COMMONWEALTH OF PENNSYLVANIA
OFFICE OF THE GOVERNOR

March 28, 2022

The Honorable Xavier Becerra
U.S. Department of Health and Human Services
200 Independence Avenue, S.W.
Washington, D.C. 20201

Dear Secretary Becerra:

Enclosed please find the Commonwealth of Pennsylvania Department of Human Services' (Department) application for extension of the Section 1115 Medicaid Demonstration (Demonstration) titled *Medicaid Coverage for Former Foster Care Youth from a Different State and SUD Demonstration* (Project Number: 11-W-003083/3). The effective dates of the current approved Demonstration are October 1, 2017, through September 30, 2022. The extension requested is for an additional five years through September 30, 2027.

The Department has followed the transparency requirements and has used various avenues to solicit and receive public comments regarding this extension request. A notice was published in the Pennsylvania Bulletin, which is the Commonwealth's official gazette, on January 15, 2022, that included a summary description of the Demonstration, the location and times of the public hearings, options to provide comments, and an active link to the full public notice on the State's website. The full public notice on the state website included a comprehensive description of the Demonstration extension, a copy of the draft extension application, public notice process, public input process, public hearing schedule, and other required information.

The Department conducted two public hearings, on February 2, 2022, and February 4, 2022, with both telephonic and web conference capabilities to provide Pennsylvania residents the opportunity to learn about and comment on the Demonstration extension. The Department also did a presentation on the Demonstration extension to the Medical Assistance Advisory Committee on January 27, 2022.

I would like to thank you in advance for your consideration of the extension of this 1115 Demonstration Program. If you have any questions or need additional information, please contact Mr. Benny Varghese, DHS Office of Mental Health and Substance Abuse Services at 717-772-7861 or bvarghese@pa.gov.

Sincerely,

[redacted]

TOM WOLF
Governor

Medicaid Coverage for Former Foster Care Youth from a Different State and SUD Demonstration Extension

Demonstration Number: 11-W-00308/3

Commonwealth of Pennsylvania

Submitted: March 21, 2022

Section 1115 Extension Template

Pennsylvania Application Certification Statement — Section 1115(a) Extension

This document, together with the supporting documentation outlined below, constitutes the Commonwealth of Pennsylvania's (Commonwealth's) application to the Centers for Medicare & Medicaid Services (CMS) to extend the Medicaid Coverage for Former Foster Care Youth (FFCY) from a Different State and SUD Demonstration 11-W-00308 for a period of 5 years pursuant to Section 1115(a) of the Social Security Act.

Type of Request (*select one only*):

_____ Section 1115(a) extension with no program changes

__X_____ **Section 1115(a) extension with minor program changes**

This constitutes the Commonwealth's application to the Centers for Medicare & Medicaid Services (CMS) to extend its Demonstration with program changes. The Commonwealth is requesting that CMS extend approval of the Demonstration subject to the same Special Terms and Conditions (STCs), waivers, and expenditure authorities currently in effect for the period of October 1, 2017, through September 30, 2022, with small edits related to budget neutrality. In combination with completing the Section 1115 Extension Template, the Commonwealth is also submitting a redline version of the relevant section of the approved STCs to identify how it proposes to revise its Demonstration agreement with CMS.

With the exception of the proposed changes outlined in this application, the Commonwealth is requesting that CMS extend approval of the Demonstration subject to the same STCs, waivers, and expenditure authorities currently in effect for the period of October 1, 2017, through September 30, 2022.

The Commonwealth is submitting the following items that are necessary to ensure that the Demonstration is operating in accordance with the objectives of Title XIX and/or Title XXI as originally approved. The Commonwealth's application will only be considered complete for purposes of initiating federal review and federal-level public notice when the Commonwealth provides the information as requested in the below appendices.

- **Appendix A:** A historical narrative summary of the Demonstration project, which includes the objectives set forth at the time the Demonstration was approved, evidence of how these objectives have or have not been met, and the future goals of the program.

- **Appendix B:** Budget/allotment neutrality assessment and projections for the projected extension period. The Commonwealth will present an analysis of budget/allotment neutrality for the current Demonstration approval period, including status of budget/allotment neutrality to date based on the most recent expenditure and member month data, and projections through the end of the current approval that incorporate the latest data. CMS will also review the Commonwealth's Medicaid and State Children's Health Insurance Program Budget and Expenditure System expenditure reports to ensure that the Demonstration has not exceeded the federal expenditure limits established for the Demonstration. The Commonwealth's actual expenditures incurred over the period from initial approval through the current expiration date, together with the projected costs for the requested extension period, must comply with CMS budget/allotment neutrality requirements outlined in the STCs.

- **Appendix C:** Interim evaluation of the overall impact of the Demonstration that includes evaluation activities and findings to date, in addition to plans for evaluation activities over the requested extension period. The interim evaluation should provide CMS with a clear analysis of the Commonwealth's achievement in obtaining the outcomes expected as a direct effect of the Demonstration program. The Commonwealth's interim evaluation must meet all of the requirements outlined in the STCs.

- **Appendix D:** Summaries of External Quality Review Organization (EQRO) reports, managed care organization and Commonwealth quality assurance monitoring, and any other documentation of the quality of and access to care provided under the Demonstration.

- **Appendix E:** Documentation of the Commonwealth's compliance with the public notice process set forth in 42 CFR 431.408 and 431.420.

The Commonwealth's application will only be considered complete for purposes of initiating federal review and federal-level public notice when the Commonwealth provides the information requested in Appendices A through E above, along with the Section 1115 Extension Template identifying the program changes being requested for the extension period. Please list all enclosures that accompany this document constituting the Commonwealth's whole submission.

1. Section 1115 Extension Template
2. Renewal Appendices
3. Redline Version of #57 and #67 of the STCs
4. Budget Neutrality Spreadsheets

The Commonwealth attests that it has abided by all provisions of the approved STCs and will continuously operate the Demonstration in accordance with the requirements outlined in the STCs.

Signature: [redacted] **Date: March 28, 2022**

CMS will notify the state no later than 15 days of submitting its application of whether we determine the state's application meets the requirements for a streamlined federal review. The state will have an opportunity to modify its application submission if CMS determines it does not meet these requirements. If CMS reviews the state's submission and determines that any proposed changes significantly alter the original objectives and goals of the existing Demonstration as approved, CMS has the discretion to process this application full scope pursuant to regular statutory timeframes for an extension or as an application for a new Demonstration.

Renewal Appendices

Pennsylvania 1115 Demonstration Extension Appendix Documentation

One Minor Change Requested

The Commonwealth of Pennsylvania (Commonwealth or Pennsylvania) is proposing a minor change to its waiver authority because of a casemix change to one of its budget neutrality eligibility groups. The change requested and justification is outlined in Appendix B. No other changes are requested.

This Section 1115(a) Demonstration enables the Commonwealth to provide Medicaid coverage to out-of-state former foster care youth (FFCY) under age 26 years who were in foster care under the responsibility of another state or tribe in such other state when they turned 18 (or such higher age as the state has elected for termination of federal foster care assistance under Title IV-E of the Social Security Act [the Act]), were enrolled in Medicaid at that time, and are now applying for Medicaid in the Commonwealth.

The objectives of the FFCY Demonstration component are to increase and strengthen overall coverage of FFCY and improve health outcomes for this population.

2018 Substance Use Disorder Amendment

Through the substance use disorder (SUD)/opioid use disorder (OUD) amendment, the Commonwealth intends to maintain critical access to OUD and other SUD services and continue delivery system improvements for these services to provide more coordinated and comprehensive SUD/OUD treatment for Medicaid beneficiaries. This Demonstration component will provide the Commonwealth with authority to provide high quality, clinically appropriate SUD treatment services for short-term residents in residential and inpatient treatment settings that qualify as an Institution for Mental Disease (IMD). The Demonstration will also build on the Commonwealth's existing efforts to improve models of care focused on supporting individuals in the community and home, outside of institutions, and strengthen a continuum of SUD services based on the American Society of Addiction Medicine (ASAM) Criteria, or other nationally recognized assessment and placement tools that reflect evidence-based clinical treatment guidelines.

The Commonwealth will test whether the SUD Section 1115 Demonstration amendment described in these Special Terms and Conditions (STCs) is likely to assist in promoting the objectives of Medicaid by achieving the following results:

1. Increased rates of identification, initiation, and engagement in treatment.
2. Increased adherence to and retention in treatment.
3. Reductions in overdose deaths, particularly those due to opioids.

4. Reduced utilization of emergency department (ED) and inpatient hospital settings for treatment where the utilization is preventable or medically inappropriate through improved access to other continuum of care services.
5. Fewer readmissions to the same or higher level of care (LOC) where the readmission is preventable or medically inappropriate.
6. Improved access to care for physical health (PH) conditions among beneficiaries.

List and Programmatic Description of Waiver and Expenditure Authorities

Waiver Authority Requested

The Commonwealth requests an extension of the waiver authority granted in the original Demonstration. The Commonwealth did not need to request any expenditure authority to provide Medicaid coverage under the new adult group. The Commonwealth submitted an eligibility State Plan Amendment (SPA) under S50 to cover the group for youth above 133 percent Federal Poverty Limit (FPL) and requests waivers of Sections 1902(a)(8) and 1902(a)(10) to limit this State Plan group coverage to FFCY who were in Medicaid and foster care in a different state. The eligibility SPA under S50 was approved on September 29, 2017 with an effective date of October 1, 2017. This waiver authority does not apply to the SUD component of the Demonstration:

- **Provision of Medical Assistance Section 1902(a)(8) and 1902(a)(10) —** To the extent necessary to permit the Commonwealth of Pennsylvania to limit the provision of medical assistance (MA) (and treatment as eligible) for individuals described in the eligibility group under Section 1902(a)(10)(A)(ii)(XX) of the Act and the Medicaid State Plan to only FFCY who are under 26 years of age, were in foster care under the responsibility of another state or tribe on the date of attaining 18 years of age (or such higher age as the state has elected), and who were enrolled in Medicaid on that date.

Expenditure Authority Requested

The Commonwealth requests a renewal of the expenditure authority granted in the original Demonstration:

- **Residential and Inpatient Treatment Services for Individuals with SUD**. Expenditures for otherwise covered services furnished to otherwise eligible individuals enrolled in managed care who are primarily receiving treatment and withdrawal management (WM) services for SUD who are short-term residents in facilities that meet the definition of an IMD as described in STC 28.

Appendix A

A historical narrative summary of the Demonstration project, which includes the objectives set forth at the time the Demonstration was approved, evidence of how these objectives have or have not been met, and the future goals of the program.

Medicaid Coverage for FFCY from a Different State

The Affordable Care Act (ACA) created a new mandatory Medicaid eligibility group at Section 1902(a)(10)(A)(i)(IX) for FFCY who were in foster care and receiving Medicaid at age 18 years or older. Under this new group, former foster care individuals can obtain coverage until age 26 years from the state responsible for their foster care and are not subject to income or resource limits. On January 22, 2013, in accordance with the ACA, the Centers for Medicare & Medicaid Services (CMS) issued a notice of proposed rulemaking that provided guidance on Medicaid eligibility under 42 CFR §435.250, which allowed states the option to cover individuals who are now residents of their state but were in foster care and enrolled in Medicaid at age 18 years or older in a different state. On January 1, 2014, the Commonwealth began providing Medicaid coverage to FFCY from a different state as part of its Medicaid State Plan. On November 21, 2016, CMS published a final rule that changed the eligibility provision for this population. The provision no longer provides states with the option to cover youth who were not the responsibility of their own state while in care. Due to this change, the Commonwealth applied for a waiver to provide Medicaid coverage to these individuals under Section 1115 Demonstration authority. CMS approved this Demonstration on September 29, 2017 for the period of October 1, 2017 through September 30, 2022.

The purpose of this Demonstration is to provide coverage on a Statewide basis to FFCY who currently reside in the Commonwealth and were in foster care and enrolled in Medicaid at age 18 years or older in a different state. As such, the Commonwealth will cover former foster care individuals from a different state who have income at or below 133 percent FPL under a mandatory coverage group or under the new adult group and will submit an eligibility SPA to cover individuals above 133 percent FPL. The Commonwealth is requesting waivers of Sections 1902(a)(8) and 1902(a)(10) to limit the State Plan group to these individuals. The Commonwealth proposes to test and evaluate how including FFCY individuals who “aged out” in a different state increases and strengthens overall coverage for FFCY and improves health outcomes for these youth. The Commonwealth expects these hypotheses will be proven correct, and that the Demonstration will result in an increase and strengthening of overall coverage of FFCY as well as an improvement in their health outcomes.

ASAM Implementation Update Including Demonstration Impact

The purpose of the Section 1115 Demonstration waiver amendment was to afford access to high quality, medically necessary treatment for OUD and other SUDs. The Commonwealth recognized the importance of a full continuum of treatment services, including residential services provided in a cost-effective manner and for a length of stay (LOS) governed by appropriate clinical guidelines. This Demonstration has proven critical to continue the federal funding needed to support the continuation of medically necessary services and SUD treatment in residential facilities that meet the definition of IMDs for individuals 21 years–64 years of age.

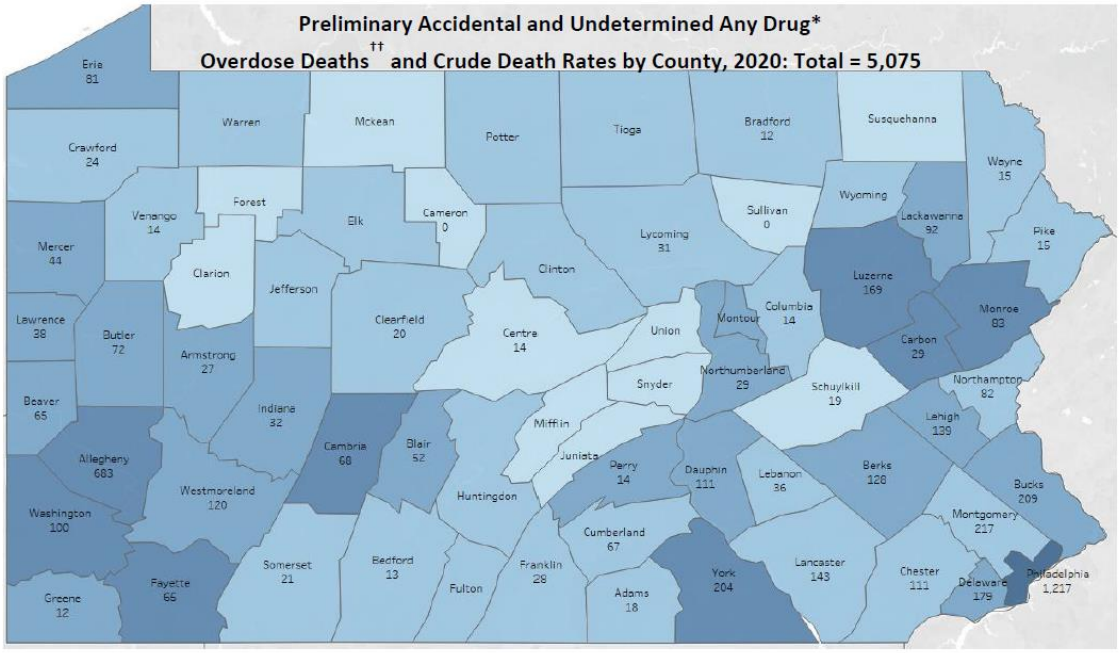
The Commonwealth has utilized the Demonstration authority to align its SUD service array with the ASAM, third edition criteria. The Commonwealth of Pennsylvania Department of Human Services (DHS or Department) has made progress on implementation of the SUD component of the 1115 Demonstration waiver.

The Commonwealth continues to implement ASAM alignment as reported in its quarterly and annual reports to CMS. The expectation is that providers will have full compliance with ASAM alignment by July 1, 2022, in order to have contractual relationships for receipt of public funds. Milestone 5 and Milestone 6 are completed.

The Commonwealth developed workplans for the implementation of all activities under the Implementation Protocol to ensure the milestones are implemented consistent with the approved STCs. Several work groups meet weekly to discuss all aspects of the SUD 1115 project.

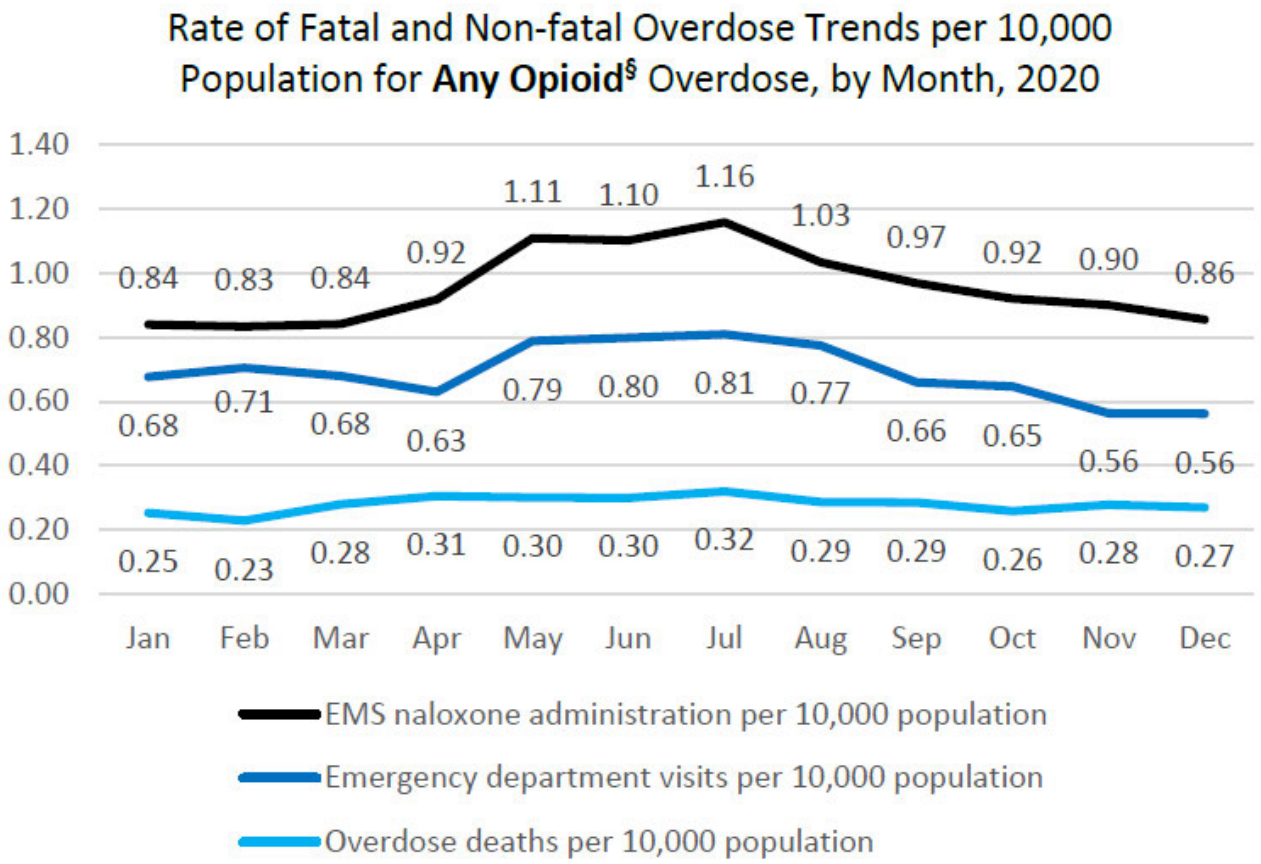
As of October 4, 2021, there were 5,075 Accidental and Undetermined Any Drug* overdose deaths in the Commonwealth in 2020. This is a decrease of 6.1 percent since the Demonstration Application 2017, when there were 5,403 overdose deaths.[1] This overall decrease occurred despite a spike in overdose deaths in the middle of the Coronavirus Disease 2019 (COVID-19) public health emergency (PHE).

[1] https://www.health.pa.gov/topics/Documents/Programs/PDMP/Pennsylvania%20Overdose%20Data%20Brief%202020.pdf, accessed on October 29, 2021.



† Fatal overdose data includes death record data from the Bureau of Health Statistics and Registries at DOH, as well as toxicology and coroner/medical examiner records data through partnerships with individual county coroners/medical examiners and the Department of Drug and Alcohol Programs. Counts do not include Homicides or Suicides. Non-fatal overdose data includes syndromic surveillance data through our partnerships with emergency departments.
†† Counts for counties with overdose death counts between 1 and 9 are suppressed.

pennsylvania
DEPARTMENT OF HEALTH



Other relevant information Demonstration impacts includes:

- Preliminary estimates show that of the 5,075 Accidental and Undetermined Any Drug* overdose deaths identified in 2020, 85 percent (4,314) were confirmed to be opioid-related, a 16 percent increase in opioid-related deaths compared to 2019 (3,728), and a seven percent decrease compared to 2017 (4,645).
- Of the 4,314 confirmed opioid-related overdose deaths, 44 percent (1,887) also involved a stimulant such as cocaine or methamphetamine contributing to death, a 22 percent increase compared to 2019 (1,553).
- In 2020, 8 percent (426) of overdose deaths involved a stimulant without an opioid. For comparison, ten percent (424) of overdose deaths involved a stimulant without an opioid in 2019.
- Four percent (189) of 2020 overdose deaths are missing toxicology information. Similarly, three percent (155) of 2019 overdose deaths were also missing toxicology information.
- On average, nearly 14 Pennsylvanians died from a drug overdose every day in 2020.

- There was a statistically significant increase in drug overdose deaths in the Commonwealth (14 percent) in 2020 compared to 2019. 2017 remains the year with the most Accidental and Undetermined overdose deaths at 5,403.
- Based on death record data, over half of drug overdose deaths occurred in the decedent's own home (57 percent), highlighting the importance of getting naloxone into the hands of community members, particularly friends and family of people who use opioids.
- 70 percent of Any Drug* overdose deaths occurred among males.
- The highest percentage (27 percent) of Any Drug* overdose deaths occurred among those 35 years–44 years old, followed by 25 percent among those 25 years–34 years old.
- 74 percent of Any Drug* overdose decedents were White, 19 percent were Black, six percent were of all additional races, and less than one percent were of unknown race.
- 92 percent of Any Drug* overdose decedents were non-Hispanic, eight percent were Hispanic, and less than one percent were of unknown ethnicity.
- Percentage change in rates‡ per 10,000 population for 2020 vs. 2019 were highest among the following demographic groups: 65+ Age Group (27 percent increase), Males (14 percent increase), Blacks (40 percent increase), and non-Hispanics (14 percent increase). As of September 27, 2021, there were 272 death records still pending for 2020, meaning the cause and manner of death have not yet been determined and results may change.

Milestone 1: Access to critical LOCs for OUD and other SUDs including:

- Outpatient
- Intensive outpatient (IOP) services
- Medication-assisted treatment (MAT) (medications, as well as counseling and other services with sufficient provider capacity to meet needs of Medicaid beneficiaries in the state)
- Intensive LOCs in residential and inpatient settings
- Medically supervised WM

System transformation: The Commonwealth continues to work with two sister agencies, forging a major system transformation across the entire Commonwealth. During the waiver period to date, the DHS has made the following progress on implementation of the SUD component of the 1115 Demonstration waiver:

- An internal impact analysis regarding the adoption of the service descriptions was conducted to determine if regulation will allow full adoption of services as indicated by the criteria. The review of ASAM Criteria descriptions was then compared to licensing requirements. This analysis was utilized to guide implementation of types of services, service hours, and staffing requirements.

- Department of Drug and Alcohol Programs (DDAP)/DHS/the Transition Workgroup engaged in an ongoing impact analysis (both independently and collaboratively) regarding service descriptions as they exist in the ASAM Criteria. This process was necessary to anticipate the impact and changes to the field for residential/inpatient and non-residential services such as (Outpatient/IOP/Partial Hospitalization Program [PHP]/Withdrawal Management [WM]).
- DDAP created a guidance document on the application of the ASAM Criteria to ensure all services within the Pennsylvania Client Placement Criteria (PCPC) continuum of care were available under the ASAM Criteria. As a result of feedback from the field in response to the first publication of this document, modifications were made to better facilitate the transition and ensure stability of the Commonwealth's continuum of care. The changes contributed to some delay in the implementation of the 1115 Demonstration timeline.
- Current capacity for utilization of IOP and PHP using historic non-ASAM definitions (historical requirements are that PHP requires 10 hours of treatment weekly (instead of 20) were reviewed to determine the impact to the Commonwealth's system should the service descriptions, as indicated in the ASAM Criteria, be fully adopted as written.
- DDAP began draft guidance on the delivery of WM, specifically the ambulatory LOCs 1-WM and 2-WM. Consideration has been given to obtaining subject matter experts via a subcommittee representative of WM providers to ensure accurate reflection of the ASAM Criteria, regulatory compliance, etc.
- At the advisement of the ASAM Transition Workgroup, a subcommittee was formed to develop best practice for the delivery of individualized care. This guidance will assist the field in applying the criteria holistically as a guide for clinical practice and decision-making rather than just a LOC placement tool.
- The ASAM Guidance document was updated to eliminate redundancy and to assist with closer compliance with the criteria. Other changes that occurred were the addition of information that had not been included in the first publication, such as admission, continued stay, and discharge guidelines. The revised ASAM Guidance document has been widely disseminated and is posted on the DDAP website.
- **Alignment of service definitions with ASAM:** Throughout 2020, the Commonwealth conducted a systematic "roll out" of service delivery descriptions and expectations beginning with residential services (3.0). DDAP and DHS communicated changes through in-person discussions, listserv communications, web postings, etc. The Commonwealth has significant buy-in from providers, managed care organizations (MCOs), and Single County Authorities (SCAs) with training and webinars they have been conducting. As part of the alignment, DHS and DDAP have worked together to develop ASAM service descriptions and delivery standards and guidance including admission, continuing stay and discharge criteria, the types of services, hours of clinical care, credentials of staff, and implementation of requirements for each LOC. DHS is continuing working to ensure that the Office of Mental Health and Substance Abuse Services (OMHSAS) encounter coding is consistent with any needed changes.

- **Oversight of provider transition to aligned ASAM service definitions:** Initially, the Commonwealth faced many political issues that caused significant delays. The Commonwealth has 800 licensed providers involved in this transition, of which approximately 450 contract with an SCA and/or an MCO. The Commonwealth completed an impact analysis to try to anticipate the challenges with alignment of the system of care (services, hours, staff credentials, etc.) with the ASAM LOC criteria. Finally, DHS and DDAP will work to ensure a cohesive provider monitoring program is in place. The SCA along with the MCOs will work together to monitor compliance with the ASAM alignment. Capacity monitoring is anticipated to be embedded in the provider monitoring effort. There are 16 providers who have provider agreements under Medicaid who do not have contracts with the SCAs.
- Service delivery alignment has begun, including hours, service description, and staff qualifications, with the expectation that providers will be significantly aligned by July 1, 2021 and fully aligned by July 1, 2022. Providers are now in the process of aligning services to the expectations set forth and determining their capacity to do so. Providers have participated in information-gathering sessions and technical assistance calls, and have submitted policies and procedures for the DDAP alignment process with the ASAM Criteria. The providers continue to submit questions via roundtable discussions, resource accounts, and email. Common challenges for the SUD providers are aligning with the ASAM Criteria for daily clinical services, staffing, and training. DDAP continues to offer support through technical assistance and clarification documents.
- DDAP has assisted the provider network by providing the service descriptions for 1.0, 2.0, 3.0, and 4.0 LOCs through written documentation, webinars, FAQs, and technical assistance. Information posted to the DDAP website includes Levels 1.0, 2.0, 3.0, and 4.0 self-assessment checklists, service characteristics, webinars, and FAQs. DDAP has issued a clarification and flexibility document on the ASAM alignment process on various aspects of the ASAM alignment. The clarification documents addressed staffing, training, and substantially aligned program LOCs. DDAP continues to respond to questions from the providers on all LOCs and works with them by offering technical assistance through conference calls, email correspondence, and FAQs. DDAP continues to work in collaboration with DHS regarding co-occurring services for individuals with SUD and mental health (MH) diagnoses to replace current DHS guidance and bulletins.
  - **ASAM 2.1:** DDAP continues to participate in roundtable discussions for Level 2.1.
  - **ASAM 2.5:** DDAP completed the alignment for Level 2.5 PHP services for the providers under contract with the SCAs. DDAP will continue to review requests of providers who want to contract with the SCA and align with PHP services. DDAP has reviewed policies and procedures for Level 2.5 PHP services and is conducting technical assistance calls with the providers of Level 2.5.
  - **ASAM 3.5:** DDAP continues to participate in roundtable discussions for Level 3.5. DDAP will continue to align with the ASAM Criteria by no longer delineating two types of 3.5 LOC, i.e., 3.5 Rehabilitative and 3.5 Habilitative. Services including LOS within a 3.5 LOC will be determined based on the identified needs of the individual within those programs. *Specialized* 3.5 programs such as Pregnant Women and Women with Children services and those programs that have a criminal justice component will utilize the amount of time needed to address needs identified in the six-dimensional assessment/re-assessment.

  - **ASAM 3.7:** DDAP has also completed the Level 3.7 alignment for SCA contracted providers. This newly updated LOC will increase staffing hours.
  - **Residential standards:** OMHSAS and DDAP have had challenges implementing residential provider alignment with ASAM because of the number of providers affected, the number of changes required for ASAM alignment, and the timing of the changes. The Commonwealth has heard concerns from providers about staffing/client ratios and credentialing. Providers are expressing concern about the rates paid by the Medicaid managed care. Preliminary designations for residential services were issued based on provider reported staffing. However, staffing alone does not assure that the services described by the criteria is being delivered in residential or ambulatory treatment settings.
  - **WM standards:** DDAP is working on providing information to the field regarding WM, specifically the ambulatory LOCs 1-WM and 2-WM. DDAP has been working on guidance for aligning ambulatory and residential WM services to the ASAM Criteria and is currently working with physician advisors to ensure that the guidance for alignment to the criteria is sufficient and appropriate. With the exception of OUD medication induction, ambulatory WM has not been widely utilized across the Commonwealth and therefore this service has warranted added study and consideration. DDAP anticipates releasing direction and guidance about WM services in 2022 with alignment to begin immediately, with continued implementation throughout the year. DDAP and DHS are preparing criteria for alignment of co-occurring enhanced services that will replace a 2006 guidance document.
  - **Medicated-assisted treatment (MAT):** The Commonwealth is working to ensure that all residential providers have accessibility to MAT for their residents, but there remains some degree of stigma regarding MAT and philosophical barriers with providers. The Commonwealth is trying to address this via education, awareness campaigns, etc. MAT accessibility is addressed in five-year contracts with SCAs as part of the full continuum of care. DDAP continues to educate providers and the SCAs regarding MAT across the continuum. The Case Management and Clinical Services Manual addresses the requirements around MAT. In addition, the ASAM Criteria, 2013 also addresses MAT for all LOCs.

- **Contractual changes**: The Commonwealth is making the ASAM alignment transition through SCA and HealthChoices contractual and agreement changes. Staff will evaluate if additional addendums or other requirements are needed. DDAP/DHS expects requirements to be fully aligned with ASAM service delivery in 2021. Provider compliance with the fully-aligned ASAM continuum is expected by July 2022.

Milestone 2: Use of evidence-based, SUD-specific patient placement criteria including:

- Implementation of requirement that providers assess treatment needs based on SUD-specific, multidimensional assessment tools such as the American Society of Addiction Medicine (ASAM) Criteria or other patient placement assessment tools which reflect evidence-based clinical treatment guidelines.

- Implementation of a utilization management approach such that:
  - Beneficiaries have access to SUD services at the appropriate LOC
  - Interventions are appropriate for the diagnosis and LOC
  - There is an independent process for reviewing placement in residential treatment settings

Use of ASAM in assessments and treatment planning: The transition to the use of ASAM in assessments and treatment planning is proceeding well. The Commonwealth has had both in-person and online training active as of January 1, 2020. To date, approximately 12,750 individuals have been trained in The ASAM Criteria through either a two-day classroom offering through Train for Change or on-demand modules through The Change Companies. These individuals are trained in use of ASAM skill training and use of the LOC tool and placement determinations.

- Commonwealth prior authorization guidelines were issued as of December 31, 2018.
- The 2020 Block Grant Agreement included references to application of the ASAM Criteria.

Use of ASAM for patient placement: The transition to using ASAM LOC for a placement tool is also going well given the caveat that the Commonwealth has not fully transitioned to the ASAM service descriptions. DDAP issued guidance to the counties to use the ASAM admission criteria as of May 1, 2018. On March 1, 2019, the ASAM Criteria was required for treatment plans, continued stay, and discharge criteria. Providers are utilizing ASAM Criteria for admission determinations of LOC, but because the service definitions are not yet fully aligned the service delivery is not fully aligned with ASAM. The Commonwealth staff are unable to fully assess how transition to the criteria is affecting access because services do not yet align with the placement criteria.

The field has primarily been using ASAM Criteria as a LOC placement tool. DDAP issued guidance to the counties to use the ASAM admission criteria as of May 1, 2018 for SCA funded services and ASAM treatment plan, continuing stay, and discharge criteria as of March 1, 2019. OMHSAS added language to the Program Standards and Requirement document effective January 1, 2019 that ASAM was to be used as medical necessity criteria for Medicaid-funded services. Any licensed treatment provider who is a Medicaid managed care provider is required by managed care agreements to conduct drug and alcohol (D&A) assessments in accordance with the most recent version of the ASAM Criteria.

Milestone 3: Use of nationally recognized SUD-specific program standards to set provider qualifications for residential treatment facilities including:

- Implementation of residential treatment provider qualifications in licensure requirements, policy manuals, or other guidance. Qualification should meet program standards in the ASAM Criteria, or other nationally recognized, evidence-based SUD-specific program standards regarding, in particular, the types of services, hours of clinical care, and credentials of staff for residential treatment settings
- Implementation of state process for reviewing residential treatment providers to ensure compliance with these standards

- Requirement that residential treatment facilities offer MAT on site or facilitate access off site

The Commonwealth is utilizing three separate delivery systems to ensure compliance under the Demonstration: The Medicaid behavioral health- managed care organizations (BH-MCOs), the Medicaid fee-for-service (FFS) delivery system, and the SCAs who contract with the DDAP to provide the Substance Abuse and Mental Health Services Administration block grant funded services. The Single County Authorities (SCA) along with the MCOs will work together to monitor compliance with the ASAM alignment.

Use of the ASAM Criteria is required in the SCA contracts with licensed treatment providers. DDAP has also been able to identify licensed treatment providers that are non-contracted with the SCA.

There are 16 providers who are Medicaid-only providers and not subject to SCA monitoring for ASAM requirements. The Healthchoices-BH agreements require that all D&A reviews be conducted in accordance with ASAM Criteria. OMHSAS will monitor compliance with this requirement.

In 2018, DDAP conducted a survey of the residential providers which included an initial self-assessment of the staffing levels at the provider. The self-assessment from providers was based on staffing, not on service description or delivery of service as described by ASAM Criteria. DDAP considers inpatient non-hospital residential providers to be aligned with the ASAM Criteria Level 3.5 by virtue of being in compliance with regulatory requirements for this activity. The ASAM Level 3.7 did not previously exist in the Commonwealth; therefore, DDAP aligned providers who were interested in providing this LOC through technical assistance calls and review of policy and procedures related to the ASAM Criteria for Level 3.7. There are 10 providers who are aligned for Level 3.7 services. In addition to the initial alignment, providers may request to align with Level 3.7 on an ongoing basis by participating in the alignment process with DDAP. Confirmation of service delivery will occur in 2022.

Milestone 4: Sufficient provider capacity at critical LOCs, including for MAT for OUD including:

- Completion of assessment of the availability of providers enrolled in Medicaid and accepting new patients in the critical LOCs throughout the State (or at least in participating regions of the state), including those that offer MAT

Capacity: With the alignment of provider standards to ASAM, DDAP, and OMHSAS believe there will be sufficient outpatient and IOP capacity. However, as the alignment occurs it is unclear if there will be sufficient PHP access. This LOC has changes in the service descriptions. ASAM 3.5 should have sufficient access. However, ASAM 3.7 capacity is undetermined. This LOC also has changes from the previous definitions. The WM roll out has not started yet so there may be some capacity issues that may need to be addressed.

Milestone 5: Implementation of comprehensive treatment and prevention strategies to address opioid abuse and OUD including:

- Implementation of opioid prescribing guidelines, along with other interventions, to prevent opioid abuse

- Expanded coverage of, and access to, naloxone for overdose reversal
- Implementation of strategies to increase utilization and improve functionality of prescription drug monitoring programs

The Commonwealth's work to address the opioid crisis focuses on three areas: prevention, rescue, and treatment. Working with Commonwealth agencies and local, regional, and federal officials have resulted in significant action to address the opioid crisis.

Prescribing Guidelines and Other Initiatives

The Commonwealth's initiatives with prescribing guidelines and other initiatives has resulted in:

- The waiver of birth certificate fees for those with OUD has helped close to 2,700 people, enabling easier entry into recovery programs.
- More than 6,000 health care professionals have been visited and provided training on how to prescribe opioids cautiously and judiciously.
- 813 drug take-back boxes help Pennsylvanians properly dispose of unwanted drugs, including 482,000 pounds of unwanted drugs in 2018.
- Commonwealth prescribing guidelines were issued as of December 31, 2018.
- Commonwealth prior authorization guidelines were issued as of December 31, 2018.
- On September 9, 2019, the Governor Tom Wolf's office announced that recent data shows that in 2018, more than 4,400 people died from a drug overdose. This represents a nearly 18% decrease in drug overdose deaths from 2017.

Naloxone and Other Overdose Prevention Efforts

Commonwealth efforts to improve access to naloxone include:

- A standing order signed by Dr. Rachel Levine, Pennsylvania's Physician General, in 2018 allowed Emergency Medical Services (EMS) to leave behind nearly 2,400 doses of naloxone.
- The "Good Samaritan" law for drug overdose (2014 Act 139, Public Law 2487) was passed September 30, 2014.
- The Commonwealth has ensured that naloxone is available via standing order with the passage of Act 139 of 2014.
- The Get Help Now Hotline received more than 87,095 calls since inception in 2016, with nearly half of all callers connected directly to a treatment provider.
- The Commonwealth's prison system has expanded their MAT program, which is viewed as a model program for other states.

- Education regarding opioids and naloxone has been provided to more than 9,500 prescribers through either online or face-to-face education under the disaster declaration.
- Several agencies have worked together to collaborate on the seizure and destruction of illicit opioids across the Commonwealth.
- From 2016 to 2019, 3,055 cases of neonatal abstinence syndrome were reported to the Opioid Command Center.
- The coordination with seven major commercial insurers has expanded access to naloxone and mental health (MH) care, while also working to make it more affordable.
- Naloxone has been made available to first responders through the Commission on Crime and Delinquency, with more than 75,000 kits made available and more than 16,241 overdose reversals reported through that program since November 2017. In addition, EMS have administered more than 49,000 doses of naloxone and more than 10,000 doses were made available to members of the public during the Commonwealth's naloxone distribution last year.

Prescription Drug Monitoring Program

- In December 2019, the Prescription Drug Monitoring Program (PDMP) sent a message to all Commonwealth prescribers to raise awareness of common misapplications of the Centers for Disease Control and Prevention and Pennsylvania opioid prescribing guidelines and the PDMP system.
- As of December 19, 2018, Attorney General Josh Shapiro's suspicious activity reporting tool was available for health care professionals and the public to report suspicious activity involving prescription medications.
- Pennsylvania has launched a continuing education curriculum for prescribers titled Evidence-Based Prescribing: Tools You Can Use to Fight the Opioid Epidemic.
- The Pennsylvania PDMP is integrating the PDMP system with the electronic health records and pharmacy management systems of all eligible health care entities in Pennsylvania.
- The PDMP reduced opioid prescriptions by 27% and has virtually eliminated doctor shopping.
- The Opioid Data Dashboard and Data Dashboard 2.0 is providing public-facing data regarding prevention, rescue, and treatment.

Milestone 6: Improved care coordination and transitions between LOCs including:

- Implementation of policies to ensure residential and inpatient facilities link beneficiaries, especially those with OUD, with community-based services and supports following stays in these facilities

Transition and care coordination: The ASAM alignment will emphasize the provider standards for transition between LOCs. Licensure regulations within the Commonwealth require linkage/referral to services as necessary.

DDAP is planning to provide case management services separate from the clinical counselors by distinct teams/individuals including ancillary services. DDAP is working on a separate five-year strategic plan for improving case management services. Any individual with SUD in the Commonwealth who needs case management will be able to receive it.

DDAP continues to emphasize a separation of clinical services from care coordination. DDAP's Case Management and Clinical Services Manual discusses the requirements around case management services and clinical services being separate and distinct services.

DDAP continues to provide education to providers regarding MAT across the continuum of care. DDAP's Case Management and Clinical Services Manual includes the requirement for treatment providers to not exclude individuals on MAT from being admitted into services and for contracted providers to admit and provide services to individuals who use MAT for SUD.

Implementation Issues

OMHSAS and DDAP have had challenges implementing residential provider alignment with ASAM due to the size of the system and efforts to coordinate the transition with so many providers. The Commonwealth has heard concerns about staffing/client ratios and credentialing. Providers have expressed concern about the costs associated with ASAM implementation. DHS is pursuing CMS approval for a minimum fee schedule Directed Payment which should address concerns of providers in the BH-MCO delivery system regarding rates.

The Commonwealth has had objections from some of the provider community that is opposed to the implementation of ASAM. Admittedly, this has created some delay in maintaining adherence to the original timelines for full transition to ASAM. However, both DHS and DDAP have been working diligently to abate any concerns and respond to misinformation that surrounds ASAM implementation as the Commonwealth continues to move forward with the transition/implementation process.

The majority of providers have implemented ASAM Criteria as an admission placement tool with relative ease. There have been few difficulties brought to DDAP's attention related specifically regarding use of the placement criteria. DDAP has received positive feedback from some of the stakeholders regarding use of the placement criteria.

DDAP is also working to educate the field and legislature on individualized and person-centered care and the benefits of evidence-based practices. There continues to be some apprehension from certain stakeholder groups and organizations regarding the ASAM alignment so DDAP is continually meeting with these entities and the legislature to address their concerns.

Evaluation Design

Mercer Government Human Services Consulting (Mercer), part of Mercer Health & Benefits LLC, the independent evaluator , facilitated meetings with the Commonwealth team to develop the evaluation design plan for the waiver. These meetings included development of driver diagrams, development of research questions, development of hypotheses, developing the analytic methods employed in the evaluation, and assessing the methodological limitations. The meetings began October 12, 2018. The

Commonwealth finalized the draft evaluation design and submitted the plan to CMS on March 31, 2019. CMS approved the evaluation design on May 22, 2020.

Monitoring Protocol

The Commonwealth has fully complied with all requirements surrounding the monitoring protocol. The Commonwealth submitted the Monitoring Protocol to CMS on May 15, 2019. The Commonwealth programmed the performance metrics through PeopleStat, its internal data analysis group. CMS issued Technical Specification updates to metrics on August 28, 2020 and September 11, 2021. CMS approved the SUD monitoring protocol on December 15, 2020. The Commonwealth has submitted regular quarterly and annual Monitoring Reports for all quarters.

To complete these activities, the Commonwealth held meetings with the External Quality Review Organization (EQRO), PeopleStat (part of the DHS), DDAP, and Mercer to review required performance measure specifications and discuss the evaluation design and waiver milestones. Pennsylvania and its contractors completed service and coding crosswalks to ensure that the performance measures are calculated consistently. The deviations in coding and programming from the CMS specifications for performance measures based on factors such as data availability and Pennsylvania specific coding practices were identified, evaluated, and documented. In addition, OMHSAS met with the PDMP team to select the Health Information Technology (HIT) performance measures. A reporting schedule of performance measures was developed.

Appendix B

Budget neutrality assessment, and projections for the projected extension period. The Commonwealth will present an analysis of budget neutrality for the current Demonstration approval period, including the status of budget neutrality to date based on the most recent expenditure and member month data, and projections through the end of the current approval that incorporate the latest data. CMS will also review the Commonwealth's Medicaid Budget and Expenditure/ State Children's Health Insurance Program Budget and Expenditure System (MBES/CBES) expenditure reports to ensure that the Demonstration has not exceeded the federal expenditure limits established for the Demonstration. The Commonwealth's actual expenditures incurred over the period from initial approval through the current expiration date, together with the projected costs for the requested extension period, must comply with CMS budget/allotment neutrality requirements outlined in the STCs.

Medicaid Coverage for FFCY from a Different State

Pennsylvania is not requesting Section 1115 expenditure authority, as the affected population is comprised of a Medicaid State Plan eligibility group described in Section 1902(a)(10)(ii)(XX) of the Social Security Act (new adult group). Therefore, no budget neutrality agreement is needed in conjunction with this Demonstration since expenditures will be reported under its State Plan.

Analysis of Current Demonstration for SUD

CMS approved a hypothetical per member per month (PMPM) budget neutrality agreement for the Commonwealth for this Demonstration. *Please note that the dates for budget neutrality align with the SUD amendment, so Demonstration Year 1 (DY1) begins July 1, 2018.*

The trend rates and per capita cost estimates for each eligibility group for each year of the Demonstration are listed in the table below. DY1 began July 1, 2018 with the SUD Amendment approval. The extension would be effective October 1, 2022.

Eligibility Group	Trend	DY1 PMPM	DY2 PMPM	DY3 PMPM	DY4 PMPM	DY5 PMPM
SUD IMD Temporary Assistance for Needy Families (TANF)	4.8%	$520.37	$545.35	$571.53	$598.96	$627.71
SUD IMD Social Security Income (SSI) Duals	4.8%	$252.46	$264.58	$227.28	$290.59	$304.54
SUD IMD SSI Non-Duals	4.8%	$2,024.02	$2,121.17	$2,222.99	$2,329.69	$2,441.52
SUD IMD HealthChoices Expansion (HCE)	4.8%	$741.38	$776.97	$814.26	$853.34	$894.30

The Commonwealth reports on the 1115 waiver schedules this quarter by Date of Payment. The Commonwealth is using the correct budget neutrality forms for the SUD 1115 quarterly report. See the table below for the Schedule C as of quarter ending December 31, 2021.

MBES Schedule C Medical Assistance Program Waivers

Total Computable

Waiver Name	DY1	DY2	DY3	DY4
SUD IMD TANF	1,250,975	5,935,984	3,750,744	1,283,377
SUD IMD SSI Duals	324,105	1,556,926	1,912,372	871,658
SUD IMD SSI Non-Duals	5,368,743	24,344,293	15,898,501	6,873,030
SUD IMD HCE	5,273,657	64,600,680	36,553,859	13,546,972
Total	**12,217,480**	**96,437,883**	**58,115,476**	**22,575,037**

Federal Share

Waiver Name	DY1	DY2	DY3	DY4
SUD IMD TANF	653,050	3,196,531	2,190,734	752,543
SUD IMD SSI Duals	169,025	868,259	1,116,976	510,984
SUD IMD SSI Non-Duals	2,803,541	13,173,189	9,286,014	4,030,970
SUD IMD HCE	4,917,856	59,595,744	32,898,476	12,192,275
Total	**8,543,472**	**76,833,723**	**45,492,200**	**17,486,772**

To calculate the PMPM spending by waiver year, the Commonwealth must adjust the DY1 and DY2 expenditures to reflect the correct DY. In the quarterly Part C 1115 report, the Commonwealth has made these adjustments. The overall budget neutrality and member months reporting is current and the overall budget neutrality is noted below.

Budget Neutrality Summary

Hypotheticals Test 1

Without-Waiver Total Expenditures	MEG		DYs						Total
			Actual DY1	Actual DY2	Actual DY3	Actual DY4	Projection DY4	Projection DY5 Q1	
Hypothetical 1 Per Capita									
SUD IMD TANF	1	Total	$ 4,426,788	$ 4,001,233	$ 4,064,492	$ 1,375,248	$6,048,159	$1,624,513	
		PMPM	$520.37	$545.35	$571.53	$598.96	$598.96	$627.71	
		Member Months	8,507	7,337	7,112	2,296	10,098	2,588	
SUD IMD SSI Duals	2	Total	$ 1,053,146	$ 1,134,598	$ 1,133,361	$ 416,038	$ 1,030,719	$301,190	
		PMPM	$252.46	$264.58	$277.28	$290.59	$ 251.14	$304.54	
		Member Months	4,172	4,288	4,087	1,432	4,104	989	
SUD IMD SSI Non-Duals	3	Total	$ 18,695,873	$ 19,111,742	$ 18,013,548	$ 6,964,872	$18,094,275	$4,858,625	
		PMPM	$2,024.02	$2,121.17	$2,222.99	$2,329.69	$2,329.69	$2,441.52	
		Member Months	9,237	9,010	8,103	2,990	7,767	1,990	
SUD IMD HCE	4	Total	$ 50,872,013	$ 52,089,623	$ 50,816,127	$ 18,686,866	$58,646,367	$15,749,517	
		PMPM	$741.38	$776.97	$814.26	$853.34	$853.34	$894.30	
		Member Months	68,618	67,042	62,408	21,899	68,725	17,611	
Total			**$74,863,162**	**$76,797,277**	**$74,870,546**	**$27,904,373**	**$84,911,825**	**$22,533,846**	**$320,877,495**

With-Waiver Total Expenditures	MEG	DYs						Total
		Actual DY1	Actual DY2	Actual DY3	Actual DY4	Projection DY4	Projection DY5 Q1	
Hypothetical 1 Per Capita								
SUD IMD TANF	1	$4,072,243	$3,662,957	$3,750,744	$1,283,381	$6,048,298	$1,624,513	
SUD IMD SSI Duals	2	$508,708	$1,397,261	$1,912,372	$871,655	$1,121,968	$301,190	
SUD IMD SSI Non-Duals	3	$15,745,807	$16,453,461	$15,898,501	$6,873,032	$18,094,702	$4,858,625	
SUD IMD HCE	4	$36,206,063	$36,864,782	$36,553,858	$13,546,955	$58,645,792	$15,749,517	
Total		**$56,532,821**	**$58,378,461**	**$58,113,008**	**$22,575,022**	**$84,911,825**	**$22,533,846**	**$270,738,354**

Hypotheticals Variance 1		$18,330,341	$18,408,613	$16,757,537	$5,329,351	**$(0)**	**$(0)**	$58,825,842

The Commonwealth is budget neutral for the first three years of the waiver by $58,825,842**.**

All eligibility groups are budget neutral with the exception of the SUD IMD SSI Duals eligibility group. As noted below, the With- Waiver Expenditures on a PMPM basis exceed the Hypothetical Without-Waiver PMPM amount. In addition, the total actual With-Waiver expenditures by eligibility group exceed the Without-Waiver Total Expenditure amount.

Eligibility Group: SUD IMD SSI Duals		DYs						Total Actual
		Actual DY1	Actual DY2	Actual DY3	Actual DY4	Projection DY4	Projection DY5	
Without-Waiver Total Expenditures	Member Months	4,172	4,288	4,087	1,432	3,861	989	
	PMPM	$252.46	$264.58	$277.28	$290.59	$290.59	$304.54	
	Total	$1,053,263	$1,134,519	$1,133,361	$416,038	$1,121,849	$1,205,090	$3,737,143
With-Waiver Total Expenditures	PMPM	$121.93	$325.85	$467.87	$608.83	$290.59	$304.54	
	Total	$508,708	$1,397,261	$1,912,372	$871,655	$1,121,849	$1,205,090	$4,689,996

The Commonwealth has researched these expenditures and found that With-Waiver Expenditures for the Dual Eligible MEG in DY2 (2019 Q4) began to grow because of a change in the underlying casemix of the eligibility group. The number of Nursing Facility Clinically Eligible (NFCE) individuals with Medicare relative to the number of community well individuals with Medicare grew. The table below — **SSI Duals Summary** — outlines the Without-Waiver PMPM, Actual PMPM, NFCE Proportion, and Total Member Months.

SSI Duals Summary

DY	Time Period	Without- Waiver PMPM	With- Waiver PMPM	NFCE Percent of Population	Member Months
DY1	Q3 2018	$252.46	$128.48	N/A	1,012
	Q4 2018	$252.46	$126.04	N/A	1,048
	Q1 2019	$252.46	$117.99	N/A	1,009
	Q2 2019	$252.46	$115.67	N/A	1,102
DY2	Q3 2019	$264.58	$189.11	0.9%	1,166
	Q4 2019	$264.58	$ 336.18	3.3%	1,133
	Q1 2020	$264.58	$ 375.09	3.1%	1,157
	Q2 2020	$264.58	$ 434.65	4.3%	833
DY3	Q3 2020	$277.28	$ 466.15	4.7%	1,041
	Q4 2020	$277.28	$ 484.01	4.8%	971
	Q1 2021	$277.28	$ 416.71	3.5%	1,000
	Q2 2021	$277.28	$ 502.50	4.6%	1,076
DY4	Q3 2021	$290.59	$ 604.84	6.1%	1,060
	Q4 2021	$290.59	$ 620.20	6.5%	371

Note: The NFCE Proportion column lists "N/A" for State Fiscal Year (SFY) 2018/2019 (DY1) since the data files from Pennsylvania did not include any Community HealthChoices (CHC) data allocated to the SSI with Medicare MEG until starting in 2019 Q3 (DY2). Therefore, we do not show any data coming through for the NFCE population until DY2 (2019 Q3).

The State's actuary, Mercer, has analyzed the underlying casemix relative to the original data used to calculate the Without- Waiver PMPMs. We have concluded that if the SSI Dual Eligible eligibility group were split into two populations using the original data and trend rates, the eligibility group would be budget neutral. **SSI Duals — NFCE/NFI** tables below split the SSI Duals data between the NFCE and Nursing Facility Ineligible (NFI) populations. Both tables provide the Without-Waiver PMPM, Actual PMPM, and Member Months for the NFI and NFCE populations separately.

SSI Duals — NFI Only

DY	Time Period	Without- Waiver PMPM	Actual PMPM	Member Months
DY1	Q3 2018	$ 208.19	$ 128.48	1,012
	Q4 2018	$ 208.19	$ 126.04	1,048
	Q1 2019	$ 208.19	$ 117.99	1,009
	Q2 2019	$ 208.19	$ 115.67	1,102
DY2	Q3 2019	$ 218.19	$ 138.11	1,155
	Q4 2019	$ 218.19	$ 162.66	1,096
	Q1 2020	$ 218.19	$ 208.51	1,121
	Q2 2020	$ 218.19	$ 209.71	797
DY3	Q3 2020	$ 228.66	$ 207.73	992
	Q4 2020	$ 228.66	$ 207.53	924
	Q1 2021	$ 228.66	$ 214.96	965
	Q2 2021	$ 228.66	$ 225.59	1,026
DY4	Q3 2021	$ 239.64	$ 221.49	996
	Q4 2021	$239.64	$ 233.59	347

SSI Duals — NFCE Only

Time Period	Without- Waiver PMPM	Actual PMPM	Member Months
Q3 2018	$ 5,448.55	N/A	N/A
Q4 2018	$ 5,448.55	N/A	N/A
Q1 2019	$ 5,448.55	N/A	N/A
Q2 2019	$ 5,448.55	N/A	N/A
Q3 2019	$ 5,710.08	$5,542.47	11
Q4 2019	$ 5,710.08	$ 5,474.20	37
Q1 2020	$ 5,710.08	$ 5,560.92	36
Q2 2020	$ 5,710.08	$ 5,416.30	36
Q3 2020	$ 5,984.17	$ 5,699.24	49
Q4 2020	$ 5,984.17	$ 5,918.80	47
Q1 2021	$ 5,984.17	$ 5,977.05	35
Q2 2021	$ 5,984.17	$ 6,182.62	50
Q3 2021	$ 6,271.41	$ 6,515.24	65
Q4 2021	$ 6,271.41	$ 6,216.62	24

Note: We have included the first four quarters in the data table but allocated all of the SSI Duals amounts to the NFI population group (due to the data set not including NFCE data for the first four quarters, as described above).

