#### **Metric Selection**

We selected 31 metrics for evaluating the Foundational Community Supports (FCS) program. All of these were also part of Initiative 1 analyses. We excluded some Initiative 1 measures because they were not relevant for this program (e.g., well-child visits in the First 15 months of life). Appendix 1 of Washington State's Evaluation Design provides details of metrics used for our evaluation of this program (Washington State Health Care Authority, 2017c).

The specific data source for individual measures varied and is described in detail in Appendix A. The metrics we used in Chapter 13 were calculated by the State of Washington. We received quarterly records showing whether each Medicaid member met the criteria for each metric (e.g., whether a person had a primary care visit or a recommended test or screening) in the corresponding measurement year. In addition, we received Medicaid enrollment records that included information about each person's participation in FCS programs, service delivery system affiliation (Medicaid beneficiaries served through the Aging and Long-Term Support Administration or Medicaid beneficiaries served through the Health Care Authority), and demographic information.

#### Sample

We defined three FCS program groups: Medicaid beneficiaries participating in (i) supportive housing; (ii) supported employment; (iii) both supportive housing and supported employment. For each of these FCS program groups, we identified a comparison group using a matching approach similar to the one specified in Danielson, Mancuso and Felver (2020). Specifically, we exact-matched FCS

participants to Medicaid beneficiaries who did not participate in the program using beneficiaries' characteristics (age, gender, primary race, and ethnicity, cumulative CDPS score rounded to the nearest integer (to aid finding exact matches) and a binary variable indicating the presence of an SUD diagnosis) and the quarter of first FCS service receipt. We also required all individuals in the treatment and comparison group to be fully enrolled in Medicaid during the 12 months prior and 12 months following first FCS service receipt.

We repeated the matching approach for each of the three FCS program groups to create three corresponding comparison groups. We used the MatchIt procedure in R to implement our matching approach. Unlike in Danielson, Mancuso and Felver (2020), we did not also match on prior utilization measures for our main analysis. Instead, we tested for parallel trends to assess the quality of our difference-in-differences approach and conducted additional sensitivity analyses related to this approach (see below).

We reported results for each of the three FCS program groups in aggregate as well as stratified by participants' delivery system affiliation (ALTSA or HCA).

#### **Statistical Analyses**

We estimated the following difference-in-differences regression:

Outcome<sub>it</sub>=
$$\beta_0$$
+ $\beta_1$ FCS<sub>i</sub>+ $\beta_2$ Post<sub>it</sub>+ $\beta_3$ FCS<sub>i</sub>\*Post<sub>it</sub>+ $\delta X_{it}$ + $\epsilon_{it}$ 

where i is an individual in our sample; t is time relative to first FCS service receipt;  $FCS_i$  is an indicator variable equal to 1 if a person was part of one of the three FCS groups (e.g., supportive housing, supported employment, and both);  $Post_{it}$  is the third and fourth quarter following the quarter of first FCS receipt;  $X_{it}$  is other covariates (age, gender, race and ethnicity, cumulative CDPS score rounded to the nearest integer, and SUD diagnosis flag); and  $\varepsilon_{it}$  is the error term. We estimated this regression separately for each outcome and each of the three FCS program groups; we then further stratified regressions by service delivery system affiliation. Standard errors were clustered at the PCSA level.

As in other difference-in-differences regressions, the coefficient of interest was the interaction between FCS enrollment and the post-intervention period (i.e.,  $\beta_3$  in the equation above). We defined the pre-intervention period as the two last quarters before first FCS receipt. Thus,  $\beta_3$  estimated covariate-adjusted changes in outcomes among FCS enrollees during the two quarters preceding first FCS receipt and the third and fourth quarters following first FCS receipt, relative to changes in outcomes among people in the comparison group in the same time periods.

The difference-in-differences approach requires trends in outcomes of the comparison group to accurately represent trends in outcomes of FCS enrollees had they not received any FCS services. We tested for such parallel trends using the four quarters preceding first FCS receipt and the following specification:

Outcome<sub>it</sub>=
$$\gamma_0 + \gamma_1 FCS_i + \gamma_2 t + \gamma_3 FCSi^*t + \lambda X_{it} + \varepsilon_{it}$$

where  $\gamma_3$ =0 corresponds to parallel trends.

In the context of FCS programs, the challenge for identifying effects of the program is that some of FCS recipients' outcomes might increase or decrease around the month of first service receipt because of temporary events (e.g., decline in employment due to job loss). It is difficult to

disentangle such temporary events from program effects unless the comparison group is affected by such events in a similar fashion. Failure to reject a parallel trend test gives us confidence that the comparison group is well matched in that regard, whereas rejection of a parallel trend test suggests that difference-in-differences estimates might at least partially reflect changes in outcomes due to other events.

In interpreting results, we also consulted trend graphs of outcomes for FCS beneficiaries and their comparison group. Such trends help visualize how difference-in-differences estimates correspond to trends over time, whether trends before first FCS are parallel or not, and whether there are data quality issues to consider when interpreting results (e.g., jumps in outcomes, small sample sizes).

We also conducted sensitivity analyses using a matching algorithm that included key utilization measures (homelessness rate, acute hospital use and emergency department visit rate) for the last two quarters prior to first FCS service receipt (the pre-enrollment period in the difference-in-differences model). Results using this alternative matching approach were largely similar to those of our preferred matching approach, with some exceptions.

## **Initiative 4: Substance Use Disorder Waiver (Chapter 14)**

#### **Metric Selection**

We selected 29 metrics from the state's Evaluation Design, selecting metrics listed in Chapter 14, which covers the Substance Use Disorder Demonstration Amendment Evaluation Design. Details on these metrics are provided in Appendix A of this report.

The specific data source for individual measures varied and is described in detail in Appendix A. We used a combination of metrics calculated by the State of Washington as well as metrics calculated from raw claims, including Medicaid enrollment records that included information about each person's demographics, and Medicaid claims/encounters records that identified diagnoses and services each person received. For metrics not provided by the state, we used CMS' Medicaid Section 1115 Substance Use Disorder Demonstrations: Technical Specifications for Monitoring Metrics, Version 3.0 (Mathematica, 2020) to develop our metrics. Data on overdose rates were obtained from Vital Statistics from the State of Washington. Data on facilities that billed Medicaid for SUD services and providers who billed for medications for addiction treatment were obtained from the Washington State Health Care Authority.

#### **Statistical Analyses**

Of our 29 metrics, 16 were developed at the beneficiary level. We conducted statistical analyses on these with adjustments described below. Of the remaining measures, we did not conduct adjusted statistical analyses. For example, we reported on the annual number of Medicaid beneficiaries and how this number changed over time, but we did not make statistical adjustments when reporting these changes. In some cases, we did not have data for the post-waiver period, and we reported baseline levels only.

The majority of measures were calculated on a "fiscal year" basis, and the analyses compared a preperiod of July 2017 to June 2018 to a post-SUD waiver period of July 2018 to June 2019. The one exception was the measure Adult Access to Preventive/Ambulatory Health Services for Medicaid beneficiaries with substance use disorder. This measure was calculated on a calendar year basis.

For this measure, we excluded 2018 (which can be considered a washout year), and ran regressions comparing 2017 to 2019.

#### **Pre-Post Regressions**

The pre-post analysis takes the following form:

$$Y_{it} = b_0 + b_1 *PostTransformation_t + a*X_{it} + e_{it}$$
 (1)

where  $Y_{it}$  is the outcome of interest for individual i in calendar-year t,  $PostTransformation_t = 1$  if the observation occurs after Medicaid Transformation, and 0 otherwise;  $X_{it}$  is a vector of demographic covariates and risk adjusters, and  $e_{it}$  is a random error term associated with the unmeasured variation in the outcome of interest. The coefficient of interest,  $b_1$ , estimates how much the outcome variable changed with Medicaid Transformation.