The Commonwealth therefore requests that the eligibility group for the SSI Dual Eligibles be split into two populations with the same trend rate. **Without-Waiver PMPM Summary** tables below show the projected Without-Waiver PMPMs for all eligibility groups including the NFI and NFCE populations separately, as calculated using the original 1115 pricing model and data.

Projected PMPMs for Demonstration Extension

MEG	Trend	DY1 PMPM	DY2 PMPM	DY3 PMPM	DY4 PMPM	DY5 PMPM	DY6 PMPM	DY7 PMPM	DY8 PMPM	DY9 PMPM	DY10 PMPM
SUD IMD TANF	4.80%	$520.37	$545.35	$571.53	$598.96	$627.71	$657.84	$689.42	$722.51	$757.19	$793.54
SUD IMD SSI Duals*	4.80%	$252.46	$264.58	$227.28	$290.59						
SUD IMD SSI Duals — NFCE*	4.80%	$5,448.55	$5,710.08	$5,984.17	$6,271.41	$6,572.44	$6,887.91	$7,218.53	$7,565.02	$7,928.14	$8,308.69
SUD IMD SSI Duals — NFI*	4.80%	$208.19	$218.19	$228.66	$239.64	$251.14	$263.19	$275.83	$289.07	$302.94	$317.48
SUD IMD SSI Non-Duals	4.80%	$2,024.02	$2,121.17	$2,222.99	$2,329.69	$2,441.52	$2,558.71	$2,681.53	$2,810.24	$2,945.13	$3,086.50
SUD IMD HCE	4.80%	$741.38	$776.97	$814.26	$853.34	$894.30	$937.23	$982.22	$1,029.37	$1,078.77	$1,130.56

*The Commonwealth is seeking CMS guidance regarding how to address the SUD IMD SSI Duals eligibility group PMPM. A prospective effective date for any change in the PMPM will be requested (either at the time of the extension or through a separate amendment).

Projected Costs for the Requested Extension Period

As seen below, the Commonwealth will be budget neutral for the upcoming period with the same trend rate, if the SSI Dual Eligible eligibility group is split into two eligibility groups.

Projected Costs for the Demonstration Extension

Without-Waiver Total Expenditures	MEG		DYs										Total
			Actual DY1	Actual DY2	Actual DY3	Actual DY4	Projection DY4	Projection DY5	Projection DY6	Projection DY7	Projection DY8	Projection DY9	Projection DY10	
	Hypothetical 1 Per Capita													
SUD IMD TANF	1	Total	$4,426,788	$4,000,688	$ 4,064,492	$ 1,375,248	$6,048,298	$6,496,932	$6,979,004	$7,496,846	$8,053,112	$8,650,653	$2,323,133	
		PMPM	$520.37	$545.35	$571.53	$598.96	$598.96	$627.71	$657.84	$689.42	$722.51	$757.19	$793.54	
		Member Months	8,507	7,336	7,112	2,296	10,098	10,350	10,609	10,874	11,146	11,425	2,928	
SUD IMD SSI Duals — Total*	2	Total	$1,053,146	$1,137,772	$ 1,133,361	$ 416,038	$1,209,662	$1,299,419	$1,395,836	$1,499,407	$1,610,663	$1,730,174	$464,638	
		PMPM	$252.46	$264.58	$277.28	$290.59	$290.59	$304.54	$319.16	$334.48	$350.53	$367.36	$384.99	
		Member Months	4,172	4,300	4,087	1,432	4,163	4,267	4,374	4,483	4,595	4,710	1,207	
SUD IMD SSI Duals — NFCE*	2A	Total	$0	$685,210	$ 1,083,135	$ 555,528	$1,163,503	$1,249,835	$1,342,573	$1,442,192	$1,549,202	$1,664,153	$446,908	
		PMPM	$5,448.55	$5,710.08	$5,984.17	$6,271.41	$6,271.41	$6,572.44	$6,887.91	$7,218.53	$7,565.02	$7,928.14	$8,308.69	
		Member Months	0	120	181	89	186	190	195	200	205	210	54	
SUD IMD SSI Duals — NFI*	2B	Total	$868,489	$912,087	$ 893,244	$ 321,860	$953,095	$1,023,815	$1,099,782	$1,181,386	$1,269,045	$1,363,208	$366,089	
		PMPM	$208.19	$218.19	$228.66	$239.64	$239.64	$251.14	$263.19	$275.83	$289.07	$302.94	$317.48	
		Member Months	4,172	4,180	3,906	1,343	3,977	4,077	4,179	4,283	4,390	4,500	1,153	

Without-Waiver Total Expenditures	MEG		DYs										Total
			Actual DY1	Actual DY2	Actual DY3	Actual DY4	Projection DY4	Projection DY5	Projection DY6	Projection DY7	Projection DY8	Projection DY9	Projection DY10	
	Hypothetical 1 Per Capita													
SUD IMD SSI Non-Duals	3	Total	$18,695,873	$19,111,742	$ 18,013,548	$ 6,964,872	$18,094,702	$19,436,870	$20,879,086	$22,428,314	$24,092,495	$25,880,158	$6,950,116	
		PMPM	$2,024.02	$2,121.17	$2,222.99	$2,329.69	$2,329.69	$2,441.52	$2,558.71	$2,681.53	$2,810.24	$2,945.13	$3,086.50	
		Member Months	9,237	9,010	8,103	2,990	7,767	7,961	8,160	8,364	8,573	8,787	2,252	
SUD IMD HCE	4	Total	$50,872,013	$52,083,407	$ 50,816,127	$ 18,686,866	$58,645,792	$62,997,927	$67,672,373	$72,693,663	$78,087,533	$83,881,628	$22,526,411	
		PMPM	$741.38	$776.97	$814.26	$853.34	$853.34	$894.31	$937.23	$982.22	$1,029.37	$1,078.77	$1,130.56	
		Member Months	68,618	67,034	62,408	21,899	68,725	70,443	72,205	74,010	75,860	77,756	19,925	
Total			**$74,863,163**	**$76,793,134**	**$74,870,546**	**$27,904,373**	**$84,905,390**	**$91,205,379**	**$97,972,818**	**$105,242,401**	**$113,051,387**	**$121,439,800**	**$32,612,658**	**$873,009,757**

With-Waiver Total Expenditures	MEG		DYs										Total
			Actual DY1	Actual DY2	Actual DY3	Actual DY4	Projection DY4	Projection DY5	Projection DY6	Projection DY7	Projection DY8	Projection DY9	Projection DY10	
	Hypothetical 1 Per Capita													
SUD IMD TANF	1		$4,072,243	$3,662,957	$3,750,744	$1,283,381	$6,048,298	$6,496,932	$6,979,004	$7,496,846	$8,053,112	$8,650,653	$2,323,133	
SUD IMD SSI Duals*	2		$508,708	$1,400,514	$1,912,372	$871,655	$1,209,662	$1,299,419	$1,395,836	$1,499,407	$1,610,663	$1,730,174	$464,638	
SUD IMD SSI Duals — NFCE*	2A		$0	$645,572	$1,056,831	$560,798	$1,163,503	$1,249,835	$1,342,573	$1,442,192	$1,549,202	$1,664,153	$446,908	
SUD IMD SSI Duals — NFI*	2B		$508,708	$754,942	$853,074	$310,856	$953,095	$1,023,815	$1,099,782	$1,181,386	$1,269,045	$1,363,208	$366,089	
SUD IMD SSI Non-Duals*	3		$15,745,807	$16,453,461	$15,898,501	$6,873,032	$18,094,702	$19,436,870	$20,879,086	$22,428,314	$24,092,495	$25,880,158	$6,950,116	
SUD IMD HCE	4		$36,206,063	$36,864,782	$36,553,858	$13,546,955	$58,645,792	$62,997,927	$67,672,373	$72,693,663	$78,087,533	$83,881,628	$22,526,411	
Total			**$56,532,821**	**$58,381,714**	**$58,113,008**	**$22,575,022**	**$84,911,825**	**$91,205,379**	**$97,972,818**	**$105,242,401**	**$113,051,387**	**$121,439,800**	**$32,612,658**	**$819,513,267**
Hypotheticals Variance 1			**$18,330,342**	**$18,411,420**	**$16,757,537**	**$5,329,351**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$58,825,842**

*The Commonwealth is seeking CMS guidance regarding how to address the SUD IMD SSI Duals eligibility group PMPM. A prospective effective date for any change in the PMPM will be requested (either at the time of the extension or through a separate amendment).

Note: In the tables above, the sum of total dollars for the NFCE and NFI populations will not equal the Total SSI Duals due to the actual member months being used in DY1–3 and then projecting them out in future DYs. Also, the "Total" lines are the sum of the TANF, NFCE, NFI, Non-Duals, and HCE populations. The SSI Duals — Total row is not included in the final "Total" calculation of dollars.

Appendix C

Interim evaluation of the overall impact of the Demonstration that includes evaluation activities and findings to date, in addition to plans for evaluation activities over the requested extension period. The interim evaluation should provide CMS with a clear analysis of the Commonwealth's achievement in obtaining the outcomes expected as a direct effect of the Demonstration program. The Commonwealth's interim evaluation must meet all of the requirements outlined in the STCs.

Mercer

Substance Use Disorder 1115 Waiver Number 11-W-00308/3 Interim Evaluation Report

Commonwealth of Pennsylvania

March 31, 2022

Contents

Section 1
Executive Summary

History and Overview of the Demonstration

The Affordable Care Act (ACA) created a new mandatory Medicaid eligibility group at Section 1902(a)(10)(A)(i)(IX) for Former Foster Care Youth (FFCY) who were in foster care and receiving Medicaid at age 18 years or older. Under this new group, former foster care individuals can obtain coverage until age 26 years from the state responsible for their foster care and are not subject to income or resource limits. On January 22, 2013, in accordance with the ACA, the Centers for Medicare & Medicaid Services (CMS) issued a notice of proposed rulemaking that provided guidance on Medicaid eligibility under 42 CFR §435.250, which allowed states the option to cover individuals who are now residents of their state but were in foster care and enrolled in Medicaid at age 18 years or older in a different state.

On January 1, 2014, the Commonwealth of Pennsylvania (Commonwealth or Pennsylvania) began providing Medicaid coverage to FFCY from a different state as part of its Medicaid State Plan. On November 21, 2016, CMS published a final rule that changed the eligibility provision for this population. The provision no longer provides states with the option to cover youth who were not the responsibility of their own state while in care. Due to this change, the Commonwealth applied for a waiver to provide Medicaid coverage to these individuals under Section 1115 Demonstration authority. CMS approved this Demonstration on September 29, 2017 for the period of October 1, 2017 through September 30, 2022.

The purpose of this Demonstration is to provide coverage on a statewide basis to FFCY who currently reside in the Commonwealth and were in foster care and enrolled in Medicaid at age 18 years or older in a different state. As such, the Commonwealth will cover former foster care individuals from a different state who have income at or below 133% Federal Poverty Level (FPL) under a mandatory coverage group or under the new adult group and will submit an eligibility State Plan Amendment (SPA) to cover individuals above 133% FPL. The Commonwealth requested waivers of Sections 1902(a)(8) and 1902(a)(10) to limit the State Plan group to these individuals.

The Commonwealth proposed to test and evaluate how including FFCY individuals who “aged out” in a different state increases and strengthens overall coverage for FFCY and improves health outcomes for these youth. The Commonwealth expected these hypotheses will be proven correct, and that the Demonstration will result in an increase and strengthening of overall coverage of FFCY as well as an improvement in their health outcomes.

Former Foster Care Youth Modified Evaluation Design

In the Modified Evaluation Design submitted by Pennsylvania to CMS on June 26, 2018, the following goals for the Demonstration were identified.

Goal 1: Ensure access to Medicaid services for former foster care individuals between the ages of 18 years and 26 years who previously resided in another state.

Evaluation Questions

1. Does the Demonstration provide continuous health insurance coverage?
    A. *Hypothesis:* Beneficiaries will be continuously enrolled for 12 months.
    B. *Measure*: Number of beneficiaries continuously enrolled.
2. How did beneficiaries utilize health services?
    A. *Hypothesis:* Beneficiaries will access health services.
    B. *Measure:* Number of beneficiaries who had an ambulatory care visit.
    C. *Measure:* Number of beneficiaries who had an emergency department (ED) visit.
    D. *Measure:* Number of beneficiaries who had an inpatient visit.
    E. *Measure:* Number of beneficiaries who had a behavioral health (BH) encounter.

The Demonstration was found to provide continuous health insurance for 12 months for approximately 40% of the 38 youth enrolled in the program each year. This resulted in access to health care for all 38 of the enrollees. Annually, 69% of youth received at least one ambulatory care visit. Overtime, the number of youth with at least one ED visit fluctuated from 26% to 43% with the average number of youth with an ED visit at 36% annually. The number of youth with an inpatient visit was on average 5% annually (ranging from 0% to 11%). The number of youth with a BH encounter was on average 21% annually.

The Demonstration was found to improve or maintain health outcomes for the target population. For example, on average, there was appropriate follow-up after hospitalization (FUH) 43% of the time for the target population. Sixty-seven percent of the population with asthma had appropriate medication management for asthma in Demonstration Year 1 (DY1) increasing to 100% of the population with asthma in DY2–DY4. Sixty-seven percent of the populations on persistent medication had appropriate medication monitoring in year DY1 increasing to 100% of the population on persistent medication having appropriate monitoring in DY4. Twenty-one percent of the population had an annual preventive visit in each of the DYs. Eighteen percent of the beneficiaries eligible to have a cervical cancer screening received a screening.

Goal 2: Improve or maintain health outcomes for the target population.

Evaluation Questions

1. What do health outcomes look like for beneficiaries?
   A. *Measure:* Number of beneficiaries with appropriate follow-up care for hospitalizations.
   B. *Measure:* Number of beneficiaries with appropriate medication management for asthma.
   C. *Measure:* Number of beneficiaries on persistent medication with annual monitoring.
   D. *Measure:* Number of beneficiaries with an annual preventive visit.
   E. *Measure:* Number of beneficiaries eligible with a cervical cancer screening.

History and Overview of the SUD Amendment

The Commonwealth developed this Demonstration project in the midst of a public health crisis affecting both the well-being of its residents and the economic health of the Commonwealth. On January 10, 2018, Governor Wolf, in order to further bolster the fight against heroin and opioid addiction, signed a statewide disaster declaration to enhance Commonwealth response, increase access to treatment, and save lives. The declaration was the first-of-its-kind for a Public Health Emergency (PHE) in Pennsylvania and utilizes a command center at the Pennsylvania Emergency Management Agency to track progress and enhance coordination of health and public safety agencies.

Pennsylvania has provided residential treatment services to individuals based upon a comprehensive assessment and standardized level of care (LOC) placement criteria to ensure appropriate treatment. Access to residential treatment services has not been based upon an arbitrary length of stay (LOS) but upon the determination of clinical need and medical necessity for this LOC. The loss in federal matching dollars due to the changes to the managed care rule placed an enormous financial burden on the Commonwealth, thereby impacting its ability to provide adequate and appropriate residential treatment services to individuals who have been assessed and determined to require the LOC the Residential Treatment Facility (RTF) provides if it meets the definition of an Institution for Mental Diseases (IMD). This severely impacted an individual's ability to remain in an appropriate level of treatment for adequate lengths of time, which may result in negative outcomes such as relapse, resulting in increased costs over time.

In addition to residential IMD services, the Demonstration was designed to support the delivery of the complete American Society of Addiction Medicine (ASAM) Criteria of services including Prevention, Outpatient, Intensive Outpatient (IOP), Partial Hospitalization Program (PHP), Residential and Inpatient, Withdrawal Management (WM), and Medication -Assisted Treatment (MAT) for both methadone and buprenorphine. Pennsylvania already provides a comprehensive set of Substance Use Disorder (SUD) treatment benefits that provide a full continuum of care through its fee-for-service (FFS) and managed care delivery systems, federal grants, and state funds. Inpatient, Outpatient, and MAT services are covered services

within Pennsylvania's Medicaid state plan. Residential drug and alcohol (D&A) detoxification and rehabilitation and Certified Recovery Specialist services are provided under the capitated agreements as "in lieu of services". Federal grants and state funds can be utilized for all allowable services.

SUD Demonstration Amendment Approval

The "Pennsylvania Former Foster Care Youth from a Different State and Substance Use Disorder 1115(a) Medicaid Demonstration" amendment, which was approved on June 28, 2018, became effective July 1, 2018 and will continue through September 30, 2022 (four years and three months). This interim evaluation will be submitted to CMS as part of the Commonwealth's renewal application, which is due March 30, 2022.

Description of the SUD Demonstration Amendment

The purpose of the Section 1115 Demonstration waiver amendment was to afford continued access to high quality, medically necessary treatment for opioid use disorder (OUD) and other SUDs. The Commonwealth is testing a new paradigm for delivering SUD services for Medicaid enrollees. By providing comprehensive, quality SUD treatment, the SUD program will achieve the following goals:

1. Reduce overdose deaths, particularly those due to opioids.
2. Reduce utilization of ED and inpatient hospital settings.
3. Reduce readmissions to the same or higher LOC.

The Commonwealth believes that these three goals will be achieved through Demonstration activities that increase access to high quality of care across the entire treatment continuum, increase treatment program retention, and improve care transition across the continuum of SUD services. The specific interventions include:

- Continuing federal reimbursement for residential treatment stays beyond the 15-day limit under the Medicaid Managed Care rule.
- Adopting all ASAM LOCs and the ASAM patient placement criteria in Medicaid managed care.
- Implementing nationally recognized SUD-specific program standards to set provider qualifications for residential treatment facilities (RTFs).
- Ensuring provider capacity at critical LOCs including MAT for OUD.
- Implementing comprehensive treatment and prevention strategies to address opioid abuse and OUD.
- Improving care coordination and transitions between LOCs.

SUD Evaluation Questions and Hypotheses

Evaluation questions and hypotheses to be addressed in the SUD portion of the evaluation were derived from and organized based on the Driver Diagrams approved in the evaluation design. The overall aims of the project are to: 1) reduce overdose deaths, particularly those due to opioids, 2) reduce utilization of ED and inpatient hospital settings, and 3) reduce readmissions to the same or higher LOC. To accomplish these goals, the demonstration includes several key activities (called primary drivers) including increasing access to care, ensuring high quality of care across the entire treatment continuum and increasing treatment program retention, and improving care transition across the continuum of SUD services. Six secondary drivers support the three primary drivers for this change. These secondary drivers become the milestones in the Commonwealth's implementation plan:

1. Increase access to critical LOCs for OUD and other SUDs.
2. Implement evidence-based, SUD-specific Patient Placement Criteria.
3. Implement nationally recognized SUD-specific program standards to set provider qualifications for RTFs.
4. Ensure sufficient provider capacity at critical LOCs including MAT for OUD.
5. Implement comprehensive treatment and prevention strategies to address opioid abuse and OUD.
6. Improve care coordination and transitions between LOCs.

SUD Evaluation Design

The evaluation of the Pennsylvania 1115 waiver utilizes a mixed-methods evaluation design with three main goals:

1. Describe the progress made on specific waiver-supported activities (process/ implementation evaluation).
2. Demonstrate change/accomplishments in each of the waiver milestones (short-term outcomes).
3. Demonstrate progress in meeting the overall project goals/aims.

A combination of qualitative and quantitative approaches is used throughout the evaluation. Qualitative methods include key informant interviews with the Office of Mental Health and Substance Abuse Services (OMHSAS) and provider staff regarding waiver activities, document reviews of agreements, policy guides and manuals, and summaries of Consumer and Family Satisfaction Team (CFST) surveys conducted between 2019 and 2021. Quantitative methods include descriptive statistics showing change over time in both counts and rates for specific metrics and interrupted time series (ITS) analysis to assess the degree to which the timing of waiver interventions affect changes across specific outcome measures.

Qualitative analysis has been used to identify and describe the SUD delivery system and the changes/maintenance through the Demonstration for Medicaid enrollees in the eligible population. Each of the milestones are discussed and documented in this Interim Evaluation Report. We identify key elements that Pennsylvania intended to modify through the Demonstration and measure the effects of those changes. Using a combination of case study methods, including document review, telephone interviews, surveys, and face-to-face meetings, we will have conducted a descriptive analysis of the key Pennsylvania demonstration features.

Methodological Limitations

There are three primary limitations to the evaluation methodology presented here. The first involves issues of data quality and data sources that either 1) are not sufficient to conduct the analysis proposed here (i.e., not enough historical data for needed prior time periods), and 2) contain errors. The second limitation is related to the design itself. Since this evaluation plan relies heavily on descriptive, time series analysis and qualitative data, this report is able to demonstrate what happened after the Demonstration was implemented. However, it is difficult to isolate why changes occurred. In other words, it will be difficult to directly attribute changes after waiver implementation to the activities undertaken as part of the waiver. Each of these limitations is discussed in greater detail within this section. Contextual complications related to the COVID-19 pandemic also make data trend interpretation extremely difficult.

SUD Findings

Milestone 1

There were some delays in providers reaching alignment by July 1, 2021. COVID-19 required changes to planned trainings and a web-based system was developed. In addition, there was some uncertainty and concern on the part of providers around the resources required to reach full alignment. In June 2021, OMHSAS and the Department of Drug and Alcohol Programs (DDAP) agreed to allow providers to apply for extensions for complete implementation. During focus groups conducted during August 2021 and September 2021, OMHSAS and DDAP stakeholders expressed confidence that the majority of concerns have been resolved. There was confidence that providers will be able to comply with all criteria for the LOC they provide in the near future.

Some specific LOCs are still a challenge for providers. Stakeholders acknowledged that this was a significant change in terms of the number of hours of service and staffing ratios. One specific example is ASAM 2.1 because there is not a separately licensed IOP LOC in the Commonwealth. The requirements for this level might be difficult for many providers to meet and many providers may choose not to continue to provide this LOC. DDAP considers WM at inpatient ASAM 3.7-WM and ASAM 4.0-WM to be substantially aligned, but WM at the ambulatory LOCs such as ASAM 1.0-WM and ASAM 2.0-WM are still being assessed for alignment with the ASAM Criteria.

The ITS analysis found:

- Significant increases in the number of members with an SUD diagnosis.
- Initial statistically significant increases in the number of any SUD services, followed by declines at the onset of the pandemic.
- Decreases in the number of members receiving IOP and PHP services.
- Increases in the number of individuals receiving early intervention services.
- Increases in the number of individuals receiving outpatient services.
- An initial decline in residential services, followed by small, statistically significant increases, then significant declines during the pandemic.
- Increases in MAT services.

Milestone 2

OMHSAS required Primary Contractors/Behavioral Health -Managed Care Organizations (PCs/BH-MCOs) to use ASAM patient placement criteria for Medicaid utilization review and admission prior authorization to residential facilities on January 1, 2019. DDAP issued guidance to the counties to use ASAM admission criteria as of May 1, 2018. DDAP began requiring ASAM Criteria for treatment plans, continued stay, and discharge criteria as of May 2019.

Some stakeholders report that use of the ASAM for admission criteria is consistent across providers, but many reported a perspective that it is not regularly being used in treatment plans, continued stay, and discharge criteria. OMHSAS and DDAP are working together to develop a protocol and tool that will monitor, among other compliance requirements, the degree to which ASAM Criteria are being used in continued stays and discharge decisions. Once this protocol is in use, more statements that are definitive can be made about use of ASAM placement criteria.

To date, approximately 12,750 individuals have been trained. DDAP has two options to complete required ASAM training, a two-day live classroom offering and a series of on-demand modules. From 2018 through June 2019, over 7,500 individuals were trained in the in-person two-day skill building training. The live classroom course was reformatted for a virtual experience. Approximately 400 students attended virtual ASAM Criteria training in 2020. Since the inception of the ASAM Criteria, over 9,800 Pennsylvania provider staff have been trained in the two-day classroom course. Nine hundred and seventy-two Pennsylvania-based organizations ordered subscriptions to the on-demand, online modules for approximately 2,150 potential users.

Milestone 3

The metrics reported reflect a decline in the delivery of services by unique providers because the Commonwealth only counts enrolled providers who delivered care in FFS, which was affected by the pandemic from January 2020 through June 2020. The actual number of enrolled providers providing SUD services has not declined to the same extent.

Milestone 4

The Commonwealth has not done a capacity review since development of the waiver application.

Once the alignment of provider standards to ASAM is completed, OMHSAS and DDAP believe there will be sufficient outpatient and IOP capacity as well as capacity at most of the residential ASAM LOCs. Without a formal assessment, complete up to date numbers for all available providers is difficult to document. However, both OMHSAS and DDAP stakeholders report they believe that there have been more MAT licenses granted since implementation and are certain that overall treatment capacity has increased for both ambulatory and residential.

Milestone 5

Since the Midpoint Assessment, OMHSAS and DDAP have had challenges implementing residential and residential WM provider alignment with ASAM. As mentioned previously, the size of the system transformation effort has been the primary challenge. Providers requested more time than the Commonwealth had originally planned to make the transition. However, providers are now making strides in alignment and there is more confidence, as compared to reporting during the midpoint assessment, that provider alignment will be accomplished by July 1, 2022.

No descriptive analyses of trends in measures for Milestone 5 and Milestone 6 are available at this time due to limited data points. Currently, only data for calendar year (CY) 2019 are available due to delays in technical specifications for these measures. The CY 2020 data are still being programmed according the new specifications. This measure will be included in the Final Evaluation Report.

Milestone 6

DDAP continues efforts to improve and increase case management services provided by single county authorities (SCAs), making some funding available through block grants to help strengthen existing case management services. Stakeholders expressed a desire for the department to go beyond just tracking members through LOCs. Instead, they are encouraging and supporting case management that emphasizes a community-based and individualized approach. ASAM requirements are being integrated into case management expectations.

SUD Evaluation Conclusions

The findings reported here are consistent with a Demonstration that is still in the midst of implementation efforts. Somewhat sharp increases in diagnosis and more gradual increases in access to some levels of SUD care reflect full implementation of ASAM Criteria for assessing treatment needs and making appropriate placements. However, it is hard to explain a very high single month jump of individuals diagnosed during the first implementation month. More gradual increases observed over time after implementation, however, are consistent with early implementation of the ASAM assessment criteria. It is also important to note that the original intent of the waiver was to maintain access to key SUD services that would have been eliminated due to CMS rule changes. Original research hypotheses only anticipated small changes across the entire array of services.

An important theme in discussing Demonstration implementation with key stakeholders is that change takes time. DDAP may have under estimated how disruptive providers viewed the changes. However, initial concerns are beginning to lessen with greater communication, technical assistance, and allowing more time for alignment activities.

Interpretations, and Policy Implications and Interactions with Other State SUD Initiatives

The SUD 1115 Demonstration has been a key tool in Governor Wolf's Administration's campaign to address SUDs. Throughout the 15 SUD PHEs, the Commonwealth has utilized multiple interventions to address all aspects of OUD. OMHSAS has found DDAP and its SCAs to be good partners in implementing the 1115 Demonstration.

Section 8 of this report includes a retrospective description of specific steps to combat SUD taken by the administration.

SUD Lessons Learned and Recommendations

Based on the Commonwealth's experience with the 1115 SUD Demonstration to this point the following lessons have been learned and will be described: 1) placement criteria matters, 2) the pandemic disrupted service patterns, and 3) change management disrupted service patterns before improving access to care. The Commonwealth has two closely related recommendations at this time: 1) a measured approach to change may create less provider abrasion and 2) acceptance of change takes time. Important considerations for this kind of Demonstration project include:

1. **Placement criteria matters** — good placement criteria promotes good treatment planning, combining modality matching (for all pertinent problems and priorities identified in the assessment) with placement matching (which identifies the least intensive LOC that can safely and effectively provide the resources that will meet the patient's needs).

2. **The COVID-19 pandemic disrupted service patterns** — it shifted service delivery from residential and congregate settings to individual telehealth care overnight. The evaluation highlighted changes to utilization and LOCs due to restricted physical movement and migration to virtual appointments. Increased need for services also was highlighted as the number of overdose deaths in 2020 rose to almost peak 2017 rates.

3. **Change management disrupted service patterns before improving access to care** — the changes required for aligning ASAM appear to have slightly decreased utilization in 2018, potentially related to mandatory training. While this lost utilization was small, it was statistically significant. The training also appears to have resulted in a number of individuals being served at lower LOCs (e.g., outpatient rather than IOP or PHP).

   At this point in the Demonstration, the Commonwealth has one primary recommendation. The Commonwealth recommends a measured, dare we say slower, approach to change which is easier on the provider organizations and more likely to produce lasting results. Change does not happen overnight and lasting change may take many years to implement.

Section 2
Former Foster Care Individuals Evaluation

Medicaid Coverage for Former Foster Care Youth from a Different State

In the Modified Evaluation Design submitted by Pennsylvania to CMS on June 26, 2018, the following goals for the Demonstration were identified:

1. Ensure access to Medicaid services for former foster care individuals between the ages of 18 years and 26 years who previously resided in another state (the "target population").
2. Improve or maintain health outcomes for the target population.

The Modified Evaluation Design would apply to the five DYs of the 1115 Demonstration waiver:

- DY1: October 1, 2017 to September 30, 2018
- DY2: October 1, 2018 to September 30, 2019
- DY3: October 1, 2019 to September 30, 2020
- DY4: October 1, 2020 to September 30, 2021
- DY5: October 1, 2021 to September 30, 2022

Based on the criteria outlined in the Modified Evaluation Design, the goals identified were measured (to date) as follows.

Goal 1: Ensure access to Medicaid services for former foster care individuals between the ages of 18 years and 26 years who previously resided in another state.

Evaluation Questions

1. Does the Demonstration provide continuous health insurance coverage?
   A. *Hypothesis:* Beneficiaries will be continuously enrolled for 12 months.
   B. *Measure*: Number of beneficiaries continuously enrolled.

DY	Number of Beneficiaries Continuously Enrolled	Total Number of Enrollees	Percentage
DY1	16.00	39.00	41%
DY2	18.00	42.00	43%
DY3	14.00	28.00	50%

DY	Number of Beneficiaries Continuously Enrolled	Total Number of Enrollees	Percentage
DY4	12.00	42.00	29%
Average	**15.00**	**37.75**	**40%**

2. How did beneficiaries utilize health services?

   A. *Hypothesis:* Beneficiaries will access health services.

   B. *Measure:* Number of beneficiaries who had an ambulatory care visit.

DY	Number of Beneficiaries With Ambulatory Care Visit	Total Number of Enrollees	Percentage
DY1	27.00	39.00	69%
DY2	29.00	42.00	69%
DY3	20.00	28.00	71%
DY4	28.00	42.00	67%
Average	**26.00**	**37.75**	**69%**

   C. *Measure:* Number of beneficiaries who had an ED visit.

DY	Number of Beneficiaries With ED Visit	Total Number of Enrollees	Percentage
DY1	14.00	39.00	35%
DY2	17.00	42.00	40%
DY3	12.00	28.00	43%
DY4	11.00	42.00	26%
Average	**13.50**	**37.75**	**36%**

D. *Measure:* Number of beneficiaries who had an inpatient visit.

DY	Number of Beneficiaries With Inpatient Visit	Total Number of Enrollees	Percentage
DY1	2.00	39.00	5%
DY2	0.00	42.00	0%
DY3	3.00	28.00	11%
DY4	2.00	42.00	5%
Average	**1.75**	**37.75**	**5%**

E. *Measure:* Number of beneficiaries who had a BH encounter.

DY	Number of Beneficiaries With BH Encounter	Total Number of Enrollees	Percentage
DY1	9.00	39.00	23%
DY2	6.00	42.00	14%
DY3	6.00	28.00	21%
DY4	10.00	42.00	24%
Average	**7.75**	**37.75**	**21%**

Goal 2: Improve or maintain health outcomes for the target population.

Evaluation Questions

1. What do health outcomes look like for beneficiaries?

A. *Measure:* Number of beneficiaries with appropriate follow-up care for hospitalizations.

DY	Number of Beneficiaries With Follow-Up Care	Number of Beneficiaries With Hospitalizations	Percentage
DY1	1.00	2.00	50%
DY2	0.00	0.00	0%
DY3	0.00	3.00	0%
DY4	1.00	2.00	50%
Average	**0.50**	**1.75**	**43%**

B. *Measure:* Number of beneficiaries with appropriate medication management for asthma.

DY	Number of Beneficiaries with Asthma Medication Management	Number of Beneficiaries on Asthma Medication	Percentage
DY1	2.00	3.00	67%
DY2	2.00	2.00	100%
DY3	1.00	1.00	100%
DY4	2.00	2.00	100%
Average	**1.75**	**2.00**	**88%**

C. *Measure:* Number of beneficiaries on persistent medication with annual monitoring.

DY	Number of Beneficiaries With Annual Monitoring	Number of Beneficiaries on Persistent Medications	Percentage
DY1	6.00	9.00	67%
DY2	6.00	7.00	86%
DY3	8.00	9.00	89%
DY4	7.00	7.00	100%
Average	**6.75**	**8.00**	**84%**

D. *Measure:* Number of beneficiaries with an annual preventive visit.

DY	Number of Beneficiaries With Annual Preventive Visit	Total Number of Enrollees	Percentage
DY1	7.00	39.00	18%
DY2	11.00	42.00	26%
DY3	8.00	28.00	29%
DY4	5.00	42.00	12%
Average	**7.75**	**37.75**	**21%**

E. *Measure: Number of beneficiaries eligible with a cervical cancer screening.*

DY	Number of Beneficiaries Who Received Cervical Cancer Screening	Number of Beneficiaries Eligible for Cervical Cancer Screenings	Percentage
DY1	2.00	19.00	11%
DY2	5.00	20.00	25%
DY3	2.00	14.00	14%
DY4	4.00	20.00	20%
Average	**3.25**	**18.25**	**18%**

Section 3
General Background Information

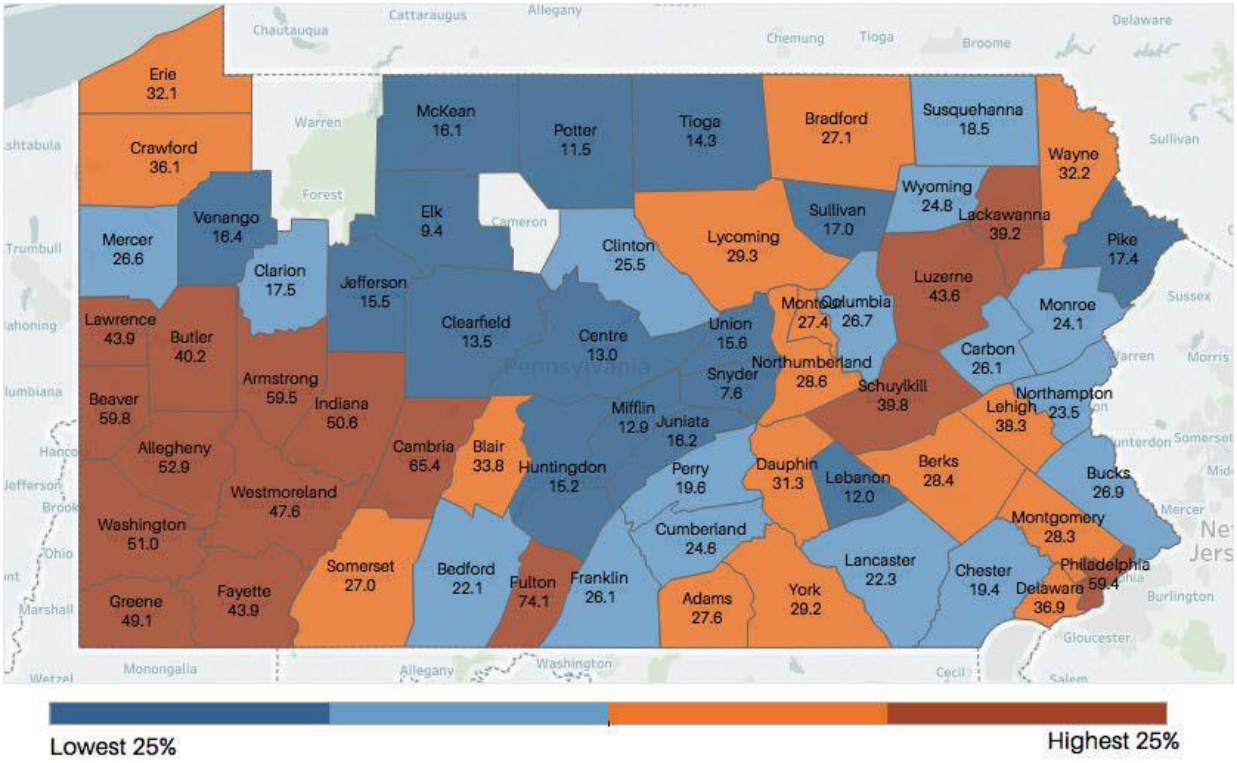
History and Overview of the SUD Amendment

The Commonwealth developed this Demonstration project in the midst of a public health crisis affecting both the well-being of its residents and the economic health of the Commonwealth. On January 10, 2018, Governor Wolf, in order to further bolster the fight against heroin and opioid addiction, signed a statewide disaster declaration to enhance Commonwealth response, increase access to treatment, and save lives. The declaration was the first-of-its-kind for a PHE in Pennsylvania and utilizes a command center at the Pennsylvania Emergency Management Agency to track progress and enhance coordination of health and public safety agencies.[2] The opioid disaster declaration was renewed 14 times through August 25, 2021. In 2017, more than 5,403 Pennsylvanians[3] lost their lives to drug-related overdose, which averages to almost 15 drug-related deaths each day. This was a significant increase from the approximately 3,500 overdose fatalities in 2015, and over double from the nearly 2,500 deaths in 2014. The Pennsylvania drug-related overdose death rate in 2016 was 36.50 per 100,000 people, a substantial increase from the death rate of 2015.[3] This death rate was significantly higher than the national average of 16.30 per 100,000. Pennsylvania's Prescription Drug Monitoring Program (PDMP) reports that the number of ED visits related to an opioid overdose has increased by 82% from the third quarter of 2016 to the third quarter of 2017. While Pennsylvania is a very large and diverse state, there is no area of the Commonwealth not affected by this epidemic. The map below shows the rate of drug-related overdose deaths per 100,000 people in Pennsylvania counties in 2016.

[2] Governor Wolf Declares Heroin and Opioid Epidemic a Statewide Disaster Emergency. 2018. Retrieved from https://www.governor.pa.gov/governor-wolf-declares-heroin-and-opioid-epidemic-a-statewide-disaster-emergency

[3] Pennsylvania lawmakers allow opioid emergency to lapse. August 25, 202. Retrieved from https://apnews.com/article/health-pennsylvania-coronavirus-pandemic-opioids-017df3ad9649f3e68e98c75707040984

Analysis of Overdose Deaths in Pennsylvania. 2016. Available at: Analysis of Overdose Deaths in Pennsylvania, 2016



The Pennsylvania Health Care Cost Containment Council (PHC4), which is an independent Commonwealth agency charged with collecting, analyzing, and reporting on health care in the Commonwealth, examined hospital admissions between 2000 and 2014 for Pennsylvania residents ages 15 and older (excluding overdoses treated in EDs or overdose deaths that occurred outside the hospital setting). The findings showed a 225% increase in the number of hospitalizations for overdose of pain medication and a 162% increase in the number of hospitalizations for overdose of heroin during that period. While there were higher numbers of hospital admissions for these types of overdoses among urban county residents, the percentage increases were larger for rural county residents. For rural county residents, there was a 285% increase between 2000 and 2014 in the number of hospitalizations for pain medication and a 315% increase for heroin, whereas for urban counties, the percentage increases were 208% and 143%, respectively.[4]

[4] Hospitalizations for Opioid Overdose – 2016 to 2017. 2018. Retrieved from https://www.phc4.org/reports/researchbriefs/overdoses/17/docs/researchbrief_overdoses2017.pdf

In June 2018, PHC4 released their updated findings for 2017 that contained the following highlights[5].

Heroin

- The hospital admission rate for heroin overdose in 2017 peaked at 536 in the second quarter, but as a whole, the year saw an increase of 12.7%, which was the lowest percentage increase since 2011.
- The in-hospital mortality rate for these patients in 2014 was 7.5%, increased to 9.3% in 2016 and was up to 9.6% in 2017.

Pain Medication

- There were 1,747 hospital admissions for overdose of pain medication in 2017.
- The in-hospital mortality rate for these patients was 2.9% in 2016 and rose to 5.0% in 2017.
- In 2017, 84% of opioid-related deaths involved fentanyl or a fentanyl analog.[6]

Pennsylvania recognized the importance of a full continuum of treatment services, including residential services that are provided in a cost-effective manner and for a LOS that is governed by appropriate clinical guidelines to address the crisis described above. This Demonstration was determined to be critical to continue the federal funding needed to support the continuation of medically necessary services and SUD treatment in RTFs that meet the definition of IMDs, for individuals 21–64 years of age, regardless of the LOS.

Prior to the Demonstration application, CMS approved these residential services as cost-effective alternatives to State Plan Services (in lieu of services) in HealthChoices, Pennsylvania's Medicaid mandatory Managed Care Program. However, the requirements in the Medicaid Managed Care rule allow states to receive federal funding, for individuals 21–64 years old, in a RTF that is an IMD only if the LOS is no longer than 15 days. Pennsylvania estimated that this rule change would impact nearly 160 SUD service providers encompassed within the definition of IMD, affecting about 12,240 individuals statewide. Pennsylvania recognized the importance of these services in the continuum of care, and believes that this Demonstration is critical in ensuring that the Commonwealth is able to sustain the availability of these services to the impacted population.

Residential treatment services provide a structured recovery environment in combination with high-intensity clinical services. Individuals in residential settings receive daily clinical services to stabilize symptoms; a range of cognitive, behavioral, and other therapies to develop recovery skills in a protected environment; and recovery support services to assist in developing a social network supportive of recovery. Dependence on substances is a complex

[5] Hospitalizations for Opioid Overdose – 2016. Retrieved from http://www.phc4.org/reports/researchbriefs/overdoses/16/docs/researchbrief_overdose2016.pdf

[6] Opioid Program – Profile. Retrieved from https://public.tableau.com/profile/pdph#!/vizhome/UnintentionalDrugRelatedDeaths/

disease that affects multiple brain circuits, and effective treatment must incorporate an array of clinical and psychosocial components provided in a safe environment, as determined by appropriate clinical guidelines.

Residential treatment is a core service in the continuum of care for many individuals with SUD. The National Institute for Drug Abuse identified key principles for effective treatment, which include the ability to remain in treatment services for an adequate period of time. The appropriate duration of treatment depends on the clinical needs of the individual. Research indicates that the majority of individuals need at least 90 days of treatment to significantly reduce or stop using substances.[7] Recovery is a long-term process, and the best outcomes occur with longer durations of treatment across the entire continuum of care based upon clinical needs.

Pennsylvania has provided residential treatment services to individuals based upon a comprehensive assessment and standardized LOC placement criteria to ensure appropriate treatment. Access to residential treatment services has not been based upon an arbitrary LOS but upon the determination of clinical need and medical necessity for this LOC. The loss in federal matching dollars due to the current changes to the managed care rule placed an enormous financial burden on the Commonwealth, thereby impacting its ability to provide adequate and appropriate residential treatment services to individuals who have been assessed and determined to require the LOC the RTF provides if it meets the definition of an IMD. This severely impacts an individual's ability to remain in an appropriate level of treatment for adequate lengths of time, which may result in negative outcomes such as relapse, resulting in increased costs over time.

In addition to residential IMD services, the Demonstration was designed to support the delivery of the complete ASAM Criteria of services including Prevention, Outpatient, IOP, PHP, Residential and Inpatient, WM, and MAT for both methadone and buprenorphine. Pennsylvania already provides a comprehensive set of SUD treatment benefits that provide a full continuum of care through its FFS and managed care delivery systems, federal grants, and state funds. Inpatient, Outpatient, and MAT services are covered services within Pennsylvania's Medicaid state plan. Residential D&A Detoxification, Rehabilitation, and Certified Recovery Specialist services are provided under the capitated agreement as "in lieu of services". Federal grants and state funds can be utilized for all allowable services.

SUD Demonstration Amendment Approval

The "Pennsylvania Former Foster Care Youth from a Different State and Substance Use Disorder 1115(a) Medicaid Demonstration" amendment, which was approved on June 28, 2018, became effective July 1, 2018 and will continue through September 30, 2022 (four years and three months). This interim evaluation will be submitted to CMS as part of the Commonwealth's renewal application, which is due March 30, 2022.

[7] Principles of Drug Addiction Treatment – A Research-Based Guide. 2012. Retrieved from https://www.drugabuse.gov/sites/default/files/podat_1.pdf

Description of the Demonstration

The purpose of the Section 1115 Demonstration waiver amendment is to afford continued access to high quality, medically necessary treatment for OUD, and other SUDs. The Commonwealth is testing a new paradigm for delivering SUD services for Medicaid enrollees. By providing comprehensive, quality SUD treatment, the SUD program will achieve the following goals:

- Reduce overdose deaths, particularly those due to opioids.
- Reduce utilization of ED and inpatient hospital settings.
- Reduce readmissions to the same or higher LOC.

The Commonwealth believes that these three goals will be achieved through Demonstration activities that increase access to high quality of care across the entire treatment continuum, increase treatment program retention, and improve care transition across the continuum of SUD services. The specific interventions include:

- Continuing federal participation for residential treatment stays beyond the 15-day limit under the Medicaid Managed Care rule.
- Adopting all ASAM LOCs and the ASAM patient placement criteria in Medicaid managed care.
- Implementing nationally recognized SUD-specific program standards to set provider qualifications for RTFs.
- Ensuring provider capacity at critical LOCs including MAT for OUD.
- Implementing comprehensive treatment and prevention strategies to address opioid abuse and OUD.
- Improving care coordination and transitions between LOCs.

Medicaid and Medicaid Managed Care

In the HealthChoices program, BH services (mental health [MH]/SUD services) are administered separately from physical health (PH) managed care. The HealthChoices program, is administered by five BH prepaid inpatient health plans and eight PH-MCOs operating under the 1915(b) waiver authority. In addition, on January 1, 2018, the Commonwealth implemented the Community HealthChoices (CHC) program under a concurrent §1915(c) waiver and §1915(b) waiver. CHC is Pennsylvania's managed long-term services and supports initiative. The CHC 1915(b)/1915(c) concurrent waivers allow the Commonwealth to require Medicaid beneficiaries to receive nursing facility, hospice, home- and community-based services, BH, and PH services through MCOs selected by the Commonwealth through a competitive procurement process.

OMHSAS under the Pennsylvania Department of Human Services (DHS) oversees the HealthChoices- Behavioral Health (HC-BH) Managed Care Program. With a few exceptions, Medicaid beneficiaries are automatically enrolled in the HC-BH program in the county of their residence. As of February 1, 2019, 2.62 million individuals were enrolled in HC-BH, supported by projected total funding of $3.9 billion in Fiscal Year (FY) 2019–2020.

Department of Drug and Alcohol Programs

While DDAP is not responsible for Medicaid in Pennsylvania, the below information outlines how this department functions as part of the SUD service delivery system in the Commonwealth. Pennsylvania established DDAP in 2010. DDAP has the statutory authority to oversee substance use services, except for the responsibility for managing substance use services in Medicaid and HC-BH, which remain under OMHSAS. Both DHS and DDAP are cabinet agencies under the Governor's Office. DDAP maintains the responsibility for the development of the Commonwealth D&A Plan and for the control, prevention, intervention, treatment, rehabilitation, research, education, and training aspects of substance use issues.

DDAP is responsible for the allocation of the federal Substance Abuse Prevention and Treatment Block Grant in combination with Commonwealth appropriations to the SCAs. The SCA system provides the administrative oversight to local substance use programs that provide prevention, intervention, and treatment services. The SCA contracts with the local licensed treatment providers for a full continuum of care for individuals who qualify for substance use services within their geographical region.

DDAP requires the SCAs to provide screening, assessment, and coordination of services as part of the case management function. Screening includes evaluating the individual's need for a referral to emergent care including detoxification, prenatal, perinatal, and psychiatric services. Assessment includes LOC assessment and placement determination. All individuals who present for D&A treatment services must be screened and, if appropriate, referred for LOC assessment. Through coordination of services, the SCA ensures that the individual's treatment and non-treatment needs are addressed as well as ensuring the individual is enrolled in the appropriate health care coverage.

The SCA is responsible for ensuring the individual has access to available D&A treatment and treatment-related services, which is facilitated through the case management system. The provision of case management services will vary from county to county in terms of how these functions are organized and delivered. In some instances, the SCA may choose to contract for certain case management functions and activities while retaining others.

HC-BH agreements require BH-MCOs to have a letter of agreement with SCAs to coordinate service planning and delivery. The letter of agreement includes:

- A description of the role and responsibilities of the SCA.
- Procedures for coordination with the SCA for placement and payment for care provided to members in RTFs outside the HealthChoices zone.

Treatment Service Array

Pennsylvania has developed a comprehensive set of SUD treatment benefits that provide a full continuum of care through its FFS and managed care delivery systems, federal grants, and Commonwealth funds. The continuum includes:

- Inpatient D&A (Detoxification and Rehabilitation Services)
- Outpatient D&A, including Methadone Maintenance Services
- MAT
- Residential D&A Detoxification and Rehabilitation
- Certified Recovery Specialist Services

Inpatient, Outpatient, and MAT services are covered services within Pennsylvania's Medicaid State Plan. Residential D&A Detoxification and Rehabilitation and Certified Recovery Specialist Services are not available under the Medicaid State Plan and are provided under Pennsylvania's 1915(b) HealthChoices Waiver as "in lieu of services" (IMD restrictions in Medicaid Managed Care apply to residential services). Federal grants and Commonwealth funds can be utilized for all allowable services. SCAs at the local level receive federal grants as well as Commonwealth and local funds to support treatment needs of individuals who are uninsured or underinsured. In FY 2014–2015, the SCAs reported providing treatment to 32,417 unique individuals.

For HealthChoices members, the continuum of care consists of an array of treatment interventions, as well as additional ancillary services to support a recovery environment. Each BH-MCO contracts with a variety of providers to complete the LOC assessment. This may include the SCA, licensed intake and evaluation providers, or licensed outpatient providers. Clinical services are determined based upon a comprehensive assessment process and the application of standardized placement criteria such as the ASAM Criteria for children and adolescents under the age of 21. The Pennsylvania Client Placement Criteria (PCPC)[8] was utilized for adults prior to the beginning of this demonstration. The transition to ASAM placement criteria for adults began in July 2018 and the transition is continuing.

Alignment of service standards to ASAM national criteria began with the approval of this demonstration. The expectation was that providers would be substantially aligned by July 1, 2021 and have full compliance by July 1, 2022. On June 29, 2021, Pennsylvania released additional guidance for providers to request six-month waivers of the implementation timeline if they would have difficulty meeting the July 1, 2021 deadline. Under the new guidance, the DDAP may grant a specific provider an extension to December 31, 2021 for substantial compliance; however, there are no changes to the expectation of full compliance by July 1, 2022. Over 300 facilities requested extensions.

[8] Pennsylvania's Client Placement Criteria for Adults — Third Edition. 2014. Retrieved from Pennsylvania Client Placement Criteria (pacdaa.org)

OMHSAS-DDAP Coordination

While OMHSAS is responsible for the administration of HC-BH, DDAP is the entity that has the statutory authority for the licensing of SUD treatment programs. OMHSAS and DDAP collaborate closely at various levels to ensure synergy across systems and to maintain consistency in the application of program requirements.

Drug Addiction Treatment Act of 2000 and the SUD Delivery System

The Drug Addiction Treatment Act of 2000 (DATA 2000) expanded the clinical context of medication-assisted opioid dependency treatment by allowing qualified physicians to dispense or prescribe specifically approved Schedule III, IV, and V narcotic medications in settings other than an opioid treatment program (OTP) such as a methadone clinic. The legislation waives the requirement for obtaining a separate Drug Enforcement Administration registration as a Narcotic Treatment Program for qualified physicians administering, dispensing, and prescribing specific Food and Drug Administration-approved controlled substances such as buprenorphine in settings beyond OTPs.

DATA 2000 increases options for treating opiate dependence and gives individuals the ability to coordinate both BH and PH care by the use of qualified physicians. Since the beginning of 2002, 3,717 Pennsylvania physicians have been certified under DATA 2000, with 2,725 of those certified to treat up to 30 patients and the remaining 992 certified to treat up to 100 patients.[9] According to a survey conducted by the Substance Abuse and Mental Health Services Administration (SAMHSA), physicians and patients alike reported an average of an 80% reduction in opioid abuse when asked whether buprenorphine was effective in treating addiction. Additionally, responses to the survey indicated that buprenorphine and similar medications increase other indices of recovery.[10]

Population Impacted

This Demonstration will target all Pennsylvania Medicaid managed care recipients in need of OUD/SUD treatment services, including services provided in residential and inpatient treatment settings that qualify as an IMD, which are expenditures not otherwise eligible for match under Section 1903 of the Social Security Act.

[9] Number of DATA-Waived Practitioners Newly Certified Per Year. Retrieved from https://www.samhsa.gov/medication-assisted-treatment/physician-program-data/certified-physicians?field_bup_us_state_code_value=PA&=Apply

[10] MAT Legislation, Regulations, and Guidelines. Retrieved from https://www.samhsa.gov/medication-assisted-treatment/legislation-regulations-guidelines

Section 4
Evaluation Questions and Hypotheses

Evaluation questions and hypotheses to be addressed in the evaluation were derived from and organized based on the Driver Diagram's approved in the evaluation design. The overall aims of the project are to:
1) reduce overdose deaths, particularly those due to opioids, 2) reduce utilization of ED and inpatient hospital settings, and 3) reduce readmissions to the same or higher LOC. To accomplish these goals, the demonstration includes several key activities (called primary drivers) including increasing access to care, ensuring high quality of care across the entire treatment continuum and increasing treatment program retention, and improving care transition across the continuum of SUD services. Six secondary drivers support the three primary drivers for this change. These secondary drivers become the milestones in the Commonwealth's implementation plan:

1. Increase access to critical LOCs for OUD and other SUDs.
2. Implement evidence-based, SUD-specific Patient Placement Criteria.
3. Implement nationally recognized SUD-specific program standards to set provider qualifications for RTFs.
4. Ensure sufficient provider capacity at critical LOCs including MAT for OUD.
5. Implement comprehensive treatment and prevention strategies to address opioid abuse and OUD.
6. Improve care coordination and transitions between LOCs.