For computational ease and interpretability, we generally used ordinary least squares. We estimated equation (1) separately for each ACH.

#### **Covariates**

We used the following covariates in our pre-post and difference-in-difference models: age groups (under 18, 18-24, 25-34, 35-44, 45-54, 55-64), race (a single identifier for Alaskan Native, American Indian, Asian, Black, Hawaiian, Not Provided, Other, or Pacific Islander), ethnicity (Hispanic or non-Hispanic), risk adjuster indicators based on the Chronic Illness and Disability Payment System (CDPS), indicators of chronic conditions based on the Chronic Conditions Warehouse, indicators of serious mental illness (based on the definition above), and high-poverty ZIP code (defined as mean income for the ZIP code below 20 percent of the statewide median income). All demographic covariates were defined based on the member's last month of enrollment in the measurement year.

## **Clustering of Standard Errors**

We adjusted our regressions by clustering at the Primary Care Service Area. (Dartmouth Atlas Data, 2020; Goodman, et al., 2003).

# Appendix C: Qualitative Methods

In this appendix, we provide detailed information about the qualitative data presented in this report, the data sources we used to develop findings, and the methods for conducting those analyses.

## **ACH- and State Key Informant Interviews**

#### **Qualitative Data Collection**

Semistructured interviews with 14 key informants at the state were conducted between January and April 2019. The Initiative 1 qualitative team consulted HCA to develop an initial list of key informants to invite to participate in an interview. Participants were selected for their diverse department representation and to ensure a range of perspectives. As part of each interview, we asked interviewees to recommend other experts we should talk with for a deeper understanding of issues or a different perspective.

We used an iterative sampling strategy to achieve a maximum-variation sample. Our team moved between selecting some key informants for interviews, conducting interviews and analyzing the data, and then using insights from interviews to inform subsequent sample selection. The process of moving between selection, data collection, and analysis helped ensure that a full range of ideas and perspectives surfaced. Interviews lasted approximately one hour and were conducted using video software or over the phone. Interview guides were tailored for each interviewee based on their area of expertise.

From May to November 2019 the Initiative 1 qualitative team conducted nine in-person site visits to each ACH. We completed between five and nine interviews with each ACH based on the ACH's size, number of selected health improvement projects, and organizational structure. In total, we completed 60 semistructured interviews with ACH key informants. Prior to the site visit we conducted an initial planning call with leaders at each ACH to identify participants to interview. ACH interview guides were also tailored for each interviewee based on their area of expertise. Hourlong interviews were primarily conducted in person at the site visit; however, some interviews were completed remotely using video conferencing software to accommodate ACH scheduling needs.

State and ACH interviews were professionally transcribed, and transcripts were de-identified and entered into Atlas.ti (Version 8, Atlas.ti Scientific Software Development GmbH, Berlin, Germany) for data management and analysis.

#### **Qualitative Data Analysis**

For the Interim Report, the Initiative 1 qualitative team reviewed segments of interview transcripts and publicly available materials containing information about health improvement project (HIP) planning and implementation. Data sources included state interview transcripts, ACH interview transcripts, HCA's project toolkit, ACH implementation plans, project plans, and semiannual reports.

These data were analyzed using an immersion-crystallization approach (Borkan, 1999). First, the qualitative team reviewed the data together and met weekly to discuss emerging findings and build a code list. Specific codes were developed to tag segments of text related to each HIP area. Team

members then reviewed the collated text pertaining to each project area to describe statewide patterns that related to model selection, the ways in which the toolkit materials were utilized and interpreted, and how ACHs planned to monitor and support their contracted partners with project implementation. This information was populated into a matrix to facilitate examining statewide similarities as well as characteristics that were unique to individual ACHs. Then, team members developed analytic summaries for each project area that were prepared and shared with the larger study team during mixed methods meetings. Initiative 1 qualitative and quantitative team members came together to discuss each project area and its associated performance measures. These discussions helped facilitate sense-making, interpretation, and richer analyses. Following these meetings qualitative team members refined project-related findings and collaborated with a quantitative team member to finalize the results for each project area.

### **Substance Use Disorder Treatment Provider Interviews**

#### **Qualitative Data Collection**

The Initiative 4 qualitative team conducted a series of interviews with key informants representing the waiver's main stakeholder groups (SUD providers, MCOs, and beneficiaries) as well as Tribes. The two main aims of these interviews were:

- To identify factors that have affected the achievement of the milestones and targets to date and/ or are likely to affect future performance in meeting milestones and targets.
- To assess the risk of potentially missing milestones and performance targets.
- To identify strategies (e.g., changes in policy, payment, outreach, and enforcement) that the state could use to address performance gaps.

In collaboration with the Health Care Authority, the Initiative 4 qualitative team identified a list of potential informants with experience-based knowledge of SUD treatment systems affected by the waiver. The team selected informants to represent multiple sectors within the treatment delivery system, including providers (with an emphasis on residential treatment providers), Tribal providers, patient advocates, MCOs, and representatives from the Health Care Authority and Department of Corrections. Within the provider category, the team aimed to maximize variation in geographic regions, provider size, Tribal and non-Tribal affiliation, and payer mix (predominantly Medicaid versus broad payer mix).

Once the qualitative team and HCA had agreed upon a list, the agency emailed an introductory letter to informants providing background on the assessment. The assessment team followed up to schedule interviews. Interview invitations were sent to potential informants at 26 organizations. Eight informants did not respond to the invitation, and three informants declined (two for availability issues during the COVID-19 pandemic, the other for lack of pertinent information), yielding 14 completed interviews with 19 participants (some organizations including more than one representative). Organizations declining for COVID-19 reasons included two of the three SUD treatment facilities operated by Tribes or Urban Indian Health Programs we contacted, leaving one Tribally specific provider in the sample. Exhibits A.2 and A.3 summarize key informants by category and ACH region.

Exhibit A.2: SUD Waiver Key Informants, by Type

Key Informant Category	Interview Count		
SUD provider organizations, general	6		
Tribe or UIHP-operated SUD provider organizations	1		
Managed care organizations	2		
Client advocacy groups	3		
State agency staff (Health Care Authority; Department of Corrections)	2		

Exhibit A.3: SUD Waiver Key Informants, by ACH Region

	Better Health Together	Cascade Pacific Action Alliance	Elevate Health	Greater Columbia ACH	HealthierHere	North Central ACH	North Sound ACH	Olympic Community of Health	SWACH
SUD provider organizations, general	Х	Х		Χ			X	Χ	
Tribe- or UIHP- operated SUD provider organizations					Х				
Client advocacy groups	Χ				Х				

Interviews lasted approximately one hour and followed a semistructured interview guide. Interviews were conducted remotely using the WebEx platform, allowing informants to connect via web video plus audio, web audio only, or phone, according to their preference. Interviewees were asked to describe how the SUD waiver amendment affected SUD service delivery for their organization and across the state. We asked participants to identify and describe factors likely to affect progress toward milestones, as well as factors that might contribute to changes (or lack thereof) in metrics. We also asked interviewees to offer recommendations on actions the state might take to facilitate progress.

#### Qualitative Data Analysis

Interviews were recorded with informant permission, professionally transcribed, de-identified, and loaded into the Atlas.ti qualitative software application (Version 8, Atlas.ti Scientific Software Development GmbH, Berlin, Germany) for analysis. The Initiative 4 qualitative team developed an analytic codebook centered around milestones and related aspects of waiver implementation, creating additional codes inductively in response to interview content. Three team members reviewed and coded initial interviews jointly, meeting at least weekly, to refine the codebook and develop consistency in coding practice. Subsequent interviews were coded individually. Team members jointly reviewed output by code to summarize the content on each milestone and develop related themes.