The specific evaluation questions to be addressed were selected based on the following criteria:

1. Potential for improvement, consistent with the key milestones of the Demonstration listed above.
2. Potential for measurement, including (where possible and relevant) baseline measures that can help to isolate the effects of Demonstration initiatives and activities over time.
3. Potential to coordinate with ongoing performance evaluation and monitoring efforts.

Evaluation Hypotheses and Research Questions

Milestone 1: Improve access to critical LOCs for OUD and other SUDs for individuals in Medicaid managed care. Critical LOCs are defined as early intervention, outpatient services, IOP and PHP services, residential and inpatient services, WM, and MAT.
Hypothesis 1: The 1115 SUD Demonstration will increase access to the specified critical LOCs for individuals in Pennsylvania Medicaid managed care compared to prior to the waiver.
Research Question 1: Has access to critical LOCs as defined below improved in Medicaid managed care?
***Analytic Approach*:** ITS; regression analysis for change over time after waiver implementation.
Research Question 2: Since the development of the 1115 SUD waiver, are more individuals receiving services at critical LOCs when compared to the numbers prior to the waiver onset?
Analytic Approach: ITS; regression analysis for change over time after waiver implementation.

Milestone 2: Use of evidence-based, SUD-specific Patient Placement Criteria.
Hypothesis 2: The 1115 SUD Demonstration will lead to use of ASAM placement criteria by all providers by the end of the first year of the Demonstration project.
Research Question 1: Has the use of evidence-based SUD-specific patient placement criteria (ASAM Criteria) been implemented across all LOCs for all patient populations?
Analytic Approach: Qualitative narrative analysis; counts.

Milestone 3: Use of nationally recognized SUD-specific program standards to set provider qualifications for RTFs.
Hypothesis 4: The 1115 SUD Demonstration will establish ASAM Criteria and program standards to set provider qualifications for all Residential Facilities by January 2021.
Research Question 1: Has OMHSAS established ASAM Criteria and program standards to set provider qualifications for all Residential Facilities?
Analytic Approach: Qualitative narrative analysis; counts.

Milestone 4: Improve provider capacity at critical LOCs including MAT for OUD in Medicaid.
Hypothesis 3: The 1115 SUD Demonstration will increase provider capacity as defined below for SUD treatment at critical LOCs for individuals in Pennsylvania Medicaid managed care.
Research Question 1: Has the availability of providers in Medicaid accepting new patients including MAT improved under the Demonstration?
Analytic Approach: Qualitative narrative analysis; counts.

Milestone 5: Improvements in comprehensive treatment and prevention strategies to address opioid abuse and OUD for individuals in Medicaid managed care.
Hypothesis 5: The 1115 SUD Demonstration will improve outcomes for individuals in Pennsylvania Medicaid managed care under the following measures: • Alcohol or other drug (AOD) Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment (IET). • Use of opioids at high dosage (HDO). • Use of opioids from multiple providers (UOP). • Concurrent use of opioids and benzodiazepines. • Continuity of pharmacotherapy for OUD. • Follow-up after discharge from the ED for MH or alcohol or other drug dependence. • Rate of overdose deaths in the Commonwealth. • Access to preventive/ambulatory health services for adult Medicaid managed care beneficiaries with SUD.
Research Question 1: Will improvements in treatment and prevention strategies in Medicaid managed care improve outcomes of individuals with an SUD in Medicaid managed care as demonstrated by: more effective initiation of treatment, decrease use of opioid at high dosages, reduce use of multiple opioids from multiple providers, reduce concurrent use of opioids and benzodiazepines, improve continuity of pharmacotherapy for OUD, decreased overdose deaths, and access to preventive/ambulatory services?
***Analytic Approach*:** ITS; regression analysis for change over time after waiver implementation.

Milestone 6: Improved care coordination and transition between LOCs for individuals in Medicaid managed care.
Hypothesis 6: The 1115 SUD Demonstration will improve follow-up after discharge from EDs and decrease re-admissions for individuals in Pennsylvania Medicaid managed care with SUD.
Research Question 1: Has the Demonstration impacted access to care for individuals with SUD in Medicaid managed care by linking beneficiaries with community-based services and supports following stays in residential and inpatient treatment facilities and reducing re-admission rates for treatment? • Follow-up after discharge from the ED for MH or AOD dependence; follow-up after discharge from the ED for MH within seven days or 30 days: beneficiaries with an outpatient visit, IOP visit, or PHP with a MH practitioner within seven days or 30 days after an ED visit with a principal diagnosis of mental illness/ED visits with a principal diagnosis of mental illness. • Follow-up after discharge from the ED for AOD dependence within seven days or 30 days: beneficiaries with an outpatient visit, IOP visit, or PHP with a MH practitioner within seven days or 30 days after an ED visit with a principal diagnosis of AOD dependence/ED visits with a principal diagnosis of AOD.
***Analytic Approach*:** ITS; regression analysis for change over time after waiver implementation.

The evaluation design also includes the following CMS-required measures of cost:

- Total Medicaid SUD spending in Medicaid managed care during the measurement period.
- Total Medicaid SUD spending on residential treatment within IMDs in Medicaid managed care during the measurement period.
- Costs by source of care for high cost individuals with SUD in Medicaid managed care during the measurement period.

Cost data will be analyzed using descriptive, time series analysis. This will show the changes in cost over time, from the period (at least one year) prior to the Demonstration waiver, and the years following. Changes over time will be analyzed to determine whether costs increase, decrease, or stay the same.

A full list of measures and analytic method for each can be found in the approved Evaluation Design for this project. This document has been included with this submission.

Section 5
Methodology

Evaluation Design

The evaluation of the Pennsylvania 1115 waiver utilizes a mixed-methods evaluation design with three main goals:

- Describe the progress made on specific waiver-supported activities (process/ implementation evaluation).
- Demonstrate change/accomplishments in each of the waiver milestones (short-term outcomes).
- Demonstrate progress in meeting the overall project goals/aims.

A combination of qualitative and quantitative approaches is used throughout the evaluation. Qualitative methods include key informant interviews with OMHSAS and provider staff regarding waiver activities, document reviews of agreements, policy guides and manuals, and summaries of CFST surveys conducted between 2019 and 2021. Quantitative methods include descriptive statistics showing change over time in both counts and rates for specific metrics and ITS analysis to assess the degree to which the timing of waiver interventions affect changes across specific outcome measures.

Qualitative analysis has been used to identify and describe the SUD delivery system and the changes/maintenance through the Demonstration for Medicaid enrollees in the eligible population. Each of the milestones are discussed and documented in this Interim Evaluation Report. We identify key elements that Pennsylvania intended to modify through the demonstration and measure the effects of those changes. Using a combination of case study methods, including document review, telephone interviews, surveys, and face-to-face meetings, Mercer conducted a descriptive analysis of the key Pennsylvania demonstration features.

The evaluation also analyzes how Pennsylvania is carrying out its implementation plan and describes changes made to its initial design throughout the implementation. We identify both planned changes that are part of the demonstration design (e.g., implementation of ASAM) and operational and policy modifications Pennsylvania makes based on changing circumstances.

During on-going communication with the Commonwealth, we have collected detailed information on how Pennsylvania has implemented each milestone including how it has structured the ASAM implementation, identified providers at each ASAM level, implemented PDMP and other Health Information Technology (HIT) changes, and structured care coordination between LOCs for beneficiaries enrolled in the demonstration. This Interim Evaluation Report describes the scope of each of these milestones as implemented by the Commonwealth.

Key informant interviews/focus groups and document reviews were conducted during the fall of 2020 and again in August 2021 and September of 2021. These consisted of focus group discussions with key staff members in the following departments who are directly responsible for SUD 1115 implementation and operations: OMHSAS, DDAP, the DHS PeopleStat program (the department's reporting group), the Pennsylvania PDMP System, and the Pennsylvania eHealth Partnership Program.

PeopleStat has calculated the quantitative performance measures required by CMS under the demonstration. PeopleStat acts independently of OMHSAS and the Office of Medical Assistance Programs (OMAP). It has direct access to the data warehouse utilized by the Medicaid agency for encounter data and claims. The data are automatically updated any time a provider submits a claim or encounter data. PeopleStat has calculated all performance measures using the period of time specified in the CMS technical manual (e.g., monthly, quarterly, or annual) and the approved 1115 monitoring protocol.

Target and Comparison Populations

The Target population includes any Medicaid beneficiary with a SUD enrolled in the Commonwealth's HC-BH managed care plans. The HC-BH population consists of seven different eligible groups, or aid categories, which may change from time to time. Qualification for the HC-BH Program is based on a combination of factors, including family composition, income level, insurance status, and/or pregnancy status, depending on the aid category in question. The SUD Findings section of this report describes trends in the overall population and any noteworthy outcomes for specific subpopulations. Graphs and data tables for each subpopulation, for each metric, is included in Appendix B: Subpopulation Charts.

The comparison population groups in this design will be comprised of the target population, which will serve as its own comparison group longitudinally, where the research question will compare service utilization differences across the demonstration period.

Evaluation Period

The evaluation period for this Interim Evaluation Report is July 1, 2018 through March 31, 2021.

Methodological Limitations

There are three primary limitations to the evaluation methodology presented here. The first involves issues of data quality and data sources that either 1) are not sufficient to conduct the analysis proposed here (i.e., not enough historical data for needed prior time periods), and 2) contain errors. The second limitation is related to the design itself. Since this evaluation plan relies heavily on descriptive, time series analysis and qualitative data, this report is able to demonstrate what happened after the Demonstration was implemented. However, it is difficult to isolate why changes occurred. In other words, it will be difficult to directly attribute changes after waiver implementation to the activities undertaken as part of the waiver. Each of these limitations is discussed in greater detail within this section. Contextual complications related to the COVID-19 pandemic also make data trend interpretation extremely difficult.

Many of the metrics being computed by PeopleStat for the waiver are new to OMHSAS. CMS previously identified computation/metric errors and over the course of the Demonstration has distributed revised measure specifications, requiring adjustment, and updated programming by PeopleStat. All measures in this report use latest data submitted to CMS with the required measure definitions and technical specifications for the time period.

Because of some changes that directly affect the data system (i.e., the change from International Classification of Diseases, Ninth Revision [ICD-9] to ICD-10 codes), the historical data needed to forecast the slope of the "counterfactual" trend line (what would have happened without the Demonstration) is somewhat limited. This historical data is an important component of the ITS design, but also supports the descriptive time series analysis.

In addition to historical data, it is possible that the Commonwealth's data systems will additionally have current issues that make data errors more likely. For example, there are differences in the use of procedure codes between OMAP and OMHSAS that could cause services to be coded differently. The approved Monitoring Protocol identified these differences, and to the extent that the metrics were not national standard metrics, adjusted for these differences through programming documented in the Monitoring Protocol. However, there may be some issues that remain in the national metrics (e.g., Healthcare Effectiveness Data and Information Set [HEDIS©] metrics) where the Commonwealth did not request deviations.

In addition, the evaluation plan primarily relies on encounter data, which will reflect the services delivered by the providers, but not the actual cost to Medicaid, which is the capitation rate paid. In order to account for this, cost measures are included based on the actuaries' determination of the portion of the Medicaid capitation rate attributed to SUD services. The Commonwealth has attempted to address this concern by calculating the cost measures using both the actuarial assumptions to develop the Medicaid capitation rate and by separately calculating those metrics using encounter data.

The current system has a runout of 12 months, and will need to account for timing around pulling data to calculate numerators and denominators for the measures. The runout or latency period is established based on requirements of the primary contractor and its BH-MCO to adjudicate claim and subsequently submit an encounter to the state. Claim adjudication and encounter submission may take up to 180 days before the PC and its BH-MCO because of the allowed timeframes for submission and adjudication of claims.

DHS requires the PC or its BH-MCO to submit an encounter, or "pseudo claim", each time a Member has an encounter with a Provider. All encounters must be Health Insurance Portability and Accountability Act of 1996 (HIPAA) compliant, submitted, and approved in PROMISe™ (i.e., pass PROMISe edits) within 90 days following the date that the BH-MCO paid/adjudicated the provider's claim or encounter. CMS noted that Commonwealth metrics calculated with three or less months of run out were not credible. As a result, CMS has granted the Commonwealth permission to calculate the performance metrics using exactly six months of runout, using the "DPW Accepted Date" to run the queries "as of" the six-month mark.

In addition, when encounter data is corrected, the new data does not replace the old automatically, meaning that an encounter can be reported multiple times. An important cleaning procedure is used to identify and remove duplicate encounter records. PeopleStat has worked extensively to ensure that duplicate encounter records have been removed. To de-duplicate the data we first look at the claim type for the claim, then use a specific series of fields to rank the records and eliminate all but the first based on a series of fields; that is, if the fields RID and MCO and BEGIN_DATE are used in the sort for the ranking, the first record based on those three fields should be kept. There are six groupings of fields for these sorts based on the type of claim — Inpatient, Outpatient, Professional, Pharmacy, Long-Term Care, and Dental. As noted previously, PeopleStat acts independently of OMHSAS and OMAP. It has direct access to the data warehouse utilized by the Medicaid agency for encounter data and claims. The data are automatically updated any time a provider submits a claim or encounter data. In addition, CMS has validated the metrics against the SUD databook with the Commonwealth making minor changes as identified through an iterative process.

The third limitation is related to the type of design being used. While the ITS design is the strongest available in the absence of a randomized trial or matched control group, there are some threats to the validity of results in the design.[11] The primary threat is that of history, or other changes over time happening during the waiver period. This ITS design is only valid to the extent that the waiver program was the only thing that changed during the evaluation period. Other changes to policies or programs could affect the outcomes being measured here. We have attempted to control this threat by considering other policy and program changes happening concurrent to the waiver period interventions. In addition, we are aware that impacts of the COVID-19 pandemic likely significantly affect the trend seen here. The presentation of findings below notes the dates of other changes and analyzes the degree to which the slope of the trend line changes after implementation of other interventions are made.

A related threat to the validity of this evaluation is external (history). Since OMHSAS has not identified a comparison group (a group of Medicaid managed care members who would be eligible for the waiver interventions but who will not receive them and/or for whom data will not be collected), it is difficult to attribute causality. It is less certain whether the changes observed in outcomes are due entirely to the waiver interventions, rather than some external, outside cause (including other program and policy changes described earlier). This is further complicated that in the pre-Demonstration time period, Medicaid members could have been receiving other SUD services paid for by another source (e.g., state-block grant) that are not counted in our pre-Demonstration Medicaid data. This means that some observed increases in services might be due to changes in payment source rather than an actual increase in the number of members receiving services. This is reflected in our description of findings, below.

[11] Penfold, RB, Zhang, F. “Use of interrupted time series analysis in evaluating heath care quality improvements.” Academic Pediatrics, 2013 Nov-Dec, 13(6Suppl): S38-44.

However, the ITS design controls for this threat to *some* degree, by linking what would have likely happened (e.g., forecasting the trajectory of counts and rates over time) without any program changes and comparing this forecast to actual changes over time. To strengthen this design as much as possible, we collected as many data points as possible across multiple years preceding waiver changes. This allows for adjustment of seasonal or other cyclical variations in the data. Additionally, the design will examine multiple change points, identifying key areas of major program and policy adjustments, so that with each major milestone accomplishment corresponding changes to metrics can be observed. One potentially confounding factor of this design is that many of the Demonstration activities proposed are not new interventions, but represent programs that would have no longer been funded without the waiver, due to other rule changes. It is very difficult to predict a trend line in that situation (programs being discontinued).

However, even though programmatic changes in this demonstration are modest, the hypotheses put forth in this document do assume some small improvement over current trends. If the data is not available to forecast negative trends that may happen without these programs, the current model should still be able to show the minor improvements indicated in these hypotheses.

The ITS analysis also attempts to include a sensitivity analysis to determine the degree to which specific ITS assumptions impact the analysis. Specifically, the degree to which the assumption that trends in time are linear vs. non-linear. Additionally, this model assumes that changes will occur directly after the intervention. However, due to known delays in several implementation steps, we expect that for some outcomes, there will be a significant lag between the start of the waiver and observed outcomes. We attempt to limit this threat to validity by triangulating our data. Encounter data trends across multiple time periods will be compared to trends happening at other points in time (other large policy or program or environmental shifts that might influence the slope of the trend in addition to the Demonstration). In addition, key informant interviews will be used to inform the quantitative findings and explain the degree to which individuals are seeing Demonstration impacts.

Another threat to validity in this design may be the ability to measure the outcome rate of interest for the desired period of time both before and after waiver implementation. Evaluators will work closely with OMHSAS and their data teams to assure that complete data is available for each measure and discuss any specific data concerns or considerations on a measure-by-measure basis.

According to the literature on ITS analysis, estimating the level and slope parameters requires a minimum of eight observations before and after implementation in order to have sufficient power to estimate the regression coefficients. We have worked closely with OMHSAS and their data teams to gather as many data points as possible and discuss limitations within the evaluation findings if enough points cannot be collected.

It should also be noted that ITS cannot be used to make inferences about any one individual’s outcomes as a result of the waiver. Conclusions can be drawn about changes to population rates, in aggregate, but not speak to the likelihood of any individual Medicaid member having positive outcomes as a result of the waiver.

Qualitative data, while useful in confirming quantitative data and providing rich detail, can be compromised by individual biases or perceptions. Key informant interviews, for example, represent a needed perspective around context for demonstration activities and outcomes. However, individuals may be limited in their insight or understanding of specific programmatic components, meaning that the data reflects perceptions, rather than objective program realities. This report attempts to address these limitations by collecting data from a variety of different perspectives to help validate individuals' reports. Finally, results have been reviewed with stakeholders to confirm findings.

Section 6
Results

The following section outlines results from the ITS analysis as well as both quantitative and qualitative descriptive analysis. Conclusions drawn from these finds are presented in the following section (7).

Milestone 1

Milestone 1: Improve access to critical LOCs for OUD and other SUDs for individuals in Medicaid managed care. Critical LOCs are defined as early intervention, outpatient services, IOP and PHP services, residential and inpatient services, WM, and MAT.
Hypothesis 1: The 1115 SUD Demonstration will increase access to the specified critical LOCs for individuals in Pennsylvania Medicaid managed care compared to prior to the waiver.

Has access to critical LOCs as defined in the Demonstration improved in Medicaid managed care?

The Commonwealth completed its crosswalk of ASAM Criteria with the current system of care and providers have begun to use ASAM Criteria for placement decisions and admission to each LOC. However, work continues to align service delivery descriptions and expectations. Training for providers continues and DHS and DDAP have worked together to develop ASAM service descriptions and delivery standards including admission, continuing stay and discharge criteria, the types of services, hours of clinical care, credentials of staff, and implementation of requirements for each LOC. DHS is working to ensure that the coding is consistent with any needed changes. The Demonstration will ensure that providers will align delivery with the new ASAM service alignment starting July 1, 2021, with full compliance required by July 1, 2022.

There were some delays in providers reaching alignment by July 1, 2021. COVID-19 required changes to planned trainings and a web-based system was developed. In addition, there was some uncertainty and concern on the part of providers around the resources required to reach full alignment. In June 2021, OMHSAS and DDAP agreed to allow providers to apply for extensions for complete implementation. During focus groups conducted during August 2021 and September 2021, OMHSAS and DDAP stakeholders expressed confidence that the majority of concerns have been resolved. There was confidence that providers will be able to comply with all criteria for the LOC they provide in the near future.

Some specific LOCs are still a challenge for providers. OMHSAS and DDAP stakeholders acknowledged that this was a significant change in terms of the number of hours of service and staffing ratios. One specific example is ASAM 2.1 because there is not a separately licensed IOP LOC in the Commonwealth. The requirements for this level might be difficult for many providers to meet and many providers may choose not to continue to provide this LOC. DDAP considers WM at inpatient ASAM 3.7-WM and ASAM 4.0-WM to be substantially

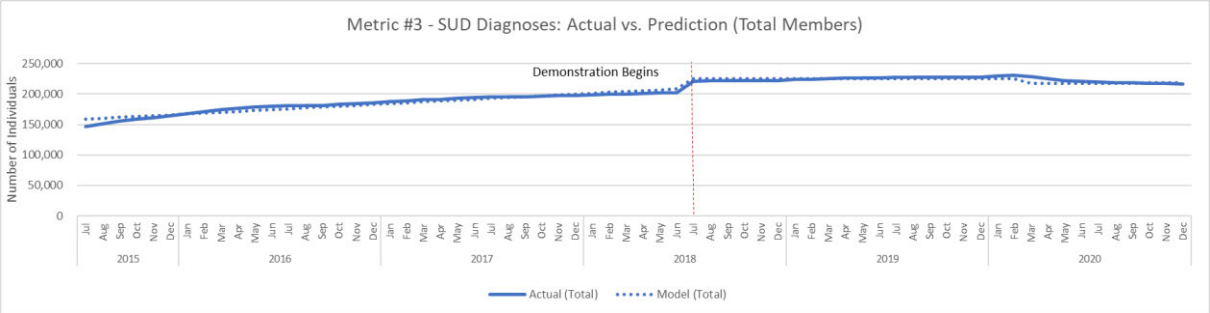
aligned, but WM at the ambulatory LOCs such as ASAM 1-WM and ASAM 2-WM are still being assessed for alignment with the ASAM Criteria. Overall, in the past year, stakeholders report that a great deal of progress has been made in alignment across all providers. DDAP has an alignment self-assessment and facilities checklists available on the website, and to date close to 50 facilities have completed the checklist showing substantial alignment. DDAP is providing technical assistance to all providers for all LOCs to help support their transitions.

To estimate changes in SUD service delivery during the Demonstration, we performed ITS analyses with performance metrics and enrollee data. As noted in the Methodology section of this report, ITS analyses estimate the trends in a variable — such as SUD diagnoses or outpatient services — before and after the start of a program and attempts to measure any resulting trend changes. ITS is especially useful for evaluating population-level time-series health data.[12] It should be noted, however, that there might be other factors impacting change beyond the Demonstration.

The following analyses measure change in utilization and service delivery before and after Demonstration implementation, which began in July 2018. When reviewing the pre-Demonstration data, there are monthly increases and decreases as compared to the trend, but no consistent patterns, so the analyses do not need to control for seasonality. The analyses do control for COVID-19 beginning in March 2020. Analyses of subpopulations appear in Appendix B.

SUD Diagnosis

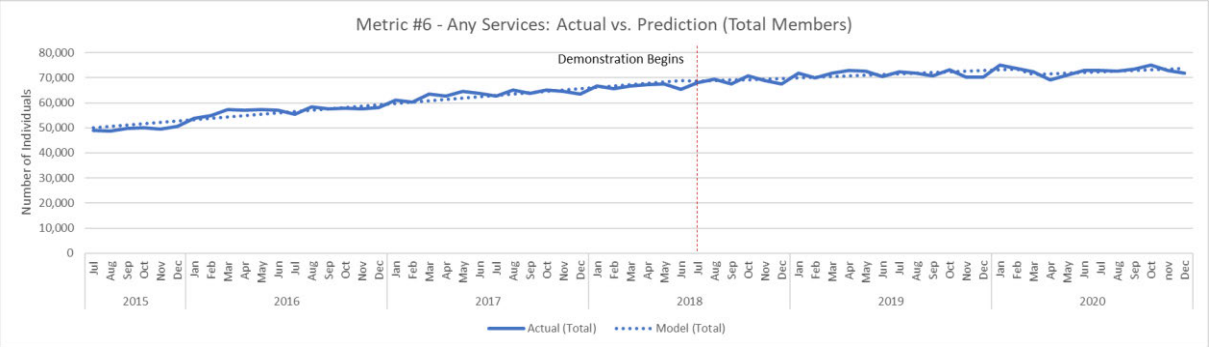
The ITS analysis for Metric #3 across all members revealed an initial increase in individuals (approximately 16,737) with SUD diagnoses upon the Demonstration beginning. This was followed by an additional increase of approximately 40 more individuals per month. The effect of the Demonstration, as well as its effect over time, were statistically significant ($p < .001$). The effect of COVID-19 was also statistically significant ($p < .01$). The one-month initial increase in this metric appears to be very high and potentially due to data issues.



[12] Bernal, J. L., Cummins, S., & Gasparrini, A. (2017). Interrupted time series regression for the evaluation of public health interventions: A tutorial. *International Journal of Epidemiology, 46*(1), 348–355. https://doi.org/10.1093/ije/dyw098

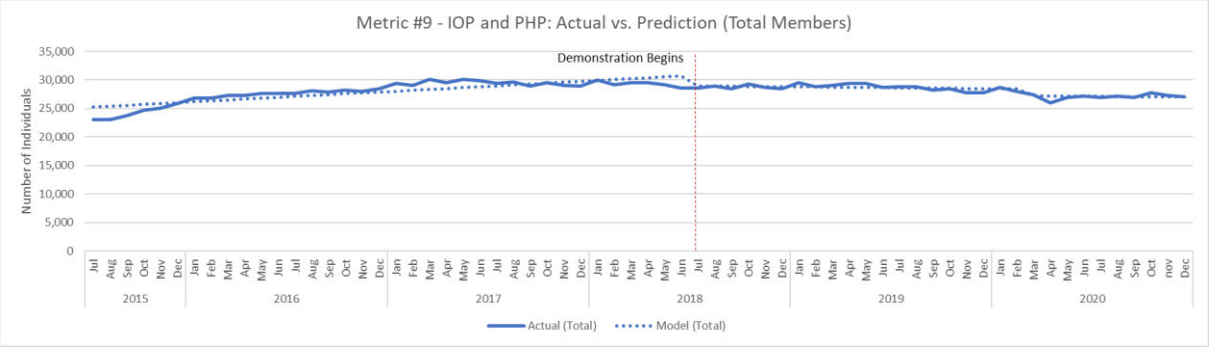
SUD Any Service

The ITS analysis for Metric #6 across all members revealed an initial decrease in individuals (approximately 331) receiving any SUD services paid by Medicaid upon the Demonstration beginning. This was followed by an increase of approximately 258 more individuals per month. The effects of the Demonstration over time were statistically significant ($p < .001$), as was the effect of COVID-19 ($p < .05$). It is possible that the required new training on ASAM placement criteria in 2018 may account for the initial slight decline in services as practitioners spent two days in non-revenue producing services, followed by a gradual increase in services as implementation moved forward. At the onset of COVID-19 all services declined drastically as personal concern, stay at home orders, and other public health measures drastically reduced in-patient treatment options.



Intensive Outpatient Services Partial Hospitalization

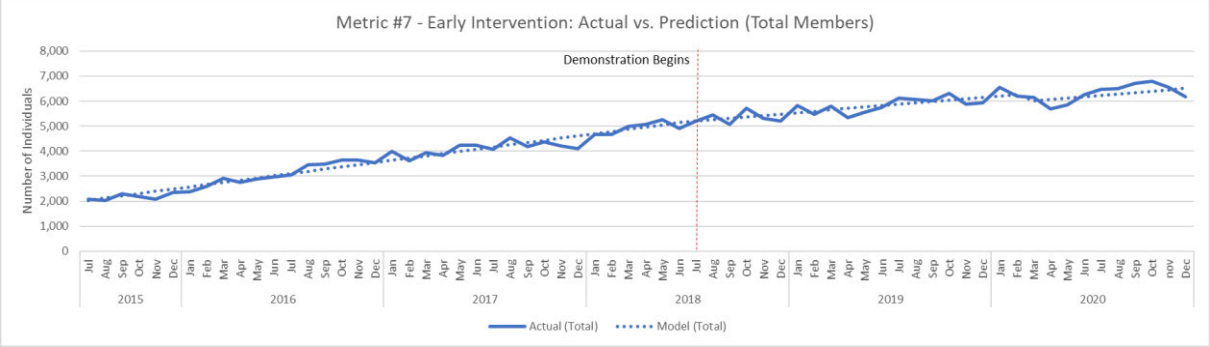
The ITS analysis for Metric #9 across all members revealed an initial decrease in individuals (approximately 1,754) receiving IOP and PHP services paid for by Medicaid upon the Demonstration beginning. This was followed by a decline of approximately 27 individuals per month. These effects were all statistically significant ($p < .001$). The effect of COVID-19 was also statistically significant ($p < .05$).



Since the development of the 1115 SUD waiver, are more individuals receiving services at critical LOCs when compared to the numbers prior to the waiver onset?

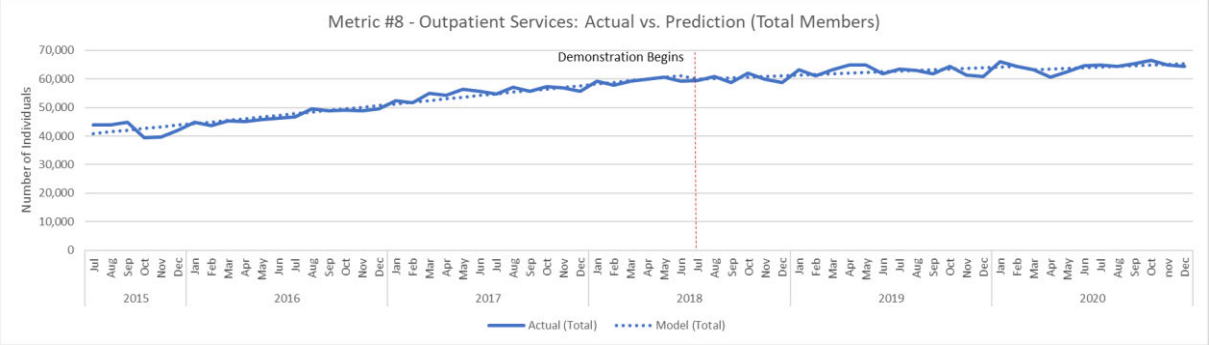
Early Intervention Services

The ITS analysis for Metric #7 across all members revealed a small initial increase in individuals (approximately 71) receiving early intervention Medicaid services upon the Demonstration beginning. This was followed by an increase of approximately 55 more individuals per month. These effects of the Demonstration over time were statistically significant ($p < .001$), while the effect of COVID-19 was not statistically significant. As you can see in the chart below, early intervention services showed a historical trend increase in the 3.5 years prior to the demonstration. This increase is probably related to the OMAP MCO Screening, Brief Intervention, and Referral to Treatment (SBIRT) adoption starting in 2016 and subsequent performance improvement projects. However, the additional increase seen in the ITS analysis shows a greater increase than would have been predicted based on the historical trend.



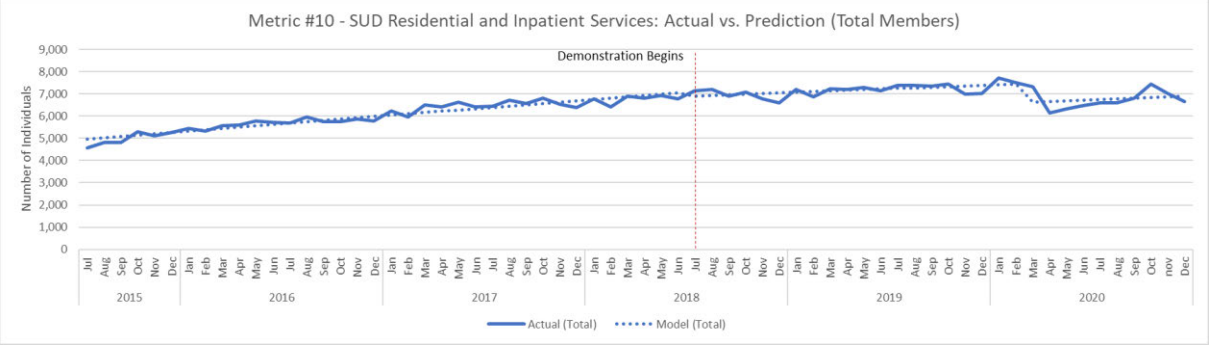
Outpatient Services

The ITS analysis for Metric #8 across all members revealed an initial decrease in individuals (approximately 1,169) receiving Medicaid outpatient services upon the Demonstration beginning. This was followed by an increase of approximately 241 more individuals per month. These effects were statistically significant (p <.001), while the effect of COVID-19 was not. As was the case with early intervention services, these increasing trends began well before the demonstration implementation. Increases between 2016 and 2018 were likely due to the performance improvement projects (PIPs) undertaken by MCOs. However, the ITS model still showed a significant impact over the already observed increases.



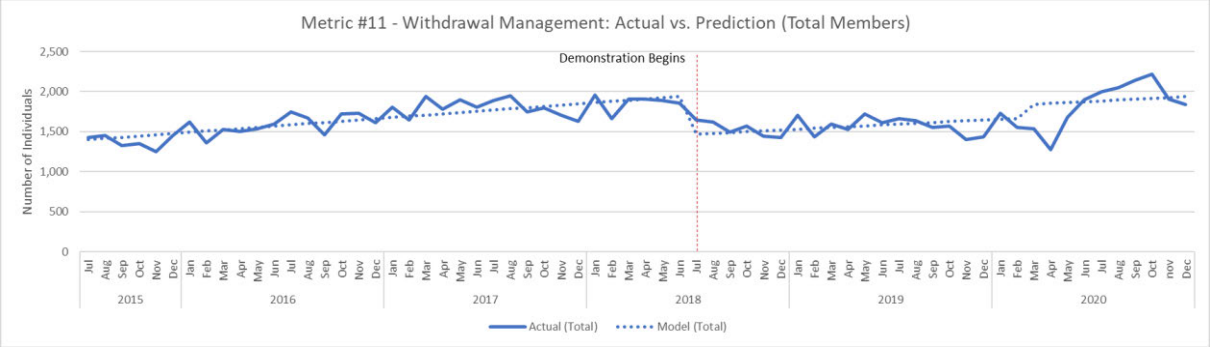
Residential and Inpatient Services

The ITS analysis for Metric #10 across all members revealed an initial decrease in individuals (approximately 162) receiving SUD residential and inpatient services paid for by Medicaid upon the Demonstration beginning. This was followed by an increase of approximately 30 individuals per month. The effects of the Demonstration over time was statically significant (p < .01), as was the effect of COVID-19 (p < .001). It is possible that the initial decline in services was impacted by required trainings in 2018, where providers were not available for two days during early implementation.



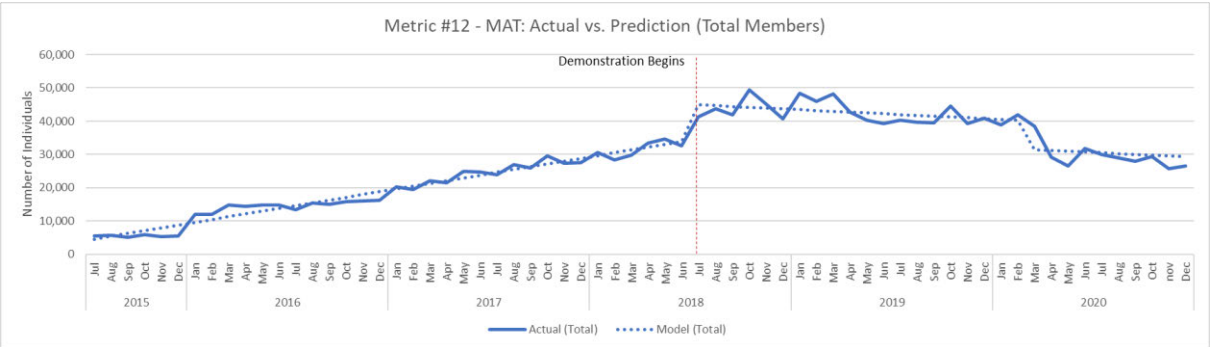
Withdrawal Management

The ITS analysis for Metric #11 across all members revealed an initial decrease in individuals (approximately 472) receiving Medicaid WM services upon the Demonstration beginning. This was followed an increase of approximately 10 more individuals per month. These effects were not statistically significant.



Medication- Assisted Treatment

The ITS analysis for Metric #12 across all members revealed an initial increase in individuals (approximately 11,078) receiving MAT services paid for by Medicaid upon the Demonstration beginning. The increase post-Demonstration was statistically significant, but likely also influenced heavily by confounding factors. The Commonwealth implemented the Centers of Excellence (COE) and other statewide initiatives to increase MAT usage during the same time period. After the initial increase, there was a decrease of approximately 244 fewer individuals per month. These effects, as well as the effect of COVID-19, were all highly statistically significant (p <.001). The decrease is likely due in part to both the pandemic and Medicare's new coverage of MAT (beginning in 2020), which lead to a significant decrease in MAT billings for the dual-eligible population.



Consumer Satisfaction — Access to Care

Generally, surveys conducted during 2019, 2020, and 2021 revealed a high level of overall satisfaction with access to care, with more than 85% of respondents responding "yes" to the question "In the past 12 months, were you able to get the help you needed".

CFST	Access to Care Question Proxy	Number Reporting "Yes" 2019–2020	Percent Reporting "Yes" 2019–2020	Number Reporting "Yes" 2021 (quarter)	Percent Reporting "Yes" 2021 (quarter)
CFST #1	In the last 12 months, were you able to get the help you needed?	131	98%	49	100%
CFST #2	In the last 12 months, were you able to get the help you needed?	N/A	N/A	536	86%

Milestone 2

Milestone 2: Use of evidence-based, SUD-specific Patient Placement Criteria.
Hypothesis 2: The 1115 SUD Demonstration will lead to use of ASAM placement criteria by all providers by the end of the first year of the Demonstration project.

Has the use of evidence-based SUD-specific patient placement criteria (ASAM Criteria) been implemented across all LOCs for all patient populations?

OMHSAS required PCs/BH-MCOs to use ASAM patient placement criteria for Medicaid utilization review and admission prior authorization to residential facilities on January 1, 2019. DDAP issued guidance to the counties to use ASAM admission criteria as of May 1, 2018. DDAP began requiring ASAM Criteria for treatment plans, continued stay, and discharge criteria as of May 2019.

Some stakeholders report that use of the ASAM for admission criteria is consistent across providers, but many reported a perspective that it is not regularly being used in treatment plans, continued stay, and discharge criteria. OMHSAS and DDAP are working together to develop a protocol and tool that will monitor, among other compliance requirements, the degree to which ASAM Criteria are being used in continued stays and discharge decisions. Once this protocol is in use, more statements that are definitive can be made about use of ASAM placement criteria.

For this hypothesis, two metrics were identified for the evaluation: IMD placement and LOS. Since only two data points are available regarding IMD placement and LOS, an ITS analysis cannot be done on these measures. As shown in the table below, the number of individuals placed in an IMD increased between 2019 and 2021. Additionally, LOS increased by approximately five days. All agreements have been modified to require utilization review based on ASAM admission, continuing stay, and discharge criteria for all ASAM LOCs.

Measure Number	Measure Name	Time Period	Demonstration Denominator	Demonstration Numerator or Count	Demonstration Rate/ Percentage
5	Medicaid Beneficiaries Treated in an IMD for SUD	July 1, 2018 through June 30, 2019	-	64,113	-
		July 1, 2019 through June 30, 2020		59,836	
36	Average LOS in IMDs	July 1 2018 through June 30, 2019	36,079	229,696	6.37 days
		July 1, 2019 through June 30, 2020	31,704	216,538	6.83 days

To date, approximately 12,750 individuals have been trained. DDAP has two options to complete required ASAM training, a two-day live classroom offering and a series of on-demand modules. From 2018 through June 2019, over 7,500 individuals were trained in the in-person two-day skill building training. The live classroom course was reformatted for a virtual experience. Approximately 400 students attended virtual ASAM Criteria training in 2020. Since the inception of the ASAM Criteria, over 9,800 Pennsylvania provider staff have been trained in the two-day classroom course. Nine hundred and seventy-two Pennsylvania-based organizations ordered subscriptions to the on-demand, online modules for approximately 2,150 potential users.

Milestone 4

Milestone 4: Improve provider capacity at critical LOCs including MAT for OUD in Medicaid.
Hypothesis 3: The 1115 SUD Demonstration will increase provider capacity as defined below for SUD treatment at critical LOCs for individuals in Pennsylvania Medicaid managed care.

Has the availability of providers in Medicaid accepting new patients including MAT improved under the Demonstration?

The Commonwealth has not done a capacity review since development of the waiver application.

Once the alignment of provider standards to ASAM is completed, OMHSAS and DDAP believe there will be sufficient outpatient and IOP capacity as well as capacity at most of the residential ASAM LOCs. Without a formal assessment, complete up to date numbers for all available providers is difficult to document. However, both OMHSAS and DDAP stakeholders report they believe that there have been more MAT licenses granted since implementation and are certain that overall treatment capacity has increased for both ambulatory and residential.

Workforce issues, as is the case in most other states, continues to be a barrier to overall system capacity. This issue will likely be a point of discussion for the foreseeable future. Providers emphasized that the use of telehealth is a solution to some capacity challenges and that changes to billing and authorization requirements made during the COVID-19 PHE should be maintained after the PHE is over.

The Commonwealth has calculated the required SUD 1115 demonstration metrics on SUD Provider availability.

Measure Number	Measure Name	Demonstration Count July 1, 2018–June 30, 2019	Demonstration Count July 1, 2019–June 30, 2020
13	SUD Provider Availability	6,274	5,014
14	SUD Provider Availability — MAT	3,753	3,693

The metrics above reflect a decline in the delivery of services by unique providers because the Commonwealth only counts enrolled providers who **delivered** care in FFS, which was affected by the pandemic for time period January 2020 through June 2020. The actual number of enrolled SUD providers has not declined to the same extent. The enrolled SUD providers by provider type and specialty show that enrollment remained steady if the delivery of care is not factored into the analysis.

OMHSAS BH Homes and FFS	Provider Type	Specialty	Description	FY 2018–2019 Provider Count	FY 2019–2020 Provider Count	November 2021 Provider Count
	8	84	Methadone Maintenance (MAT in an OTP)	66	66	64
	8	184	D&A Outpatient (Now ASAM 1.0)	273	273	283
	11	128	D&A IOP (Now ASAM 2.1)	181	181	169
	11	129	D&A Partial Hospitalization (Now ASAM 2.5)	60	60	61
	11	131	D&A Halfway House (Now ASAM 3.1)	34	34	33
	11	132	D&A Medically Monitored Detoxification (Now ASAM 3.7-WM)	44	44	48
	11	133	D&A Medically Monitored Residential, Short- Term (Converting to ASAM 3.5 and 3.7)	83	83	85

	11	134	D&A Medically Monitored Residential, Long-Term	83	83	85
	11	184	Outpatient D&A (Converting to ASAM 3.5 and 3.7)	159	159	163
	Unduplicated Methadone Maintenance Providers			274	274	
	Unduplicated SUD			373	373	

All Enrolled Regardless of Program	Provider Type	Specialty	Description	FY 2018–2019 Provider Count	FY 2019–2020 Provider Count
	8	84	Methadone Maintenance (MAT in an OTP)	66	68
	8	184	D&A Outpatient (Now ASAM 1.0)	274	288
	11	128	D&A IOP (Now ASAM 2.1)	181	189
	11	129	D&A Partial Hospitalization (Now ASAM 2.5)	60	65
	11	131	D&A Halfway House (Now ASAM 3.1)	34	34
	11	132	D&A Medically Monitored Detoxification (Now ASAM 3.7-WM)	44	48
	11	133	D&A Medically Monitored Residential, Short- Term (Converting to ASAM 3.5 and 3.7)	83	87
	11	134	D&A Medically Monitored Residential, Long- Term	83	87
	11	184	Outpatient D&A (Converting to ASAM 3.5 and 3.7)	159	170
	Unduplicated Methadone Maintenance Providers			275	289
	Unduplicated SUD			374	393

The number of providers enrolled has remained constant or increased over time. However, as discussed previously the number of providers actually providing services has declined due to the pandemic.

The number of Medicaid enrolled PHP providers is 61. Of those, DDAP data shows that 53 providers are aligned with ASAM Level 2.5 (PHP) already. The number of Medicaid Medically Monitored Detoxification facilities enrolled in Medicaid is 28 of which eight facilities are aligned with ASAM Level 3.7-WM.

Counts of providers do not align with stakeholder perception. Once ASAM alignment is complete, certification reviews will reflect the actual number of beds at each LOC and a complete analysis of capacity can be finalized.

Milestone 3

Milestone 3: Use of nationally recognized SUD-specific program standards to set provider qualifications for RTFs.
Hypothesis 4: The 1115 SUD Demonstration will establish ASAM Criteria and program standards to set provider qualifications for all Residential Facilities by January 2021.

Has OMHSAS established ASAM Criteria and program standards to set provider qualifications for all Residential Facilities?

Since the Midpoint Assessment, OMHSAS and DDAP have had challenges implementing residential and residential WM provider alignment with ASAM. As mentioned previously, the size of the system transformation effort has been the primary challenge. Providers requested more time than the Commonwealth had originally planned to make the transition. However, stakeholders (OMHSAS and DDAP) report that providers are now making strides in alignment and there is more confidence, as compared to reporting during the midpoint assessment, that provider alignment will be accomplished by July 1, 2022.

DDAP has issued specific information about the credentialing requirements, requirements, and which providers can be can be grandfathered.

OMHSAS and DDAP are currently working on a monitoring protocol, a tool, and a timeline, anticipating January of 2022 start for monitoring activities. Stakeholders expressed confidence that the first level of monitoring (ASAM Level 3.5) would be complete by summer 2022.

Milestone 5

Milestone 5: Improvements in comprehensive treatment and prevention strategies to address opioid abuse and OUD for individuals in Medicaid managed care.

Hypothesis 5: The 1115 SUD Demonstration will improve outcomes for individuals in Pennsylvania Medicaid managed care under the following measures:

- **AOD IET.**
- **Use of opioids at high dosage (HDO).**
- **Use of opioids from multiple providers (UOP).**
- **Concurrent use of opioids and benzodiazepines.**
- **Continuity of pharmacotherapy for OUD.**
- **Follow-up after discharge from the ED for MH or alcohol or other drug dependence.**
- **Rate of overdose deaths in the Commonwealth.**
- **Access to preventive/ambulatory health services for adult Medicaid managed care beneficiaries with SUD.**

Research question: Will improvements in treatment and prevention strategies in Medicaid managed care improve outcomes of individuals with an SUD in Medicaid managed care as demonstrated by: more effective initiation of treatment, decrease use of opioid at high dosages, reduce use of multiple opioids from multiple providers, reduce concurrent use of opioids and benzodiazepines, improve continuity of pharmacotherapy for OUD, decreased overdose deaths and access to preventive/ambulatory services?

Measure Number	Measure Name	Time Period	Demonstration Denominator	Demonstration Numerator or Count	Demonstration Rate/ Percentage
18	Use of Opioids in High Dosage in Persons Without Cancer	January 1, 2019 through December 31, 2019	46,035	8,731	190%
21	Concurrent Use of Benzodiazepines	January 1, 2019 through December 31, 2019	46,036	10,816	24%
22	Continuity of Pharmacotherapy for OUD	January 1, 2019 through December 31, 2019	23,801	11,307	48%

No descriptive analysis of trends in these measures is available at this time due to limited data points. Currently, only data for CY 2019 are available due to delays in technical specifications for these measures. The CY 2020 data are still being programmed according to the new specifications. These measures will be included in the Final Evaluation Report.

Consumer Perceptions — Improved Outcomes

Generally, surveys conducted during 2019, 2020, and 2021 revealed a high level of overall satisfaction with consumer progress in treatment, with between 75% and 90% of respondents reporting overall satisfaction with treatment outcomes and/or the perception that their quality of life or community participation improved after treatment.

Milestone 6

Milestone 6: Improved care coordination and transition between LOCs for individuals in Medicaid managed care.
Hypothesis 6: The 1115 SUD Demonstration will improve follow-up after discharge from EDs and decrease re-admissions for individuals in Pennsylvania Medicaid managed care with SUD.

Research question: Has the Demonstration impacted access to care for individuals with SUD in Medicaid managed care by linking beneficiaries with community-based services and supports following stays in residential and inpatient treatment facilities and reducing re-admission rates for treatment?

DDAP continues efforts to improve and increase case management services provided by SCAs, making some funding available through block grants to help strengthen existing case management services. Stakeholders expressed a desire for the department to go beyond just tracking members through LOCs. Instead, they are encouraging and supporting case management that emphasizes a community-based and individualized approach. ASAM requirements are being integrated into case management expectations.

Measure Number	Measure Name	Time Period	Demonstration Denominator	Demonstration Numerator or Count	Demonstration Rate/ Percentage
17 (1)	Follow-up After ED Visit AOD Abuse or Dependence (30 days)	CY 2019	96,090	81,005	84%
17 (1)	Follow-up After ED Visit AOD Abuse or Dependence (seven days)	CY 2019	96,090	27,880	29%
17 (2)	Follow-up After ED Visit AOD Abuse or Dependence (30 days)	CY 2019	179,788	85,091	47%
17 (2)	Follow-up After ED Visit AOD Abuse or Dependence (seven days)	CY 2019	179,788	47,611	27%

No descriptive analysis of trends in these measures is available at this time due to limited data points. Currently, only data for CY 2019 are available due to delays in technical specifications for these measures. The CY 2020 data are still being programmed according the new specifications. This measure will be included in the Final Evaluation Report.

Consumer Perceptions — Care Coordination

Generally, surveys conducted during 2019, 2020, and 2021 revealed that the majority of respondents reported being an active participant in their treatment plans and feeling that they are an important part of the treatment process.

CFST	Consumer Reported Outcomes	Number Reporting "Better"[13] 2019–2020	Percent Reporting "Better" 2019–2020	Number Reporting "Better" 2021 (quarter)	Percent Reporting "Better" 2021 (quarter)
CFST #1	Treatment has improved my overall quality of life.	121	98%	47	96%
CFST #2	What affect has treatment had on your quality of life?	N/A	N/A	544	87%
CFST #3	Average across 11 outcome items.	N/A	N/A	642	73.2%

Cost Measures

Pennsylvania examined the spending under the demonstration to the spending prior to the implementation of the waiver.

Spending Metric #1 — Total Medicaid SUD Spending in Medicaid Managed Care

The Total Medicaid SUD spending in Medicaid managed care during the measurement period was compared to the spending prior to the implementation of the waiver. This was expressed as the percent of the Medicaid managed care capitation rates spent on SUD during the measurement period. The Demonstration was implemented on July 1, 2018 (the beginning of State Fiscal Year [SFY] 2018–2019). After that date, the percentage of the BH capitated rates increased to over 20% of the rate. However, the percentage of the overall physical and behavioral capitation rates combined spent on SUD decreased after the beginning of the demonstration to under 4%.

[13] Includes responses of "much better" and "a little or somewhat better".

Category	SFY 2015/2016	SFY 2016/2017	SFY 2017/2018	SFY 2018/2019	SFY 2019/2020	SFY 2020/2021
Portion of the Medicaid BH managed care rates spent on SUD during the measurement period.	18.5%	18.9%	19.5%	20.3%	20.7%	20.5%
Portion of the Medicaid managed care rates spent on SUD during the measurement period.	4.1%	4.5%	4.5%	4.1%	3.7%	3.5%

Spending Metric #2 — Total Medicaid SUD Spending on Residential Treatment Within IMDs in Medicaid Managed Care

The Total Medicaid SUD spending on residential treatment within IMDs in Medicaid managed care during the measurement period was compared to residential treatment within IMDs before the demonstration. The proportion of the BH capitated rates spend on residential treatment within IMDs increased as a percentage of BH capitated rates.

Category	SFY 2015/2016	SFY 2016/2017	SFY 2017/2018	SFY 2018/2019	SFY 2019/2020	SFY 2020/2021
Portion of the Medicaid BH managed care rates spent on IMDs during the measurement period.	15.7%	15.6%	15.8%	16.3%	16.5%	16.4%
Portion of the Medicaid managed care rates spent on IMDs during the measurement period.	3.5%	3.7%	3.6%	3.3%	2.9%	2.8%

As noted below, the portion of the capitation rates spent on SUD and other BH care has decreased since the beginning of the demonstration as the portion of the capitation rates spent on PH has increased.

Category	SFY 2015/2016	SFY 2016/2017	SFY 2017/2018	SFY 2018/2019	SFY 2019/2020	SFY 2020/2021
BH — SUD	4.1%	4.5%	4.5%	4.1%	3.7%	3.5%
BH — Other	17.9%	19.2%	18.5%	16.2%	14.1%	13.7%
PH (HC-PH and CHC)	54.6%	52.8%	54.0%	60.1%	65.3%	65.9%
Total (All Programs)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Section 7
Conclusions

Former Foster Care Youth

The Demonstration was found to provide continuous health insurance for 12 months for approximately 40% of the 38 youth enrolled in the program each year. This resulted in access to health care for all 38 of the enrollees. Annually, 69% of youth received at least one ambulatory care visit. Overtime the number of youth with at least one ED visit fluctuated from 26% to 43% with the average number of youth with an ED visit at 36% annually. The number of youth with an inpatient visit was on average 5% annually (ranging from 0% to 11%). The number of youth with a BH encounter was on average 21% annually.

The Demonstration was found to improve or maintain health outcomes for the target population. For example, on average, there was appropriate follow-up after hospitalization (FUH) 43% of the time for the target population. Sixty-seven percent of the population with asthma had appropriate medication management for asthma in DY1 increasing to 100% of the population with asthma in DY2–DY4. Sixty-seven percent of the populations on persistent medication had appropriate medication monitoring in year DY1 increasing to 100% of the population on persistent medication having appropriate monitoring in DY4. Twenty-one percent of the population had an annual preventive visit in each of the DYs. Eighteen percent of the beneficiaries eligible to have a cervical cancer screening received a screening.

Substance Use Disorder

The findings reported here are consistent with a Demonstration that is still in the midst of implementation efforts. Somewhat sharp increases in diagnosis and more gradual increases in access to some levels of SUD care reflect full implementation of ASAM Criteria for assessing treatment needs and making appropriate placements. However, it is hard to explain a very high single month jump of individuals diagnosed during the first implementation month. More gradual increases observed over time after implementation, however, are consistent with early implementation of the ASAM assessment criteria. It is also important to note that the original intent of the waiver was to maintain access to key SUD services that would have been eliminated due to CMS rule changes. Original research hypotheses only anticipated small changes across the entire array of services.

An important theme in discussing Demonstration implementation with key stakeholders is that change takes time. The Department may have under estimated how disruptive providers viewed the changes. However, initial concerns are beginning to lessen with greater communication, technical assistance, and allowing more time for alignment activities.

Initial data are showing small declines in SUD providers, MAT providers specifically. The new required training on ASAM placement criteria in 2018 may account for the initial slight decline in services as practitioners spent two days in non-revenue producing activities, followed by a gradual increase in services as implementation moved forward. However, it is difficult to determine the degree to which lower numbers are due to the Demonstration or the impacts of

COVID-19. Given patterns of lower service utilization directly following the start of the pandemic, this latter factor seems more likely to be affecting capacity. More data, particularly after the official end of the PHE, will allow for more discussion of the impact of COVID-19 on the Demonstration generally and on provider capacity more specifically. In addition, a monitoring protocol is still under development that will provide vital data around the degree to which providers fully transition to ASAM service definitions alignment.

Increases in early intervention, outpatient services, and MAT are consistent with Demonstration goals to more effectively utilize lower LOCs and evidence-based treatment. Increases in early intervention, outpatient services, and MAT may be related to the OMAP MCO SBIRT adoption prior to the demonstration and the PIPs PH-MCOs have undertaken. The PIPs are an effort to increase utilization in routine outpatient care related to early detection of SUD and outpatient treatment including MAT. The MAT increase post-Demonstration was potentially related to the Commonwealth implementing the Centers of Excellence (COE) and other statewide initiatives to increase MAT usage during the same time period.

After the initial increase, there was a decrease in MAT, likely due in part to both the pandemic and Medicare's new coverage of MAT, which lead to a significant decrease in MAT billings for the dual-eligible population. In addition, new managed care prescriber screening requirements took effect requiring all prescribers to be screened for fraud and abuse and separately enrolled in Medicaid. This initiative might have reduced the number of prescribers of MAT and decreased the amount of prescribing of MAT. Many providers did not provide MAT via telehealth during the pandemic. Therefore, the overall number of providers may have stayed constant, but the number providing any MAT services did increase, reflective of those providers not wanting to provide via telehealth when in-person appointments were not possible.

While some placements have increased, providers are still working to realize full alignment with ASAM service delivery criteria, which may be affecting access to two key LOCs. Trends show the number of individuals receiving IOP and PHP has decreased fairly steadily since the beginning of the demonstration with a dip for the pandemic in May 2020. Note that the Commonwealth's standards for IOP and PHP have been clarified to better align with ASAM standards and this could account for fewer programs reporting that they provide PHP, which is substantially different under ASAM from the historic Commonwealth service description. Since these services are in congregate settings, utilization decreased after the beginning of the pandemic in March 2020. While there has been some increase as the pandemic has gone on, the overall utilization of IOP/PHP has continued to decrease due to ASAM alignment.

The number of individuals receiving residential and inpatient services was fairly steady over time up until the beginning of the pandemic (spring 2020) when there was a drop. Utilization increased again beginning in the fall of 2020 through March 2021. The impact of COVID-19 on most of the metrics reported here, particularly large decreases in congregate care settings, are a significant factor in Demonstration progress.

Further, some declines in residential and other services seen immediately following Demonstration implementation could be due to the number of providers attending training in the initial months. More than 7,500 providers attended in-person two-day trainings, which meant they were unable to provide services during that time.

Since most providers are still working to provide the full array of services, aligned with ASAM standards of care, it is premature to discuss member outcomes at this time. This will be more thoroughly examined in the Final Evaluation Report.

Section 8
Interpretations, Policy Implications, and Interactions with Other State Initiatives

The SUD 1115 Demonstration has been a key tool in Governor Wolf's Administration's campaign to address SUDs. Throughout the 15 SUD PHEs, the Commonwealth has utilized multiple interventions to address all aspects of OUD. OMHSAS has found DDAP and its SCAs to be good partners in implementing the 1115 Demonstration.

The following is a retrospective description of specific steps to combat SUD taken by the administration.

- The Commonwealth cooperated with the Drug Enforcement Administration's 19th National Prescription Drug Take-Back Day Initiative on October 24, 2020.
- Governor Wolf launched the nation's first innovative, evidence-based SUD stigma reduction campaign on September 28, 2020. Life Unites Us is an evidence-based approach to stigma reduction of SUD specifically for OUD. The partnership with national non-profit, Shatterproof, is the first of its kind.
- The Wolf administration encouraged participation in overdose awareness day on August 31, 2020 to remember those who have lost their battle with SUD.
- Governor Wolf released an opioid command center strategic plan to fight the opioid epidemic on July 6, 2020.
- Governor Wolf announced more than $2 million in grants for employment services for individuals with OUD on July 2, 2020.
- Governor Wolf awarded $1 million in grants to help veterans overcome SUD on March 2, 2020. Governor Wolf awarded $1.5 million in grants for OUD Criminal Justice Diversion Programs on February 18, 2020. On February 11, 2020, the Wolf Administration announced more than $1.2 million in grants to nine county jails to support the county jail-based MAT Program to increase OUD services to inmates in prisons and jails across the Commonwealth.
- On February 4, 2020, Governor Wolf proposed regulations to support MH/SUD coverage and consumer rights.
- On January 30, 2020, Governor Wolf announced $5 million in grants from DDAP to help individuals in recovery for OUD and their families. The grants are available for entities to deliver employment support services to individuals in recovery from OUD. On January 8, 2020, Governor Wolf announced that nearly $1 million in grants would be given to higher education institutions for opioid use prevention among college students and to create naloxone training opportunities for post-secondary institutions.

- On December 30, 2019, Governor Wolf announced that the Commonwealth would allocate $5 million in federal funding for loan repayment for health care practitioners providing medical and BH care, and treatment for SUD and OUD in areas where there is high opioid-use and a shortage of health care practitioners.
- On December 3, 2019, Governor Wolf signed the eighth renewal of Pennsylvania's Opioid Disaster Declaration. In January 2018, he signed the first disaster declaration so the Commonwealth could focus resources and break down government siloes to address the burgeoning heroin and opioid epidemic.
- On December 2, 2019, Governor Wolf announced that DDAP would award $2.1 million in federal SAMHSA grants to enhance community recovery supports for individuals with SUD.
- On November 7, 2019, Governor Wolf announced that his administration was awarding $3.4 million in federal SAMHSA grants for support services for pregnant and postpartum women with OUD.
- On October 28, 2019, Governor Wolf announced a new law mandating health care providers prescribing controlled substances do so electronically, unless they meet certain exceptions. Act 96 of 2018 requires the electronic prescribing, which is a deterrent against prescription fraud.
- On October 1, 2019, Governor Wolf kicked off the first Opioid Command Center Opioid Summit: "Think Globally, Act Locally". The summit brought 200 individuals helping their communities fight the opioid crisis, including community organizations, non-profits, schools, health care workers, addiction and recovery specialists, and families affected by the opioid crisis.
- On September 6, 2019, the Governor's Office announced that Pennsylvania would receive more than $75 million in additional federal funding over the next year to support efforts to address the opioid crisis in Pennsylvania. This brings the total in federal funding for the Commonwealth's opioid response to more than $141 million over the past two years.
- DDAP was awarded another $55.9 million by SAMHSA. The grant represents a second year of funding for Pennsylvania through the State Opioid Response grant to continue practices and services that have a demonstrated evidence-based approach to prevention, treatment, recovery, education, and training. The $55.9 million will be used to continue year-one progress of the housing initiative and loan repayment program, as well as provide adequate funding to counties throughout the Commonwealth in support of departmental goals of reducing stigma, intensifying prevention, strengthening treatment systems, and empowering sustained recovery.

- Additionally, the Department of Health received a federal grant for more than $8.4 million, expected to repeat each of the next two years, from the Centers for Disease Control and Prevention (CDC) and the Agency for Toxic Substances and Disease Registry (ATSDR), to support efforts to address the substance use crisis in Pennsylvania. The funding is to support the Commonwealth in its drug-related overdose surveillance work to get high quality, comprehensive and timely data on overdose-related morbidity and mortality, and to use that data to assist in prevention and intervention efforts. The funding will go to the department's PDMP office to continue the work of the Pennsylvania Overdose Data to Action program, which includes allowing for the collection of data for all drug overdoses. Previously, only data on opioid overdoses was collected. Availability of this funding will improve access to high quality, comprehensive and timely data on overdose morbidity and mortality. Areas where the funding will help with prevention include:
  - Increased collaboration with county and municipal health departments.
  - Additional naloxone training for first responders.
  - Staffing the program's Patient Advocacy Unit.
  - Provide individualized, one-on-one education to opioid prescribers.
  - Offering continuing medical education to providers on evidence-based approaches to opioid prescribing and addressing SUD.
- The Opioid Command Center, established in January 2018 when Governor Wolf signed the first opioid disaster declaration, meets every week to discuss the opioid crisis. The command center is staffed by personnel from 17 Commonwealth agencies, spearheaded by the Departments of Health and DDAP.
- The "Good Samaritan" law for drug overdose (2014 Act 139, Public Law 2487) was passed September 30, 2014.
- The Commonwealth has ensured that naloxone is available via standing order with the passage of Act 139.

Section 9
Lessons Learned and Recommendations

Based on the Commonwealth's experience with the 1115 SUD Demonstration to this point, the following lessons have been learned and will be described: 1) placement criteria matters, 2) the pandemic disrupted service patterns, and 3) change management disrupted service patterns before improving access to care. The Commonwealth has two closely related recommendations at this time: 1) a measured approach to change may create less provider abrasion and 2) acceptance of change takes time.

Placement Criteria Matters

The Commonwealth has already seen results of the implementation of the ASAM assessment criteria being used regularly across the system for treatment planning and placement decisions. They have seen a slight shift in placement of individuals to lower LOCs as providers use ASAM Criteria to develop client treatment plans and BH-MCOs use the placement criteria to ensure that individuals receive the most appropriate resource-intensive services according to ASAM assessments. This shift is supported by research that the consistent use of a multi-dimensional assessment to summarize a person's needs, define severity reliably, and develop a treatment plan that allows clinicians to identify problems, goals, and treatment plan objectives to provide individualized treatment uniformly across the system at the lowest level possible. The ASAM Criteria identify the problem areas most important in formulating an individualized treatment plan and in making subsequent patient placement decisions. Use of the ASAM promotes good treatment planning, combining modality matching (for all pertinent problems and priorities identified in the assessment) with placement matching (which identifies the least intensive LOC that can safely and effectively provide the resources that will meet the patient's needs).

The ASAM Criteria is the most widely used and comprehensive set of guidelines for placement, continued stay, transfer, or discharge of patients with addiction and co-occurring conditions. It is a single national set of criteria for providing outcome-oriented and results-based care in the treatment of addiction. Adolescent and adult treatment plans are developed through a multidimensional patient assessment over five broad levels of treatment that are based on the degree of direct medical management provided, the structure, safety, and security provided and the intensity of treatment services provided.

The Pandemic Disrupted Service Patterns

The pandemic shifted service delivery from residential and congregate settings to individual telehealth care overnight. The evaluation highlighted changes to utilization and LOCs due to restricted physical movement and migration to virtual appointments. Increased need for services also was highlighted as the number of overdose deaths in 2020 rose to almost peak 2017 rates.

Change Management Disrupted Service Patterns Before Improving Access to Care

The changes required for aligning ASAM appear to have slightly decreased utilization in 2018 due to lost productivity potentially caused by mandatory training. While this lost utilization was small, it was statistically significant. The training also appears to have resulted in a number of individuals being served at lower LOCs (e.g., outpatient rather than IOP or PHP).

At this point in the Demonstration, the Commonwealth has one primary recommendation. The Commonwealth recommends a measured, dare we say slower, approach to change which is easier on the provider organizations and more likely to produce lasting results. Change does not happen overnight and lasting change may take many years to implement.

Appendix A

Centers for Medicare & Medicaid Services-Approved Evaluation Design

DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop S2-25-26
Baltimore, Maryland 21244-1850

State Demonstrations Group

May 22, 2020

Teresa Miller
Secretary
Pennsylvania Department of Human Services
625 Forster Street, Room 333
Harrisburg, PA 17120

Dear Ms. Miller:

The Centers for Medicare & Medicaid Services (CMS) has approved the evaluation design for the Substance Use Disorder (SUD) component of Pennsylvania's section 1115 demonstration entitled, "Pennsylvania Medicaid Coverage for Former Foster Care Youth from a Different State and Substance Use Disorder Demonstration" (Project Number 11-W-00308/3), and effective through September 30, 2022. We sincerely appreciate the state's commitment to a rigorous evaluation of your demonstration.

CMS has added the approved evaluation design to the demonstrations Special Terms and Conditions (STC) as part of Attachment E. A copy of the STCs, which includes the new attachment, is enclosed with this letter. The approved evaluation design may now be posted to the state's Medicaid website within thirty days, per 42 CFR 431.424(c). CMS will also post the approved evaluation design as a standalone document, separate from the STCs, on Medicaid.gov.

Please note that an interim evaluation report, consistent with the approved evaluation design is due to CMS one year prior to the expiration of the demonstration, or at the time of the renewal application if the state chooses to extend the demonstration. Likewise, a summative evaluation report, consistent with this approved design, is due to CMS within 18 months of the end of the demonstration period.

Page 2 – Ms. Teresa Miller

We look forward to our continued partnership with you and your staff on the Pennsylvania Medicaid Coverage for Former Foster Care Youth from a Different State and Substance Use Disorder Demonstration. If you have any questions, please contact your CMS project officer, Mr. Felix Milburn. Mr. Milburn may be reached by email at Felix.Milburn@cms.hhs.gov.

Sincerely,

Danielle Daly -S Digitally signed by Danielle Daly -S Date: 2020.05.27 11:06:27 -04'00'

Danielle Daly
Director
Division of Demonstration
Monitoring and Evaluation

Angela D. Garner -S Digitally signed by Angela D. Garner -S Date: 2020.05.29 13:36:25 -04'00'

Angela D. Garner
Director
Division of System Reform
Demonstrations

cc: Dan Belnap, State Monitoring Lead, CMS Medicaid and CHIP Operations Group

Commonwealth of Pennsylvania

Substance Use Disorder 1115 Waiver

Number 11-W-00308/3

Evaluation Design

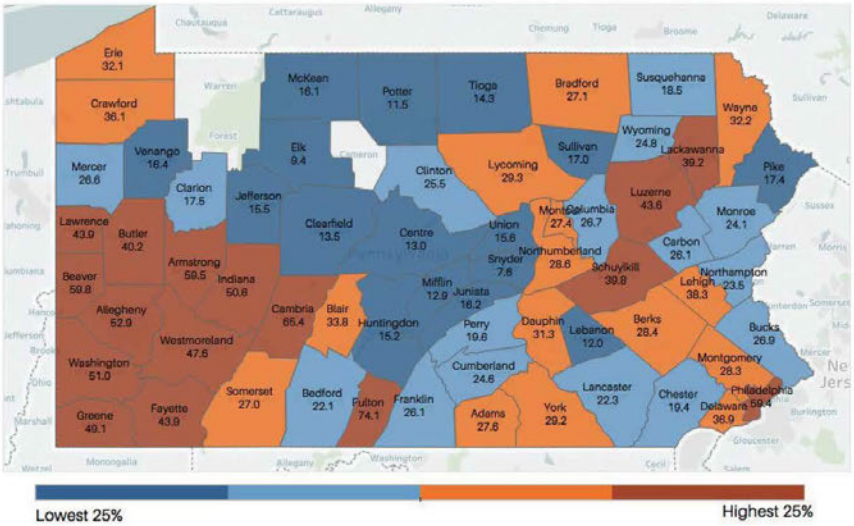
Updated January 31, 2020

Table of Contents

A. General Background Information

1. History and Overview

The Commonwealth of Pennsylvania (Commonwealth or Pennsylvania) is in the midst of a public health crisis affecting both the well-being of its residents and the economic health of the Commonwealth. On January 10, 2018, Governor Tom Wolf, in order to further bolster the fight against heroin and opioid addiction, signed a statewide disaster declaration to enhance Commonwealth response, increase access to treatment and save lives. The declaration was the first-of-its-kind for a public health emergency in Pennsylvania and utilizes a command center at the Pennsylvania Emergency Management Agency to track progress and enhance coordination of health and public safety agencies.[1] In 2016, more than 4,600 Pennsylvanians[2] lost their lives to drug-related overdose which averages to 13 drug-related deaths each day. This is a significant increase from the approximately 3,500 overdose fatalities in 2015, and almost double from the nearly 2,500 deaths in 2014. The Pennsylvania drug-related overdose death rate in 2016 was 36.5 per 100,000 people, a substantial increase from the death rate of 2015. This death rate is significantly higher than the national average of 16.3 per 100,000. Pennsylvania's Prescription Drug Monitoring Program (PDMP) reports that the number of emergency department (ED) visits related to an opioid overdose has increased by 82% from the third quarter of 2016 to the third quarter of 2017. While Pennsylvania is a very large and diverse state, there is no area of the Commonwealth that is not affected by this epidemic. The map below shows the rate of Drug-Related Overdose Deaths per 100,000 people in Pennsylvania Counties in 2016:



[1] Governor Wolf Declares Heroin and Opioid Epidemic a Statewide Disaster Emergency. (2018). Retrieved from https://www.governor.pa.gov/governor-wolf-declares-heroin-and-opioid-epidemic-a-statewide-disaster-emergency

[2] "Analysis of Overdose Deaths in Pennsylvania, 2016." Available at: https://www.dea.gov/docs/DEA-PHL-DIR-034-17%20Analysis%20of%20Overdose%20Deaths%20in%20Pennsylvania%202016.pdf

The Pennsylvania Health Care Cost Containment Council (PHC4), which is an independent Commonwealth agency charged with collecting, analyzing, and reporting on health care in the Commonwealth, examined hospital admissions between 2000 and 2014 for Pennsylvania residents ages 15 and older (excluding overdoses treated in EDs or overdose deaths that occurred outside the hospital setting). The findings showed a 225% increase in the number of hospitalizations for overdose of pain medication and a 162% increase in the number of hospitalizations for overdose of heroin during that period. While there were higher numbers of hospital admissions for these types of overdoses among urban county residents, the percentage increases were larger for rural county residents. For rural county residents, there was a 285% increase between 2000 and 2014 in the number of hospitalizations for pain medication and a 315% increase for heroin, whereas for urban counties, the percentage increases were 208% and 143%, respectively.[3]

In June 2018, PHC4 released their updated findings for 2017 that contained the following highlights[4]:

Heroin

- The hospital admission rate for heroin overdose in 2017 peaked at 536 in the second quarter, but as a whole, the year saw an increase of 12.7% which was the lowest percentage increase since 2011.
- The in-hospital mortality rate for these patients in 2014 was 7.5%, increased to 9.3% in 2016 and was up to 9.6% in 2017.

Pain Medication

- There were 1,747 hospital admissions for overdose of pain medication in 2017.
- The in-hospital mortality rate for these patients was 2.9% in 2016 and rose to 5.0% in 2017.
- In 2017, 84% of opioid-related deaths involved fentanyl or a fentanyl analog.[5]

Pennsylvania recognized the importance of a full continuum of treatment services, including residential services that are provided in a cost-effective manner and for a length of stay (LOS) that is governed by appropriate clinical guidelines to address the crisis described above. This Demonstration is critical to continue the federal funding needed to support the continuation of medically necessary services and substance use disorder (SUD) treatment in residential treatment facilities that meet the definition of Institution for Mental Diseases (IMDs), for individuals 21-64 years of age, regardless of the LOS.

Until recently, the Centers for Medicare & Medicaid Services (CMS) approved these residential services as cost-effective alternatives to State Plan Services (in lieu of services) in HealthChoices, Pennsylvania's Medicaid mandatory Managed Care Program. However, the requirements in the Medicaid Managed Care rule allow states to receive federal funding, for individuals 21-64 years old, in a residential treatment facility that is an IMD only if the LOS is no longer than 15 days. Pennsylvania estimated that this rule change would impact nearly 160 SUD service providers encompassed within the definition of IMD, affecting about 12,240 individuals statewide. Pennsylvania recognized the importance of these

[3] Hospitalizations for Opioid Overdose – 2016 to 2017. (2018). Retrieved from http://www.phc4.org/reports/researchbriefs/overdoses/17/docs/researchbrief_overdoses2017.pdf
[4] Hospitalizations for Opioid Overdose – 2016. Retrieved from http://www.phc4.org/reports/researchbriefs/overdoses/16/docs/researchbrief_overdose2016.pdf
[5] Opioid Program - Profile. Retrieved from https://public.tableau.com/profile/pdph#!/vizhome/UnintentionalDrugRelatedDeaths/

services in the continuum of care, and believes that this Demonstration is critical in ensuring that the Commonwealth is able to sustain the availability of these services to the impacted population.

Residential treatment services provide a structured recovery environment in combination with high-intensity clinical services. Individuals in residential settings receive daily clinical services to stabilize symptoms; a range of cognitive, behavioral, and other therapies to develop recovery skills in a protected environment; and recovery support services to assist in developing a social network supportive of recovery. Dependence on substances is a complex disease that affects multiple brain circuits, and effective treatment must incorporate an array of clinical and psychosocial components provided in a safe environment, as determined by appropriate clinical guidelines.

Residential treatment is a core service in the continuum of care for many individuals with SUD. The National Institute for Drug Abuse identified key principles for effective treatment which include the ability to remain in treatment services for an adequate period of time. The appropriate duration of treatment depends on the clinical needs of the individual. Research indicates that the majority of individuals need at least 90 days of treatment to significantly reduce or stop using substances.[6] Recovery is a long-term process, and the best outcomes occur with longer durations of treatment across the entire continuum of care based upon clinical needs.

Pennsylvania has provided residential treatment services to individuals based upon a comprehensive assessment and standardized level of care (LOC) placement criteria to ensure appropriate treatment. Access to residential treatment services has not been based upon an arbitrary LOS but upon the determination of clinical need and medical necessity for this LOC. The loss in federal matching dollars due to the current changes to the managed care rule placed an enormous financial burden on the Commonwealth, thereby impacting its ability to provide adequate and appropriate residential treatment services to individuals who have been assessed and determined to require the LOC the residential treatment facility provides if it meets the definition of an IMD. This severely impacts an individual's ability to remain in an appropriate level of treatment for adequate lengths of time which may result in negative outcomes such as relapse, resulting in increased costs over time.

In addition to residential IMD services, the Demonstration will support the delivery of the complete American Society of Addiction Medicine (ASAM) criteria of services including Prevention, Outpatient, Intensive Outpatient, Partial Hospitalization, residential and inpatient, withdrawal management, and medication assisted treatment for both methadone and buprenorphine. Pennsylvania already provides a comprehensive set of SUD treatment benefits that provide a full continuum of care through its fee-for-service and managed care delivery systems, federal grants and state funds. Inpatient, Outpatient, and MAT services are covered services within Pennsylvania's Medicaid state plan. Residential drug and alcohol detoxification and rehabilitation and Certified Recovery Specialist services are provided under the capitated contract as "in lieu of services". Federal grants and state funds can be utilized for all allowable services.

[6] Principles of Drug Addiction Treatment – A Research-Based Guide. (2012). Retrieved from https://www.drugabuse.gov/sites/default/files/podat_1.pdf

For HealthChoices members, the continuum of care consists of an array of treatment interventions as well as additional ancillary services to support a recovery environment. Each Behavioral Health (BH)-Managed Care Organization (MCO) contracts with a variety of providers to complete the LOC assessment. This may include the Single County Authority (SCA), licensed intake and evaluation providers or licensed outpatient providers. Clinical services are determined based upon a comprehensive assessment process and the application of the standardized placement criteria in *American Society of Addiction Medicine-Patient Placement criteria* (ASAM-PPC-2R).

2. Demonstration Approval

The "Pennsylvania Former Foster Care Youth from a Different State and Substance Use Disorder 1115(a) Medicaid Demonstration" amendment, which was approved on June 28, 2018, became effective July 1, 2018 and will continue through September 30, 2022 (four years and three months).

3. Description of the Demonstration

The purpose of the Section 1115 Demonstration waiver amendment is to afford continued access to high quality, medically necessary treatment for opioid use disorder (OUD) and other SUDs. The Evaluation Design developed and described throughout this document will apply to this SUD Demonstration waiver amendment.

The demonstration will test a new paradigm for delivering SUD services for Medicaid enrollees. By providing comprehensive, quality SUD treatment, the SUD program will achieve the following goals:

1. Reduce overdose deaths, particularly those due to opioids;
2. Reduce utilization of ED and inpatient hospital settings; and
3. Reduce readmissions to the same or higher LOC.

The Commonwealth believes that these three goals will be achieved through Demonstration activities that increase access to high quality care across the entire treatment continuum, increase treatment program retention, and improve care transition across the continuum of SUD services. The specific interventions include:

- Continuing federal reimbursement for residential treatment stays beyond the 15-day limit under the Medicaid Managed Care rule;
- Adopting all ASAM levels of care and the ASAM patient placement criteria in Medicaid managed care;
- Ensuring provider capacity at critical levels of care including Medication assisted treatment for OUD;
- Implementing nationally recognized SUD-specific program standards to set provider qualifications for residential treatment facilities;
- Implementing comprehensive treatment and prevention strategies to address Opioid abuse and OUD; and
- Improving care coordination and transitions between levels of care.

Medicaid and Medicaid Managed Care

In the HealthChoices program, BH services (mental health [MH] and substance use services) are "carved out" and administered separately from physical health (PH) managed care. The HealthChoices program, is administered by five BH prepaid inpatient health plans and eight PH-MCOs operating under the

1915(b) waiver authority. The Office of Mental Health and Substance Abuse Services (OMHSAS) in the Department of Human Services (DHS) oversees the HealthChoices Behavioral Health (HC-BH) Managed Care Program. With a few exceptions, Medicaid beneficiaries are automatically enrolled in the HC-BH program in the county of their residence. As of February 1, 2019, 2.62 million individuals were enrolled in HC-BH, supported by projected total funding of $3.9 billion in fiscal year (FY) 2019-2020.

Department of Drug and Alcohol Programs

While the Department of Drug and Alcohol Programs (DDAP) is not responsible for Medicaid in Pennsylvania, the below information outlines how this department functions as part of the SUD service delivery system in the Commonwealth. Pennsylvania established DDAP in 2010. DDAP has the statutory authority to oversee substance use services, except for the responsibility for managing substance use services in Medicaid and HC-BH, which remain under OMHSAS. Both DHS and DDAP are cabinet agencies under the Governor. DDAP maintains the responsibility for the development of the Commonwealth Drug & Alcohol Plan and for the control, prevention, intervention, treatment, rehabilitation, research, education and training aspects of substance use issues.

DDAP is responsible for the allocation of the federal Substance Abuse Prevention and Treatment Block Grant in combination with Commonwealth appropriations to the SCAs. The SCA system provides the administrative oversight to local substance use programs that provide prevention, intervention and treatment services. The SCA contracts with the local licensed treatment providers for a full continuum of care for individuals who qualify for substance use services within their geographical region.

DDAP requires the SCA to provide screening, assessment and coordination of services as part of the case management function. Screening includes evaluating the individual's need for a referral to emergent care including detoxification, prenatal, perinatal and psychiatric services. Assessment includes LOC assessment and placement determination. All individuals who present for drug and alcohol treatment services must be screened and, if appropriate, referred for LOC assessment. Through coordination of services, the SCA ensures that the individual's treatment and non-treatment needs are addressed as well as ensuring the individual is enrolled in the appropriate health care coverage.

The SCA is responsible for ensuring the individual has access to available drug and alcohol treatment and treatment-related services, which is facilitated through the case management system. The provision of case management services will vary from county to county in terms of how these functions are organized and delivered. In some instances, the SCA may choose to contract for certain case management functions and activities while retaining others.

HC-BH contracts require BH-MCOs to have a letter of agreement with SCAs to coordinate service planning and delivery. The letter of agreement includes:

- A description of the role and responsibilities of the SCA; and
- Procedures for coordination with the SCA for placement and payment for care provided to members in residential treatment facilities outside the HealthChoices zone.

Treatment Service Array

Pennsylvania has developed a comprehensive set of SUD treatment benefits that provide a full continuum of care through its fee-for-service and managed care delivery systems, federal grants and Commonwealth funds. The continuum includes:

- Inpatient Drug and Alcohol (Detoxification and Rehabilitation Services)
- Outpatient Drug and Alcohol, including Methadone Maintenance Services
- Medication Assisted Treatment (MAT)
- Residential Drug and Alcohol Detoxification and Rehabilitation
- Certified Recovery Specialist Services

Inpatient, Outpatient, and MAT services are covered services within Pennsylvania's Medicaid State Plan. The last two services listed above are not available under the Medicaid State Plan and are provided under Pennsylvania's 1915(b) HealthChoices Waiver as "in lieu of services" (IMD restrictions in Medicaid Managed Care apply to residential services). Federal grants and Commonwealth funds can be utilized for all allowable services. SCAs at the local level receive federal grants as well as Commonwealth and local funds to support treatment needs of individuals who are uninsured or underinsured. In FY 2014-2015, the SCAs reported providing treatment to 32,417 unique individuals.

For HealthChoices members, the continuum of care consists of an array of treatment interventions, as well as additional ancillary services to support a recovery environment. Each BH-MCO contracts with a variety of providers to complete the LOC assessment. This may include the SCA, licensed intake and evaluation providers or licensed outpatient providers. Clinical services are determined based upon a comprehensive assessment process and the application of standardized placement criteria such as the ASAM patient placement criteria (ASAM PPC-2R) for children and adolescents under the age of 21. The Pennsylvania Client Placement Criteria (PCPC)[7] is currently being utilized for adults. The transition to ASAM criteria for adults began in July 2018 and the transition is continuing.

OMHSAS-DDAP Coordination

While OMHSAS is responsible for the administration of HC-BH, DDAP is the entity that has the statutory authority for the licensing of SUD treatment programs. OMHSAS and DDAP collaborate closely at various levels to ensure synergy across systems and to maintain consistency in the application of program requirements.

Drug Addiction Treatment Act of 2000 and the SUD Delivery System

The Drug Addiction Treatment Act of 2000 (DATA 2000) expanded the clinical context of medication-assisted opioid dependency treatment by allowing qualified physicians to dispense or prescribe specifically approved Schedule III, IV, and V narcotic medications in settings other than an opioid treatment program (OTP) such as a methadone clinic. The legislation waives the requirement for obtaining a separate Drug Enforcement Administration registration as a Narcotic Treatment Program for

[7] Pennsylvania's Client Placement Criteria for Adults – Third Edition. (2014). Retrieved from http://www.ddap.pa.gov/Manuals/PA%20Client%20Placement%20Criteria%20(PCPC)%20Edition%203%20Manual.pdf

qualified physicians administering, dispensing, and prescribing specific Food and Drug Administration-approved controlled substances such as buprenorphine in settings beyond OTPs.

DATA 2000 increases options for treating opiate dependence and gives individuals the ability to coordinate both BH and PH care by the use of qualified physicians. Since the beginning of 2002, 3,717 Pennsylvania physicians have been certified under DATA 2000, with 2,725 of those certified to treat up to 30 patients and the remaining 992 certified to treat up to 100 patients.[8] According to a survey conducted by the Substance Abuse and Mental Health Services Administration (SAMHSA), physicians and patients alike reported an average of an 80% reduction in opioid abuse when asked whether buprenorphine was effective in treating addiction. Additionally, responses to the survey indicated that buprenorphine and similar medications increase other indices of recovery.[9]

4. Population Impacted

This Demonstration will target all Pennsylvania Medicaid managed care recipients in need of OUD/SUD treatment services, including services provided in residential and inpatient treatment settings that qualify as an IMD, which are expenditures not otherwise eligible for match under section 1903 of the Social Security Act.

In FY 2015-2016, 118,716 individuals (unduplicated) received SUD services funded by Pennsylvania's Medicaid program; 37,804 of those individuals received SUD residential services, which was a substantial increase from FY 2014-2015, when 30,421 individuals received residential services. In fiscal year 2016-2017 the number of individuals covered by Medicaid with SUD was 235, 748. This was an increase of 6% from fiscal year 2015-2016 and a 34% increase from fiscal year 2014-2015. The percentage increase is due, in part, to Medicaid expansion implemented in 2015. According to the Pennsylvania Open Portal data the number of individuals covered by Medicaid with an OUD in calendar year 2017 was 119,523 with 61% being newly eligible diagnosed because of the Medicaid expansion. In fiscal year 2017-2018 38,565 individuals received SUD residential services that includes Non-Hospital SUD Detoxification, Non-Hospital SUD Halfway Houses and Non-Hospital SUD Rehabilitation. Of those individuals, 59.73% had at least one primary diagnosis of opioid use disorder. Additionally, according to the Bureau of Labor Statistics, Pennsylvania has an unemployment rate of 5.1%, which is one of the highest in the country.[10] Pennsylvania also has a poverty rate of 12.9%, which increases to 26.4% in Philadelphia, the country's poorest large city, which has endured a spike in opioid overdoses in recent years.[11] These socio-economic factors, combined with the growing number of individuals with SUDs, present a challenge for the Medicaid program to provide a continuum of care for beneficiaries in need of the full array of substance use treatment services.

[8] Number of DATA-Waived Practitioners Newly Certified Per Year. Retrieved from https://www.samhsa.gov/medication-assisted-treatment/physician-program-data/certified-physicians?field_bup_us_state_code_value=PA&=Apply
[9] MAT Legislation, Regulations, and Guidelines. Retrieved from https://www.samhsa.gov/medication-assisted-treatment/legislation-regulations-guidelines
[10] Local Area Unemployment Statistics Map. Retrieved from https://www.samhsa.gov/medication-assisted-treatment/legislation-regulations-guidelines
[11] Population Estimates. Retrieved from https://www.census.gov/quickfacts/fact/table/PA/PST045216

B. Evaluation Questions and Hypothesis

Evaluation questions and hypotheses to be addressed were derived from and organized based on the Driver Diagram below. The overall aims of the project are to: 1) Reduce overdose deaths, particularly those due to opioids; 2) Reduce utilization of ED and inpatient hospital settings; and 3) Reduce readmissions to the same or higher LOC. To accomplish these goals, the demonstration includes several key activities (called primary drivers) including increasing access to care, ensuring high quality of care across the entire treatment continuum and increasing treatment program retention, and improving care transition across the continuum of SUD services. The three primary drivers for this change are supported by six secondary drivers. These secondary drivers become the **milestones** in the Commonwealth's implementation plan:

- Increase access to critical levels of care for OUD and other SUDs;
- Implement evidence-based, SUD-specific Patient Placement Criteria;
- Ensure sufficient provider capacity at critical levels of care including Medication assisted treatment for OUD;
- Implement nationally recognized SUD-specific program standards to set provider qualifications for residential treatment facilities;
- Implement comprehensive treatment and prevention strategies to address Opioid abuse and OUD;
- Improve care coordination and transitions between levels of care.

The specific evaluation questions to be addressed were selected based on the following criteria:

1. Potential for improvement, consistent with the key milestones of the Demonstration listed above;
2. Potential for measurement, including (where possible and relevant) baseline measures that can help to isolate the effects of Demonstration initiatives and activities over time; and
3. Potential to coordinate with ongoing performance evaluation and monitoring efforts.

Research questions were selected to address the Demonstration's major program goals, to be accomplished by Demonstration activities associated with each of the **six program milestones**. Specific hypotheses regarding the Demonstration's impact are posed for each of these evaluation questions. These are linked to the program's milestones and primary drivers in the diagrams and tables beginning in Section 2 "Driver Diagrams, Research Questions and Hypotheses," directly following the next section "Targets for Improvement".

1. Targets for Improvement

The goal of the SUD waiver is to improve overall population health outcomes for Medicaid managed care beneficiaries diagnosed with an SUD. Specifically, the waiver will:

1. Reduce overdose deaths, particularly those due to opioids;
2. Reduce utilization of ED and inpatient hospital settings; and
3. Reduce readmissions to the same or higher LOC.

Each of these objectives is translated into quantifiable targets for improvement so that the performance of the Demonstration in relation to these targets can be measured. These targets for improvement are

used to create the aims in the Driver Diagram and to support the hypotheses in the program evaluation design. These objectives will be achieved by increasing beneficiary access to appropriate LOCs and treatment duration, ensuring high quality care across the entire treatment continuum and increasing treatment program retention by improving care transition across the continuum of SUD services. The corresponding improvement target for each of the Demonstration objectives is identified in the table below.

Each target was set in consultation with OMHSAS leadership. Through analysis of data and discussion with partners, the Commonwealth determined these were reasonable and achievable performance goals. Where possible and relevant, the Commonwealth considered baseline data and trends.

One consideration regarding target setting is the Commonwealth's concern that without waiver funding, much of the services already in place would be unavailable, leading to significant decreases in these targets. Therefore, the expectation is that the waiver will lead to stabilization and modest increases in the measures. The corresponding improvement target for each of the Demonstration objectives is identified in the following table.

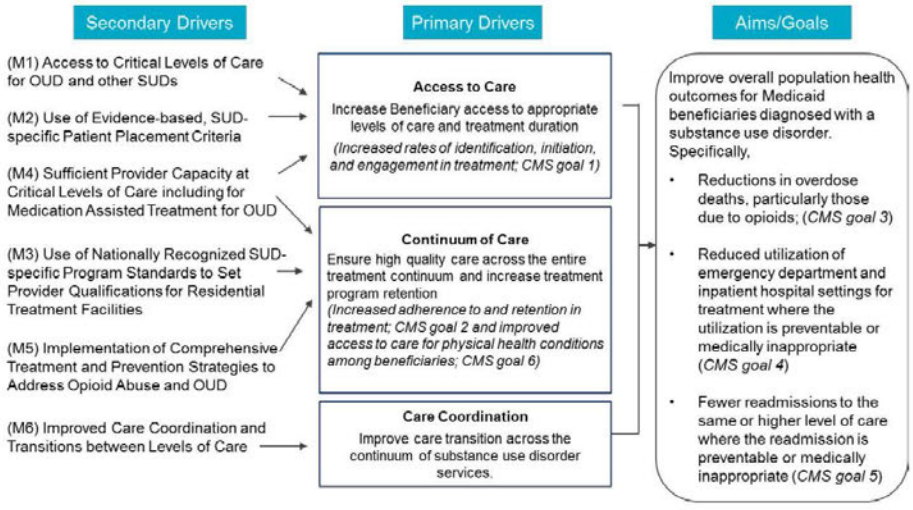
DHS/OMHSAS OBJECTIVES	TARGET FOR IMPROVEMENT
1. Increase beneficiary identification and access to appropriate levels of treatment duration.	• 1% annual increase in the number of individuals enrolled in Medicaid managed care with a SUD diagnosis. • 1% annual increase in the rate of the members with a SUD diagnosis (members) accessing each LOC. • 2.5% annual increase in the rate of members with a SUD accessing any services. • 1% annual increase in the rate of members with an SUD treated in an IMD. • Maintain an IMD LOS less than 30 days. • Maintain number of providers. • 2.5% annual increase in residential and inpatient bed capacity. • 1% overall increase in the number of new providers accepting Medicaid patients.
2. Increase rates of initiation and engagement of treatment.	• 1% annual increase in each alcohol or other drug (AOD) Initiation and Engagement of Alcohol and other Drug Dependence Treatment (IET) measure (National Committee for Quality Assurance [NCQA], National Quality Forum [NQF] #0004, Medicaid Adult Core set). *(Note: There are two rates reported; the goal will be 1% annual increase in each rate.)*
3. Ensure high quality care across the entire treatment continuum and increase treatment program retention.	• All residential providers receive ASAM guidance for all LOCs by July 2020. • All residential have MAT onsite or access to MAT by July 2020. • All provider grant agreement/contracts have been updated to reflect new guidance by July 2020.
4. Increased adherence to and retention in treatment.	• 1% annual decrease in the use of opioids at high dosage (Pharmacy Quality Alliance [PQA], NQF #2940, Medicaid Adult Core Set). • 1% annual decrease in concurrent use of prescribed opioids and benzodiazepines (PQA). • 1% annual increase in continuity of pharmacotherapy for OUD (RAND, NQF #3175).

DHS/OMHSAS OBJECTIVES	TARGET FOR IMPROVEMENT
	• 1% decrease in the rate of overdose deaths in the Commonwealth.
5. Improved access to care for PH conditions among beneficiaries.	• 1.5% annual increase in utilization of preventive/ambulatory visits for adult Medicaid managed care beneficiaries with SUD.
6. Improve care transition across the continuum of SUD services.	• 1% increase in the rate of follow-up after discharge from the ED within seven days and within 30 days for MH or alcohol and other drug dependence (NCQA, NQF #2605, Medicaid Adult Core set). *(Note: There are four rates reported; the goal will be 1% annual increase in each rate.)* • 1% decrease in the rate of re-admissions among beneficiaries with SUD.

2. Driver Diagrams, Research Questions and Hypotheses

The program aims represent the ultimate goals of the waiver. The primary drivers represent strategic improvements (primary drivers) to achieve the program aims. The secondary drivers are the interventions (milestones) that will need to be reached in order achieve the strategic improvements. The performance measures outlined with the research question and hypothesis for each milestone describe specific activities completed as part of the implementation. The driver diagrams below present the connections between the milestones, strategic improvements and aims.

Driver Diagram



Measuring Effects on the Three Aims

CMS has established milestones (interventions or secondary drivers) and performance measures associated with those milestones to achieve the goals of the waiver. Some of those performance measures being used to monitor progress of the activities can also be used to indicate that the program aims have been met. Ultimately, the activities and milestones organized under the primary drivers of

improved access to care, improved continuum of care and improved care coordination are designed to further the three main project aims:

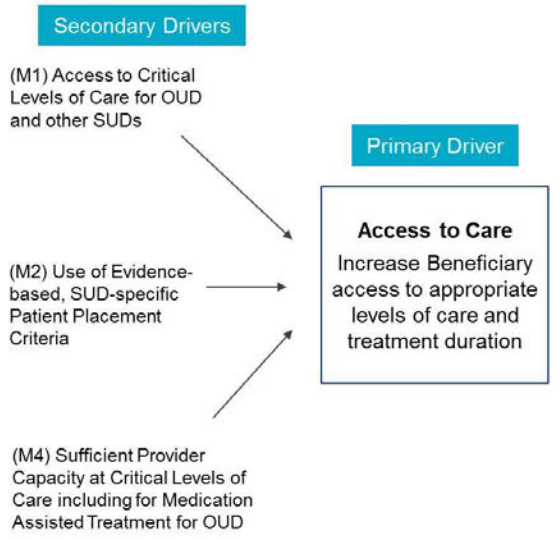
- Reductions in overdose deaths, particularly those due to opioids. (CMS goal 3)
- Reduced utilization of ED and inpatient hospital settings. (CMS goal 4)
- Fewer readmissions to the same or higher LOC. (CMS goal 5)

For the outcome evaluation, select performance measures will be used to demonstrate observed changes in the following outcomes, using an interrupted time-series design:

- Rate of overdose deaths overall
- Rate of opioid deaths
- Rate of ED utilization
- Rate of hospitalization
- Rate of readmissions to same or higher LOC

Additional performance measures will be collected to monitor progress on meeting the milestones and project goals. These performance measures are grouped and described under the related primary drivers.

Access to Care Driver



The overall aim of the Access to Care Driver is to increase beneficiary access to appropriate LOCs and treatment duration. This corresponds directly to CMS goal 1: increased rates of identification, initiation and engagement in treatment.

Three milestones describe how the Demonstration will improve access to care: improving access to critical LOCs, using evidence-based SUD placement criteria, and improving provider capacity. The Summary Design Tables at the end of this document describe the three research questions that will be used to determine the degree to which the Demonstration is able to accomplish each of these.

Milestone One: Qualitative data will be collected to describe each of the activities being undertaken in order to support Milestone One (see Driver Diagram). There are no specific outcome measures.

For the outcome evaluation, each of the performance measures in the Summary Design Tables will be used to demonstrate observed changes in provider capacity, better assignment of patients to the appropriate LOC, and, therefore, better **access to care** for the waiver population. Descriptive, time series analyses will be used to show changes in the number/percentage of providers delivering SUD services at each LOC.

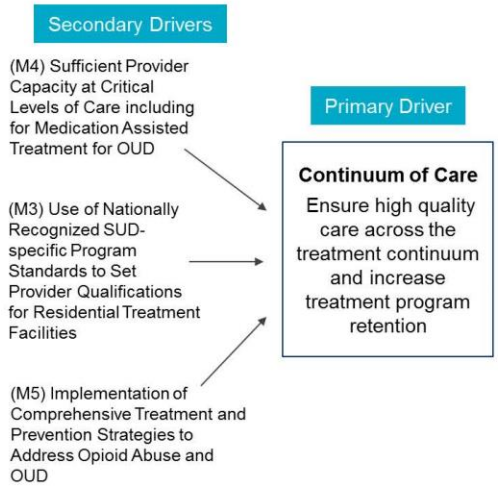
Milestone Two: Qualitative and quantitative data will be collected to describe each of the activities being undertaken in order to support Milestone 2 (see Driver Diagram). There are no specific outcome measures linked to milestone 2.

Milestone Four: For the outcome evaluation, the performance measures in the Summary Design table will be used to demonstrate observed changes in provider capacity, better assignment of patients to the appropriate LOC, and, therefore, better **access to care** for the waiver population. Descriptive, time series analyses will be used to show changes in the number/percentage of providers delivering SUD services at each LOC.

To show changes in access to care, an interrupted time series design will, if possible, be used to show change over time in the following outcomes (from the performance measures listed in Milestone 1):

- Rate of individuals enrolled in any treatment service (rate of treatment engagement)
- Rate of individuals enrolled in each LOC
- Rate of individuals served in an IMD
- LOS in IMD

Continuum of Care Drivers



The overall aim of the continuum of care primary driver is to ensure high quality of care across the treatment continuum and increase program retention. This corresponds directly to the following CMS goals:

- Increased adherence to and retention in treatment. (CMS goal 2)
- Improved access to care for PH conditions among beneficiaries. (CMS goal 6)

The Evaluation design for Milestone 4 was discussed previously, under the access to care primary driver.

Milestone Three: Milestone 3 is described in the Summary Design Table and addresses insuring that there is sufficient provider capacity at critical LOCs.

Qualitative data will be used to describe the processes used to update residential provider guidance for all LOCs by July 2020 including requiring MAT onsite; as well as the process for updating provider guidance (Medicaid only providers or contracts). The evaluation will also include a qualitative review and report of all residential treatment providers for those updated standards by July 2020.

The quantitative measures used for this milestone will be the number and percentage of providers whose grant agreement/contracts or guidance have been updated to reflect the new ASAM criteria.

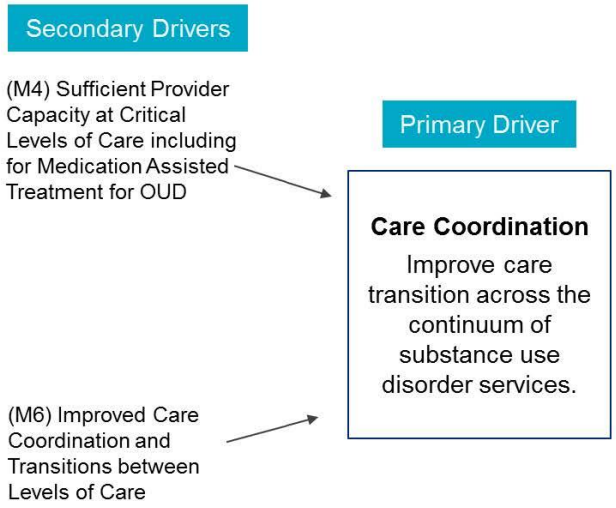
Milestone Five: For the outcome evaluation, each of the performance measures outlined in the Summary Design table will be used to demonstrate observed changes in the use of opioids at high dosage, use of opioids from multiple providers and concurrent use of opioids and benzodiazepines for the waiver population. PeopleStat will calculate all of the performance measures; they will use the Medicaid data warehouse and a state-specific IMD database for the majority of measures. PeopleStat has direct access to the data warehouse. The exception is the number of overdose deaths which is

calculated using vital statistics data. Vital statistics information on overdose deaths is maintained on the Vital Statistics website and is calculated by PeopleStat. All data is obtained by the OMHSAS SUD 1115 project manager who sends a request to the source of the information (PDMP, eHealth, DDAP, and PeopleStat).

To show changes in the CMS goals **of increased retention in treatment and improved access to physical care**, an interrupted time series design will be used to show change over time in the following outcomes:

- Continuity of pharmacotherapy for OUD (RAND, NQF #3175)
- Access to preventive/ambulatory health services for adult Medicaid managed care beneficiaries with SUD

Care Coordination Driver



The overall aim of the care coordination driver is to improve care transition across the continuum of SUD services. This is not one of the CMS specified goals, but is a primary driver in meeting the three main project aims.

Milestone Six: PeopleStat will calculate the performance measures outlined in the data summary table using the Medicaid data warehouse. For the outcome evaluation, to show improvements in care coordination, an interrupted time series design will be used to show change over time in the following outcome:

- Follow-up after discharge from the ED for MH or alcohol or other drug dependence (NCQA, NQF #2605, Medicaid Adult Core Set)

C. Methodology

1. Evaluation Design

The evaluation of the Pennsylvania 1115 waiver will utilize a mixed-methods evaluation design with three main goals:

1. Describe the progress made on specific waiver-supported activities (process/implementation evaluation);
2. Demonstrate change/accomplishments in each of the waiver milestones (short term outcomes); and
3. Demonstrate progress in meeting the overall project goals/aims.

A combination of qualitative and quantitative approaches will be used throughout the evaluation. Qualitative methods will include key informant interviews with OMHSAS and provider staff regarding waiver activities as well as document reviews of contracts, policy guides and manuals. Quantitative methods will include descriptive statistics showing change over time in both counts and rates for specific metrics and interrupted time series analysis to assess the degree to which the timing of waiver interventions affect changes across specific outcome measures.

Qualitative analysis will include document review and interviews with key informants. Qualitative analysis will identify and describe the SUD delivery system and the changes/maintenance through the Demonstration for Medicaid enrollees in the eligible population. Each of the milestones will be discussed and documented. This will allow identification of key elements Pennsylvania intends to modify through the demonstration and measure the effects of those changes. Using a combination of case study methods, including document review, telephone interviews, and face-to-face meetings, a descriptive analysis of the key Pennsylvania demonstration features will be conducted.

The evaluation will analyze how Pennsylvania is carrying out its implementation plan and track any changes it makes to its initial design as implementation proceeds. Both planned changes that are part of the demonstration design (e.g., implementation of ASAM) and operational and policy modifications Pennsylvania makes based on changing circumstances will be identified. Finally, it is anticipated that, in some instances, changes in the policy environment in the Commonwealth will trigger alterations to the original demonstration implementation plan.

During on-going communication with the Commonwealth, detailed information on how Pennsylvania has implemented each milestone including how it has structured the ASAM implementation, identified providers at each ASAM level, implemented PDMP and other Health Information Technology (HIT) changes, and structured care coordination between levels of care for beneficiaries enrolled in the demonstration will be collected. The evaluation will analyze the scope of each of these milestones as implemented by the Commonwealth, the extent to which they conduct these functions directly or through contract, and internal structures established to promote implementation of the milestones.

Key informant interviews and document reviews will occur at four critical junctures: initially, prior to the mid-point assessment, prior to the interim evaluation report being written and prior to the final summative evaluation report being finalized. Specifically, the initial qualitative analysis will occur February–June 2019. The second qualitative analysis will occur July–September, 2020. The third

qualitative analysis will occur July–September, 2021. The final qualitative analysis will occur October–December 2023.

The interview questions and documents which will be reviewed are listed under each milestone. The key informant interviews will be conducted with key staff members in the following departments who are directly responsible for SUD 1115 implementation and operations: OMHSAS, DDAP, the DHS PeopleStat program, the Pennsylvania PDMP, and the Pennsylvania eHealth Partnership Program. Note: the DHS PeopleStat program, the Pennsylvania PDMP, and the Pennsylvania eHealth Partnership Program will be interviewed to ensure that the performance measures and HIT portions of the demonstration are implemented consistently with the implementation protocol.

To maximize efficiency in the evaluation, most outcome measures align with performance measures being reported to CMS for each of the six milestones.

PeopleStat will calculate the quantitative performance measures. PeopleStat acts independently of OMHSAS and OMAP. It has direct access to the data warehouse utilized by the Medicaid agency for encounter data and claims. The data will be automatically updated any time a provider submits a claim or encounter data. PeopleStat will calculate all performance measures using the period of time specified in the CMS technical manual (e.g., monthly, quarterly or annual).

2. Target and Comparison Populations

The comparison population groups in this design will be comprised of the target population, which will serve as its own comparison group longitudinally, where the research question will compare service utilization differences across the demonstration period.

The Target population includes any Medicaid beneficiary with a SUD enrolled in the Commonwealth's HC-BH managed care plans. The HC-BH population consists of seven different eligible groups, or aid categories which may change from time to time. Qualification for the HC-BH Program is based on a combination of factors, including family composition, income level, insurance status, and/or pregnancy status, depending on the aid category in question. The scope of benefits and program requirements vary by the MA category. Should the Department choose to implement cost sharing options at a future date, these options may also be determined by MA category. The eligible groups are:

- *Temporary Assistance to Needy Families (TANF) and TANF-Related MA*: A federal block grant program, matched with state funds, which provides cash payments and MA, or MA only (Medically Needy Only and Non-Money Payment), to families which contain dependent children who are deprived of the care or support of one or both Parents due to absence, incapacity, or unemployment of a parent.
- *Healthy Horizons*: An MA program which provides non-money payment MA and/or payment of the Medicare premium, deductibles, or coinsurance to disabled persons and persons age 65 and over. Exception: An individual who is determined eligible for Healthy Horizons for cost sharing coverage only (categories PG and PL) will not be enrolled in the HC Program.

- *Supplemental Security Income (SSI) without Medicare*: Monthly cash payments made to persons who are aged, blind, or have been disabled for less than two years and will become eligible for Medicare when the disability has lasted for two years, under the authority of Title XVI of the Social Security Act, as amended, Section 1616(A) of the Social Security Act, or Section 212(A) of Pub. L. 93-66. This category automatically receives MA.
- *SSI-Related*: An MA category which has the same requirements as the corresponding category of SSI. Persons who receive MA in SSI-Related categories are aged, blind or disabled. This includes Medically Needy Only and Non-Money Payment.
- *State-Only General Assistance*: Note: not under the demonstration): A state funded program which provides cash grants and MA (Categorically Needy) or MA only (Medically Needy Only and Non-Money Payment) to Pennsylvania individuals and families whose income and resources are below established standards and who do not qualify for the TANF program.
- *Eligible Groups Under Modified Adjusted Gross Income (MAGI) Rule:* MAGI Group (MG)00 – Children ages 1-5 inclusive and income at or below 157% Federal Poverty Level (FPL). Youth ages 6-18 inclusive and income at or below 119%. Infants and pregnant women at or below 215% FPL. MG19 – Youth ages 6-18 inclusive with income at or below 119% FPL. MG27 – Income at or below 33% FPL. MG 71 – Transitional Medical Assistance.
- *Newly Eligible Groups under Affordable Care Act (ACA)*: Childless adults with income less than or equal to 133% of the applicable FPL. Parents and designated care takers and individuals ages 19 or 20 with income between 4% and 133% of the applicable FPL.

Evaluation Period

The evaluation period is July 1, 2018 through September 30, 2022. The Draft Summative Evaluation Report analysis will allow for a 12-month run out of encounter data. Results across this time period will be included in the Draft Summative Evaluation Report due to CMS by March 30, 2024. Draft interim results derived from a portion of this evaluation period, July 1, 2018 through June 30, 2021 (with three month run out of encounter data) will be reported in the Draft Interim Evaluation Report due to CMS on September 30, 2021.

3. Evaluation Measures and Data Sources

The following tables summarize both process (implementation) and outcome measures for the evaluation. It includes both qualitative and quantitative data sources. PeopleStat will calculate all performance measures using the Medicaid data warehouse and a state-specific IMD database except for overdose deaths, which is calculated using vital statistics data, and the PDMP and eHealth measures which are calculated using PDMP and eHealth data. Vital Statistics information on overdose deaths is maintained on the website. The data is obtained when the OMHSAS SUD 1115 project manager sends a note to the source of the information (PDMP, eHealth, DDAP, and PeopleStat). Peoplestat has direct access to the data warehouse.

PeopleStat will calculate all of the performance measures; they will use the Medicaid data warehouse and a state-specific IMD database for the majority of measures. The exceptions include the number of

overdose deaths which is calculated using vital statistics data, and the PDMP and eHealth measures which are calculated using PDMP and eHealth data.

Vital statistics information on overdose deaths is maintained on the Vital Statistics website. The data is obtained when the OMHSAS SUD 1115 project manager sends a note to the source of the information (PDMP, eHealth, DDAP, and PeopleStat). Peoplestat has direct access to the data warehouse.

Measuring Achievement of Overall Project Aims			
Measure Type	**Description**	**Data Type**	**Data Source**
Outcome	Rate of overdose deaths overall	Quantitative	Vital Statistics data
Outcome	Rate of opioid deaths	Quantitative	Vital Statistics data
Outcome	Rate of ED utilization	Quantitative	Claims/encounters (PeopleStat)
Outcome	Rate of hospitalization	Quantitative	Claims/encounters (PeopleStat)
Outcome	Rate of readmissions to same or higher LOC	Quantitative	Claims/encounters (PeopleStat)

Measuring Primary Drivers/Milestone Hypotheses			
Primary Driver: Access to Care			
Hypothesis 1: The 1115 SUD Demonstration will increase access to the specified critical LOCs for individuals in Pennsylvania Medicaid managed care compared to prior to the waiver.			
Measure Type	**Description**	**Data Type**	**Data Source**
Process	Description of activities undertaken for Milestone 1.	Qualitative	• Key Informant Interviews • Document Review, including: – OMHSAS BH contracts – OMHSAS coding documentation – OMHSAS bulletins
Process	Number and percentage of individuals enrolled in Medicaid managed care with an SUD diagnosis.	Quantitative	Claims/encounters (PeopleStat)
Outcome	Rate of individuals enrolled in any treatment service (rate of treatment engagement).	Quantitative	Claims/encounters (PeopleStat)
Outcome	Rate of individuals enrolled in each LOC.	Quantitative	Claims/encounters (PeopleStat)
Outcome	Rate of individuals served in an IMD.	Quantitative	Claims/encounters (PeopleStat) and state-specific IMD database
Outcome	LOS in IMD.	Quantitative	Claims/encounters (PeopleStat) and state-specific IMD database
Hypothesis 2: The 1115 SUD Demonstration will lead to use of ASAM placement criteria by all providers by the end of the first year of the Demonstration project.			
Measure Type	**Description**	**Data Type**	**Data Source**
Process	Number and percentage of contracts modified to require utilization review	Quantitative	Document Review including:

Measuring Primary Drivers/Milestone Hypotheses			
Primary Driver: Access to Care			
	based on ASAM admission, continuing stay and discharge criteria for all ASAM levels of care.		• OMHSAS behavioral health contracts
Process	Number of managed care organizations that begin prior authorization and utilization review based on ASAM residential placement criteria.	Quantitative	Document Review including: • OMHSAS BH PC contracts • DDAP bulletins including ASAM placement guidelines • OMHSAS bulletins • OMHSAS instructions to BH contractors • OMHSAS results from BH organization PC onsite reviews
Process	Number of providers trained to use ASAM as assessment tool	Quantitative	Document Review, including: • DDAP and OMHSAS Provider training records on the ASAM placement criteria
Process	Medicaid ASAM placement guidelines created for Medicaid only providers.	Quantitative	Document Review including: • OMHSAS behavioral health BH PC contracts • DDAP bulletins including ASAM placement guidelines • OMHSAS bulletins • OMHSAS instructions to BH contractors • OMHSAS results from BH organization PC onsite reviews
Process	Provider education on ASAM placement guidelines conducted in first 12 months.	Quantitative	Document Review, including: • DDAP and OMHSAS Provider training records on the ASAM placement criteria
Hypothesis 3: The 1115 SUD Demonstration will increase provider capacity as defined below for SUD treatment at critical LOCs for individuals in Pennsylvania Medicaid managed care.			
Measure Type	**Description**	**Data Type**	**Data Source**
Process	Number and percentage of providers enrolled in Medicaid and qualified to deliver SUD services and meet the standards to provide buprenorphine or methadone as part of MAT.	Quantitative	Document Review • OMAP Medicaid Provider enrollment database records • SAMHSA/DDAP Data 2000 provider enrollment records
Process	Number of new providers accepting Medicaid patients.	Quantitative	Document Review, including: • OMHSAS results from BH organization PC onsite reviews

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Measuring Primary Drivers/Milestone Hypotheses			
Primary Driver: Access to Care			
Process	Number and percentage of providers enrolled in Medicaid and providing each of the following critical LOCs: early intervention, outpatient services, intensive outpatient and partial hospitalization services, residential and inpatient services, withdrawal management and MAT.	Quantitative	Document Review, including: • OMAP Medicaid Provider enrollment database records • SAMHSA/DDAP Data 2000 provider enrollment records

Measuring Primary Drivers/Milestone Hypotheses			
Primary Driver: Continuum of Care			
Hypothesis 4: The 1115 SUD Demonstration will establish ASAM criteria and program standards to set provider qualifications for all Residential Facilities by January 2021.			
Measure Type	**Description**	**Data Type**	**Data Source**
Process	Description of activities undertaken for Milestone 1.	Qualitative	• Key Informant Interviews • Document Review • OMHSAS BH PC contracts • DDAP bulletins • OMHSAS bulletins • OMHSAS instructions to BH contractors • DDAP and OMHSAS provider training records • OMAP Medicaid Provider enrollment database records
Process	Number and rate of providers reviewed for compliance.	Quantitative	Document Review, including: • OMHSAS results from BH organization PC onsite reviews • OMHSAS and DDAP onsite provider reviews
Process	Number and rate of providers in compliance.	Quantitative	Document Review, including: • OMHSAS results from BH organization PC onsite reviews • OMHSAS and DDAP onsite provider reviews
Hypothesis 5: The 1115 SUD Demonstration will improve outcomes for individuals in Pennsylvania Medicaid managed care.			
Measure Type	**Description**	**Data Type**	**Data Source**
Outcome	Initiation of AOD treatment: initiation of AOD treatment through an inpatient admission, outpatient visit, intensive	Quantitative	Claims/encounters (PeopleStat)

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Measuring Primary Drivers/Milestone Hypotheses			
Primary Driver: Continuum of Care			
	outpatient encounter or partial hospitalization within 14 days of the index episode start date/eligible population.		
Outcome	Number/rate of Medicaid members prescribed opioids at high dosage.	Quantitative	Claims/encounters (PeopleStat)
Outcome	Number/rate of Medicaid members prescribed opioids from multiple providers (four or more).	Quantitative	Claims/encounters (PeopleStat)
Outcome	Number/rate of Medicaid members prescribed opioids and benzodiazepines concurrently.	Quantitative	Claims/encounters (PeopleStat)
Outcome	Number/rate of Medicaid members with pharmacotherapy for SUD with at least 180 days of continuous treatment.	Quantitative	Claims/encounters (PeopleStat)
Outcome	Follow-up after discharge from the ED for AOD dependence within 7 days or 30 days: beneficiaries with an outpatient visit, intensive outpatient visit or partial hospitalization with a MH practitioner within 7 days or 30 days after an ED visit with a principal diagnosis of AOD dependence/ED visits with a principal diagnosis of AOD.	Quantitative	Claims/encounters (PeopleStat)
Outcome	Rate of overdose deaths in the Commonwealth: number of overdose deaths/number of deaths.	Quantitative	Claims/encounters (PeopleStat)
Outcome	Number/rate of Medicaid members with an SUD diagnosis that had an ambulatory or preventative care visit.	Quantitative	Claims/encounters (PeopleStat)

Measuring Primary Drivers/Milestone Hypotheses			
Primary Driver: Care Coordination			
Hypothesis 6: The 1115 SUD Demonstration will improve follow-up after discharge from EDs and decrease re-admissions for individuals in Pennsylvania Medicaid managed care with SUD.			
Measure Type	**Description**	**Data Type**	**Data Source**
Outcome	Number/rate of follow-up after discharge from the ED for MH or AOD.	Quantitative	Claims/encounters

4. Analytic Methods

Multiple analytic techniques will be used, depending on the type of data for the measure and the use of the measure in the evaluation design (e.g., process measure vs. outcome measures).

Descriptive, content analysis will be used to present data related to process evaluation measures gathered from document reviews, key informant interviews, etc., as discussed previously. Qualitative analysis software (R Qualitative, or ATLAS) will be used to organize documentation, including key informant interview transcripts. Analysis will identify common themes across interviews and documents. In some cases, checklists may be used to analyze documentation (e.g. licensure) for compliance with standards. These data will be summarized in order to describe the activities undertaken for each project milestone, including highlighting specific successes and challenges.

Descriptive statistics including frequency distributions and time series (presentation of rates over time) will be used for quantitative process measures in order to describe the output of specific waiver activities. These analysis techniques will also be used for some short-term outcome measures in cases where the role of the measure is to describe changes in the population, but not to show specific effects of the waiver Demonstration.

An interrupted time series design will be used to describe the effects of waiver implementation. Specific outcome measure(s) will be collected for multiple time periods both before and after start of intervention. Segmented regression analysis will be used to measure statistically the changes in level and slope in the post-intervention period (after the waiver) compared to the pre-intervention period (before the waiver). The interrupted time series (ITS) design will be dependent on PeopleStat's ability to produce historical data on specific outcome measures (see Methodology Limitation section for more information). The ITS design uses historical data to forecast the "counterfactual" of the evaluation, that is to say, what would happen if the Demonstration did not occur. We propose using basic time series linear modeling to forecast these "counterfactual" rates for three years following the Demonstration implementation.[12] The more historical data available, the better these predictions will be. ITS models are commonly used in situations where a contemporary comparison group is not available.[13] The Commonwealth has considered options for a contemporary comparison group. Since the demonstration will target managed care members, a comparison group made up of fee for service members was considered. However, many of the demonstration changes take place at the provider level and will, therefore also impact fee for service members, thus contaminating the comparison group.

For this demonstration, establishing the counterfactual is somewhat nuanced. The driver diagram and evaluation hypotheses assume that Demonstration activities will have overall positive impacts on outcome measures. The figure below illustrates an ITS design that uses basic regression forecasting to establish the counterfactual – this is represented by the grey line in the graphic. The counterfactual is based on historical data (the blue line). It uses time series averaging (trend smoothing) and linear regression to create a predicted trend line (shown below as the grey line). The orange line in the graph is the (sample) actual observed data. Segmented regression analysis will be used to measure statistically

[12] E Kontopantelis (2015). Regression based quasi-experimental approach when randomisation is not an option: interrupted time series analysis. British Medical Journal (BMJ). Retrieved: https://www.bmj.com/content/350/bmj.h2750.

[13] Ibid.

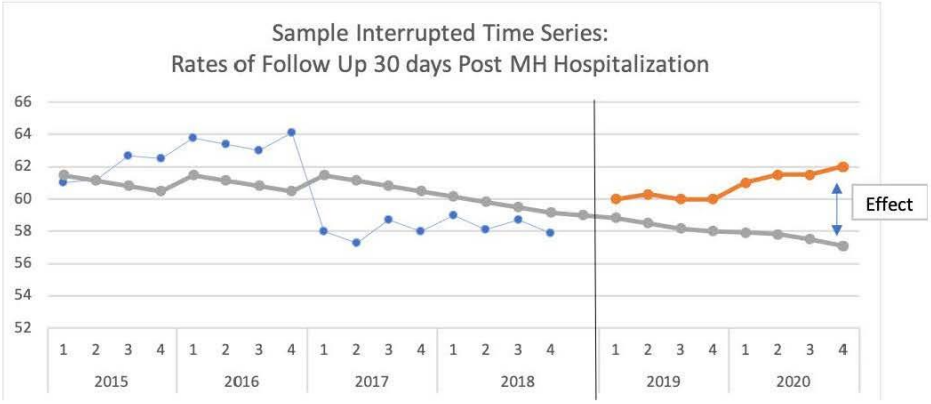
the changes in level and slope in the post-intervention period compared to the predicted trend (see "effect" in the graph below).

$$Y_t = \beta_0 + \beta_1 T + \beta_2 X_t + \beta_3 T X_t$$

Where β_0 represents the baseline observation, β_1 is the change in the measure associated with a time unit (quarter or year) increase (representing the underlying pre-intervention trend), β_2 is the level change following the intervention and β_3 is the slope change following the intervention (using the interaction between time and intervention: TX_t).[14]

This can be represented graphically as follows.

Figure 1: (SAMPLE data only) Rates of Follow Up Post Mental Health Hospitalization



Pre-demonstration data from 2015 to July 1, 2018 will be calculated using the monthly, quarterly, or annual period of time as specified in the CMS technical specifications for each metric. Trends in these data for each measure will be used to predict the counterfactual (what would have happened without the Demonstration). Outcomes measures will be calculated beginning July 1, 2018 through the end of the waiver demonstration project (September 30, 2022)

One potentially confounding factor of this design is that many of the Demonstration activities proposed are not new interventions, but represent programs that would no longer be funded without the waiver, due to other rule changes. It is very difficult to predict a trend line in that situation (programs being discontinued). However, if historical data is available for several years prior to these programs' implementation, it is possible to use more sophisticated linear modeling to predict a decreasing trend (change to more negative outcomes) that would have happened without the Demonstration.

[14] Bernal, J.L., Cummins, S. and Gasparrini, A. "Interrupted time series regression for the evaluation of public health interventions: a tutorial" (2017 Feb.). International Journal of Epidemiology 46(1): 348-355.

However, even though programmatic changes in this demonstration are modest, the hypotheses put forth in this document do assume some small improvement over current trends. If the data is not available to forecast negative trends that may happen without these programs, the current model should still be able to show the minor improvements indicated in these hypotheses.

5. Summary Design Table for the Evaluation of the Demonstration

Milestone 1: Improve access to critical LOCs for OUD and other SUDs for individuals in Medicaid managed care. Critical LOCs are defined as early intervention, outpatient services, intensive outpatient and partial hospitalization services, residential and inpatient services, withdrawal management and MAT.							
Hypothesis 1: The 1115 SUD Demonstration will increase access to the specified critical LOCs for individuals in Pennsylvania Medicaid managed care compared to prior to the waiver.							
Research question 1: Has access to critical LOCs as defined below improved in Medicaid managed care?							
Analytic Approach: Interrupted time series; regression analysis for change over time after waiver implementation.							
Driver: Access to Care (primary); Access to critical LOC's for OUD and other SUDs (secondary)							
Key Informant Interview questions (Interviewee: OMHSAS): • What are the services available in the Pennsylvania Medicaid program under the Demonstration and how do they differ from the Commonwealth's previous system? • To what extent did Pennsylvania implement the ASAM LOC? • What are the activities undertaken to improve access to critical LOC for OUD and other SUDs for individuals in Medicaid managed care?							
Document review with source listed: • OMHSAS BH contracts • OMHSAS coding documentation • OMHSAS bulletins • Manuals and training records							
Measure	**Steward**	**Numerator**	**Denominator**	**Data Source**	**Measurement Period**	**Reporting Frequency**	**Target**
Number and percentage of individuals enrolled in Medicaid managed care with an SUD diagnosis.	CMS	The number of unique beneficiaries (de-duplicated total) enrolled in the measurement period who receive MAT or have qualifying facility, provider, or pharmacy claims with a SUD diagnosis and a SUD-related treatment during	All Medicaid managed care beneficiaries enrolled for any amount of time during the measurement period	Encounter data/claims	Monthly	Quarterly	1% annual increase in the number of individuals enrolled in Medicaid managed care with a SUD diagnosis.

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Milestone 1: Improve access to critical LOCs for OUD and other SUDs for individuals in Medicaid managed care. Critical LOCs are defined as early intervention, outpatient services, intensive outpatient and partial hospitalization services, residential and inpatient services, withdrawal management and MAT.							
		the measurement period and/or in the 11 months before the measurement period.					
Number and percentage of individuals enrolled in Medicaid managed care using each of the following critical LOCs: early intervention, outpatient services, intensive outpatient and partial hospitalization services, residential and inpatient services, withdrawal management and MAT.		The total number of unique beneficiaries (de-duplicated total) with a service claim for early intervention services (such as procedure codes associated with Screening, Brief Intervention, and Referral to Treatment during the measurement period. Create this performance measure for each LOC: early intervention, outpatient services, intensive outpatient and partial hospitalization services, residential and inpatient services, withdrawal management and MAT.	All Medicaid managed care beneficiaries with a SUD diagnosis enrolled for any amount of time during the measurement period.	Encounter data/claims	Month	Quarterly	1% annual increase in the rate of the members with a with SUD diagnosis (members) accessing each LOC.

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Milestone 1: Improve access to critical LOCs for OUD and other SUDs for individuals in Medicaid managed care. Critical LOCs are defined as early intervention, outpatient services, intensive outpatient and partial hospitalization services, residential and inpatient services, withdrawal management and MAT.							
Number and percentage of individuals enrolled in Medicaid managed care using any SUD treatment service, facility claim, or pharmacy claim.	CMS	The number of unique beneficiaries (de-duplicated total) enrolled in the measurement period who receive MAT or have qualifying facility, provider, or pharmacy claims with a SUD diagnosis and a SUD-related treatment during the measurement period and/or in the 12 months before the measurement period.	All Medicaid managed care beneficiaries enrolled for any amount of time during the measurement period.	Encounter data/claims	Month	Quarterly	2.5% annual increase in the rate of members with a SUD accessing any services.
Number and percentage of individuals enrolled in Medicaid managed care treated in an IMD for SUD.	CMS	The number of unique beneficiaries (de-duplicated total) enrolled in the measurement period who have a service or pharmacy claim with a SUD diagnosis and who received inpatient/residential treatment in an IMD within the measurement period.	All Medicaid managed care beneficiaries enrolled for any amount of time during the measurement period.	Encounter data/claims	Year	Annually	1% annual increase in the rate of members with an SUD treated in an IMD.

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Milestone 1: Improve access to critical LOCs for OUD and other SUDs for individuals in Medicaid managed care. Critical LOCs are defined as early intervention, outpatient services, intensive outpatient and partial hospitalization services, residential and inpatient services, withdrawal management and MAT.							
Average LOS for individuals enrolled in Medicaid managed care treated in an IMD for SUD.		The total number of days in an IMD for all beneficiaries with an identified SUD.	The total number of discharges from an IMD for beneficiaries in managed care with a residential treatment stay for SUD.	Encounter data/claims; State-specific IMD database	Year	Annually	Maintain an IMD LOS less than 30 days.
Research question 2: Since the development of the 1115 SUD waiver, are more individuals receiving services at critical LOCs when compared to the numbers prior to the waiver onset? Note: Performance measures for this research question are included in the table below:							
• Number and percentage of individuals enrolled in Medicaid managed care with an SUD diagnosis. • Number and percentage of individuals enrolled in Medicaid managed care using each of the following critical LOCs: early intervention, outpatient services, intensive outpatient and partial hospitalization services, residential and inpatient services, withdrawal management and MAT. • Number and percentage of individuals enrolled in Medicaid managed care using any SUD treatment service, facility claim or pharmacy claim. • Number and percentage of individuals enrolled in Medicaid managed care treated in an IMD for SUD and the average LOS in the IMD.							
Analytic Approach: Interrupted time series; regression analysis for change over time after waiver implementation							

Milestone 2: Use of Evidence-based, SUD-specific Patient Placement Criteria.
Hypothesis 2: The 1115 SUD Demonstration will lead to use of ASAM placement criteria by all providers by the end of the first year of the Demonstration project.
Research question 1: Has the use of evidence-based SUD-specific patient placement criteria (ASAM criteria) been implemented across all LOCs for all patient populations?
Analytic Approach: Qualitative narrative analysis; counts
Driver: Access to Care (primary); Use of evidence-based placement criteria (secondary)
Key Informant Interview questions (Interviewee: and DDAP): • What is the patient placement criteria in the Pennsylvania Medicaid program under the Demonstration and how do they differ from the Commonwealth's previous system? • To what extent did Pennsylvania implement the ASAM placement criteria? • What are the activities undertaken to ensure implementation of the ASAM placement criteria for individuals in Medicaid managed care?
Document review with source listed: • OMHSAS BH primary contractor (PC) contracts

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Milestone 2: Use of Evidence-based, SUD-specific Patient Placement Criteria.

- DDAP bulletins including ASAM placement guidelines
- OMHSAS bulletins
- OMHSAS instructions to BH contractors
- OMHSAS results from BH organization PC onsite reviews
- DDAP and OMHSAS Provider training records on the ASAM placement criteria
- Office of Medical Assistance Programs (OMAP) Medicaid Provider enrollment database records
- SAMHSA/DDAP Data 2000 provider enrollment records

Measure	Steward	Numerator	Denominator	Data Source	Measurement Period	Reporting Frequency	Target
Number and percentage of contracts modified to require utilization review based on ASAM admission, continuing stay and discharge criteria for all ASAM LOCs.	Pennsylvania	Number of contracts modified.	Total number of contracts	PC contracts	Year	Annual	All provider grant agreement/contracts have been updated to reflect new guidance by July 2020.
Number of MCOs that begin prior authorization and utilization review based on ASAM residential placement criteria.	Pennsylvania	Number of PCs conducting prior authorization and utilization review based on ASAM.	Total number of PCs	PC onsite reviews	Year	Annual	
Number of providers trained to use ASAM as assessment tool.	Pennsylvania	Number of providers training to use ASAM as an assessment.	Total number of providers	DDAP and OMHSAS training records	Year	Annual	
Medicaid ASAM placement guidelines created	Pennsylvania	Number of ASAM placement guidelines	Total number of Medicaid only providers	ASAM placement guidelines	Year	Annual	All residential providers receive ASAM guidance for

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Milestone 2: Use of Evidence-based, SUD-specific Patient Placement Criteria.							
for Medicaid-only providers.		created for Medicaid only providers.					all LOCs by July 2020.
Provider education on ASAM placement guidelines conducted in first 12 months	Pennsylvania	Number of providers training to use ASAM placement criteria.	Total number of providers	DDAP and OMHSAS training records	Year	Annual	

Milestone 4: Improve provider capacity at critical LOCs including MAT for OUD in Medicaid.							
Hypothesis 3: The 1115 SUD Demonstration will increase provider capacity as defined below for SUD treatment at critical LOCs for individuals in Pennsylvania Medicaid managed care.							
Research question 1: Has the availability of providers in Medicaid accepting new patients including MAT improved under the Demonstration?							
Analytic Method: Qualitative narrative analysis; counts							
Driver: Access to Care (primary); Sufficient provider capacity (secondary)							
Document review with source listed: • OMAP Medicaid Provider enrollment database records • OMHSAS results from BH organization onsite reviews • OMHSAS and DDAP results from provider licensure/onsite document reviews							
Measure	**Steward**	**Numerator**	**Denominator**	**Data Source**	**Measurement Period**	**Reporting Frequency**	**Target**
Maintenance of existing providers	CMS	The total number of eligible SUD providers.	SUD providers who were enrolled in Medicaid and qualified to deliver Medicaid SUD services during the measurement period.	Provider enrollment database Claims (if necessary)	Year	Annually	Maintain number of providers
Bed capacity	Pennsylvania	The total number of beds open	The total number of beds licensed	Licensure/onsite document review	Year	Annually	2.5% annual increase in residential

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Milestone 4: Improve provider capacity at critical LOCs including MAT for OUD in Medicaid.							
Hypothesis 3: The 1115 SUD Demonstration will increase provider capacity as defined below for SUD treatment at critical LOCs for individuals in Pennsylvania Medicaid managed care.							
Research question 1: Has the availability of providers in Medicaid accepting new patients including MAT improved under the Demonstration?							
Analytic Method: Qualitative narrative analysis; counts							
Driver: Access to Care (primary); Sufficient provider capacity (secondary)							
			and contracting with Medicaid.				and inpatient bed capacity.
The number of new providers accepting Medicaid patients.	CMS	The total number of new eligible SUD providers accepting Medicaid patients.	New SUD providers who were enrolled in Medicaid and qualified to deliver Medicaid SUD services during the measurement period.	Provider enrollment database Claims (if necessary)	Year	Annually	1% overall increase in the number of new providers accepting Medicaid patients.

Milestone 3: Use of Nationally recognized SUD-specific program standards to set provider qualifications for residential treatment facilities.
Hypothesis 4: The 1115 SUD Demonstration will establish ASAM criteria and program standards to set provider qualifications for all Residential Facilities by January 2021
Research question 1: Has OMHSAS established ASAM criteria and program standards to set provider qualifications for all Residential Facilities?
Analytic Method: Qualitative narrative analysis; counts
Driver: Continuum of Care (primary); Use of nationally-recognized SUD standards of care (secondary)
Key Informant Interview questions (Interviewees: OMHSAS and DDAP): • What program standards were set to ensure provider qualifications for all residential facilities? • What processes were used to update the residential provider standards and provider guidance (contracts, bulletins)? • How do they differ from the Commonwealth's previous system? • To what extent did Pennsylvania implement the ASAM placement LOC? What activities have been undertaken to review for compliance with those program standards?
Document review: • OMHSAS BH PC contracts • DDAP bulletins

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Milestone 3: Use of Nationally recognized SUD-specific program standards to set provider qualifications for residential treatment facilities.

- OMHSAS bulletins
- OMHSAS instructions to BH contractors
- OMHSAS results from BH organization PC onsite reviews
- OMHSAS and DDAP onsite provider reviews
- DDAP and OMHSAS provider training records

OMAP Medicaid Provider enrollment database records

Measure	Steward	Numerator	Denominator	Data Source	Measurement Period	Reporting Frequency	Target
Description of activities undertaken for Milestone 1: Implementation successes and challenges.	N/A	None Qualitative data	Key Informant Interviews Document Review	See interview questions & document review sources above	July 1, 2018 through September 30, 2020 (annual interviews and reviews 2020, 2021, 2022)	Annually	The Commonwealth will undertake the activities outlined in the protocol.
Number and rate of providers reviewed for compliance.	Pennsylvania	Number of providers reviewed	Total number of providers	OMHSAS and DDAP onsite reviews	Year	Annual	All residential providers will be reviewed for ASAM compliance initially and every three years thereafter or as needed.
Number and rate of providers in compliance.	Pennsylvania	Number of providers in compliance	Number of providers reviewed	OMHSAS and DDAP onsite reviews	Year	Annual	The Commonwealth will utilize review compliance to set a baseline rate of providers in compliance. That rate will improve over time.

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Milestone 5: Improvements in comprehensive treatment and prevention strategies to address opioid abuse and OUD for individuals in Medicaid managed care.

Hypothesis 5: The 1115 SUD Demonstration will improve outcomes for individuals in Pennsylvania Medicaid managed care under the following measures:

- AOD IET
- Use of opioids at high dosage.
- Use of opioids from multiple providers.
- Concurrent use of opioids and benzodiazepines.
- Continuity of pharmacotherapy for OUD.
- Follow-up after discharge from the ED for MH or alcohol or other drug dependence.
- Rate of overdose deaths in the Commonwealth.
- Access to preventive/ambulatory health services for adult Medicaid managed care beneficiaries with SUD.

Research question: Will improvements in treatment and prevention strategies in Medicaid managed care improve outcomes of individuals with an SUD in Medicaid managed care as demonstrated by: more effective initiation of treatment, decrease use of opioid at high dosages, reduce use of multiple opioids from multiple providers, reduce concurrent use of opioids and benzodiazepines, improve continuity of pharmacotherapy for OUD, decreased overdose deaths and access to preventive/ambulatory services?

Analytic Approach: Interrupted time series; regression analysis for change over time after waiver implementation

Driver: Continuum of Care (primary); Implementation of comprehensive treatment and prevention strategies (secondary)

Key Informant Interview questions (Interviewees: the DHS PeopleStat program, the Pennsylvania PDMP, and the Pennsylvania eHealth Partnership Program)

- Were the performance measures calculated correctly?
- What are the HIT/Health Information Exchange/PDMP initiatives under the Demonstration and how do they differ from the Commonwealth's previous system?
- What is the status of the PDMP and HIT elements of the implementation design plan?

Measure	Steward	Numerator	Denominator	Data Source	Measurement Period	Reporting Frequency	Target
Initiation of AOD treatment: initiation of AOD treatment through an inpatient admission, outpatient visit, intensive outpatient encounter or partial hospitalization within 14 days of the	NCQA, NQF #0004, Medicaid Adult Core set	Initiation of AOD Treatment—percentage of beneficiaries who initiated treatment through an inpatient AOD admission,	Patients with a new episode of AOD abuse or dependence: Age 18 and older as of December 31 of the measurement year.	Encounter data/claims	Year	Annually	1% annual increase in each AOD Initiation and Engagement of Alcohol and other Drug Dependence Treatment (IET) measure NCQA, NQF #0004, Medicaid Adult Core set). *(Note: There*

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Milestone 5: Improvements in comprehensive treatment and prevention strategies to address opioid abuse and OUD for individuals in Medicaid managed care.							
index episode start date/eligible population.		outpatient visit, intensive outpatient encounter or partial hospitalization, telehealth, or MAT within 14 days of the diagnosis.	Report the following diagnosis cohorts for each age stratification: • Alcohol abuse or dependence • Opioid abuse or dependence • Other drug abuse or dependence • Total AOD abuse or dependence Continuous enrollment 60 days (2 months) prior to the IESD through 48 days after the IESD (109 total days).				*are two rates reported; the goal will be 1% annual increase in each rate.)*
Engagement of AOD treatment: two or more inpatient admissions, outpatient visits, intensive outpatient encounters or partial hospitalizations beginning the day after the initiation encounter through 29 days after the initiation event/eligible population.	NCQA, NQF #0004, Medicaid Adult Core set	Engagement of AOD Treatment—percentage of beneficiaries who initiated treatment and who had two or more additional AOD services or MAT within 34 days of the initiation visit.	Patients with a new episode of AOD abuse or dependence: Age 18 and older as of December 31 of the measurement year. Report the following diagnosis cohorts for each age stratification: • Alcohol abuse or dependence • Opioid abuse or dependence	Encounter data/claims	Year	Annually	1% annual increase in each AOD Initiation and Engagement of Alcohol and other Drug Dependence Treatment (IET) measure NCQA, NQF #0004, Medicaid Adult Core set). *(Note: There are two rates reported; the goal will be 1% annual increase in each rate.)*

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Milestone 5: Improvements in comprehensive treatment and prevention strategies to address opioid abuse and OUD for individuals in Medicaid managed care.							
			• Other drug abuse or dependence • Total AOD abuse or dependence Continuous enrollment 60 days (2 months) prior to the Index Episode Start Date (IESD) through 48 days after the IESD (109 total days).				
Use of opioids at high dosage: (beneficiaries 18 and older who received prescriptions for opioids with a daily dosage greater than 120 morphine milligram equivalents for 90 consecutive days or longer/beneficiaries 18 and older who received prescriptions for opioids)*1,000.	NCQA, NQF #2940, Medicaid Adult Core set	Rate per 1,000 beneficiaries age 18 and older included in the denominator without cancer who received prescriptions for opioids with a daily dosage greater than 120 morphine milligram equivalents for 90 consecutive days or longer. Patients in hospice are also excluded.	Any Medicaid managed care enrollee age 18 and older as of January 1 of the measurement year. No more than one gap in continuous enrollment of up to 31 days during the measurement year.	Encounter data/claims	Year	Annually	1% annual decrease in the use of opioids at high dosage (Pharmacy Quality Alliance [PQA], NQF #2940, Medicaid Adult Core Set).

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Milestone 5: Improvements in comprehensive treatment and prevention strategies to address opioid abuse and OUD for individuals in Medicaid managed care.							
Use of opioids from multiple providers: (beneficiaries who received prescriptions for opioids from four or more prescribers and four or more pharmacies/beneficiaries who received prescriptions for opioids)*1,000.	PQA	The proportion (XX out of 1,000) of individuals from the denominator receiving prescriptions for opioids from four (4) or more prescribers AND four (4) or more pharmacies.)	Any Medicaid managed care enrollee age 18 and older as of January 1 of the measurement year. No more than one gap in continuous enrollment of up to 31 days during the measurement year.	Encounter data/claims	Year	Annually	
Concurrent use of opioids and benzodiazepines: beneficiaries with concurrent use of prescription opioids and benzodiazepines/ beneficiaries.	PQA, Medicaid Adult Core set	Beneficiaries age 18 and older with concurrent use of prescription opioids and benzodiazepines. Patients with a cancer diagnosis or in hospice are excluded.	Beneficiaries age 18 and older enrolled in Medicaid managed care. Patients with a cancer diagnosis or in hospice are excluded.	Encounter data/claims			1% annual decrease in concurrent use of prescribed opioids and benzodiazepines (PQA).
Continuity of pharmacotherapy for OUD: beneficiaries with 180 days continuous pharmacotherapy treatment with an OUD medication/beneficiaries with diagnosis of OUD during an inpatient, intensive outpatient, partial hospitalization, outpatient, detoxification	USC, NQF #3175	Percentage of adults in the denominator with pharmacotherapy for OUD who have at least 180 days of continuous treatment.	Beneficiaries age 18 and older enrolled in Medicaid managed care.	Encounter data/claims	Year	Annually	1% annual increase in continuity of pharmacotherapy for OUD (RAND, NQF #3175).

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Milestone 5: Improvements in comprehensive treatment and prevention strategies to address opioid abuse and OUD for individuals in Medicaid managed care.							
or ED encounter during the measurement period and at least one claim for an OUD medication.							
Follow-up after discharge from the ED for MH within 7 days or 30 days: beneficiaries with an outpatient visit, intensive outpatient visit or partial hospitalization with a MH practitioner within 7 days or 30 days after an ED visit with a principal diagnosis of mental illness/ED visits with a principal diagnosis of mental illness.	NCQA, NQF #2605, Medicaid Adult Core set	30-Day Follow-Up A follow-up visit with any practitioner, with a principal diagnosis of MH within 30 days after the ED visit (31 total days). Include visits that occur on the date of the ED visit. 7-Day Follow-Up A follow-up visit with any practitioner, with a principal diagnosis of MH within 7 days after the ED visit (8 total days). Include visits that occur on the date of the ED visit.	Beneficiaries age 18 and older enrolled in Medicaid managed care	Encounter data/claims	Year	Annually	1% increase in the rate of follow-up after discharge from the ED within seven days and within 30 days for MH or alcohol and other drug dependence (NCQA, NQF #2605, Medicaid Adult Core set). *(Note: There are four rates reported; the goal will be 1% annual increase in each rate.)*
Follow-up after discharge from the ED for AOD dependence within 7 days or 30 days: beneficiaries with an outpatient visit, intensive outpatient visit	NCQA, NQF #2605, Medicaid Adult Core set	30-Day Follow-up. A follow-up visit with any practitioner, with a principal diagnosis of AOD	Beneficiaries age 18 and older enrolled in Medicaid managed care	Encounter data/claims	Year	Annually	1% increase in the rate of follow-up after discharge from the ED within seven days and within 30 days for MH or alcohol and other

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Milestone 5: Improvements in comprehensive treatment and prevention strategies to address opioid abuse and OUD for individuals in Medicaid managed care.							
or partial hospitalization with a MH practitioner within 7 days or 30 days after an ED visit with a principal diagnosis of AOD dependence/ED visits with a principal diagnosis of AOD.		abuse or dependence within 30 days after the ED visit (31 total days). Include visits that occur on the date of the ED visit. 7-Day follow-up A follow-up visit with any practitioner, with a principal diagnosis of AOD abuse or dependence within 7 days after the ED visit (8 total days). Include visits that occur on the date of the ED visit.					drug dependence (NCQA, NQF #2605, Medicaid Adult Core set). *(Note: There are four rates reported; the goal will be 1% annual increase in each rate.*
Rate of overdose deaths in the Commonwealth: number of overdose deaths/number of deaths.	CMS	The number of overdose deaths among eligible beneficiaries.	Beneficiaries enrolled in Medicaid managed care for at least one month (30 consecutive days) during the measurement period.	Encounter data/claims	Year	Annually	1% decrease in the rate of overdose deaths in the Commonwealth.
Access to preventive/ambulatory health services for adult Medicaid managed care	NCQA	Medicaid managed care members who had an ambulatory or	Beneficiaries enrolled in Medicaid managed care for at least one month (30 consecutive days)	Encounter data/claims	Year	Annually	1.5% annual increase in utilization of preventive/ambulatory visits for adult Medicaid managed

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Milestone 5: Improvements in comprehensive treatment and prevention strategies to address opioid abuse and OUD for individuals in Medicaid managed care.							
beneficiaries with SUD: the number of Medicaid beneficiaries with SUD who had an ambulatory or preventive care visit/number of beneficiaries with SUD.		preventive care visit during the measurement year.	during the measurement period.				care beneficiaries with SUD.

Milestone 6: Improved care coordination and transition between LOCs for individuals in Medicaid managed care							
Hypothesis 6: The 1115 SUD Demonstration will improve follow-up after discharge from EDs and decrease re-admissions for individuals in Pennsylvania Medicaid managed care with SUD.							
Research question: Has the Demonstration impacted access to care for individuals with SUD in Medicaid managed care by linking beneficiaries with community-based services and supports following stays in residential and inpatient treatment facilities and reducing re-admission rates for treatment? The following measures are described above: • Follow-up after discharge from the ED for MH or AOD dependence: Follow-up after discharge from the ED for MH within 7 days or 30 days: beneficiaries with an outpatient visit, intensive outpatient visit or partial hospitalization with a MH practitioner within 7 days or 30 days after an ED visit with a principal diagnosis of mental illness/ED visits with a principal diagnosis of mental illness. • Follow-up after discharge from the ED for AOD dependence within 7 days or 30 days: beneficiaries with an outpatient visit, intensive outpatient visit or partial hospitalization with a MH practitioner within 7 days or 30 days after an ED visit with a principal diagnosis of AOD dependence/ED visits with a principal diagnosis of AOD.							
Analytic Approach: Interrupted time series; regression analysis for change over time after waiver implementation							
Driver: Care Coordination (primary); Improved coordination and transitions between levels of care (secondary)							
Measure	**Steward**	**Numerator**	**Denominator**	**Data Source**	**Measurement Period**	**Reporting Frequency**	**Target**
Number and percentage of re-admissions among beneficiaries with SUD: number of acute inpatient readmissions within 30 days of discharge from an acute	NCQA	The number of acute inpatient stays among beneficiaries with SUD during the measurement period followed by an acute	The beneficiaries enrolled in Medicaid managed care.	Encounter data/claims	Year	Annually	1% decrease in the rate of re-admissions among beneficiaries with SUD.

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Milestone 6: Improved care coordination and transition between LOCs for individuals in Medicaid managed care							
inpatient stay/number of acute inpatient stays among beneficiaries with SUD		readmission within 30 days. For this metric, acute inpatient stays and a discharge on or between the first day of the measurement period and 30 days prior to the last day of the measurement period are considered index hospital stays (with the exception of stays that meet exclusion criteria). Acute inpatient stays with an admission date within 30 days of a discharge date associated with an index hospital stay are index readmission stays.					

Performance Measures for cost Note: there are no hypotheses regarding these metrics.

The evaluation design has been updated with this information.

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Pennsylvania will add the following measures of cost:

- Total Medicaid SUD spending in Medicaid managed care during the measurement period.
- Total Medicaid SUD spending on residential treatment within IMDs in Medicaid managed care during the measurement period.
- Costs by source of care for high cost individuals with SUD in Medicaid managed care during the measurement period.

The spending will be compared to prior to the implementation of the waiver.

Measure	Steward	Numerator	Denominator	Data Source	Measurement Period	Reporting Frequency	Target
Total Medicaid SUD spending in Medicaid managed care during the measurement period.	Commonwealth	Portion of the Medicaid managed care rate spent on SUD during the measurement period.	Medicaid managed care rates	Encounter data/claims	Year	Interim and final evaluation reports	Maintenance of SUD spending in capitation rates.
Total Medicaid SUD spending on residential treatment within IMDs in Medicaid managed care during the measurement period.	Commonwealth	Portion of the Medicaid managed care rate spent on IMDs during the measurement period.	Medicaid managed care rates	Encounter data/claims	Year	Interim and final evaluation reports	Maintenance of IMD spending in capitation rates.
Costs by source of care for high cost individual with SUD in Medicaid managed care during the measurement period.	Commonwealth	Portion of the Medicaid managed care rates spent on different categories of care for individuals with SUD during the measurement period.	Medicaid managed care rates	Encounter data/claims	Year	Interim and final evaluation reports	Proportion of spending on different service categories in capitation rates for high cost individuals with SUD.

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Cost data will be analyzed using descriptive, time series analysis. This will show the changes in cost over time, from the period (at least one year) prior to the Demonstration waiver, and the years following. Changes over time will be analyzed to determine whether costs increase, decrease or stay the same.

D. Methodological Limitations

There are two primary limitations to the evaluation methodology presented here. The first involves issues of data quality and data sources that either 1) are not sufficient to conduct the analysis proposed here (not enough historical data for needed prior time periods, for example) and/or 2) contain errors. The second limitation is related to the design itself. Because this evaluation plan relies heavily on descriptive, time series analysis and qualitative data, this evaluation will be able to demonstrate what happened after the Demonstration was implemented. But it will be difficult to isolate why changes occurred. In other words, it will be difficult to directly attribute changes after waiver implementation to the activities undertaken as part of the waiver. Each of these limitations is discussed in greater detail within this section.

Many of the metrics being computed by PeopleStat for the waiver will be new to OMHSAS. It is unclear at this time the degree to which it will be possible to generate historical data needed to forecast the slope of the "counterfactual" trend line (what would have happened without the Demonstration). This historical data is an important component of the ITS design, but also supports the descriptive time series analysis. In particular, there will be a limitation in estimating the slope of what the trend line would be without the Demonstration if we do not have data to model what would happen to the measures should the programs, already in operation, cease.

In addition to historical data, it is possible that the Commonwealth's data systems will additionally have current issues that make data errors more likely. For example, there are differences in the use of procedure codes between OMAP and OMHSAS that could cause services to be coded differently. In addition, the evaluation plan relies on encounter data, which will reflect the service delivered, but not the actual cost to Medicaid. In order to account for this, cost measures will be included on the portion of the Medicaid capitation rate.

The current system has a runout of 12 months, and will need to take into account timing around pulling data to calculate numerators and denominators for the measures. In addition, when encounter data is corrected, the new data does not replace the old automatically, meaning that an encounter can be reported multiple times. An important cleaning procedure will be to identify and remove duplicate encounter records.

The runout or latency period is established based on requirements of the primary contractor and its BH-MCO to adjudicate a claim and subsequently submit an encounter to the state. Claim submission by a provider may take up to 180 days before the primary contractor and its BH-MCO are no longer obligated to pay the claim. The Department contractually requires that all claims are adjudicated by the BH-MCO within 90 days after claim submission.

The Department requires the Primary Contractor or its BH-MCO to submit an encounter, or "pseudo claim," each time a Member has an encounter with a Provider. All encounters must be HIPAA Compliant and submitted and approved in PROMISe™ (i.e., pass PROMISe™ edits) within 90 days following the date that the BH-MCO paid/adjudicated the provider's claim or encounter. The Primary Contractor and its subcontractor(s) shall be responsible for maintaining appropriate systems and mechanisms to obtain all

necessary data from its health care providers to ensure its ability to comply with the Department's encounter data reporting requirements.

There is the possibility of duplicated data within PROMISe data. For example, when encounter data is corrected, the new data does not replace the old automatically, meaning than an encounter can be reported multiple times. An important cleaning procedure is to identify and remove duplicate encounter records.

The Managed Care Organization (MCO) encounter data for both PH and BH services is submitted to the state through the commonwealth's Secure Encryption system called SeGOV. The encounter passes through SeGOV and enters the commonwealth's Electronic Data Interchange (EDI) HIPAA Translator that ensures the data submitted meets HIPAA guidelines. After the file passes the checks in the HIPAA Translator it is sent to the Medicaid Management Information System for validation checks on the contents of the encounter.

To de-duplicate the data PeopleStat reviews the claim type for the claim, then uses a specific series of fields to rank the records and eliminates all but the first based on a series of fields, i.e. if RID and MCO and BEGIN_DATE are used in the sort for the ranking, the first record based on those three fields should be kept. There are six groupings of fields for these sorts based on the type of claim – Inpatient, Outpatient, Professional, Pharmacy, Long-Term Care and Dental.

PeopleStat acts independently of OMHSAS and OMAP. It has direct access to the data warehouse utilized by the Medicaid agency for encounter data and claims. The data will be automatically updated any time a provider submits a claim or encounter data. PeopleStat will calculate all performance measures in the frequency outlined in the performance measure chart above.

As an additional data validation step, measures calculated by PeopleStat will be reviewed and compared against historical trends as well as independent calculations produced with data available to the evaluator to look for obvious inconsistences or discrepancies. Encounter data is submitted by the P and its BH-MCO. These encounters are first processed through the SeGOV encryption software, then the HIPAA Translator, and then Pennsylvania DHS HIPAA-compliant Provider Reimbursement and Operations Management Information System (PROMISe™). In PROMISe, the encounters are edited to ensure that Federal and State requirements are met and that service combinations are consistent with our Behavioral Health Services Reporting Classification Chart.

An example of the edits that are in place to ensure validity of the encounter data include edits that check for duplicate billing of a BH encounter, invalid combination for professional BH encounter, and date of death is prior to date of service.

While the interrupted time series design is the strongest available in the absence of a randomized trial or matched control group, there are some threats to the validity of results in the design.[15] The primary threat is that of history, or other changes over time happening during the waiver period. This

[15] Penfold, RB, Zhang, F. "Use of interrupted time series analysis in evaluating heath care quality improvements." Academic Pediatrics, 2013 Nov-Dec, 13(6Suppl): S38-44.

interrupted time series design is only valid to the extent that the waiver program was the only thing that changed during the evaluation period. Other changes to policies or programs could affect the outcomes being measured here. We will attempt to control this threat by considering other policy and program changes happening concurrent to the waiver period interventions. The analysis will note the dates of other changes and analyze the degree to which the slope of the trend line changes after implementation of other interventions are made.

A related threat to the validity of this evaluation is external (history). Because OMHSAS has not identified a comparison group (a group of Medicaid managed care members who would be eligible for the waiver interventions but who will not receive them and/or for whom data will not be collected), it will be difficult to attribute causality. It will be less certain whether the changes observed in outcomes are due entirely to the waiver interventions, rather than some external, outside cause (including other program and policy changes described earlier). However, the interrupted time series design controls for this threat to some degree, by linking what would have likely happened (e.g., forecasting the trajectory of counts and rates over time) without any program changes and comparing this forecast to actual changes over time. To strengthen this design as much as possible, as many data points will be collected as possible across multiple years preceding waiver changes. This will allow for adjustment of seasonal or other, cyclical variations in the data. Additionally, the design will examine multiple change points, identifying key areas of major program and policy adjustments, so that with each major milestone accomplishment, corresponding changes to metrics can be observed. One potentially confounding factor of this design is that many of the Demonstration activities proposed are not new interventions, but represent programs that would no longer be funded without the waiver, due to other rule changes. It is very difficult to predict a trend line in that situation (programs being discontinued). However, if historical data is available for several years prior to these programs' implementation, it is possible to use more sophisticated linear modeling to predict a decreasing trend (change to more negative outcomes) that would have happened without the demonstration.

However, even though programmatic changes in this demonstration are modest, the hypotheses put forth in this document do assume some small improvement over current trends. If the data is not available to forecast negative trends that may happen without these programs, the current model should still be able to show the minor improvements indicated in these hypotheses.

The interrupted time series analysis will also include a sensitivity analysis to determine the degree to which specific ITS assumptions impact the analysis. Specifically, the degree to which the assumption that trends in time are linear vs. non-linear will be addressed. Additionally, this model assumes that changes will occur directly after the intervention. However, it is possible that for some outcomes, there will be a lag between the start of the waiver and observed outcomes.

We will also attempt to limit this threat to validity by triangulating our data. Encounter data trends across multiple time periods will be compared to trends happening at other points in time (other large policy or program shifts that might influence the slope of the trend in addition to the Demonstration). Also, key informant interviews will be used to inform the quantitative findings and explain the degree to which individuals are seeing Demonstration impacts. We will also attempt to seek out national and

other state data for benchmarking, that will allow us to determine whether Pennsylvania is performing in a similar fashion to other Demonstration states, non-Demonstration states or national benchmarks overall.

Another threat to validity in this design may be the ability to measure the outcome rate of interest for the desired period of time both before and after waiver implementation. Evaluators will work closely with the OMHSAS and their data teams to assure that complete data is available for each measure and discuss any specific data concerns or considerations on a measure by measure basis.

According to the literature on interrupted time series analysis, estimating the level and slope parameters requires a minimum of eight observations before and after implementation in order to have sufficient power to estimate the regression coefficients.[15] Evaluators will need to work closely with OMHSAS and their data teams to gather as many data points as possible and discuss limitations within the evaluation findings if enough points cannot be collected.

It should also be noted that interrupted time series cannot be used to make inferences about any one individual's outcomes as a result of the waiver. Conclusions can be drawn about changes to population rates, in aggregate, but not speak to the likelihood of any individual Medicaid member having positive outcomes as a result of the waiver.

Qualitative data, while useful in confirming quantitative data and providing rich detail, can be compromised by individual biases or perceptions. Key informant interviews, for example, represent a needed perspective around context for demonstration activities and outcomes. However, individuals may be limited in their insight or understanding of specific programmatic components, meaning that the data reflects perceptions, rather than objective program realities. The evaluation will work to address these limitations by collecting data from a variety of different perspectives to help validate individuals' reports. In addition, standardized data collection protocols will be used in interviews and interviewers will be trained to avoiding "leading" the interviewee or inappropriately biasing the interview. It will also utilize multiple "coders" to analyze data and will create a structured analysis framework, based on research questions, that analysts will use to organize the data and to check interpretations across analysts. Finally, results will be reviewed with stakeholders to confirm findings.

E. Attachments

1. Independent Evaluator

As part of the Standard Terms and Conditions (STCs), as set forth by CMS, the Demonstration project is required to arrange with an independent party to conduct an evaluation of the SUD Demonstration to ensure that the necessary data is collected at the level of detail needed to research the approved hypotheses. Mercer Government Human Services Consulting (Mercer), through a request for proposal (RFP) process, contracts to provide technical assistance to OMHSAS. The objectives of this contract are:

- To enhance program oversight and compliance with Commonwealth and Federal requirements
- To advance the Behavioral Health Data Management
- To develop strategies with Federal, Commonwealth and local partners for cross-system coordination
- To improve health outcomes through quality of care.

Below are some of the qualifications, as expressed in the RFP:

Desired Qualifications

- Experience working with federal programs and/or Demonstration waivers
- Experience with evaluating effectiveness of complex, multi-partnered programs
- Familiarity with CMS federal standards and policies for program evaluation
- Familiarity with nationally-recognized data sources
- Analytical skills and experience with statistical testing methods

Based on these criteria, Mercer was selected as the technical assistance vendor. One of the scopes of work in the technical assistance work plan is the waiver evaluation. Mercer will develop the evaluation design, calculate the results of the study, evaluate the results for conclusions, and write the Interim and Summative Evaluation Reports.

Mercer has over 25 years assisting state governments with the design, implementation and evaluation of publicly sponsored health care programs. Mercer currently has over 25 states under contract and has worked with over 35 different states in total. They have assisted states like Arizona, Connecticut, Missouri and New Jersey in performing independent evaluations of their Medicaid programs; many of which include 1115 Demonstration waiver evaluation experience. Mercer also has unique knowledge of the Commonwealth of Pennsylvania, where they conduct rate setting activities for both physical health and behavioral health and provide ongoing technical assistance. Many projects include the collection and analysis of eligibility, enrollment, encounter and financial data and production of year-over-year comparisons. Given their previous work with the Commonwealth's programs, the Mercer team is well-equipped to work effectively as the external evaluator for the Demonstration project. The table below includes contact information for the lead coordinators from Mercer for the evaluation:

NAME	POSITION	EMAIL ADDRESS
Laura K. Nelson MD	Engagement Leader	Laura.K.Nelson@mercer.com
Heather Huff, MA	Program Manager	Heather.Huff@mercer.com
Barbara Anger, CPC	Certified Professional Coder	Barbara.Anger@mercer.com

NAME	POSITION	EMAIL ADDRESS
Nicole Fowle, MPH	Project Manager	Nicole.Fowle@mercer.com
Brenda Jenney, PhD	Statistician	Brenda.Jenney@mercer.com
Brenda Jackson, MPP	Policy and Operations Sector	Brenda.Jackson@mercer.com

Conflict of Interest Statement

DHS has taken steps to ensure that Mercer is free of any conflict of interest and will remain free from any such conflicts during the contract term. DHS considers it a conflict if Mercer currently 1) provides services to any MCOs or health care provider doing business in Pennsylvania under the Medical Assistance (MA) program; or 2) provides direct services to individuals in DHS-administered programs included within the scope of the technical assistance contract. If DHS discovers a conflict during the contract term, DHS may terminate the contract pursuant to the provisions in the contract.

Mercer's Government specialty practice does not have any conflicts of interest, such as providing services to any MCOs or health care providers doing business in Pennsylvania under the MA program or to providing direct services to individual recipients. One of the byproducts of being a nationally operated group dedicated to the public sector is the ability to identify and avoid potential conflicts of interest with our firm's multitude of clients. To accomplish this, market space lines have been agreed to by our senior leadership. Mercer's Government group is the designated primary operating group in the Medicaid space.

Before signing a contract to work in the Medicaid market, either at the state-level or otherwise, we require any Mercer entity to discuss the potential work with Mercer's Government group. If there is a potential conflict (i.e., work for a Medicaid health plan or provider), the engagement is not accepted. If there is a potential for a perceived conflict of interest, Mercer's Government group will ask our state client if they approve of this engagement, and we develop appropriate safeguards such as keeping separate teams, restricting access to files and establish process firewalls to avoid the perception of any conflict of interest. If our client does not approve, the engagement will not be accepted. Mercer has collectively turned down a multitude of potential assignments over the years to avoid a conflict of interest.

In regards to Mercer's proposed subcontractors, all have assured Mercer there will be no conflicts and that they will take any steps required by Mercer or DHS to mitigate any perceived conflict of interest. To the extent that we need to implement a conflict mitigation plan with any of our valued subcontractors, we will do so. Mercer is happy to discuss with DHS any other steps desired or needed to meet your needs in this area.

Mercer, through our contract with DHS, has assured that it presently has no interest and will not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of its services. Mercer has further assured that in the performance of this contract, it will not knowingly employ any person having such interest. Mercer additionally certified that no member of Mercer's Board or any of its officers or directors has such an adverse interest.

MERCER
MAKE TOMORROW, TODAY

NO CONFLICT OF INTEREST

Given Mercer's broad client base and diverse business offerings, we encounter situations where the interests of one client may be in conflict with the interests of another, or even with the interests of our Company itself. We identify such situations promptly, resolve them with integrity, and treat our clients fairly. More specifically, our Code of Conduct requires consultants to:

- Identify potential business conflicts of interest promptly.
- Determine an appropriate course of action to manage the conflict. Potential resolutions for a conflict are:
  - Disclosing the relationships to the relevant parties;
  - Obtaining consent from the party at risk;
  - Establishing information barriers (ethical walls); or
  - Declining the engagement.

Mercer, through our contract with DHS, has assured that it presently has no interest and will not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of its services. Mercer has further assured that in the performance of this contract, it will not knowingly employ any person having such interest. Mercer additionally certified that no member of Mercer's Board or any of its officers or directors has such an adverse interest.

Heather Huff, Principal
Printed name

[redacted]
Signature

August 5, 2019
Date

MARSH & McLENNAN COMPANIES

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2. Evaluation Budget

	DY 1 7/1/18 – 6/30/19	DY2 7/1/19 – 6/30/20	DY3 7/1/20 – 6/30/21	DY4 7/1/21 – 6/30/22	DY5 7/1/22 – 9/30/22	Final Evaluation 12/31/2024	Total Evaluation Cost
STAFF COSTS							
OMHSAS (see the break-down in the table below)	$54,346	$54,346	$54,346	$54,346	$13,586	$54,346	$285,316
STATE SYSTEM PARTNERS							
PeopleStat	$19,500	$19,500	$19,500	$19,500	$4,875	$19,500	$102,375
DDAP	$80,000	$80,000	$80,000	$80,000	$20,000	$80,000	$420,000
INDEPENDENT EVALUATOR/CONTRACTOR							
Mercer	$203,502	$55,000	$85,000	$115,000	$25,000	$285,000	$768,502
TOTAL	**$357,348**	**$208,846**	**$238,846**	**$268,846**	**$63,461**	**$438,846**	**$1,576,193**

		DY1 07/01/18 - 06/30/19		DY2 07/01/19 - 06/30/20		DY3 07/01/20 - 06/30/21		DY4 07/01/21 - 06/30/22		DY5 07/01/22 - 09/30/22		Final Evaluation 12/31/24		Total OMHSAS Staff Cost
OMHSAS Staff	**FTE for 1115 Evaluation**	**Annual Salary plus Benefits**	**FTE Equivalent Salary plus Benefits**	**Annual Salary plus Benefits**	**FTE Equivalent Salary plus Benefits**	**Annual Salary plus Benefits**	**FTE Equivalent Salary plus Benefits**	**Annual Salary plus Benefits**	**FTE Equivalent Salary plus Benefits**	**Quarter Year Salary plus Benefits**	**FTE Equivalent Salary plus Benefits**	**Annual Salary plus Benefits**	**FTE Equivalent Salary plus Benefits**	
Division Director, Program Management and Planning	12%	$119,343	$14,321	$119,343	$14,321	$119,343	$14,321	$119,343	$14,321	$29,836	$3,580	$119,343	$14,321	$75,186
Director, Bureau of Program Management and Planning	5%	$155,463	$7,773	$155,463	$7,773	$155,463	$7,773	$ 155,463	$7,773	$38,866	$1,943	$155,463	$7,773	$40,809
Community & Hospital Operations representative	7%	$119,343	$8,354	$ 119,343	$8,354	$119,343	$8,354	$119,343	$8,354	$29,836	$2,089	$119,343	$8,354	$43,859
Director Area Operations	5%	$155,463	$ 7,773	$155,463	$7,773	$155,463	$7,773	$155,463	$7,773	$38,866	$1,943	$155,463	$7,773	$40,809
Quality Management Director	5%	$136,196	$6,810	$136,196	$6,810	$136,196	$6,810	$136,196	$6,810	$34,049	$1,702	$136,196	$6,810	$35,752
Director Bureau of Quality Management & Data Review	2%	$145,514	$2,910	$145,514	$2,910	$145,514	$2,910	$145,514	$2,910	$36,378	$728	$145,514	$2,910	$15,279
Division Director OMHSAS Bureau of Quality Management & Data Review	3%	$124,753	$3,743	$ 124,753	$3,743	$124,753	$3,743	$124,753	$3,743	$31,188	$936	$124,753	$3,743	$19,649
Quality Assurance/Risk Management Director	2%	$133,089	$2,662	$133,089	$2,662	$133,089	$2,662	$133,089	$2,662	$33,272	$665	$133,089	$2,662	$13,974
TOTAL		$1,089,164	**$54,346**	$1,089,164	**$54,346**	$1,089,164	**$54,346**	$1,089,164	**$54,346**	$272,291	**$13,586**	$1,089,164	**$54,346**	**$285,316**

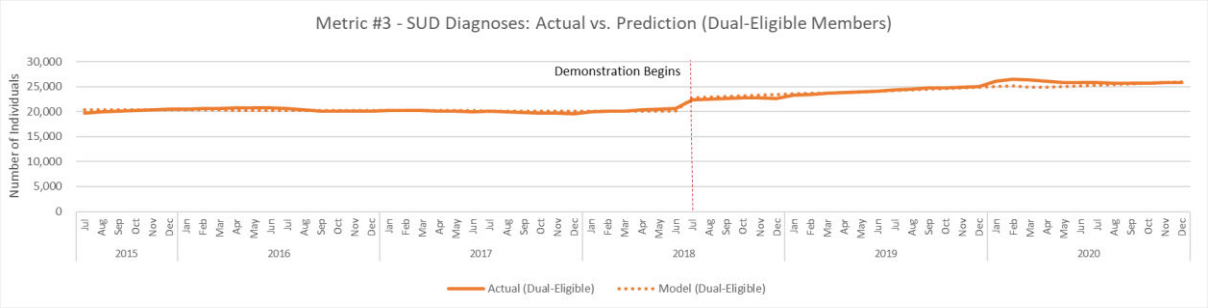
3. Timeline and Major Deliverables

The table below highlights key milestones evaluation milestones and activities for the SUD waiver and the dates for completion.

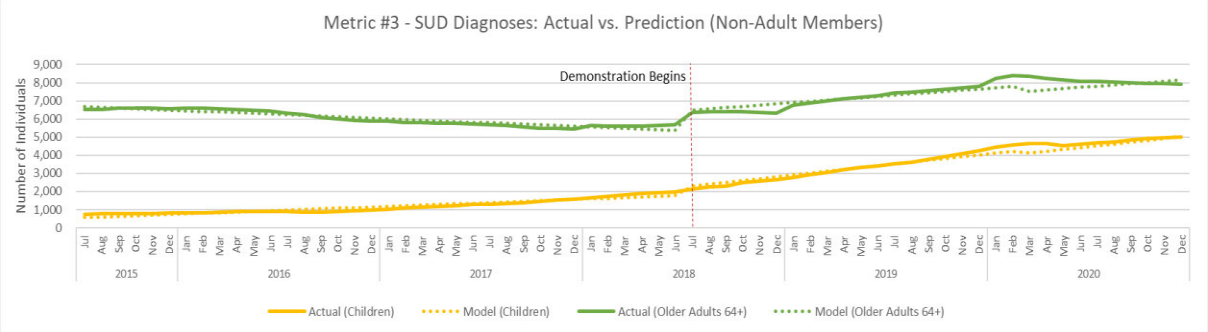
Deliverable	STC reference	Date
Submit Evaluation Design Plan to CMS	39, 50	March 31, 2019
Final Evaluation Design — due 60 days after CMS comments are received	39, 50a	60 days post comments
Publish Final Evaluation Design on Commonwealth website — 30 days after CMS approval	39, 45, 50(a)	30 days after CMS approval
Mid-point assessment due	25	November 15, 2020
Draft Interim Report due	42	September 30, 2021
Final Interim Report — due 60 days after CMS comments are received	42(d)	60 days post comments
Publish Final Interim Report on Commonwealth website — 30 days after CMS approval is received	45	30 days after CMS approval
Draft Summative Evaluation Report — due 18 months following Demonstration	43	March 31, 2024
Final Summative Evaluation Report — due 60 days after CMS comments are received	43(a)	60 days post comments
Publish Final Summative Evaluation Report on Commonwealth website — 30 days after CMS approval is received	43(b)	30 days after CMS approval

Appendix B
Subpopulation Charts

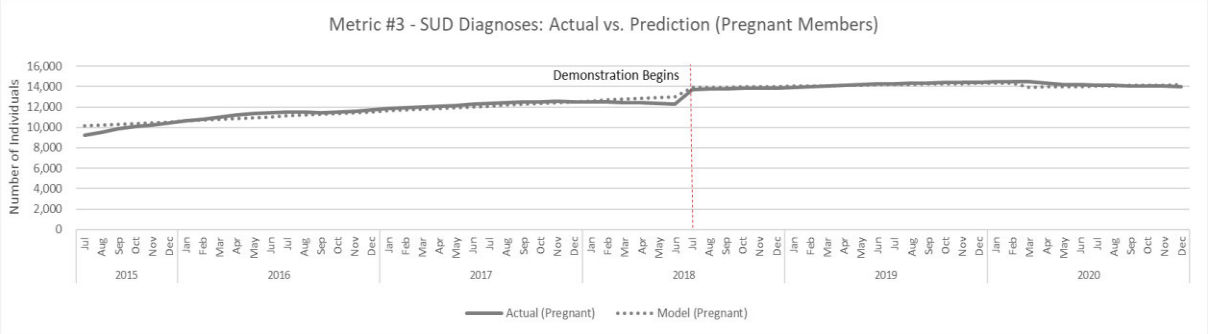
The ITS analysis for Metric #3 across dual-eligible members revealed an initial increase in individuals (approximately 2,698) with SUD diagnoses upon the Demonstration beginning. This was followed by an additional increase of approximately 123 more individuals per month. The effect of the demonstration over time was highly statistically significant ($p < .001$).



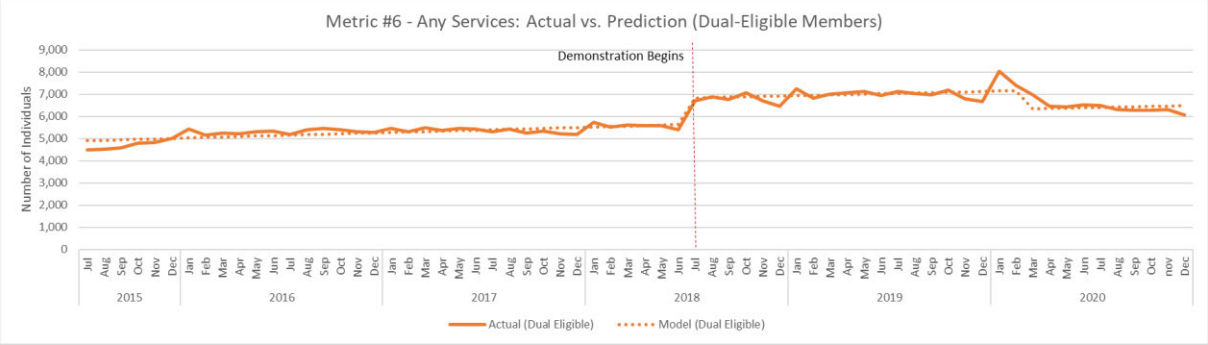
The ITS analysis for Metric #3 across non-adult members revealed an initial increase in individuals (approximately 538 children and 1,116 older adults) with SUD diagnoses upon the Demonstration beginning. This was followed by additional increases of approximately 101 more children and 68 older adults per month. The effect of the demonstration over time was highly statistically significant across both children and older adults ($p < .001$).



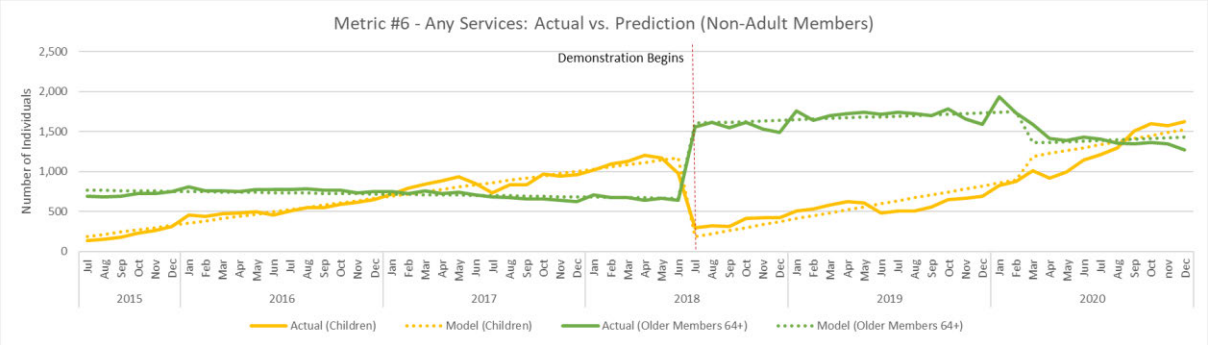
The ITS analysis for Metric #3 across pregnant members revealed an initial increase in individuals (approximately 872) with SUD diagnoses upon the Demonstration beginning. This was followed by an additional increase of approximately 26 more individuals per month. The effect of the demonstration over time was highly statistically significant ($p < .001$).



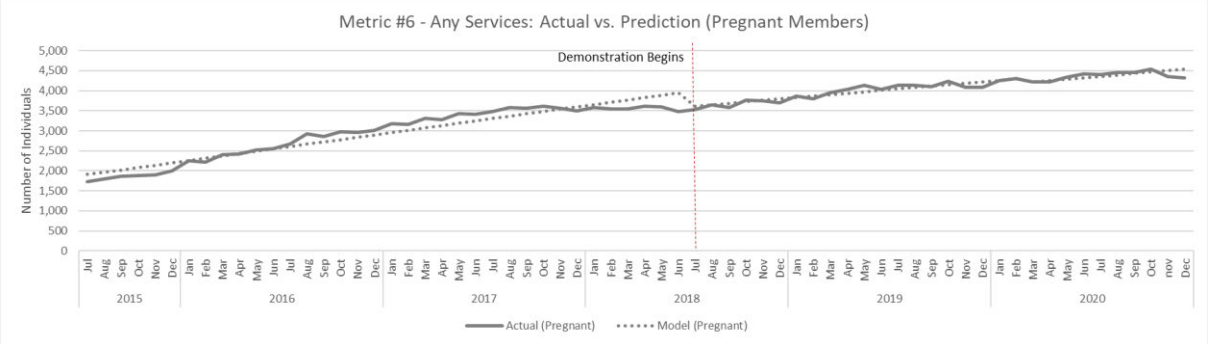
The ITS analysis for Metric #6 across dual-eligible members revealed an initial increase in individuals (approximately 1,207) receiving any services upon the Demonstration beginning. This was followed by an additional increase of approximately 17 more individuals per month. The effect of the Demonstration over time was not statistically significant.



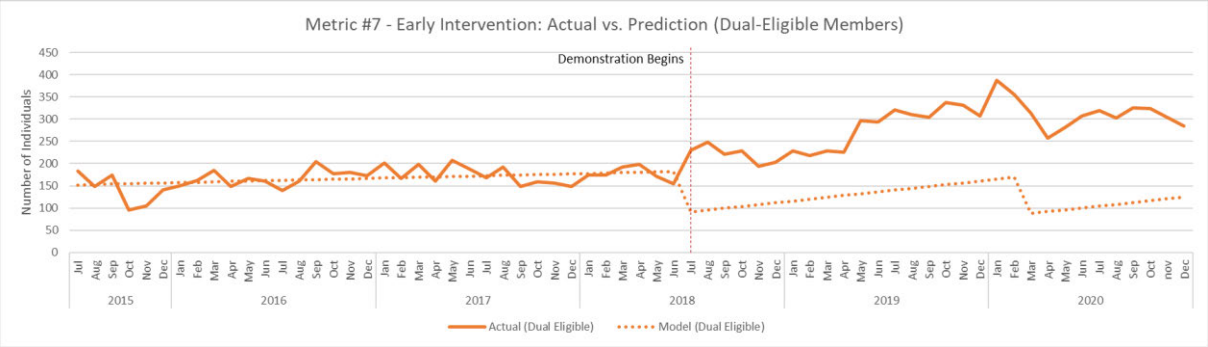
The ITS analysis for Metric #6 across non-adult members revealed an initial decrease in children (approximately 983) and initial increase in older adults (approximately 938) receiving any services upon the Demonstration beginning. This was followed by an increase of approximately 37 more children and eight older adults per month. The effect of the Demonstration over time was statistically significant for children ($p < .05$) and highly statistically significant for older adults ($p < .001$).



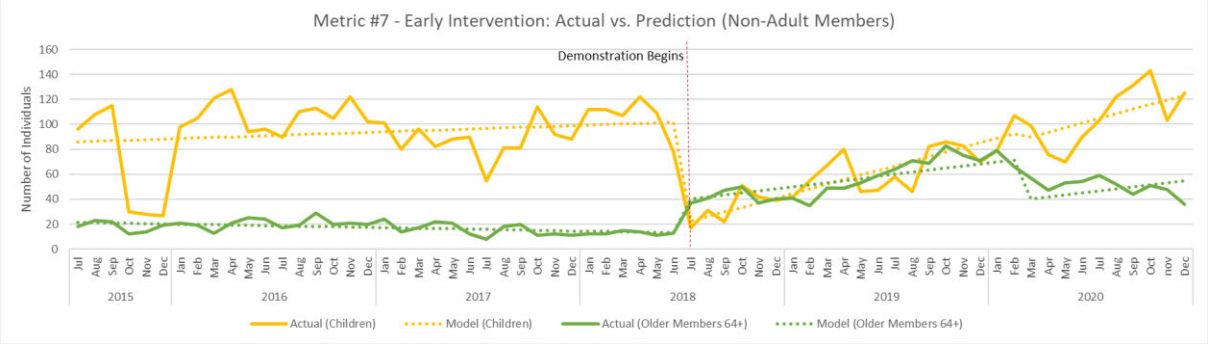
The ITS analysis for Metric #6 across pregnant members revealed an initial decrease in individuals (approximately 330) receiving any services upon the Demonstration beginning. This was followed by an increase of approximately 36 more individuals per month. The effect of the Demonstration over time was highly statistically significant ($p < .001$).



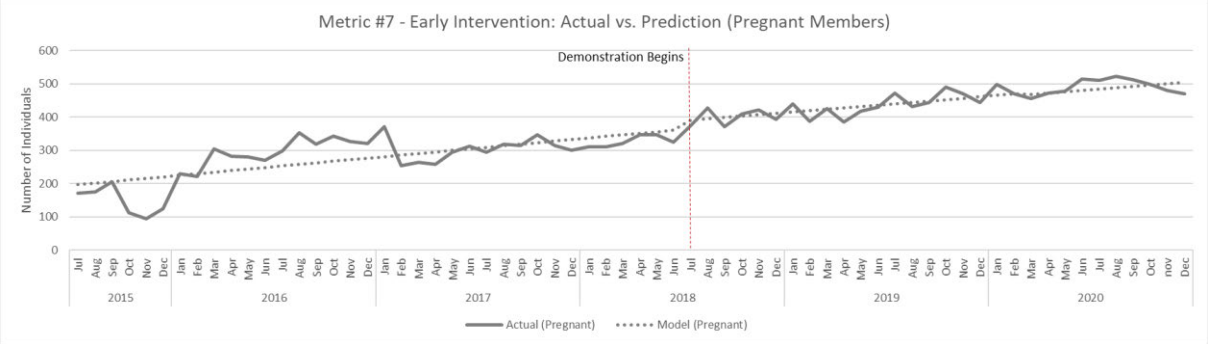
The ITS analysis for Metric #7 across dual-eligible members revealed an initial decrease in individuals (approximately 91) receiving early intervention services upon the Demonstration beginning. This was followed by an increase of approximately four more individuals per month. The effect of the Demonstration over time was highly statistically significant (p < .001).



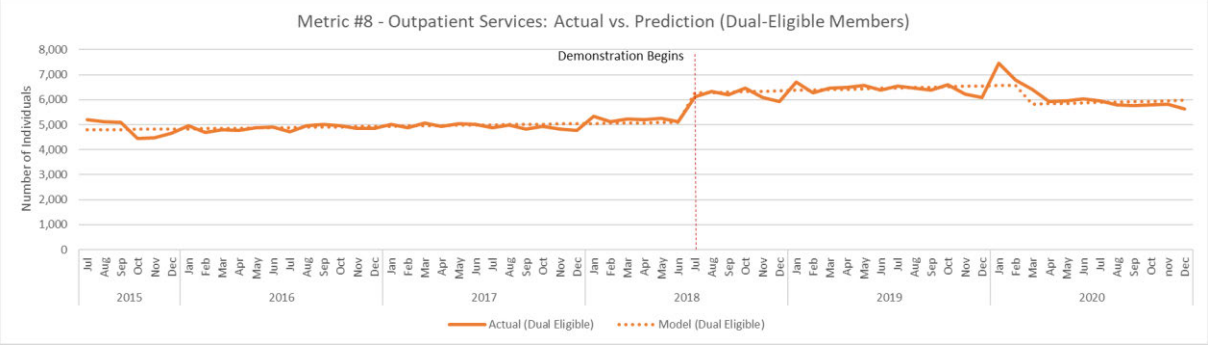
The ITS analysis for Metric #7 across non-adult members revealed an initial decrease in children (approximately 79) and an initial increase in older adults (approximately 27) receiving early intervention services upon the Demonstration beginning. This was followed by an increase of approximately four more children and two older adults per month. The effects of the Demonstration over time were statistically significant (p < .001) for both children and older adults.



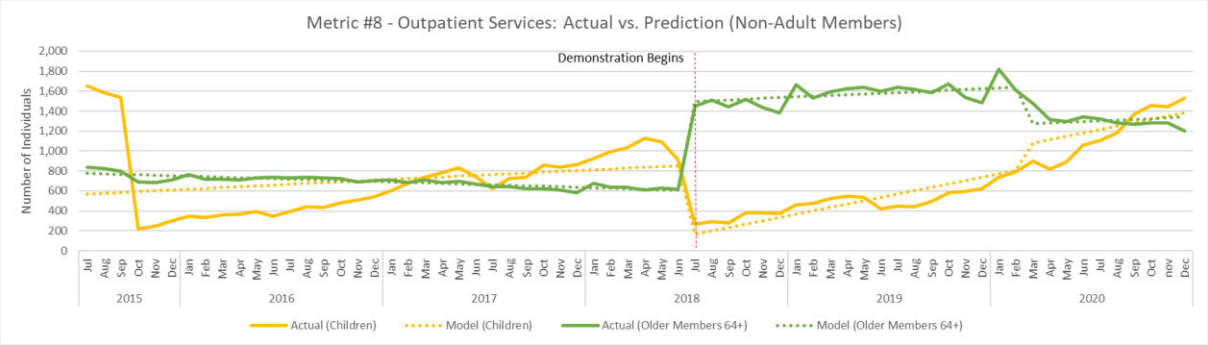
The ITS analysis for Metric #7 across pregnant members revealed an initial increase in individuals (approximately 31) receiving early intervention services upon the Demonstration beginning. This was followed by an increase of approximately four more individuals per month. The effect of the Demonstration over time was not statistically significant.



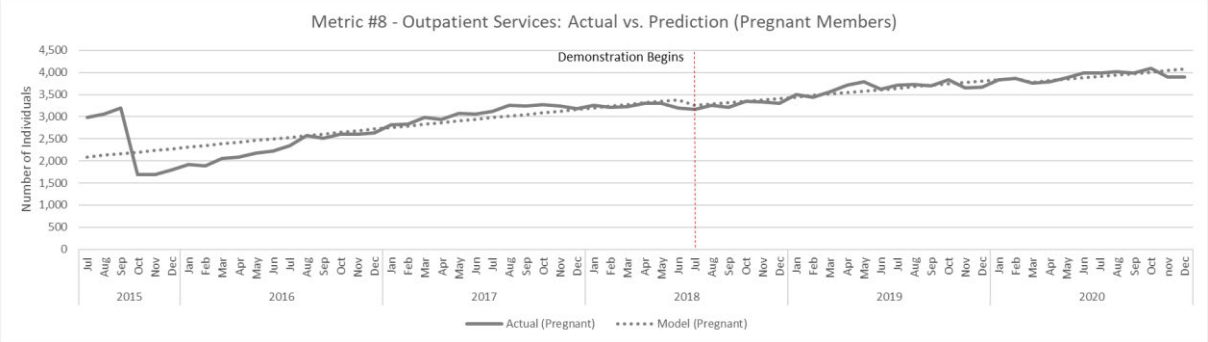
The ITS analysis for Metric #8 across dual-eligible members revealed an initial increase in individuals (approximately 1,183) receiving outpatient services upon the Demonstration beginning. This was followed by an additional increase of approximately 16 more individuals per month. The effect of the Demonstration over time was not statistically significant.



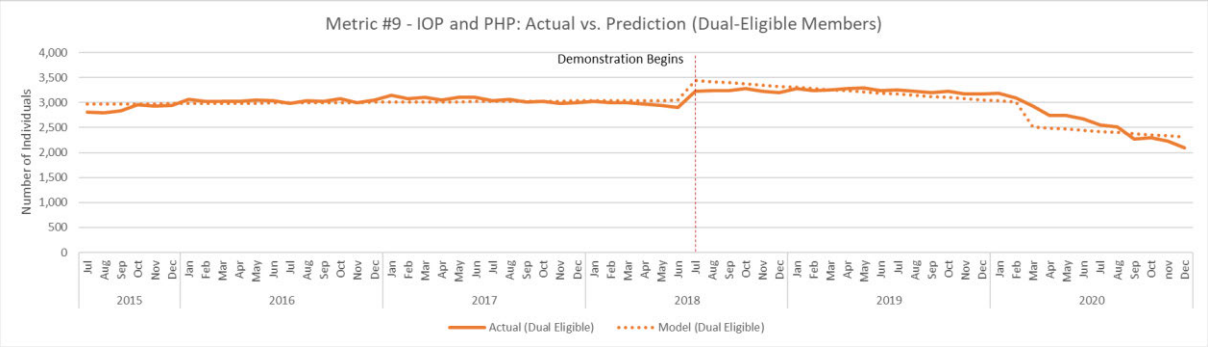
The ITS analysis for Metric #8 across non-adult members revealed an initial decrease in children (approximately 688) and an initial increase in older adults (approximately 891) receiving outpatient services upon the Demonstration beginning. This was followed by an increase of approximately 34 more children and seven older adults per month. The effects of the Demonstration over time were statistically significant for children ($p < .05$) and highly statistically significant for older adults ($pp < .001$).



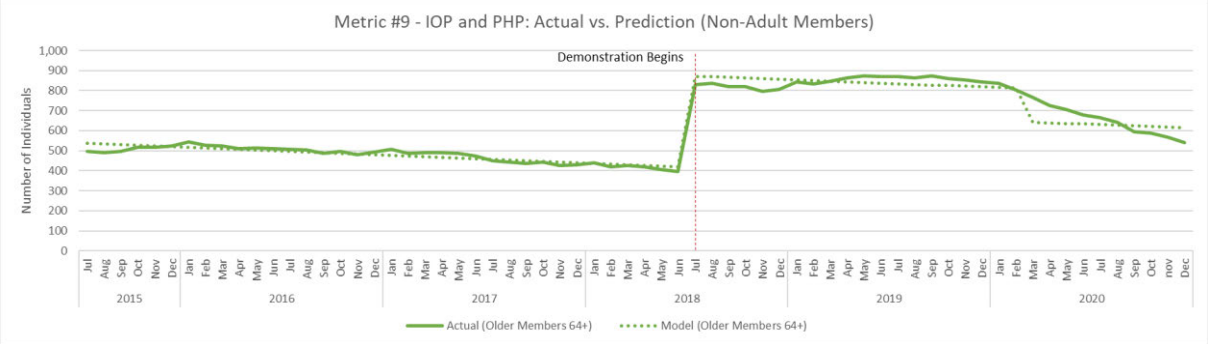
The ITS analysis for Metric #8 across pregnant members revealed an initial decrease in individuals (approximately 134) receiving outpatient services upon the Demonstration beginning. This was followed by an increase of approximately 33 more individuals per month. The effect of the Demonstration over time was not statistically significant.



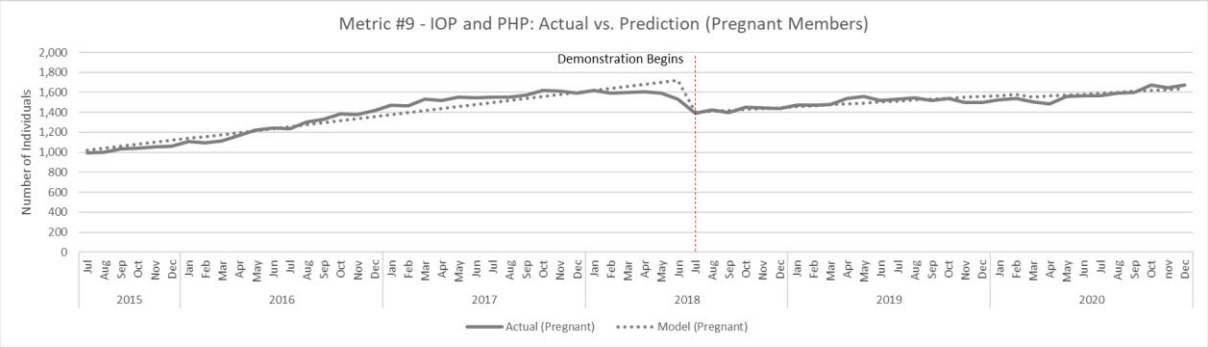
The ITS analysis for Metric #9 across dual-eligible members revealed an initial increase in individuals (approximately 393) receiving IOP and partial hospitalization services upon the Demonstration beginning. This was followed by a decline of approximately 23 fewer individuals per month. The effect of the Demonstration over time was highly statistically significant ($p < .001$).



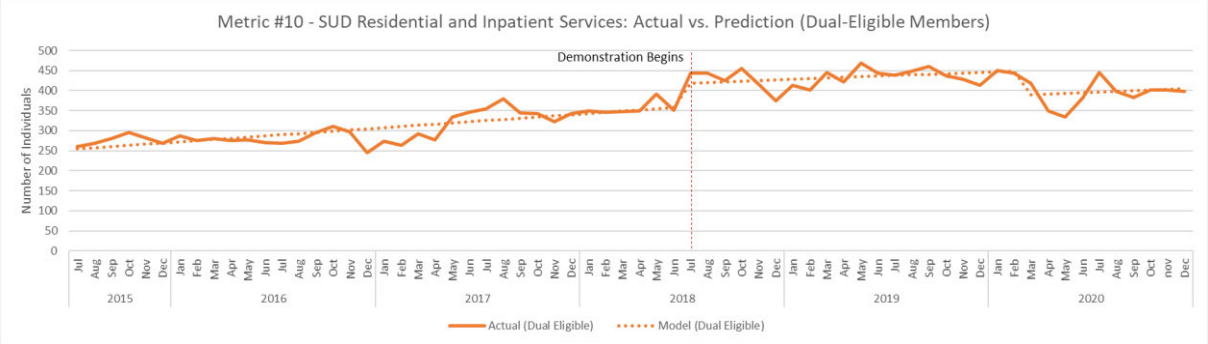
The ITS analysis for Metric #9 across non-adult members revealed an initial increase in older adults (approximately 452) receiving IOT and partial hospitalization services upon the Demonstration beginning. This was followed by a decline of approximately three fewer individuals per month. The effect of the Demonstration over time was not statistically significant.



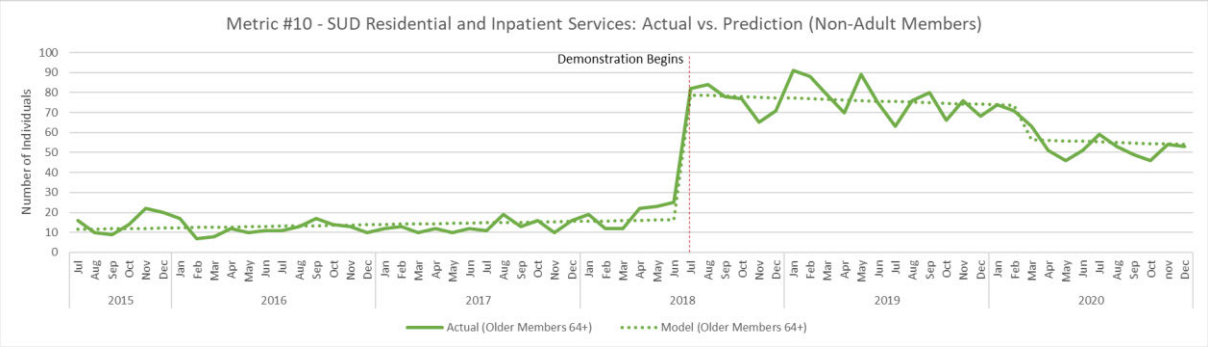
The ITS analysis for Metric #9 across pregnant members revealed an initial decrease in individuals (approximately 320) receiving IOP and partial hospitalization services upon the Demonstration beginning. This was followed by an increase of approximately nine more individuals per month. The effect of the Demonstration over time was highly statistically significant ($p < .001$).



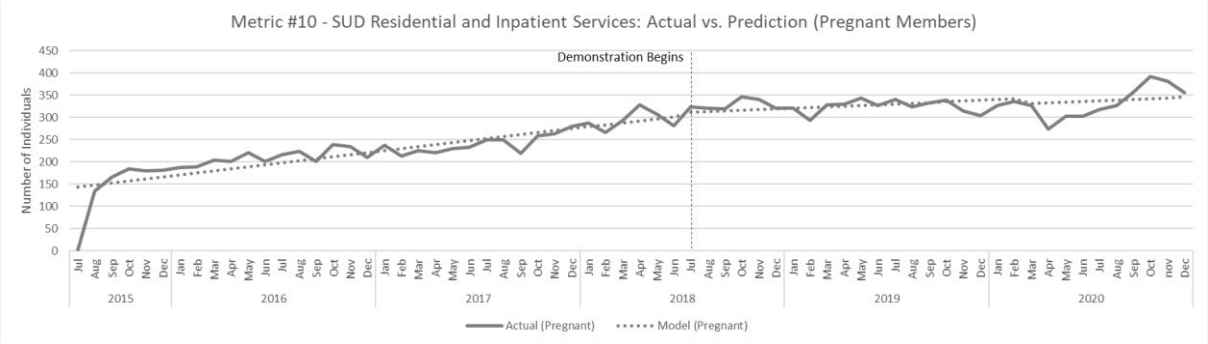
The ITS analysis for Metric #10 across dual-eligible members revealed an initial increase in individuals (approximately 60) receiving SUD residential and inpatient services upon the Demonstration beginning. This was followed by an increase of approximately two more individuals per month. The effect of the Demonstration over time was not statistically significant.



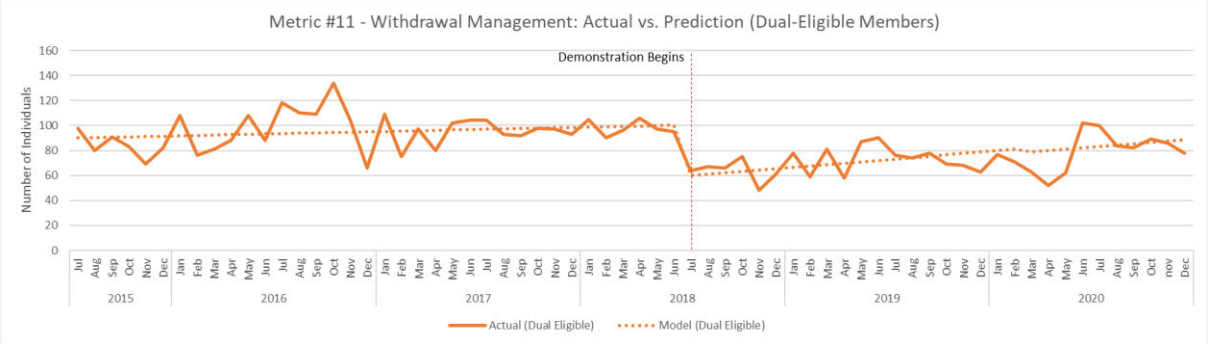
The ITS analysis for Metric #10 across non-adult members revealed an initial increase in older adults (approximately 62) receiving SUD residential and inpatient services upon the Demonstration beginning. This was followed by a decline of approximately three fewer individuals per year. The effect of the Demonstration over time was not statistically significant.



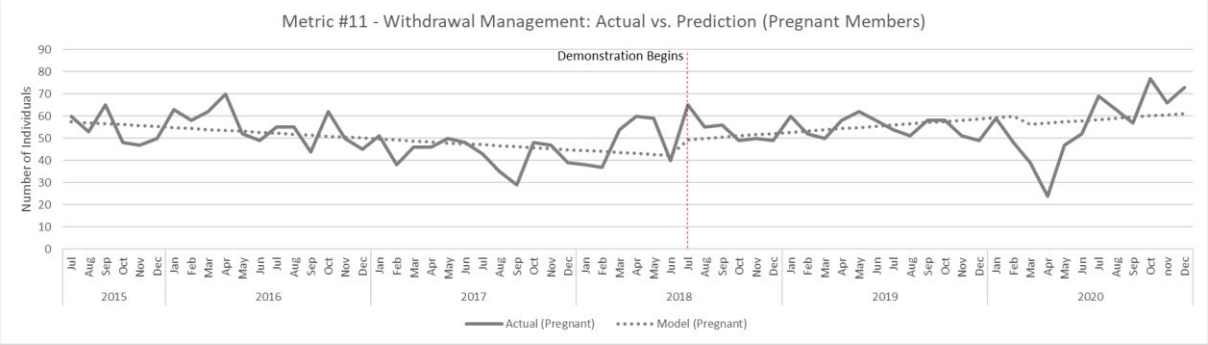
The ITS analysis for Metric #10 across pregnant members revealed an initial increase in individuals (approximately nine) receiving SUD residential and inpatient services upon the Demonstration beginning. This was followed by an increase of approximately two more individuals per month. The effect of the Demonstration over time was statistically significant ($p < .01$).



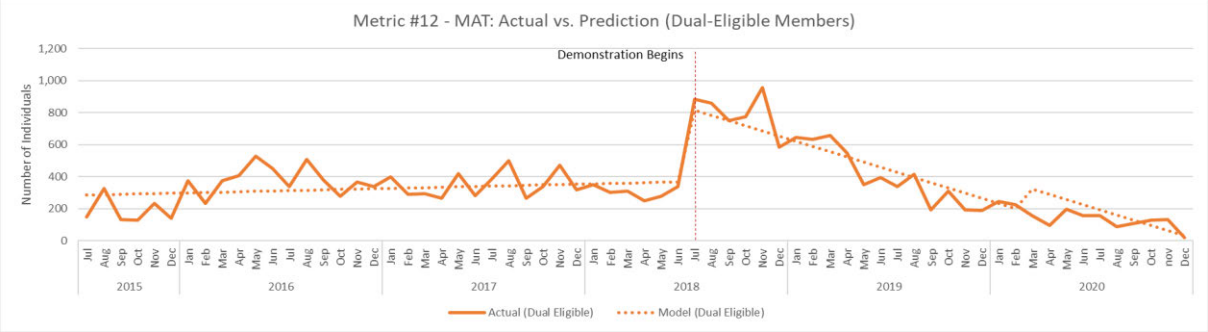
The ITS analysis of Metric #11 across dual-eligible members revealed an initial decrease in individuals (approximately 40) receiving WM services upon the Demonstration beginning. This was followed by an increase of approximately one more individual per month. The effect of the Demonstration over time was not statistically significant.



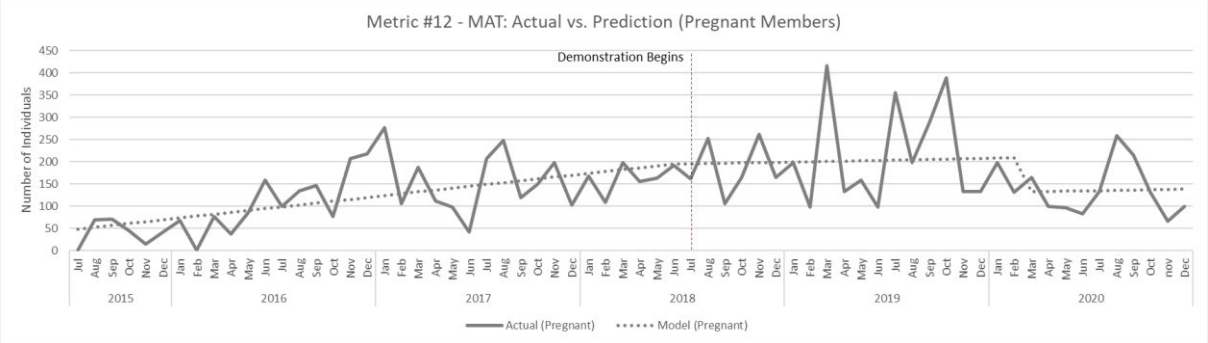
The ITS analysis of Metric #11 across pregnant members revealed an initial increase in individuals (approximately seven) receiving WM services upon the Demonstration beginning. This was followed by an increase of approximately six more individuals per year. The effect of the Demonstration over time was statistically significant ($p < .01$).



The ITS analysis for Metric #12 across dual-eligible members revealed an initial increase in individuals (approximately 448) receiving MAT services upon the Demonstration beginning. This was followed by a decline of approximately 32 fewer individuals per month. The effect of the Demonstration over time was highly statistically significant (p <.001).



The ITS analysis for Metric #12 across pregnant members did not reveal a change in individuals receiving MAT services upon the Demonstration beginning. This was followed by an increase of approximately nine more individuals per year. The effect of the demonstration was not statistically significant.



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Appendix D

Summaries of EQRO reports, managed care organization (MCO) and Commonwealth quality assurance monitoring, and any other documentation of the quality of and access to care provided under the Demonstration.

Medicaid Coverage for FFCY From a Different State

Individuals covered under this Demonstration are subject to existing quality assurance monitoring. Medicaid beneficiaries are sampled randomly and reviewed for accuracy of the eligibility determination. No issues have been identified with this population. There were no grievances and appeals for this population during the Demonstration period.

SUD: 2019 and 2020 Summary of EQRO Reports Related to SUD Treatment

The Commonwealth is required to conduct an EQRO of the services provided by contracted Medicaid MCOs. The External Quality Review (EQR) includes an analysis and evaluation of aggregated information on quality, timeliness, and access to the health care services that a MCO furnishes to Medicaid recipients. The EQR-related activities that must be included in the detailed technical reports, per 42 CFR §438.358, are validation of performance improvement projects (PIPs), validation of MCO performance measures, and review to determine MCO compliance with structure and operations standards established by the Commonwealth. DHS contracted with Island Peer Review Organization (IPRO) as its EQRO to conduct the 2019 and 2020 EQRs for the Medicaid and Children's Health Insurance Program (CHIP) MCOs.

Information Sources

The following information sources were used by IPRO to evaluate the MCOs' performance:

- MCO-conducted PIPs
- Healthcare Effectiveness Data Information Set (HEDIS) performance measure data, as available for each MCO
- Pennsylvania-Specific Performance Measures (PAPMs)
- Structure and Operations Standards Reviews conducted by DHS

PH- MCO PIP Review

IPRO undertook validation of PIPs for each Medicaid physical health- managed care organization (PH-MCO). For the purposes of the EQR, PH-MCOs were required to participate in studies selected by the Office of Medical Assistance Programs (OMAP) for validation by IPRO in 2020 for 2019 activities. As part of the EQR PIP cycle that was initiated for all PH-MCOs in 2020, PH-MCOs were required to implement two internal PIPs in priority topic areas chosen by DHS. For this PIP cycle, two topics were

selected: “Preventing Inappropriate Use or Overuse of Opioids” and “Reducing Potentially Preventable Hospital Admissions and Readmissions and Emergency Department Visits” .

“Preventing Inappropriate Use or Overuse of Opioids” was selected in light of the of the growing epidemic of accidental drug overdose in the United States, which is currently the leading cause of death in those under 50 years old living in the United States. In light of this, governmental regulatory agencies have released multiple regulatory measures and societal recommendations in an effort to decrease the amount of opioid prescriptions. DHS has sought to implement these measures as quickly as possible to impact its at-risk populations. While these measures are new and there is currently little historical data on these measures as of 2020, it remains a priority that future trends are monitored. MCOs were encouraged to develop aim statements for this project that look at preventing overuse/overdose, promoting treatment options, and stigma-reducing initiatives. Since the HEDIS Risk of Continued Opioid Use (COU) and CMS Adult Core Set Concurrent Use of Opioids and Benzodiazepines (COB) measures were first-year measures in 2019, a comparison to the national average was not available at project implementation. However, in Pennsylvania Use of Opioids at High Dosage (HDO) was found to be better than the national average for 2019, while Use of Opioids from Multiple Providers (UOP) was worse. The HEDIS UOP measure was worse than the national average for all three indicators: four or more prescribers, four or more pharmacies, and four or more prescribers and pharmacies.

In addition to increased collection of national measures, DHS has implemented mechanisms to examine other issues related to OUD and coordinated treatment. In 2016, the governor of Pennsylvania implemented the Centers of Excellence (COE) for OUD program. Prior to COE implementation, 48% of Medicaid enrollees received OUD treatment, whereas after one year of implementation, 71% received treatment. DHS, through the Hospital Quality Incentive Program, provides hospitals with incentive payments. The payments are based on follow- up within seven days for opioid treatment after a visit to the ED for OUD, and allows hospitals the opportunity to earn incentives by implementing defined clinical pathways to help them get more individuals with OUD into treatment. DHS also worked with the University of Pittsburgh to analyze OUD treatment, particularly MAT, for Pennsylvania Medicaid enrollees. Among the findings presented in January 2020 was that the number of Medicaid enrollees receiving medication for OUD more than doubled from 2014 to 2018, and that the increase was driven by office-based prescriptions for buprenorphine or naltrexone, was seen for nearly all demographic sub-groups, and was higher for rural areas. Similarly, under the Drug and Treatment Act, prescription rates for buprenorphine have increased. This is partially due to qualifying practitioners being permitted to prescribe buprenorphine for OUD treatment for a larger caseload. Caseloads under the Act increased from 30 up to 275 patients.

Because opioid misuse and abuse is a national crisis, and due to the impact this has had on Pennsylvania, the new PH PIP is centered on opioids in the following four common outcome objectives: opioid prevention, harm reduction, coordination/facilitation into treatment, and increased MAT utilization. For this PIP, the four outcome measures discussed above will be collected, and in consideration of the initiatives already implemented in Pennsylvania, three process-oriented measures related to these initiatives will also be collected, focusing on the percentage of individuals with OUD who get into MAT, the duration of treatment for those that get into MAT, and follow-up after an ED visit for OUD. MCOs will define these three measures for their PIPs.

For this PIP, OMAP has required all PH-MCOs to submit the following measures on an annual basis:

- Use of Opioids at High Dosage (HDO — HEDIS)
- Use of Opioids from Multiple Providers (UOP — HEDIS)
- Risk of Continued Opioid Use (COU — HEDIS)
- Concurrent Use of Opioids and Benzodiazepines (COB — CMS Adult Core Set)
- Percentage of Individuals with OUD who receive MAT (MCO-defined)
- Percentage of adults greater than 18 years of age with pharmacotherapy for OUD who have (MCO-defined):
  - At least 90 days
  - One hundred and eighty days of continuous treatment
- Follow-up treatment within seven days after ED visit for OUD (MCO-defined)

"Reducing Potentially Preventable Hospital Admissions and Readmissions and Emergency Department Visits" was selected also due to several factors. General findings and recommendations from the Pennsylvania Rethinking Care Program — Serious Mental Illness Innovation Project and Joint PH/BH Readmission projects, as well as overall Statewide readmission rates and results from several applicable HEDIS and Pennsylvania Performance Measures across multiple years have highlighted this topic as an area of concern to be addressed for improvement. For the recently completed Readmissions PIP, several performance measures targeted at examining preventable hospitalizations and ED visits were collected, including measures collected as part of the PH-MCO and BH-MCO Integrated Care Plan (ICP) Program Pay for Performance (P4P) Program, which was implemented in 2016 to address the needs of individuals with serious persistent mental illness (SPMI). According to PIP reporting from years 2016 to 2019, results were varied across measures and MCOs. Additionally, from 2017 to 2019, the ICP performance measures targeting the SPMI population showed inconsistent trends and little to no improvement in reducing hospitalizations and ED visits.

Research continues to indicate multiple factors that can contribute to preventable admissions and readmissions, as well as the link between readmissions and mental illness. Additionally, within Pennsylvania there are existing initiatives that lend themselves to integration of care and targeting preventable hospitalizations, and can potentially be leveraged for applicable interventions. The Patient-Centered Medical Home model of patient care, which focuses on the whole person, taking both the individual's PH and BH into account, has been added to HealthChoices agreements. The DHS Hospital Quality Improvement Program focuses on ensuring access to quality hospital services for Pennsylvania medical assistance (MA) beneficiaries. Under this initiative, the Program builds off of existing DHS programs: MCO P4P, Provider P4P within HC- PH, and the ICP Program. It focuses on preventable admissions and provides incentives for annual improvement or against a Commonwealth benchmark.

Given the DHS initiatives that focus on coordination and integration of services and the inconsistent improvement on several metrics, it has become apparent that continued intervention in this area of health care for the HealthChoices population is warranted. MCOs were encouraged to develop aim statements for this project that look at reducing potentially avoidable ED visits and hospitalizations, including admissions that are avoidable initial admissions and readmissions that are potentially preventable.

For this PIP, OMAP has required all PH-MCOs to submit the following core measures on an annual basis:

- Ambulatory Care (AMB): ED Utilization (HEDIS)
- Inpatient Utilization — General Hospital/Acute Care (IPU): Total Discharges (HEDIS)
- Plan All-Cause Readmissions (PCR — HEDIS)
- PH-MCOs were given the criteria used to define the SPMI population, and will be collecting each of the following ICP measures using data from their own systems:
  - Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (MCO-defined)
  - Emergency Room Utilization for Individuals with SPMI (MCO-defined)
  - Inpatient Admission Utilization for Individuals with SPMI (MCO-defined)
  - Adherence to Antipsychotic Medications for Individual with Schizophrenia (MCO-defined)
  - Inpatient 30-Day Readmission Rate for Individuals with SPMI (MCO-defined)

Additionally, MCOs are expected to expand efforts to address health disparities in their populations. MCOs were instructed to identify race/ethnicity barriers and identify interventions that will be implemented to remediate the barriers identified.

These PIPs will extend from January 2019 through December 2022. With research beginning in 2019, initial PIP proposals were developed and submitted in third quarter 2020, with a final report due in October 2023. The non-intervention baseline period was January 2019 to December 2019. Following the formal PIP proposal, the timeline defined for the PIPs includes interim reports in October 2021 and October 2022, as well as a final report in October 2023. For the current review year, 2020, proposal reports were due in October 2021. These proposals underwent initial review by IPRO and feedback was provided to plans, with a timeline to resubmit to address areas of concern.

BH-MCO PIP Review

IPRO undertook validation of one PIP for each HealthChoices- BH-MCO. Under the existing HealthChoices- Behavioral Health (HC- BH) agreement with OMHSAS, HC- BH contractors, along with the responsible subcontracted entities (i.e., BH-MCOs), are required to conduct a minimum of two focused studies per year. The HC- BH contractors and BH-MCOs are required to implement improvement actions and to conduct follow-up including, but not limited to, subsequent studies or re-measurement of previous studies in order to demonstrate improvement or the need for further action.

For the purposes of the EQR, BH-MCOs were required to participate in a study selected by OMHSAS for validation by IPRO in 2019 for 2018 activities.

The EQR PIP cycle effective in 2018 began for BH-MCOs and HC- BH contractors in 2014. For this PIP cycle, OMHSAS selected the topic “Successful Transitions from Inpatient Care to Ambulatory Care for Pennsylvania HealthChoices Members Hospitalized with a Mental Health or a Substance Abuse Diagnosis” as the topic for this PIP. The topic was selected because the Aggregate HealthChoices 30-day Readmission Rate had consistently not met the OMHSAS goal of a rate of 10% or less. In addition, all HealthChoices- BH-MCOs continued to remain below the 75th percentile in the HEDIS follow-up after hospitalization (FUH) metrics.

The aim statement for this PIP was: “Successful transition from inpatient care to ambulatory care for Pennsylvania HealthChoices members hospitalized with a mental health or a substance abuse diagnosis”. OMHSAS selected three common objectives for all BH-MCOs:

1. Reduce BH and substance abuse (SA) readmissions post-inpatient discharge.
2. Increase kept ambulatory follow-up appointments post-inpatient discharge.
3. Improve medication adherence post-inpatient discharge.

Additionally, OMHSAS required all BH-MCOs to submit the following core performance measures on an annual basis:

1. Readmission Within 30 Days of Inpatient Psychiatric Discharge (MH Discharges) (Behavioral Health Rehabilitation [BHR]-MH).
2. The percentage of members who were discharged from an acute inpatient facility to an ambulatory setting who were readmitted within 30 days without an SA diagnosis during the initial stay.
3. Readmission Within 30 Days of Inpatient Psychiatric Discharge (Substance Abuse Discharges) (BHR-SA).
4. The percentage of members who were discharged from an acute inpatient facility to an ambulatory setting who were readmitted within 30 days with an SA diagnosis (primary or secondary) during the initial stay.
5. Adherence to Antipsychotic Medications for Individuals with Schizophrenia (SAA).
6. The percentage of members diagnosed with schizophrenia who were dispensed and remained on an antipsychotic medication for at least 80% of their treatment period. This measure is based on the HEDIS measure of the same name.
7. Components of Discharge Management Planning (DMP).

8. This measure is based on review of facility DMPs and assesses the following:

    A. The percentage of discharge plans, including both medication reconciliation and all components of medication and therapy follow-up appointments: appointment dates, appointment times, provider names, provider addresses, and provider phone numbers.

    B. The percentage of discharge plans, including both medication reconciliation and all components of medication and therapy follow-up appointments: appointment dates, appointment times, provider names, provider addresses, and provider phone numbers where at least one of the scheduled appointments occurred.

This PIP project extended from January 2014 through December 2018, with initial PIP proposals submitted in 2014 and a final report due in September 2019. This PIP was formally introduced to the BH-MCOs and HC- BH contractors during a quality management directors meeting in June 2014. As required by OMHSAS, the project topic was “Successful Transitions from Inpatient Care to Ambulatory Care”. During the latter half of 2014, OMHSAS and IPRO conducted follow-up calls with the BH-MCOs and HC- BH contractors, as needed. In 2016, OMHSAS elected to add an additional intervention year to the PIP cycle to allow sufficient time for the demonstration of outcomes. The non-intervention baseline period was from January 2014 to December 2014. BH-MCOs were required to submit an initial PIP proposal during November 2014, with a final proposal due in early 2015. BH-MCOs were required to submit interim reports in the summers of 2016, 2017, and 2018. BH-MCOs were required to submit a final report in September 2019. Since Measurement Year (MY) 2017 was the second re-measurement, BH-MCOs were not required to submit MY 2018 performance indicator results in the final report. BH-MCOs were required to develop performance indicators and implement interventions based on evaluations of HC- BH contractor-level and BH-MCO-level data, including clinical history and pharmacy data.

This PIP was designed to be a collaboration between the HC- BH contractors and BH-MCOs. The BH-MCOs and each of their HC- BH contractors were required to collaboratively develop a root cause/barrier analysis that identified potential barriers at the BH-MCO level of analysis. Each of the barriers identified should have included the contributing HC- BH contract-level data and illustrated how HC- BH contractor knowledge of their high-risk populations contributed to addressing the barriers within their specific service areas. Each BH-MCO submitted the single root cause/barrier analysis according to the PIP schedule.

The 2019 EQR report is the sixteenth review to include validation of PIPs. With this PIP cycle, all BH-MCOs/HC- BH contractors shared the same baseline period and timeline. To initiate the PIP cycle in 2014, IPRO developed guidelines on behalf of OMHSAS that addressed the PIP submission schedule, the applicable study measurement periods, documentation requirements, topic selection, study indicators, study design, baseline measurement, interventions, re-measurement, and sustained improvement. Direction was given to the BH-MCOs/HC- BH contractors with regard to expectations for PIP relevance, quality, completeness, resubmission, and timeliness. The BH-MCOs were expected to implement the interventions that were planned in 2014, to monitor the effectiveness of their interventions, and to improve their interventions based on their monitoring results.

The BH-MCOs were required by OMHSAS to submit their projects using a standardized PIP template form, which is consistent with CMS protocol, Conducting PIPs. These protocols follow a longitudinal format and capture information relating to:

- Activity Selection and Methodology
- Data/Results
- Analysis Cycle
- Interventions

In 2018, OMHSAS continued conducting quarterly PIP review calls with each BH-MCO. The purpose of these calls was to discuss ongoing monitoring of PIP activity, to discuss the status of implementing planned interventions, and to provide a forum for technical assistance as necessary. MCOs were asked to provide up-to-date data on process measures and outcome measures prior to each meeting. Because of the level of detail provided during these meetings, BH-MCOs were asked to submit only one PIP interim report in 2018, rather than two semiannual submissions. The BH-MCOs submitted their Final Report for review in September 2019. IPRO reviewed and scored the BH-MCO submissions for Sustained Improvement and Overall Project Performance.

During the final implementation year, the BH-MCOs made improvements across several areas of their PIP. Improvements in study designs and implementation continued their trend, but plans also made important strides in data collection, trending, and reporting, which helped to increase compliance levels for several review elements. All five plans successfully met requirements for reporting out on their performance indicators, which contributed to improvements in reporting. Nevertheless, only two of the five BH-MCOs scored as “met” on the Demonstrable Improvement requirements and only one plan, Community Care Behavioral Health (CCBH), was able to demonstrated sustained improvement in their PIP. The other four BH-MCOs were found deficient in their interpretation and validation of results. The reasons varied but centered on the lack of working hypotheses and of adequate intervention tracking measures that would enable the BH-MCOs to detect and explain any significant changes in either the implementation of their interventions or ultimately in the performance indicators themselves.

In regard to overall project compliance, CCBH met all requirements, while the remaining four BH-MCOs were partially compliant. For the duration of the PIP, from 2015 through 2018, performance indicator results were mixed, as outlined below for BHR-MH, BHR-SA, SAA, and DMP.

BHR-MH:

- Beacon Health Options of Pennsylvania (BHO) and CCBH significantly improved over the course of the PIP. In contrast, PerformCare© saw a significant increase in readmissions for members with MH diagnoses, while Magellan Behavioral Health (MBH) showed no significant change in their BHR-MH rates.
- Community Behavioral Health (CBH) did not take a measurement in 2018; however, CBH showed significant increase (worsening) in its BHR-MH rates over the course of the core PIP period from 2014 to 2017.

- Between 2017 and 2018, overall, Pennsylvania showed statistically significant improvement.

BHR-SA:

- CBH did not take a measurement in 2018; however, CBH showed no significant change in its BHR-SA rate over the course of the core PIP period from 2014 to 2017.
- BHO, CCBH, and PerformCare demonstrated statistically significant improvement over the course of the PIP, while MBH registered a significant increase (worsening) in the BHR-SA rate.
- Statewide, Pennsylvania saw no significant change in its BHR-SA rate over the course of the PIP.

SAA:

- CCBH and PerformCare were the only two plans that showed statistically significant improvement over the course of the PIP. These two plans also contributed significantly to the Commonwealth's overall significant improvement in its SAA rate over the course of the PIP. As with the other measures, only a handful of Contractors Statewide showed significant improvement over the course of the PIP although, notably, there were no Contractors that did significantly worse.
- With respect to PIP results, 2017 was clearly an anomalous year for BHO, and the anomalies were fairly evenly distributed across its Contractors, suggesting BHO encounter data issues impacting SAA. As such, comparisons to 2017 for BHO and its Contractors are suspect.
- CBH did not take a measurement in 2018; however, CBH showed no significant change in its SAA rate over the course of the core PIP period from 2014 to 2017.

DMP:

- Only BHO opted to re-measure DMP for 2018. BHO improved on the major metrics but there is still opportunity to improve on keeping scheduled follow-up appointments.
- No p-value was calculable for DMP, since samples were drawn at the facility-level and therefore not generalizable at the BH-MCO level.

In summary, achievement of PIP objectives was mixed, and opportunities for improvement certainly remain. Still, the PIP did produce both clinical and non-clinical ("system") successes, which the BH-MCOs will be in a position to build on as they transition to a new PIP.

CY 2019 saw the winding down of one PIP project and the formation of a new project. MCOs submitted their final reports for the EQR PIP topic "Successful Transitions from Inpatient Care to Ambulatory Care for Pennsylvania HealthChoices Members Hospitalized with a Mental Health or a Substance Abuse Diagnosis". The results of IPRO's validation of the complete project were reported in the 2019 Balanced Budget Act (BBA) reports.

In 2019, OMHSAS directed IPRO to complete a preliminary study of SUDs in the Commonwealth, preliminary to selection of a new PIP topic. As a result, OMHSAS selected the topic "Successful Prevention, Early Detection, Treatment, and Recovery (SPEDTAR) for Substance Use Disorders" as a PIP for all BH-MCOs in the Commonwealth. The PIP will extend from 2021 through 2023, including a

final report due in 2024. While the topic will be common to Primary Contractors and BH-MCOs, each project will be developed as a collaboration and discussion between Primary Contractors and their contracted BH-MCOs.

Primary Contractors and BH-MCOs were directed to begin conducting independent analyses of their data and partnering to develop relevant interventions and intervention tracking measures. BH-MCOs will be responsible for coordinating, implementing, and reporting the project.

The aim statement for this PIP, reflecting an emphasis on reducing racial and ethnic health disparities, is: “Significantly slow (and eventually stop) the growth of SUD prevalence among HealthChoices members while improving outcomes for those individuals with SUD, and also addressing racial and ethnic health disparities through a systematic and person-centered approach”.

OMHSAS selected three common (for all MCOs) clinical objectives and one non-clinical population health objective:

1. Increase access to appropriate screening, referral, and treatment for members with an OUD and/or other SUD.
2. Improve retention in treatment for members with an OUD and/or other SUD diagnosis.
3. Increase concurrent use of Drug and Alcohol (D&A) counseling in conjunction with Pharmacotherapy (Medication-Assisted Treatment [MAT]).
4. Develop a population-based prevention strategy with a minimum of at least two activities across the MCO/HC- BH Contracting networks. The two “activities” may fall under a single intervention or may comprise two distinct interventions. While the emphasis here is on population-based strategies, this non-clinical objective should be interpreted within the PIP lens to potentially include interventions that target or collaborate with providers and health care systems in support of a specific population (SUD) health objective.

Additionally, OMHSAS identified the following core performance indicators for the SPEDTAR PIP:

1. **Follow-Up After High-Intensity Care for Substance Use Disorder (FUI) —** This HEDIS measure measures “the percentage of acute inpatient hospitalizations, residential treatment or detoxification visits for a diagnosis of SUD among members 13 years of age and older that result in a follow-up visit or service for SUD”. It contains two sub measures: continuity of care within seven days, and continuity of care within 30 days of the index discharge or visit.
2. **SUD-Related Avoidable Readmissions (SAR) —** This is a Pennsylvania-specific measure that measures avoidable readmissions for HealthChoices members 13 years of age and older discharged from detoxification, inpatient rehabilitation, or residential services with an alcohol and other drug dependence (AOD) primary diagnosis. The measure requires 30 days of continuous enrollment (from the index discharge date) in the plan’s HealthChoices program. The measure will measure discharges, not individuals (starting from Day 1 of the MY, if there are multiple qualifying discharges within any 30-day period, only the earliest discharge is counted in the denominator). The SUD avoidable readmissions submeasure is intended here to complement FUI and recognizes that appropriate LOCs for individuals with SUD will depend on the particular circumstances and

conditions of the individual. Therefore, for this submeasure, “avoidable readmission” will include detoxification episodes only.

3. **MH-Related Avoidable Readmissions —** This Pennsylvania-specific measure will use the same denominator as SAR. The measure recognizes the high comorbidity rates of MH conditions among SUD members and is designed to assess screening, detection, early intervention, and treatment for MH conditions before they reach a critical stage. For this measure, “readmission” will be defined as any acute inpatient admission with a primary MH diagnosis, as defined by the Pennsylvania-specific FUH measure, occurring within 30 days of a qualifying discharge from AOD detoxification, inpatient rehabilitation, or residential services.

4. **Medication-Assisted Treatment for Opioid Use Disorder (MAT-OUD) —** This Pennsylvania-specific performance indicator measures the percentage of HC- BH beneficiaries with an active diagnosis of OUD in the measurement period who received both BH counseling services and pharmacotherapy for their OUD during the measurement period. This Pennsylvania-specific measure is based on a CMS measure of “the percentage of Medicaid beneficiaries ages 18–64 with an OUD who filled a prescription for or were administered or dispensed a FDA-approved medication for the disorder during the measure year”. This measure will be adapted to include members age 16 years and older. BH counseling is not necessarily limited to addiction counseling.

5. **MAT-AUD —**This Pennsylvania-specific performance indicator measures the percentage of HC- BH beneficiaries with an active diagnosis of moderate to severe Alcohol Use Disorder (AUD) in the measurement period who received both BH counseling services as well as pharmacotherapy for their AUD during the measurement period. This Pennsylvania-specific measure mirrors the logic of MAT-OUD and targets members age 16 years and older with severe or moderate AUD. BH counseling is not necessarily limited to addiction counseling.

MCOs are expected to submit results to IPRO on an annual basis. In addition to running as annual measures, quarterly rates will be used to enable measurement on a frequency that will support continuous monitoring and adjustment by the MCOs and their Primary Contractors.

This PIP project will extend from January 2021 through December 2023, with initial PIP proposals submitted in 2020 and a final report due in September 2024. Final baseline results will be run for the performance indicators in Summer 2021, and PIP interventions will be recalibrated as needed.

The 2019 EQR is the seventeenth review to include validation of PIPs. With this PIP cycle, all MCOs/Primary Contractors share the same baseline period and timeline.

The MCOs are required by OMHSAS to submit their projects using a standardized PIP template form, which is consistent with CMS protocols. These protocols follow a longitudinal format and capture information relating to:

- Project Topic
- Methodology
- Barrier Analysis, Interventions, and Monitoring

- Results
- Discussion

For the SPEDTAR PIP, OMHSAS has designated the Primary Contractors to conduct quarterly PIP review calls with each MCO. The purpose of these calls will be to discuss ongoing monitoring of PIP activity, to discuss the status of implementing planned interventions, and to provide a forum for ongoing technical assistance, as necessary. MCOs will be asked to provide up-to-date data on process measures and outcome measures prior to each meeting. Because of the level of detail provided during these meetings, rather than two semiannual submissions, MCOs will submit only one PIP interim report each September, starting in 2021.

Performance Metrics

The BBA requires that performance measures be validated in a manner consistent with the EQR protocol, *Validating Performance Measures*. Audits of MCOs are to be conducted as prescribed in National Committee for Quality Assurance's (NCQA) *HEDIS 2020, Volume 5: HEDIS Compliance Audit™: Standards, Policies and Procedures* and are consistent with the validation method described in the EQRO protocols.

PH-MCO Performance Measures

Each PH-MCO underwent a full HEDIS Compliance Audit in 2020. The PH-MCOs are required by DHS to report the complete set of Medicaid measures, excluding BH and chemical dependency measures, as specified in the *HEDIS 2020: Volume 2: Technical Specifications*. All the PH-MCO HEDIS rates are compiled and provided to DHS on an annual basis. **Table 5a** represents the HEDIS performance for all nine PH-MCOs in 2020, as well as the PH MMC mean and the PH MMC weighted average.

Comparisons to fee-for-service (FFS) Medicaid data are not included in this report as the FFS data and processes were not subject to a HEDIS compliance audit for HEDIS 2020 measures.

Table 5a is the full set of HEDIS 2020 measures reported to OMAP. The individual MCO 2020 EQR reports include a subset of these measures. For 2020, in light of the COVID-19 PHE, NCQA allowed plans to rotate HEDIS measures that are collected using the hybrid methodology. Plans were allowed to report their audited HEDIS 2019 hybrid rate for an applicable measure if it was better than their HEDIS 2020 hybrid rate as a result of low chart retrieval.

In the table below, the green and red arrows indicate whether the overall weighted average of the performance metric was higher (green) or lower (red) than the previous year's result. *Please note that some of the metrics are inverse measures (i.e., a lower rate means better performance).*

Table 1: PH-MCO Results for 2020 (MY 2019) HEDIS Measures

PH-MCO HEDIS Measure	ABH	ACN	ACP	GH	GEI	HPP	KF	UHC	UPMC	PA PH MEAN	Weighted Average	
Pharmacotherapy for Opioid Use Disorder (POD)												
POD: Ages 16–64 years	25.55%	32.19%	29.87%	25.96%	40.77%	18.36%	23.33%	22.50%	26.95%	27.28%	26.38%	NA
POD: Ages 65+ year	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
POD: Total Rate	25.55%	32.25%	29.79%	25.97%	40.81%	18.32%	23.37%	22.60%	26.95%	27.29%	26.40%	NA
Overuse/Appropriateness												
Risk of Continued Opioid Use (COU)												
COU: 18–64 years — ≥ 15 days covered	3.18%	2.34%	1.85%	3.95%	4.14%	4.59%	2.49%	4.60%	6.37%	3.72%	4.03%	▼
COU: 65+ years — ≥ 15 days covered	NA	NA	8.70%	12.96%	NA	1.69%	0.72%	NA	11.43%	7.10%	5.12%	▼
COU: Total — ≥ 15 days covered	3.18%	2.35%	1.88%	3.98%	4.14%	4.57%	2.47%	4.61%	6.38%	3.73%	4.04%	▼
COU: 18–64 years — ≥ 31 days covered	1.63%	1.65%	1.18%	2.29%	1.91%	2.99%	1.65%	3.20%	3.50%	2.22%	2.37%	▲
COU: 65+ years — ≥ 31 days covered	NA	NA	4.35%	7.41%	NA	1.69%	0.00%	NA	2.86%	3.26%	2.41%	▲
COU: Total — ≥ 31 days covered	1.64%	1.64%	1.20%	2.31%	1.91%	2.98%	1.64%	3.20%	3.50%	2.22%	2.37%	▲
Use of Opioids at High Dosage (HDO)												
HDO: Rate	10.68%	6.91%	7.87%	9.28%	7.73%	6.69%	15.62%	11.12%	7.93%	9.31%	9.37%	▲

PH-MCO HEDIS Measure	ABH	ACN	ACP	GH	GEI	HPP	KF	UHC	UPMC	PA PH MEAN	Weighted Average	
Use of Opioids from Multiple Providers (UOP)												
UOP: Rate receiving prescription opioids (four or more prescribers)	18.93%	15.34%	15.59%	16.94%	17.60%	11.19%	12.34%	14.58%	12.44%	14.99%	14.36%	▼
UOP: Rate receiving prescription opioids (four or more pharmacies)	6.40%	1.55%	2.27%	3.05%	1.40%	2.24%	3.28%	2.35%	2.16%	2.74%	2.58%	▼
UOP: Rate receiving prescription opioids (four or more prescribers and pharmacies)	3.39%	0.60%	0.89%	1.65%	0.86%	1.05%	1.48%	1.15%	0.90%	1.33%	1.22%	▼

Table 2: PH-MCO Results for 2019 (MY 2018) HEDIS

PH-MCO HEDIS Measure	ABH	ACN	ACP	GH	GEI	HPP	KF	UHC	UPMC	PA PH MEAN	Weighted Average	
Overuse/Appropriateness												
Risk of Continued Opioid Use (COU)												
COU: 18–64 years — ≥ 15 days covered	3.22%	3.51%	2.98%	4.26%	6.15%	5.11%	4.16%	2.30%	5.40%	4.12%	4.39%	
COU: 65+ years — ≥ 15 days covered	9.09%	5.88%	11.76%	10.34%	23.08%	7.50%	2.86%	2.86%	6.38%	6.95%	6.33%	
COU: Total — ≥ 15 days covered	3.24%	3.52%	3.02%	4.28%	6.19%	5.12%	4.15%	2.30%	5.41%	4.14%	4.40%	
COU: 18–64 years — ≥ 31 days covered	1.58%	1.66%	1.28%	1.99%	2.81%	2.58%	2.07%	1.45%	2.66%	2.01%	2.15%	
COU: 65+ years — ≥ 31 days covered	0.00%	0.00%	3.92%	3.45%	7.69%	3.75%	0.71%	0.00%	2.13%	2.33%	2.19%	
COU: Total — ≥ 31 days covered	1.58%	1.65%	1.30%	2.00%	2.82%	2.58%	2.06%	1.45%	2.66%	2.01%	2.15%	
Use of Opioids at High Dosage (UOD)												
UOD: Rate	7.97%	5.46%	6.81%	6.68%	4.24%	8.39%	10.70%	9.44%	5.73%	7.27%	7.26%	▼

PH-MCO HEDIS Measure	ABH	ACN	ACP	GH	GEI	HPP	KF	UHC	UPMC	PA PH MEAN	Weighted Average	
Use of Opioids from Multiple Providers (UOP)												
UOP: Rate receiving prescription opioids (four or more prescribers)	14.59%	14.98%	20.11%	20.31%	16.71%	10.65%	15.32%	12.30%	15.25%	15.58%	15.76%	▼
UOP: Rate receiving prescription opioids (four or more pharmacies)	5.10%	3.62%	5.59%	3.84%	1.96%	2.14%	6.13%	2.15%	2.67%	3.69%	3.68%	▼
UOP: Rate receiving prescription opioids (four or more prescribers and pharmacies)	2.37%	1.29%	2.37%	2.10%	0.80%	1.07%	2.39%	0.90%	1.25%	1.62%	1.62%	▼

In addition to HEDIS, PH-MCOs are required to calculate PAPMs, which are validated by IPRO on an annual basis. The individual PH-MCO reports include:

- A description of each PAPM
- The MCO's review year measure rates with 95% upper and lower confidence intervals (95% CI)
- Two years of data (the MY and previous year) and the MMC rate
- Comparisons to the MCO's previous year rate and to the MMC rate

Results for PAPMs are presented for each PH-MCO in **Table 5b**, along with the PH MMC average and PH MMC weighted average, which takes into account the proportional relevance of each MCO.

Table 3: PH-MCO Results for 2020 (MY 2019) PAPMs

PH-MCO PAPMs	ABH	ACN	ACP	GEI	GH	HPP	KF	UHC	UPMC	PH MMC Average	PH MMC Weighted Average
Follow-up After ED Visit for Alcohol and Other Drug Abuse or Dependence (FUA)											
FUA: Ages 18–64 (7 days)	16.68%	14.44%	17.73%	17.73%	19.91%	14.76%	17.63%	16.42%	19.13%	17.16%	17.41%
FUA: Ages 18–64 (30 days)	25.35%	23.83%	25.92%	28.07%	28.36%	25.01%	29.13%	24.38%	30.84%	26.77%	27.34%
FUA: Ages 65+ (7 days)*	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.33%	0.00%	3.70%	3.45%
FUA: Ages 65+ (30 days)*	0.00%	0.00%	0.00%	0.00%	0.00%	14.29%	0.00%	33.33%	0.00%	5.29%	6.90%
Follow-up After ED Visit for Mental Illness (FUM)											
FUM: Ages 18–64 (7 days)	42.61%	50.74%	39.15%	61.17%	43.89%	26.93%	25.80%	32.89%	39.77%	40.33%	39.69%
FUM: Ages 18–64 (30 days)	54.34%	63.15%	51.65%	70.67%	57.26%	39.95%	38.70%	46.25%	54.91%	52.99%	52.61%
FUM: Ages 65+ (7 days)*	0.00%	100.00%	100.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	33.33%	66.67%
FUM: Ages 65+ (30 days)*	0.00%	100.00%	100.00%	100.00%	100.00%	0.00%	0.00%	0.00%	100.00%	55.56%	100.00%
Concurrent Use of Opioids and Benzodiazepines (COB)											
Ages 18–64 years	16.42%	20.02%	20.04%	20.75%	19.67%	19.78%	19.28%	15.21%	18.15%	18.81%	18.91%
Ages 65+ *	0.00%	0.00%	11.11%	71.43%	5.00%	33.33%	14.29%	0.00%	11.76%	16.32%	16.09%
Ages Total	16.37%	19.98%	20.00%	20.86%	19.60%	19.82%	19.26%	15.20%	18.14%	18.80%	18.90%

PH-MCO PAPMs	ABH	ACN	ACP	GEI	GH	HPP	KF	UHC	UPMC	PH MMC Average	PH MMC Weighted Average
Use of Pharmacotherapy for Opioid Use Disorder (OUD)											
Rate 1: Total	64.26%	67.29%	68.13%	74.09%	74.37%	33.94%	67.87%	71.50%	77.99%	66.60%	69.30%
Rate 2: Buprenorphine	56.76%	59.48%	60.82%	70.27%	69.31%	29.41%	62.95%	64.62%	67.54%	60.13%	62.57%
Rate 3: Oral Naltrexone	6.31%	6.69%	6.73%	2.86%	3.33%	2.04%	4.49%	3.93%	4.94%	4.59%	4.33%
Rate 4: Long-Acting, Injectable Naltrexone	9.01%	9.29%	7.31%	4.77%	6.78%	3.85%	6.51%	7.86%	10.37%	7.31%	7.50%
Rate 5: Methadone	0.60%	0.00%	0.29%	0.00%	0.11%	2.04%	1.01%	0.98%	5.74%	1.20%	1.83%

*Some denominators contained fewer than 30 members. Caution should be exercised when interpreting results for small denominators, as they produce rates that are less stable.

1. Lower rate indicates better performance for three measures that are related to live births: Cesarean Rate for Nulliparous Singleton Vertex, Percent of Live Births Weighing Less than 2,500 Grams (Positive), and Elective Delivery.

2. For the Reducing Potentially Preventable Readmissions measure, lower rates indicate better performance.

3. For the Adult Admission Rate measures, lower rates indicate better performance.

Table 4: PH-MCO Results for 2019 (MY 2018) PAPMs

PH-MCO PAPMs	ABH	ACN	ACP	GEI	GH	HPP	KF	UHC	UPMC	PH MMC Average	PH MMC Weighted Average
Follow-up After ED Visit for Mental Illness or Alcohol and Other Drug Abuse or Dependence (FUA/FUM)											
FUA: Ages 18–64 (7 days)	15.17%	12.06%	12.44%	16.23%	14.54%	14.26%	16.63%	14.48%	19.62%	15.05%	15.72%
FUA: Ages 18–64 (30 days)	23.87%	24.70%	19.37%	26.21%	22.90%	22.53%	26.27%	23.35%	29.81%	24.33%	24.86%
FUA: Ages 65+ (7 days)*	0.00%*	0.00%*	0.00%*	0.00%*	20.00%*	0.00%*	0.00%*	25.00%*	0.00%*	5.00%	8.70%
FUA: Ages 65+ (30 days)*	0.00%*	0.00%*	0.00%*	0.00%*	20.00%*	0.00%*	0.00%*	25.00%*	0.00%*	5.00%	8.70%
FUM: Ages 18–64 (7 days)	37.33%	54.68%	37.12%	61.08%	41.08%	23.17%	25.55%	32.43%	40.20%	39.18%	38.32%
FUM: Ages 18–64 (30 days)	48.01%	66.35%	53.34%	71.02%	55.25%	35.16%	38.63%	44.55%	54.95%	51.92%	51.30%
FUM: Ages 65+ (7 days)*	0.00%*	0.00%*	33.33%*	100.00%*	0.00%*	0.00%*	0.00%*	100.00%*	0.00%*	25.93%	41.67%
FUM: Ages 65+ (30 days)*	0.00%*	0.00%*	33.33%*	100.00%*	0.00%*	0.00%*	0.00%*	100.00%*	100.00%*	37.04%	50.00%
Concurrent Use of Opioids and Benzodiazepines (COB)											
Ages 18–64 years	22.18%	25.69%	25.17%	25.21%	21.37%	27.09%	26.65%	21.35%	22.22%	24.10%	24.18%
Ages 65+ *	0.00%*	0.00%*	11.11%*	17.39%*	4.17%*	23.53%*	14.63%	0.00%*	16.13%	9.66%	13.02%
Ages Total	22.14%	25.65%	25.10%	25.19%	21.30%	27.08%	26.60%	21.29%	22.20%	24.06%	24.15%

Table 5: CHIP-MCO Performance Metrics CHIP-MCO Results for 2020 (MY 2019) HEDIS Measures

CHIP-MCO HEDIS Measure	ABH	CBC	GEI	HPP	Highmark HMO	Highmark PPO	IBC	NEPA	UHC	UPMC	PA CHIP MEAN	PA CHIP Weighted Average
Follow -up After Hospitalization for Mental Illness (FUH)												
FUH: 7 Days	48.28%	50.94%	50.00%	NA	NA	46.81%	34.78%	NA	47.56%	57.60%	48.00%	48.97% ▼
FUH: 30 Days	70.69%	79.25%	70.00%	NA	NA	78.72%	50.72%	NA	70.73%	77.60%	71.10%	71.28% ▲
Follow-Up After High-Intensity Care for Substance Use Disorder (FUI)												
FUI: 30 days 13–17 years	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FUI: 30 days 18–19 years	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FUI: 30 days 13–19 years Total Rate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FUI: 7 days 13–17 years	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FUI: 7 days 18–19 years	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FUI: 7 days 13–19 years Total Rate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pharmacotherapy for Opioid Use Disorder (POD)												
POD: 16–19 years	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Identification of Alcohol and Other Drug Services (IAD)												
IAD: Any Services Ages 0–12 years — Male	0.01%	0.02%	0.00%	0.00%	0.05%	0.00%	0.00%	0.00%	0.02%	0.02%	0.01%	

Table 5a:

MCO HEDIS Measure	ABH	CBC	GEI	HPP	Highmark HMO	Highmark PPO	IBC	NEPA	UHC	UPMC	PA CHIP MEAN	PA CHIP Weighted Average
IAD: Any Services Ages 0–12 years — Female	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.01%	0.00%	0.01%	0.02%	0.01%	
IAD: Any Services Ages 0–12 years — Total Rate	0.01%	0.01%	0.00%	0.00%	0.02%	0.01%	0.01%	0.00%	0.01%	0.02%	0.01%	
IAD: Any Services Ages 13–17 years — Male	1.02%	1.08%	1.26%	0.65%	1.23%	0.67%	1.15%	1.61%	1.05%	1.30%	1.10%	
IAD: Any Services Ages 13–17 years — Female	0.43%	0.59%	0.76%	0.61%	0.91%	1.04%	0.69%	0.49%	0.83%	1.12%	0.75%	
IAD: Any Services Ages 13–17 years — Total Rate	0.73%	0.84%	1.01%	0.63%	1.07%	0.86%	0.91%	1.05%	0.94%	1.21%	0.92%	
IAD: Inpatient Ages 0–12 years — Male	0.00%	0.00%	0.00%	0.00%	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
IAD: Inpatient Ages 0–12 years — Female	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.02%	0.00%	
IAD: Inpatient Ages 0–12 years — Total Rate	0.00%	0.00%	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	
IAD: Inpatient Ages 13–17 years — Male	0.21%	0.20%	0.23%	0.13%	0.29%	0.30%	0.20%	0.20%	0.15%	0.14%	0.21%	
IAD: Inpatient Ages 13–17 years — Female	0.07%	0.16%	0.18%	0.18%	0.21%	0.43%	0.17%	0.10%	0.21%	0.19%	0.19%	

MCO HEDIS Measure	ABH	CBC	GEI	HPP	Highmark HMO	Highmark PPO	IBC	NEPA	UHC	UPMC	PA CHIP MEAN	PA CHIP Weighted Average
IAD: Inpatient Ages 13–17 years — Total Rate	0.14%	0.18%	0.20%	0.16%	0.25%	0.37%	0.18%	0.15%	0.18%	0.17%	0.20%	
IAD: Intensive Outpatient/Partial Hospitalization Ages 0–12 years — Male	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
IAD: Intensive Outpatient/Partial Hospitalization Ages 0–12 years — Female	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
IAD: Intensive Outpatient/Partial Hospitalization Ages 0–12 years — Total Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
IAD: Intensive Outpatient/Partial Hospitalization Ages 13–17 years — Male	0.04%	0.04%	0.05%	0.07%	0.00%	0.12%	0.11%	0.00%	0.06%	0.05%	0.05%	
IAD: Intensive Outpatient/Partial Hospitalization Ages 13–17 years — Female	0.04%	0.08%	0.09%	0.12%	0.00%	0.00%	0.11%	0.00%	0.02%	0.04%	0.05%	
IAD: Intensive Outpatient/Partial Hospitalization Ages 13–17 years — Total Rate	0.04%	0.06%	0.07%	0.09%	0.00%	0.06%	0.11%	0.00%	0.04%	0.04%	0.05%	
IAD: Outpatient Ages 0–12 years — Male	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.01%	0.00%	

MCO HEDIS Measure	ABH	CBC	GEI	HPP	Highmark HMO	Highmark PPO	IBC	NEPA	UHC	UPMC	PA CHIP MEAN	PA CHIP Weighted Average
IAD: Outpatient Ages 0–12 years — Female	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.00%	0.00%	0.00%	0.01%	0.00%	
IAD: Outpatient Ages 0–12 years — Total Rate	0.01%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.01%	0.01%	0.00%	
IAD: Outpatient Ages 13–17 years — Male	0.46%	0.68%	0.68%	0.20%	0.87%	0.43%	0.60%	1.31%	0.62%	0.95%	0.68%	
IAD: Outpatient Ages 13–17 years — Female	0.22%	0.28%	0.45%	0.31%	0.56%	0.43%	0.28%	0.40%	0.32%	0.70%	0.39%	
IAD: Outpatient Ages 13–17 years — Total Rate	0.34%	0.48%	0.56%	0.25%	0.71%	0.43%	0.44%	0.85%	0.47%	0.83%	0.54%	
IAD: ED Ages 0–12 years — Male	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	
IAD: ED Ages 0–12 years — Female	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	
IAD: ED Ages 0–12 years — Total Rate	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	
IAD: ED Ages 13–17 years — Male	0.42%	0.48%	0.50%	0.39%	0.36%	0.18%	0.54%	0.40%	0.36%	0.35%	0.40%	
IAD: ED Ages 13–17 years — Female	0.14%	0.28%	0.27%	0.18%	0.35%	0.31%	0.28%	0.00%	0.40%	0.35%	0.26%	
IAD: ED Ages 13–17 years — Total Rate	0.28%	0.38%	0.38%	0.28%	0.36%	0.24%	0.41%	0.20%	0.38%	0.35%	0.33%	

MCO HEDIS Measure	ABH	CBC	GEI	HPP	Highmark HMO	Highmark PPO	IBC	NEPA	UHC	UPMC	PA CHIP MEAN	PA CHIP Weighted Average
IAD: Telehealth Ages 0–12 years — Male	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
IAD: Telehealth Ages 0–12 years — Female	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
IAD: Telehealth Ages 0–12 years — Total Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
IAD: Telehealth Ages 13–17 years — Male	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
IAD: Telehealth Ages 13–17 years — Female	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
IAD: Telehealth Ages 13–17 years — Total Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Note: Blank fields indicate a rate was not reported by an MCO.

Table 6: CHIP-MCO Results for 2019 (MY 2018) HEDIS Measures

CHIP-MCO HEDIS Measure	ABH	CBC	GEI	HPP	Highmark HMO	Highmark PPO	IBC	NEPA	UHC	UPMC	PA CHIP MEAN	PA CHIP Weighted Average
Follow- up After Hospitalization for Mental Illness (FUH)												
FUH: 7 Days	0.01%	0.01%	0.00%	0.00%	0.02%	0.01%	0.01%	0.00%	0.01%	0.02%	0.01%	
FUH: 30 Days	1.02%	1.08%	1.26%	0.65%	1.23%	0.67%	1.15%	1.61%	1.05%	1.30%	1.10%	
Identification of Alcohol and Other Drug Services (IAD)												
IAD: Any Services/1,000 MM Ages 0–12 years — Male	0.00%	0.00%	0.00%	0.00%	0.04%	0.06%	0.03%	0.06%	0.02%	0.02%	0.02%	
IAD: Any Services/1,000 MM Ages 0–12 years — Female	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.06%	0.00%	0.04%	0.05%	0.02%	
IAD: Any Services/1,000 MM Ages 0–12 years — Total Rate	0.00%	0.00%	0.00%	0.00%	0.02%	0.03%	0.04%	0.03%	0.03%	0.03%	0.02%	
IAD: Any Services/1,000 MM Ages 13–17 years — Male	0.89%	1.24%	1.64%	0.94%	1.26%	1.45%	0.96%	0.89%	0.69%	1.18%	1.12%	
IAD: Any Services/1,000 MM Ages 13–17 years — Female	0.79%	0.66%	1.07%	0.58%	1.08%	1.00%	0.76%	0.88%	0.86%	0.83%	0.85%	
IAD: Any Services/1,000 MM Ages 13–17 years — Total Rate	0.84%	0.95%	1.35%	0.77%	1.17%	1.23%	0.86%	0.89%	0.78%	1.00%	0.98%	
IAD: Inpatient/1,000 MM Ages 0–12 years — Male	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.06%	0.00%	0.00%	0.01%	
IAD: Inpatient/1,000 MM Ages 0–12 years — Female	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%	0.00%	0.00%	0.00%	0.00%	

CHIP-MCO HEDIS Measure	ABH	CBC	GEI	HPP	Highmark HMO	Highmark PPO	IBC	NEPA	UHC	UPMC	PA CHIP MEAN	PA CHIP Weighted Average
IAD: Inpatient/1,000 MM Ages 0–12 years — Total Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.03%	0.00%	0.00%	0.01%	
IAD: Inpatient/1,000 MM Ages 13–17 years — Male	0.12%	0.15%	0.39%	0.06%	0.38%	0.18%	0.15%	0.10%	0.12%	0.06%	0.17%	
IAD: Inpatient/1,000 MM Ages 13–17 years — Female	0.16%	0.23%	0.19%	0.13%	0.13%	0.31%	0.14%	0.20%	0.23%	0.13%	0.19%	
IAD: Inpatient/1,000 MM Ages 13–17 years — Total Rate	0.14%	0.19%	0.29%	0.10%	0.25%	0.25%	0.14%	0.15%	0.17%	0.09%	0.18%	
IAD: Intensive Outpatient/Partial Hospitalization/1,000 MM Ages 0–12 years — Male	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
IAD: Intensive Outpatient/Partial Hospitalization/1,000 MM Ages 0–12 years — Female	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
IAD: Intensive Outpatient/Partial Hospitalization/1,000 MM Ages 0–12 years — Total Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

CHIP-MCO HEDIS Measure	ABH	CBC	GEI	HPP	Highmark HMO	Highmark PPO	IBC	NEPA	UHC	UPMC	PA CHIP MEAN	PA CHIP Weighted Average
IAD: Intensive Outpatient/Partial Hospitalization/1,000 MM Ages 13–17 years — Male	0.20%	0.12%	0.05%	0.06%	0.00%	0.06%	0.09%	0.00%	0.06%	0.07%	0.07%	
IAD: Intensive Outpatient/Partial Hospitalization/1,000 MM Ages 13–17 years — Female	0.08%	0.08%	0.05%	0.06%	0.06%	0.06%	0.14%	0.00%	0.06%	0.02%	0.06%	
IAD: Intensive Outpatient/Partial Hospitalization/1,000 MM Ages 13–17 years — Total Rate	0.14%	0.10%	0.05%	0.06%	0.03%	0.06%	0.11%	0.00%	0.06%	0.05%	0.07%	
IAD: Outpatient/1,000 MM Ages 0–12 years — Male	0.00%	0.00%	0.00%	0.00%	0.04%	0.03%	0.00%	0.00%	0.01%	0.01%	0.01%	
IAD: Outpatient/1,000 MM Ages 0–12 years — Female	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.04%	0.00%	
IAD: Outpatient/1,000 MM Ages 0–12 years — Total Rate	0.00%	0.00%	0.00%	0.00%	0.02%	0.01%	0.00%	0.00%	0.01%	0.02%	0.01%	
IAD: Outpatient/1,000 MM Ages 13–17 years — Male	0.49%	0.81%	0.92%	0.63%	0.76%	1.03%	0.70%	0.50%	0.39%	0.95%	0.72%	
IAD: Outpatient/1,000 MM Ages 13–17 years — Female	0.51%	0.23%	0.58%	0.19%	0.76%	0.69%	0.31%	0.29%	0.51%	0.58%	0.47%	

CHIP-MCO HEDIS Measure	ABH	CBC	GEI	HPP	Highmark HMO	Highmark PPO	IBC	NEPA	UHC	UPMC	PA CHIP MEAN	PA CHIP Weighted Average
IAD: Outpatient/1,000 MM Ages 13–17 years — Total Rate	0.50%	0.52%	0.75%	0.41%	0.76%	0.86%	0.50%	0.39%	0.45%	0.77%	0.59%	
IAD: ED/1,000 MM Ages 0–12 years — Male	0.00%	0.00%	0.00%	0.00%	0.00%	0.06%	0.00%	0.00%	0.01%	0.01%	0.01%	
IAD: ED/1,000 MM Ages 0–12 years — Female	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.03%	0.01%	0.01%	
IAD: ED/1,000 MM Ages 0–12 years — Total Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.01%	0.00%	0.02%	0.01%	0.01%	
IAD: ED/1,000 MM Ages 13–17 years — Male	0.33%	0.31%	0.48%	0.25%	0.25%	0.48%	0.29%	0.40%	0.21%	0.26%	0.33%	
IAD: ED/1,000 MM Ages 13–17 years — Female	0.24%	0.19%	0.29%	0.26%	0.25%	0.31%	0.31%	0.39%	0.18%	0.21%	0.26%	
IAD: ED/1,000 MM Ages 13–17 years — Total Rate	0.28%	0.25%	0.39%	0.26%	0.25%	0.40%	0.30%	0.39%	0.19%	0.23%	0.30%	
IAD: Telehealth/1,000 MM Ages 0–12 years — Male	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
IAD: Telehealth/1,000 MM Ages 0–12 years — Female	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
IAD: Telehealth/1,000 MM Ages 0–12 years — Total Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
IAD: Telehealth/1,000 MM Ages 13–17 years — Male	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

CHIP-MCO HEDIS Measure	ABH	CBC	GEI	HPP	Highmark HMO	Highmark PPO	IBC	NEPA	UHC	UPMC	PA CHIP MEAN	PA CHIP Weighted Average
IAD: Telehealth/1,000 MM Ages 13–17 years — Female	0.00%	0.00%	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
IAD: Telehealth/1,000 MM Ages 13–17 years — Total Rate	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

BH MCO Performance Measures

Table 7: BH-MCO Results for 2019 (MY 2018) PAPMs

BH-MCO Performance Measure	BHO	CBH	CCBH	MBH	PerformCare	BH MMC Average	BH MMC Weighted Average
Initiation and Engagement of Alcohol and Other Drug (AOD) Dependence Treatment							
Initiation of AOD Treatment — Ages 13–17	45.1%	57.3%	40.6%	37.3%	51.7%	46.4%	44.7%
Engagement of AOD Treatment — Ages 13–17	33.4%	39.7%	29.9%	25.9%	33.5%	32.5%	31.8%
Initiation of AOD Treatment — Ages 18+	46.8%	39.5%	43.0%	39.0%	40.0%	41.7%	41.9%
Engagement of AOD Treatment — Ages 18+	36.1%	23.6%	30.4%	24.2%	26.0%	28.1%	28.3%
Initiation of AOD Treatment — Ages 13+	46.8%	40.1%	42.9%	38.9%	40.6%	41.8%	42.0%
Engagement of AOD Treatment — Ages 13+	36.0%	24.1%	30.4%	24.3%	26.4%	28.2%	28.5%

- The BH MMC weighted averages (HealthChoices Aggregate of all BH-MCOs) for the HEDIS FUH seven-day and 30-day All-Ages measures were between the HEDIS 50th and 75th percentiles. Consequently, the OMHSAS goal of meeting or exceeding the HEDIS 75th percentile for ages 6 and over for both seven-day and 30-day rates was not achieved. The HC- BH Contractors that met or exceeded the 75th percentile on at least one of the two measures were: Bedford-Somerset, Berks, Blair, CABHC, Chester, CMP, Cumberland, Erie, Fayette, Franklin-Fulton, Greene, Lancaster, Lebanon, Lycoming-Clinton, NBHCC, NCSO, and Perry.
- For the Pennsylvania-Specific FUH for Mental Illness rates, the Commonwealth significantly improved on the seven-day measure but saw no significant change in the 30-day rate, when compared to the previous year.
- The Statewide rate for Readmission Within 30 Days of Inpatient Psychiatric Discharge (REA) did not change significantly from the previous year.
- None of the BH-MCOs met the OMHSAS performance goal of 10% (or lower) for REA.
- Statewide, Initiation of Alcohol and Other Drug Dependence Treatment rates for ages 18 –64 years overall improved (increased) statistically significantly from 2017.
- Statewide, Engagement in Alcohol and Other Drug Dependence Treatment rates for all three age groups worsened (decreased) statistically significantly from 2017. 2018 Statewide rates for all age groups exceeded the 75th HEDIS percentile.

CHC-MCO Performance Measures

Each CHC-MCO underwent a full HEDIS Compliance Audit in 2020. Unless otherwise noted, HEDIS 2020 (MY 2019) measures were audited through an NCQA-certified Compliance Audit. Final Audit Reports were generated and submitted in accordance with NCQA reporting requirements.

Additionally, activity surrounding reporting and validation of PAPMs for CHC is conducted at the discretion of DHS and is subject to change. During 2020, complete information could not be collected for additional PAPMs due to COVID-19. As the emergency circumstances evolve, PAPM information will be further integrated into the EQR findings, accordingly.

With the expansion of CHC for Phase 2, characteristics of reporting and organizational structures across measurement parameters varied; consequently, measurement results were not further compared at the time of this report. As warranted and included in subsequent reports: rate comparisons (including to applicable benchmarks) can be used for identification of strengths and additional opportunities for improvement; and, all rates should be further reviewed and improvement strategies further considered.

Table 8, below, summarizes the CHC-MCOs' 2020 (MY 2019) HEDIS performance measure results, with noteworthy findings listed underneath the table.

Table 8: CHC-MCO Performance Measure Results for 2020 (MY 2019) using HEDIS Technical Specifications

CHC-MCO HEDIS Measure	AHC	KF CHC	PAHW	UPMC
Pharmacotherapy for Opioid Use Disorder (POD)				
POD: Ages 16–64 years	NA	25.00%	NA	31.61%
POD: Ages 65+ year	NA	NA	NA	NA
POD: Total Rate	NA	27.69%	NA	31.76%
Use of Opioids From Multiple Providers (UOP)				
UOP: Multiple Prescribers	5.17%	12.42%	14.06%	14.36%
UOP: Multiple Pharmacies	1.72%	3.13%	2.60%	21.25%
UOP: Multiple Prescribers and Multiple Pharmacies	0.00%	1.28%	1.56%	4.62%

CHC-MCO HEDIS Measure	AHC	KF CHC	PAHW	UPMC
Risk of Continued Opioid Use (COU)				
COU: 18–64 years — ≥ 15 days covered	10.34%	11.55%	13.76%	17.55%
COU: 65+ years — ≥ 15 days covered	NA	20.44%	20.00%	20.40%
COU: Total — ≥ 15 days covered	9.23%	14.70%	14.85%	18.60%
COU: 18–64 years — ≥ 31 days covered	8.62%	9.66%	10.05%	10.00%
COU: 65+ years — ≥ 31 days covered	NA	11.01%	20.00%	11.03%
COU: Total — ≥ 31 days covered	7.69%	10.13%	11.79%	10.38%

Note: NA (Not Applicable): The rate is not applicable due to small denominator. ND (Not Determined): The calculated rate was not determined by the MCO. NQ (Not Required): The MCO was not required to report the rate. BR (Biased Rate): The calculated rate was biased and non-reportable for NCQA purposes.

1. Reported rate is per 1,000 member months.

2. Long-term services and supports (LTSS) measures are presented for informational purposes only and should be interpreted with caution (these LTSS measures were not certified nor required to be audited, in accordance with NCQA guidelines and timeframes); opportunities for improvement were not ascertained for these LTSS measures at the time of this report.

All CHC-MCOs participated in the certified 2020 (MY 2019) HEDIS Compliance Audit, and the audit was conducted in accordance with the NCQA timeline. An opportunity for improvement was identified during the HEDIS audit process: Inpatient Utilization – General Hospital/Acute Care: Total (IPUA) measurements for HEDIS 2020 (MY 2020) for two CHC-MCOs (AHC and KF CHC) were deemed biased and received a "Not Reportable" NCQA determination. Both CHC-MCOS should improve capacity to measure IPUA accurately, in accordance with NCQA guidelines and specifications. Moreover, all rates should be reviewed and improvement strategies should be considered where warranted. LTSS measures, as shown in **Table 8** above, are for informational purposes only and should be interpreted with caution (these LTSS measures were not certified nor required to be audited, in accordance with NCQA guidelines and timeframes); at the time of this report, strengths and opportunities based on LTSS measurement results were not available.

The individual CHC-MCO 2020 EQR reports include additional information pertaining to these measures; upon request, CHC-MCOs' auditor-locked workbooks and final audit reports can be made available.

Table 9: CHC-MCO Results for 2019 (MY 2018) HEDIS Measures

CHC-MCO HEDIS Measure	AHC	PHW	UPMC	PA CHC	Weighted Average
Risk of Continued Opioid Use (COU)					
COU: 18–64 years — ≥ 15 days covered	NA	33.33%	41.28%	37.31%	40.15%
COU: 18–64 years — ≥ 31 days covered	NA	26.67%	33.39%	30.03%	42.20%
COU: 65+ years — ≥ 15 days covered	NA	NA	41.96%	41.96%	40.90%
COU: 18–64 years — ≥ 31 days covered	NA	NA	26.43%	26.43%	32.46%
COU: Total — ≥ 15 days covered	NA	37.14%	41.54%	39.34%	26.61%
COU: Total — ≥ 31 days covered	NA	28.57%	30.77%	29.67%	30.33%
Use of Opioids at High Dosage (UOD)					
UOD: Rate	10.00%	3.23%	9.39%	7.54%	9.26%
Use of Opioids from Multiple Providers (UOP)					
UOP: Multiple Prescribers	22.73%	7.56%	15.84%	15.38%	15.74%
UOP: Multiple Pharmacies	1.52%	0.00%	2.66%	1.39%	2.59%
UOP: Multiple Prescribers and Multiple Pharmacies	0.00%	0.00%	1.44%	0.48%	1.39%

Documentation of Quality of and Access to Care under the Demonstration

The Commonwealth calculates all metrics required under the Demonstration. As noted below, the data through QE December 31, 2021 is available for analysis.

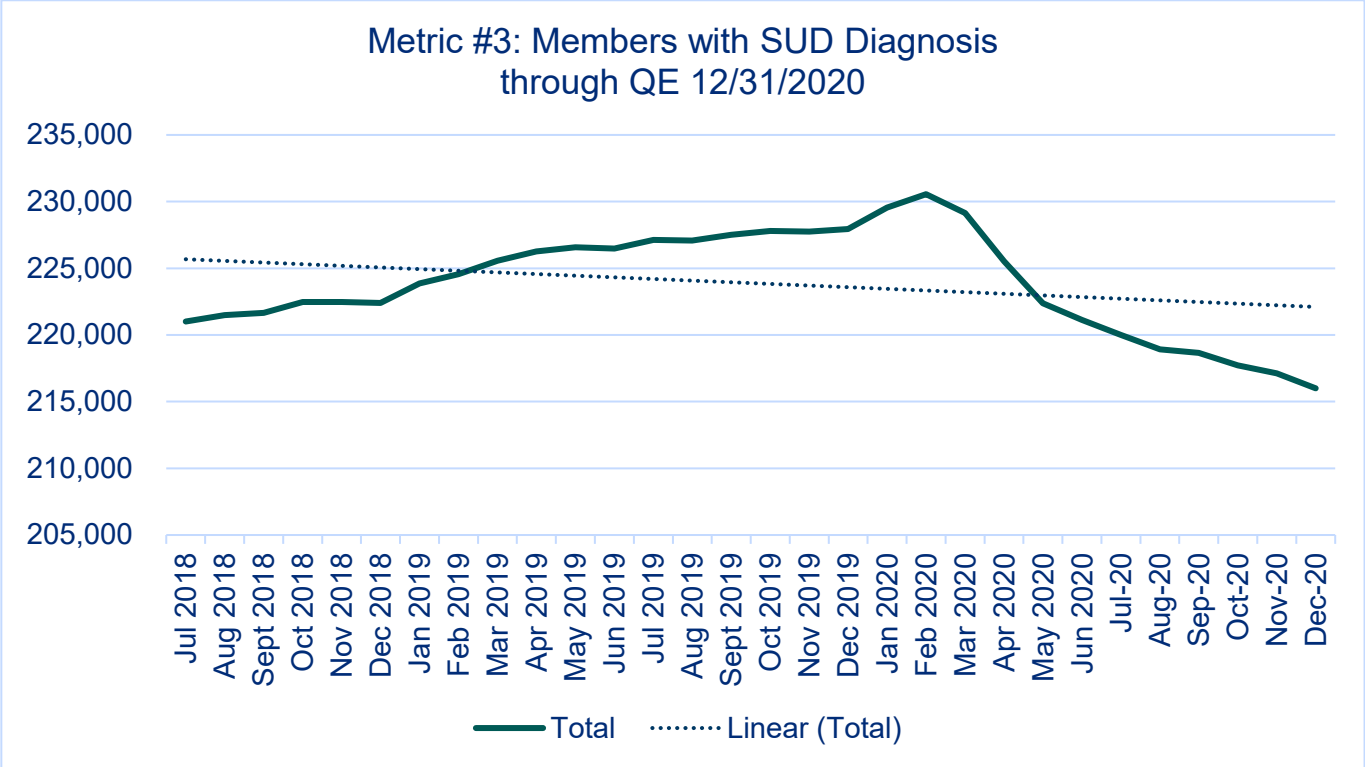
Assessment of Need and Qualification for SUD Services

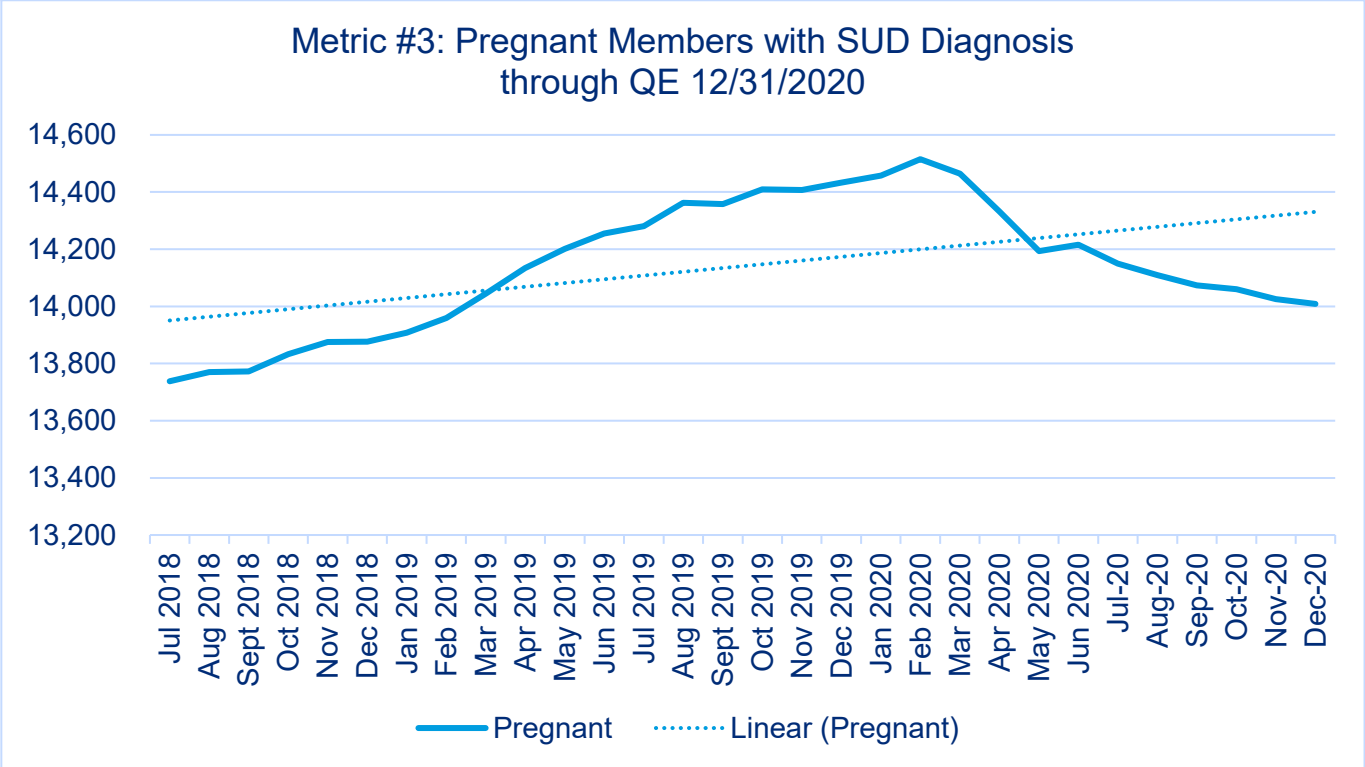
Metric #3[14] reports the number of members by month with a SUD diagnosis through DY3 Q2 (**QE December 31, 2020**). Metric #3: The number of individuals with SUD diagnoses has continued to decline through December 2020. This result may be affected by the PHE. See the graphs below.

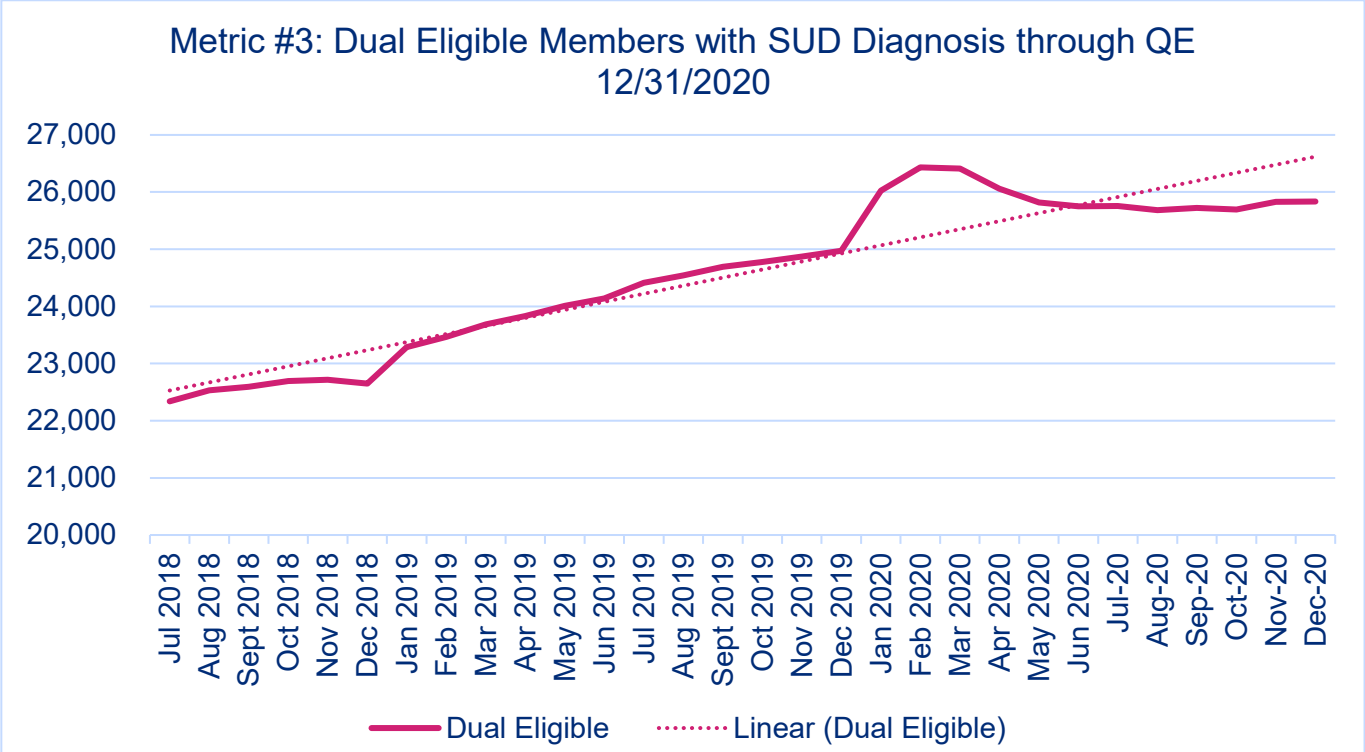
Subpopulations:

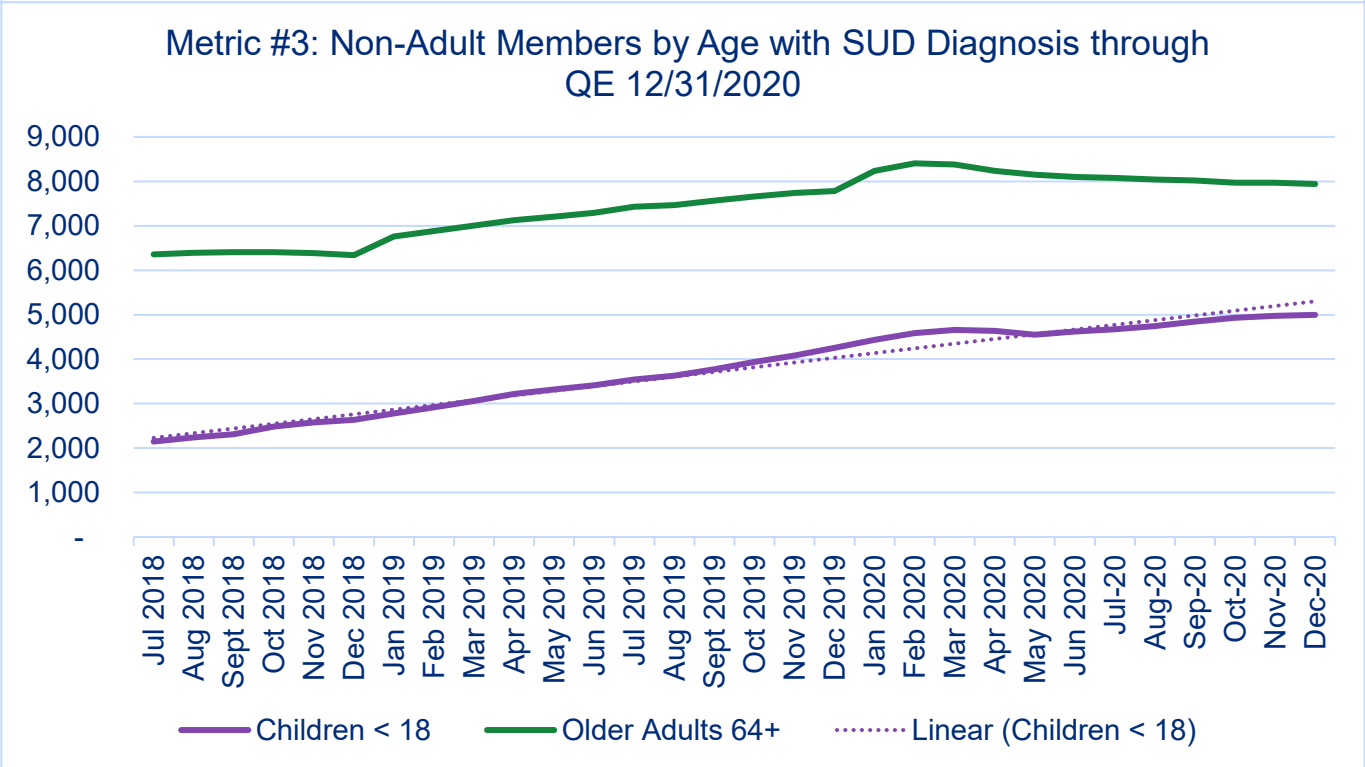
- There is a decrease in pregnant women with diagnoses after March 2020 through December 2020.
- The number of older adults and children and dual eligible individuals with a SUD diagnosis increased up through the PHE. After the PHE, the number of dual eligibles has declined.

[14] Metrics are numbered according to CMS requirements under the Demonstration.


Metric #3: Members with SUD Diagnosis through QE 12/31/2020
235,000
230,000
225,000
220,000
215,000
210,000
205,000
Jul 2018
Aug 2018
Sept 2018
Oct 2018
Nov 2018
Dec 2018
Jan 2019
Feb 2019
Mar 2019
Apr 2019
May 2019
Jun 2019
Jul 2019
Aug 2019
Sept 2019
Oct 2019
Nov 2019
Dec 2019
Jan 2020
Feb 2020
Mar 2020
Apr 2020
May 2020
Jun 2020
Jul-20
Aug-20
Sep-20
Oct-20
Nov-20
Dec-20
Total
Linear (Total)


Metric #3: Pregnant Members with SUD Diagnosis through QE 12/31/2020
14,600
14,400
14,200
14,000
13,800
13,600
13,400
13,200
Jul 2018
Aug 2018
Sept 2018
Oct 2018
Nov 2018
Dec 2018
Jan 2019
Feb 2019
Mar 2019
Apr 2019
May 2019
Jun 2019
Jul 2019
Aug 2019
Sept 2019
Oct 2019
Nov 2019
Dec 2019
Jan 2020
Feb 2020
Mar 2020
Apr 2020
May 2020
Jun 2020
Jul-20
Aug-20
Sep-20
Oct-20
Nov-20
Dec-20
Pregnant
Linear (Pregnant)


Metric #3: Dual Eligible Members with SUD Diagnosis through QE 12/31/2020
27,000
26,000
25,000
24,000
23,000
22,000
21,000
20,000
Jul 2018
Aug 2018
Sept 2018
Oct 2018
Nov 2018
Dec 2018
Jan 2019
Feb 2019
Mar 2019
Apr 2019
May 2019
Jun 2019
Jul 2019
Aug 2019
Sept 2019
Oct 2019
Nov 2019
Dec 2019
Jan 2020
Feb 2020
Mar 2020
Apr 2020
May 2020
Jun 2020
Jul-20
Aug-20
Sep-20
Oct-20
Nov-20
Dec-20
Dual Eligible
Linear (Dual Eligible)


Metric #3: Non-Adult Members by Age with SUD Diagnosis through QE 12/31/2020
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
-
Jul 2018
Aug 2018
Sept 2018
Oct 2018
Nov 2018
Dec 2018
Jan 2019
Feb 2019
Mar 2019
Apr 2019
May 2019
Jun 2019
Jul 2019
Aug 2019
Sept 2019
Oct 2019
Nov 2019
Dec 2019
Jan 2020
Feb 2020
Mar 2020
Apr 2020
May 2020
Jun 2020
Jul-20
Aug-20
Sep-20
Oct-20
Nov-20
Dec-20
Children < 18
Older Adults 64+
Linear (Children < 18)

Access to Critical LOCs for OUD and other SUDs (Milestone 1)

Metrics #6–#12 report the number of members by month receiving services through DY3 Q2. See the graphs associated with these metrics. The number of unduplicated individuals receiving any services has increased in general since the beginning of the Demonstration. There are many swings each month in the unduplicated number of individuals.

- Dual eligible and older adult utilization of SUD services decreased through December 2020.
- Pregnant Women and Children's utilization of SUD services increased through December 2020.
- *Note: We expected that the MAT for dual eligibles would drop starting January 1, 2020 because of Medicare's new coverage of MAT.*

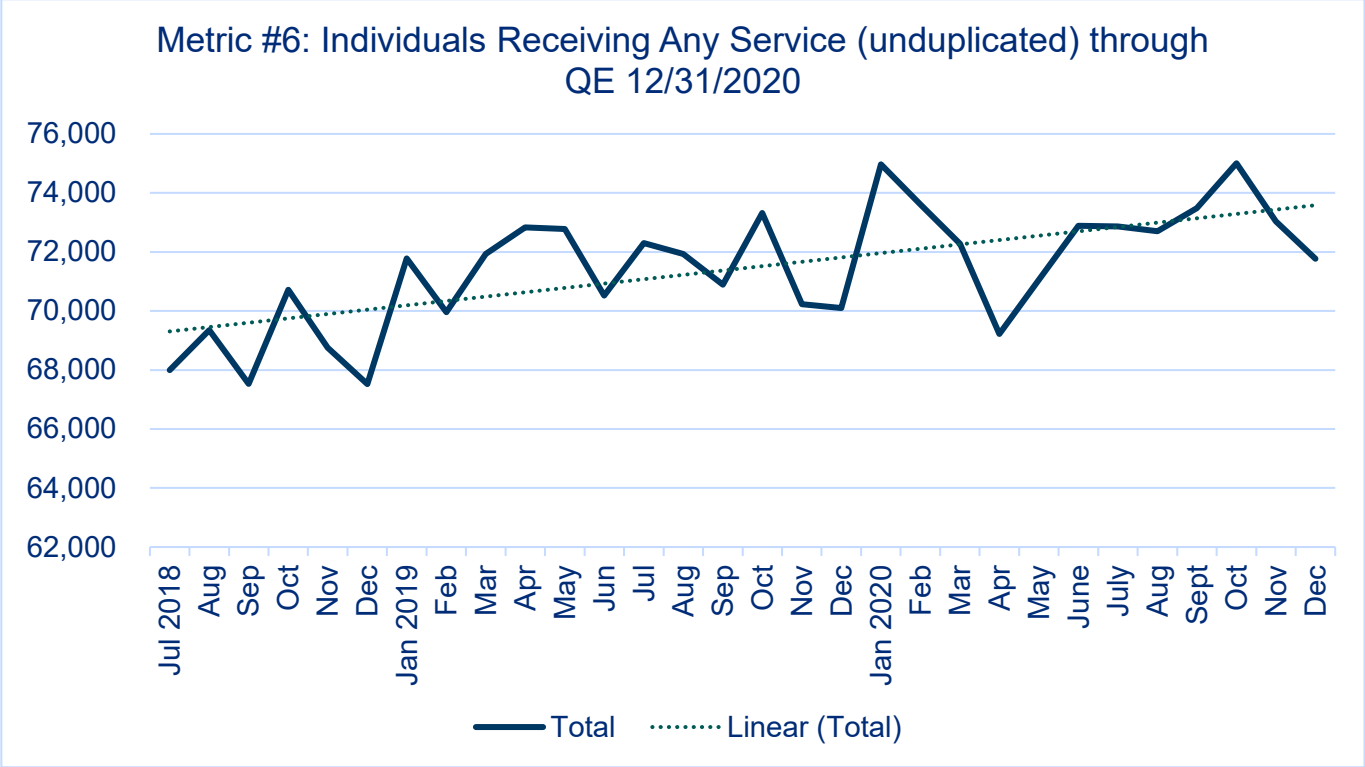
These trends are relatively consistent for all of the services received by members under the demonstration up through the end of CY 2020.

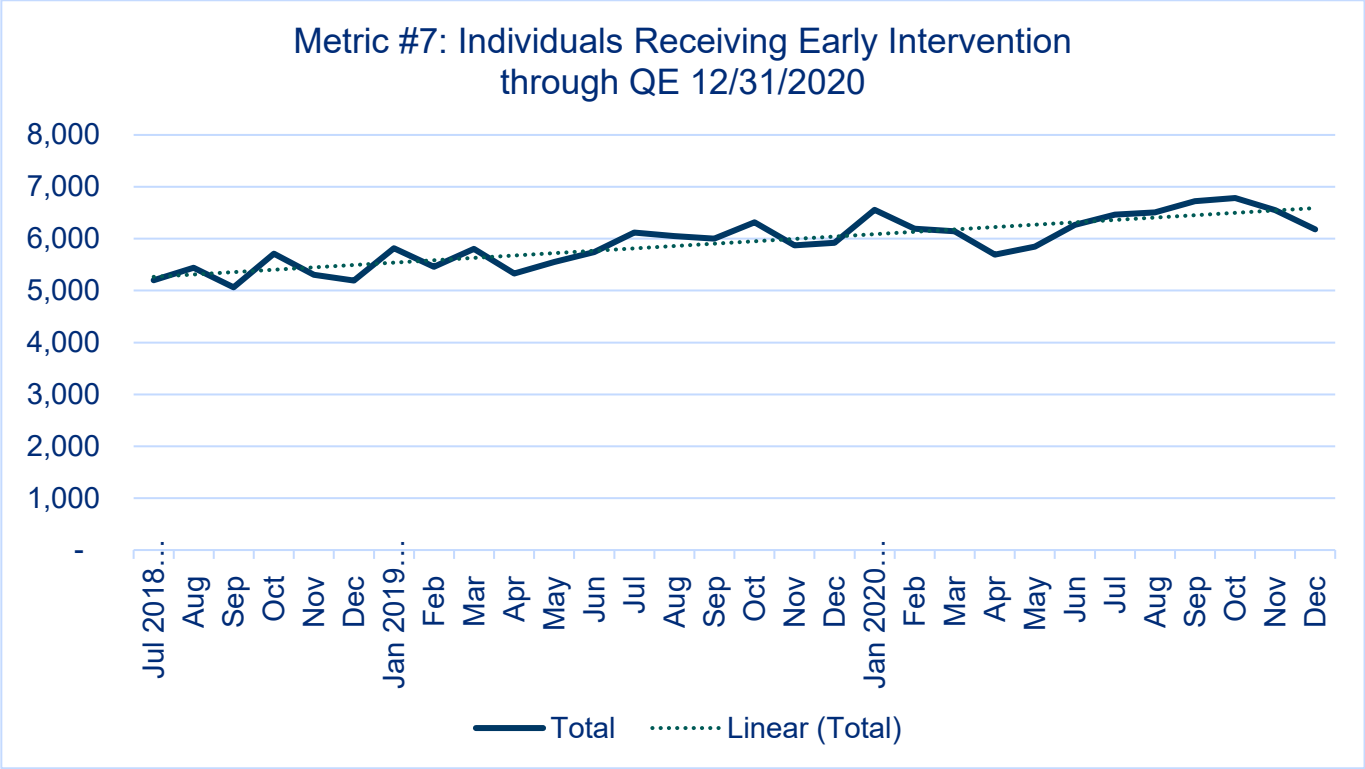
Analysis by service:

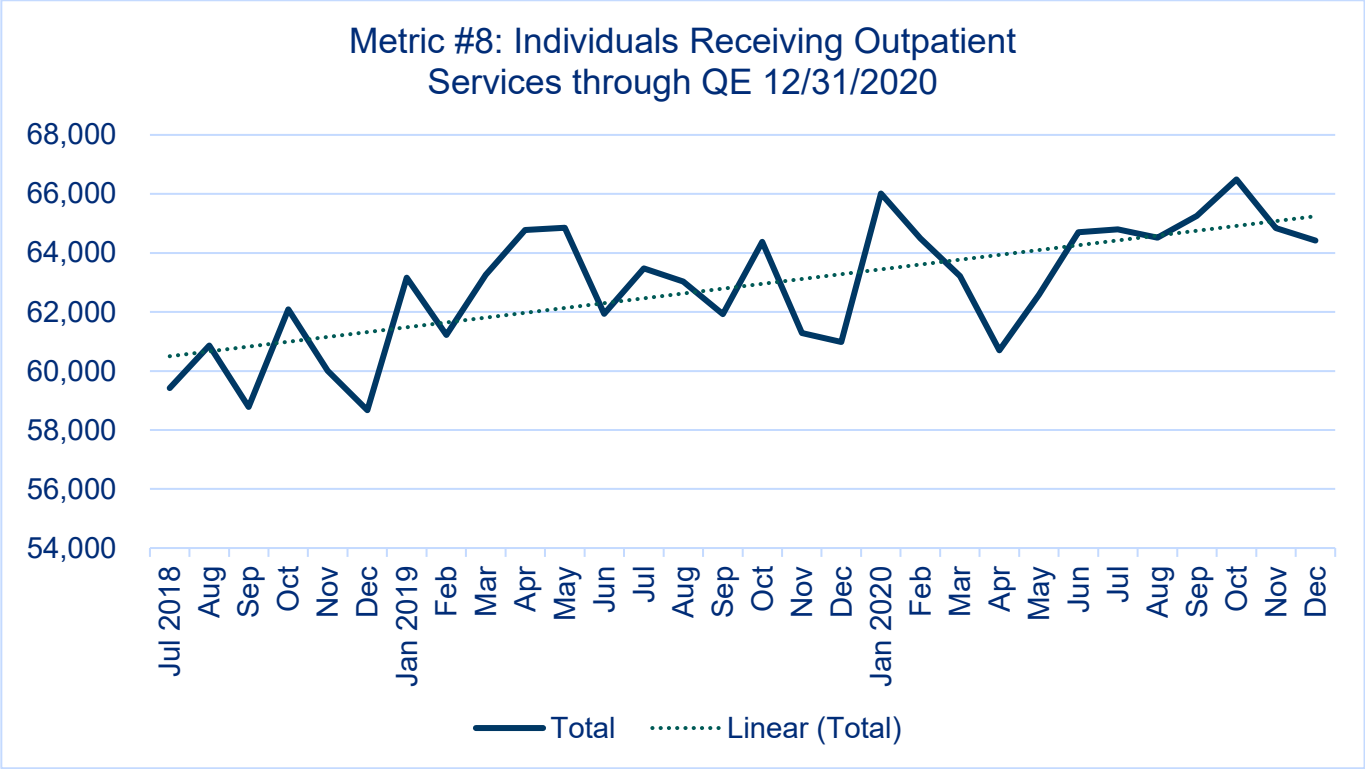
- Metric #7 reports the number of individuals receiving early intervention. The number of individuals receiving early intervention was fairly steady over time up until the PHE in Spring 2020 when there was a drop.
- Metric #8 reports the number of individuals receiving outpatient services. The number of individuals receiving outpatient care was fairly steady over time until the PHE when there was a drop from January 2020 to May 2020.
- Metric #9 reports the number of individuals receiving IOP and PHP services. The number of individuals receiving IOP and PH has decreased fairly steadily since the beginning of the demonstration with a dip, due to the PHE, in May 2020. The Commonwealth's standards for IOP and PHP have been clarified to better align with ASAM standards and this could account for fewer programs reporting that they provide PHP, which is substantially different under ASAM from the historical Commonwealth service description. Because these services are in congregate settings, utilization decreased after the beginning of the PHE in March 2020. While there has been some increase as the PHE has gone on, the overall utilization of IOP/PHP has continued to decrease due to ASAM alignment.
- Metric #10 reports the number of individuals receiving residential and inpatient services. The number of individuals receiving residential and inpatient services was fairly steady over time until the beginning of the PHE when there was a drop in Spring 2020. Utilization increased again in the fall of 2020 through December 2020. Pregnant women and children have both had slight increases in residential and inpatient utilization.
- Metric #11 reports the number of individuals receiving WM services. The number of individuals receiving WM services was fairly steady over time until the beginning of the PHE when there was a drop in utilization. Beginning in June 2020, there was a large increase in WM utilization, with utilization consistent with the linear trend by the end of the CY. Children in particular had a dramatic

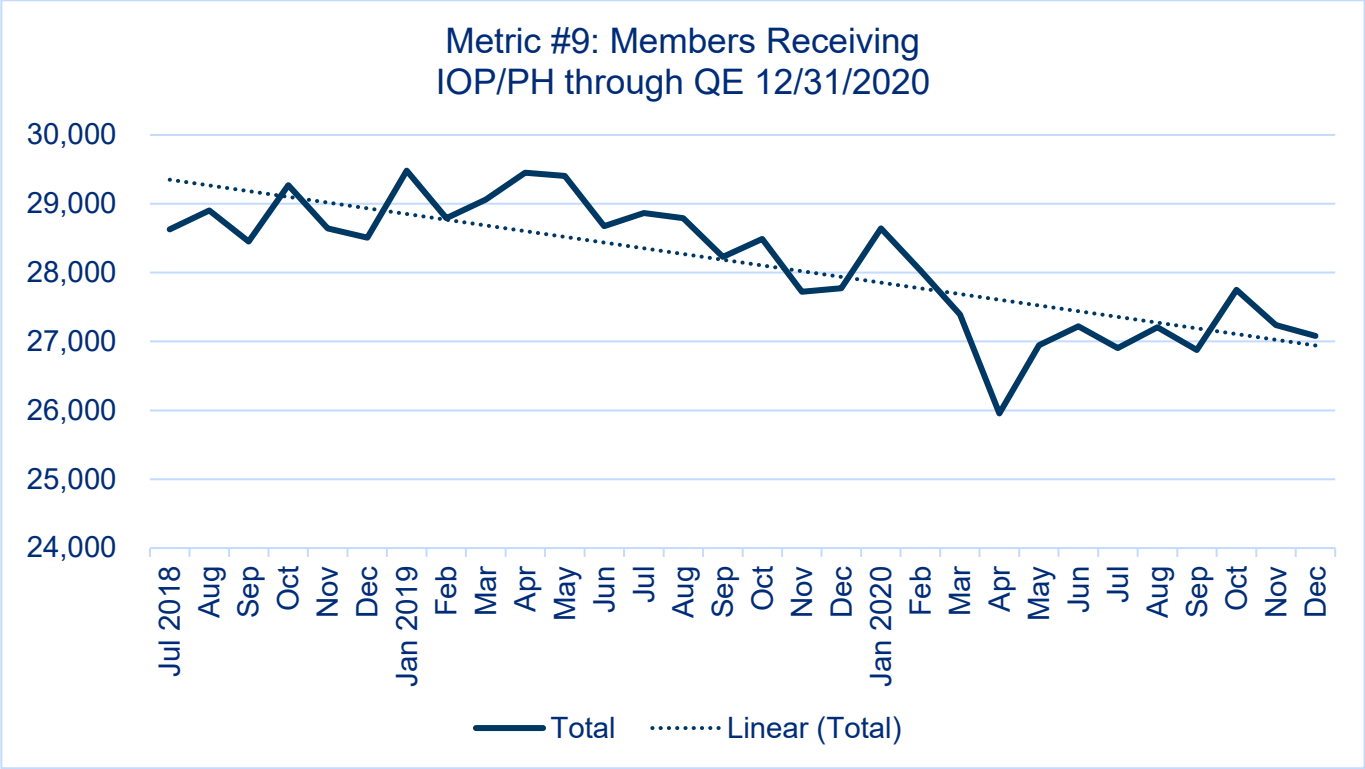
increase in WM usage in fall 2020 through December 2020. The PHE has led to volatility in the utilization of WM.

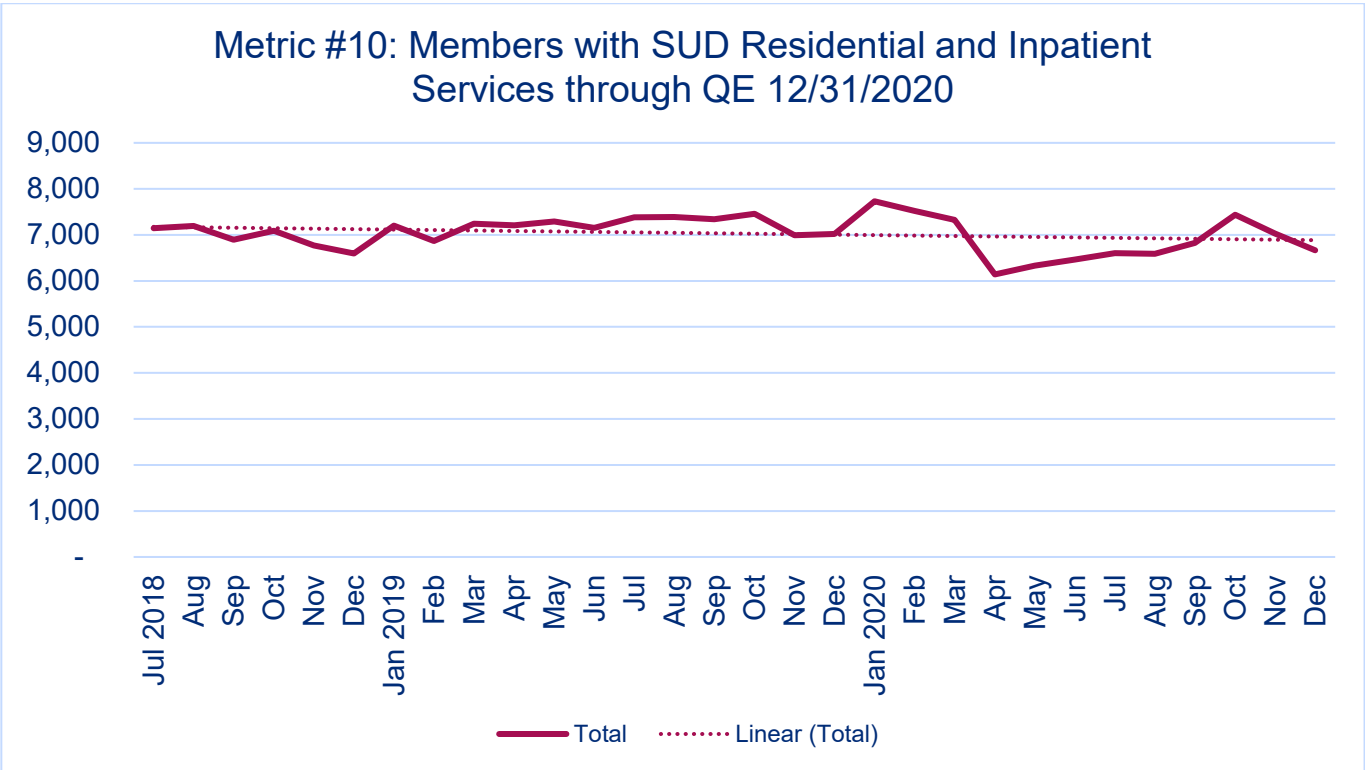
- Metric #12 reports the number of individuals receiving MAT services. About 50% of the increase in mid-2019 was due to the implementation of COE and initiatives in the Commonwealth to increase MAT usage. MAT for dual eligibles dropped starting January 1, 2020 because of Medicare's new coverage of MAT. There is another dip associated with the PHE in May 2020. The Commonwealth has been exploring preparing additional guidance to providers on how to bill Medicaid for MAT, which could improve reporting data in this area. The Commonwealth has seen an increase in the overall utilization of MAT since October 2020.

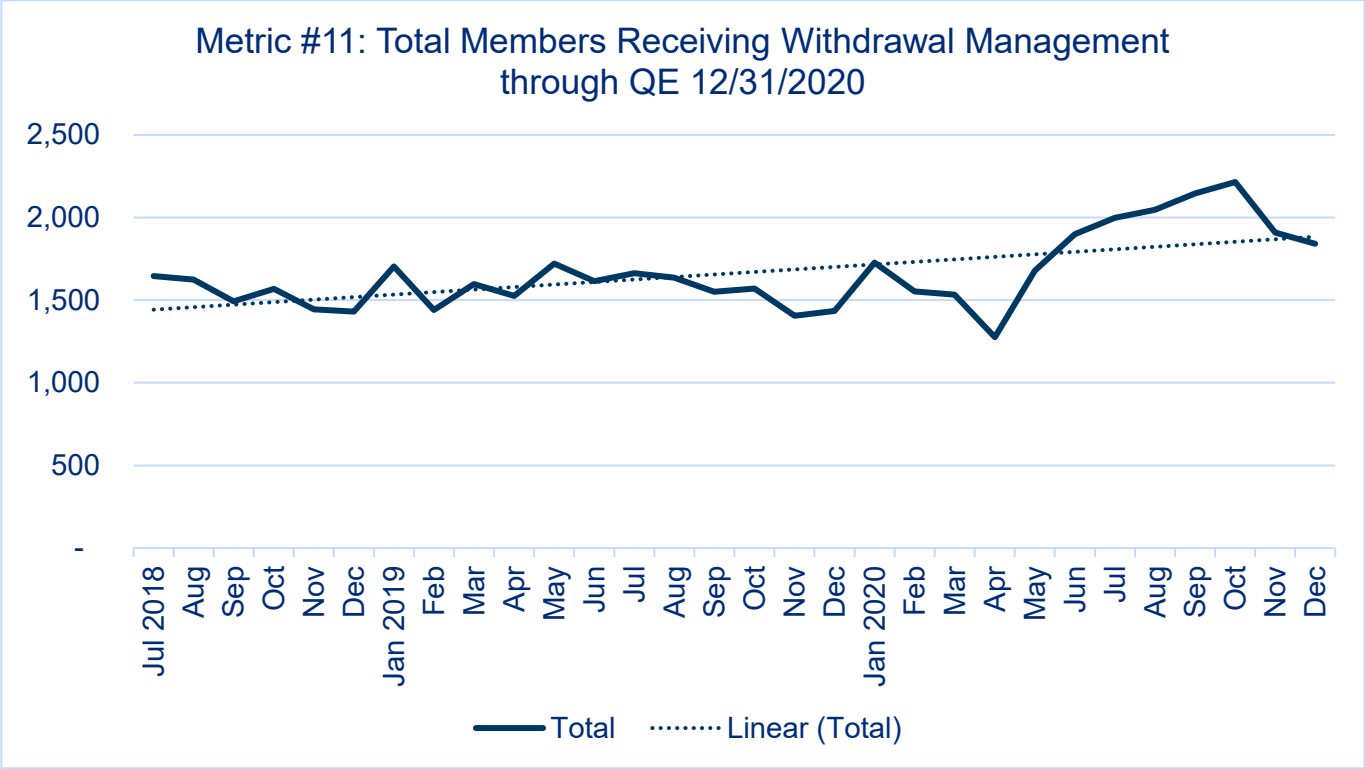


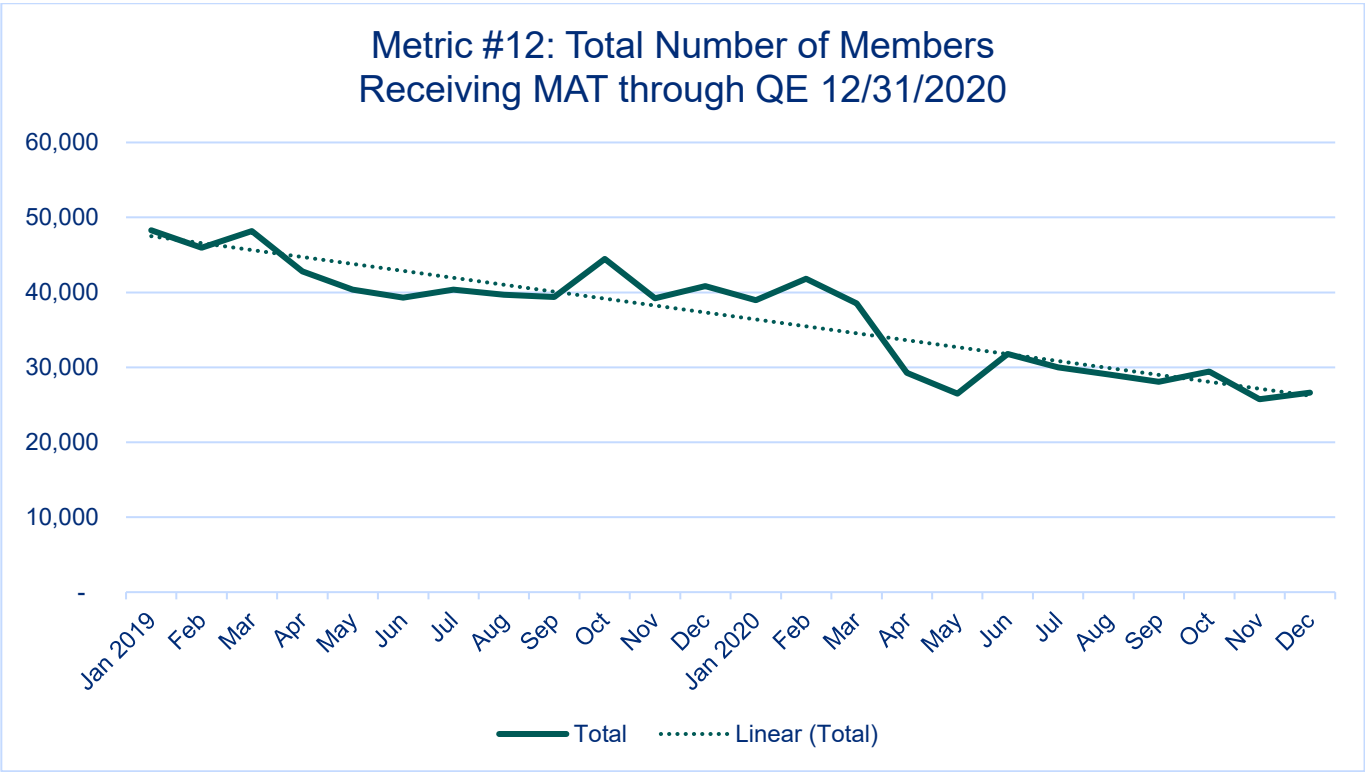

Metric #7: Individuals Receiving Early Intervention through QE 12/31/2020
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
-
Jul 2018…
Aug
Sep
Oct
Nov
Dec
Jan 2019…
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan 2020…
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Total
Linear (Total)

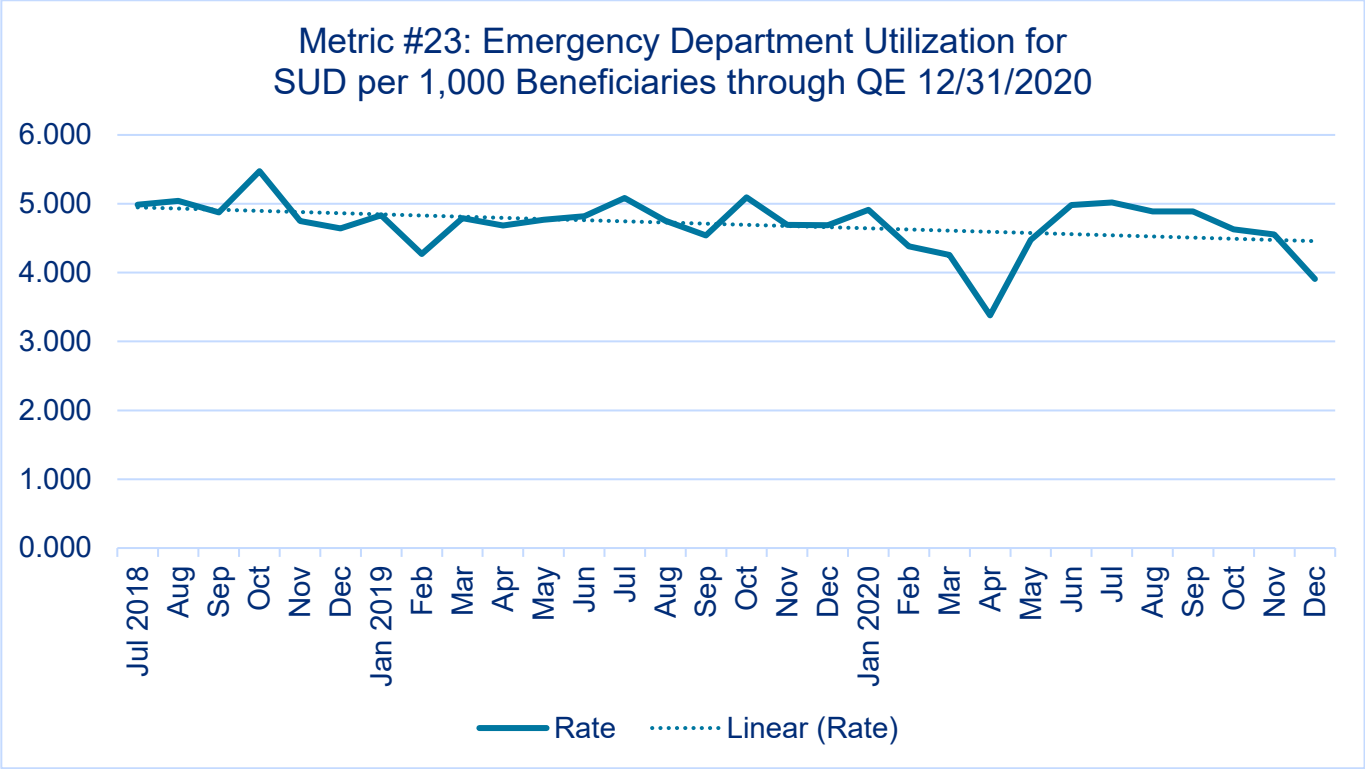

Metric #8: Individuals Receiving Outpatient Services through QE 12/31/2020
68,000
66,000
64,000
62,000
60,000
58,000
56,000
54,000
Jul 2018
Aug
Sep
Oct
Nov
Dec
Jan 2019
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan 2020
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Total
Linear (Total)

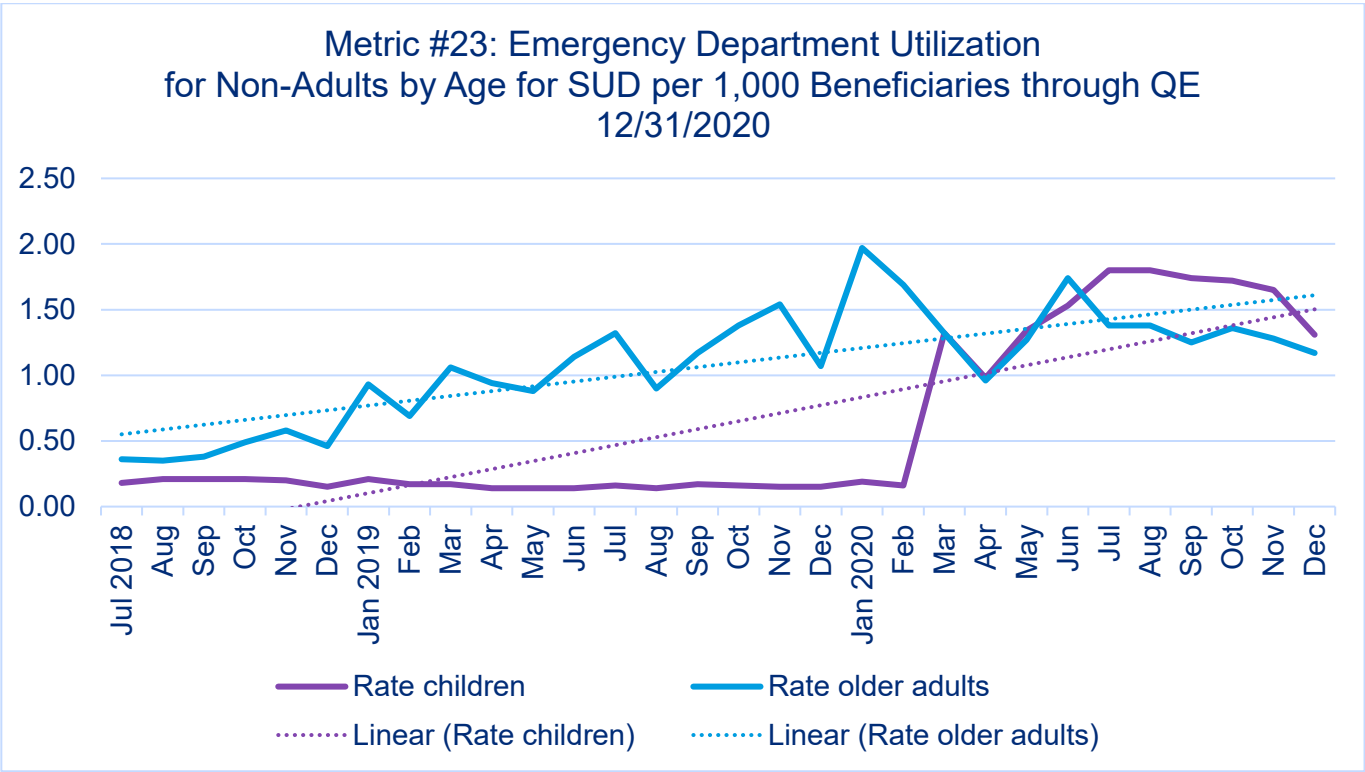

Metric #9: Members Receiving IOP/PH through QE 12/31/2020
30,000
29,000
28,000
27,000
26,000
25,000
24,000
Jul 2018
Aug
Sep
Oct
Nov
Dec
Jan 2019
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan 2020
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Total
Linear (Total)

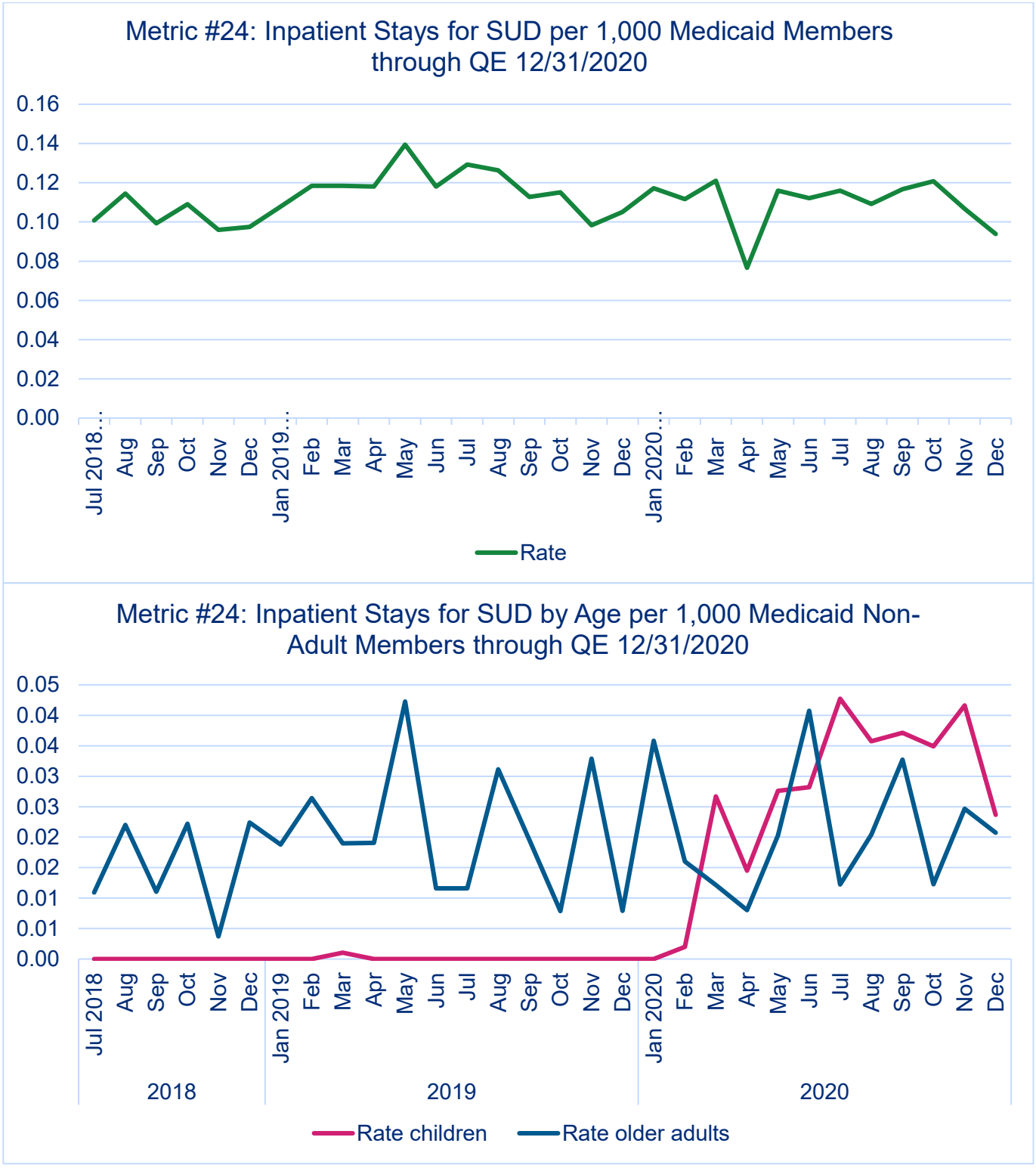

Metric #10: Members with SUD Residential and Inpatient Services through QE 12/31/2020
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
-
Jul 2018
Aug
Sep
Oct
Nov
Dec
Jan 2019
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan 2020
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Total
Linear (Total)


Metric #11: Total Members Receiving Withdrawal Management through QE 12/31/2020
2,500
2,000
1,500
1,000
500
-
Jul 2018
Aug
Sep
Oct
Nov
Dec
Jan 2019
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan 2020
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Total
Linear (Total)


Metric #12: Total Number of Members Receiving MAT through QE 12/31/2020
60,000
50,000
40,000
30,000
20,000
10,000
-
Jan 2019
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan 2020
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Total
Linear (Total)


Metric #23: Emergency Department Utilization for SUD per 1,000 Beneficiaries through QE 12/31/2020
6.000
5.000
4.000
3.000
2.000
1.000
0.000
Jul 2018
Aug
Sep
Oct
Nov
Dec
Jan 2019
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan 2020
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Rate
Linear (Rate)

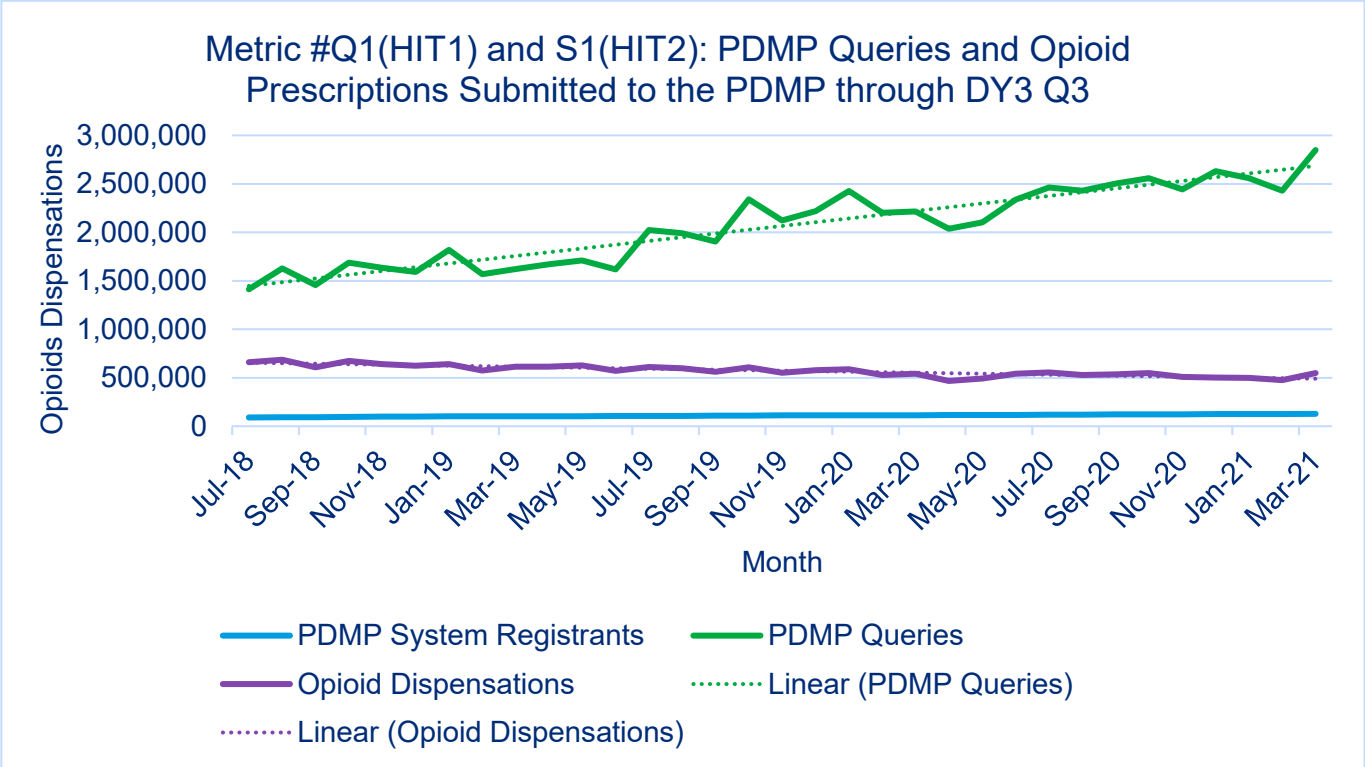

Metric #23: Emergency Department Utilization for Non-Adults by Age for SUD per 1,000 Beneficiaries through QE 12/31/2020
2.50
2.00
1.50
1.00
0.50
0.00
Jul 2018
Aug
Sep
Oct
Nov
Dec
Jan 2019
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan 2020
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Rate children
Rate older adults
Linear (Rate children)
Linear (Rate older adults)

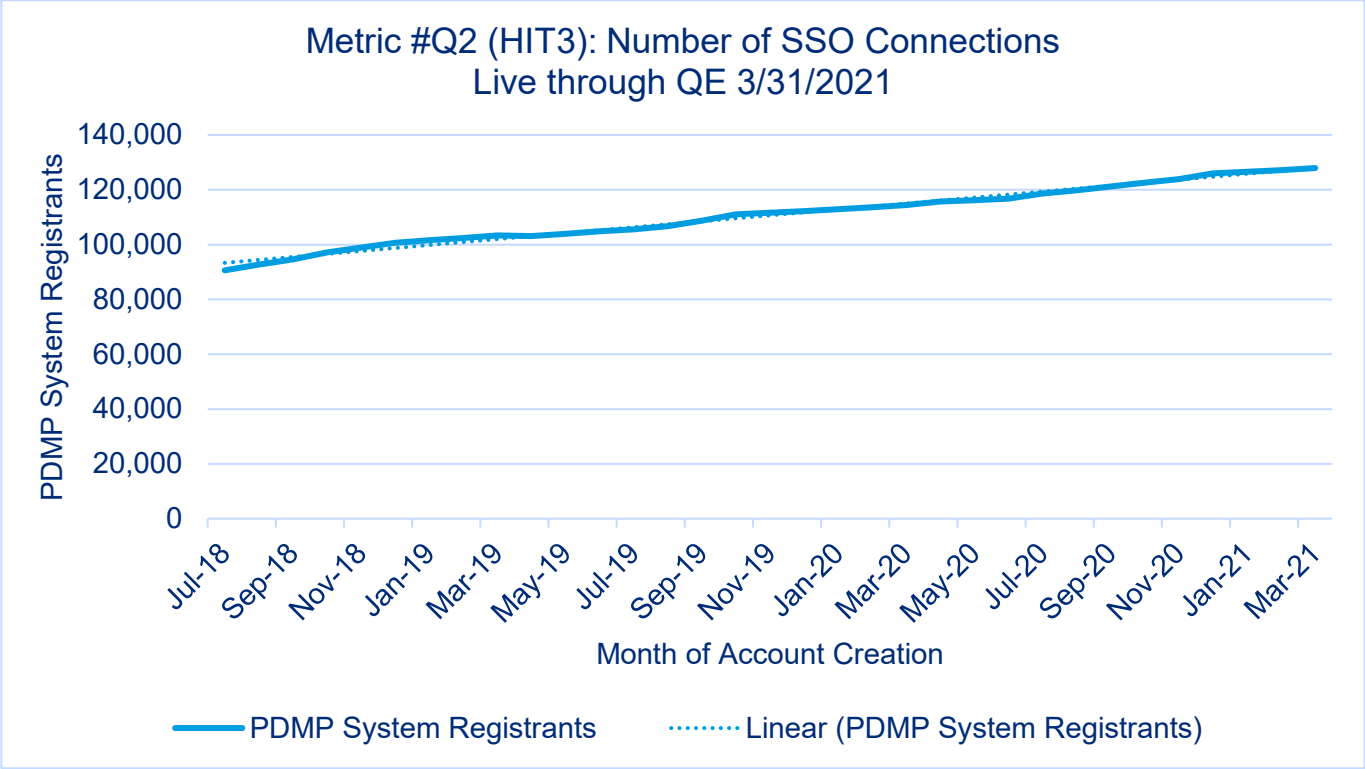

Metric #24: Inpatient Stays for SUD per 1,000 Medicaid Members through QE 12/31/2020
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
Jul 2018…
Aug
Sep
Oct
Nov
Dec
Jan 2019…
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan 2020…
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Rate
Metric #24: Inpatient Stays for SUD by Age per 1,000 Medicaid Non-Adult Members through QE 12/31/2020
0.05
0.04
0.04
0.03
0.03
0.02
0.02
0.01
0.01
0.00
Jul 2018
Aug
Sep
Oct
Nov
Dec
Jan 2019
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan 2020
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2018
2019
2020
Rate children
Rate older adults

SUD Health Information Technology (HIT)

Question Area A: The metrics from this quarter demonstrate that information technology is being used to slow down the rate of growth of individuals identified with SUD by increasing the number of providers registered with and using the PDMP. See the graphs below.

- Q1 (HIT1) PDMP checking by providers (prescribers, dispensers) PDMP Provider Inquiries continued to increase through March 31, 2021.
- Q2 (HIT3) Single Sign On (SSO) Connections live. The number of PDMP connections/users continued to increase through March 2021.

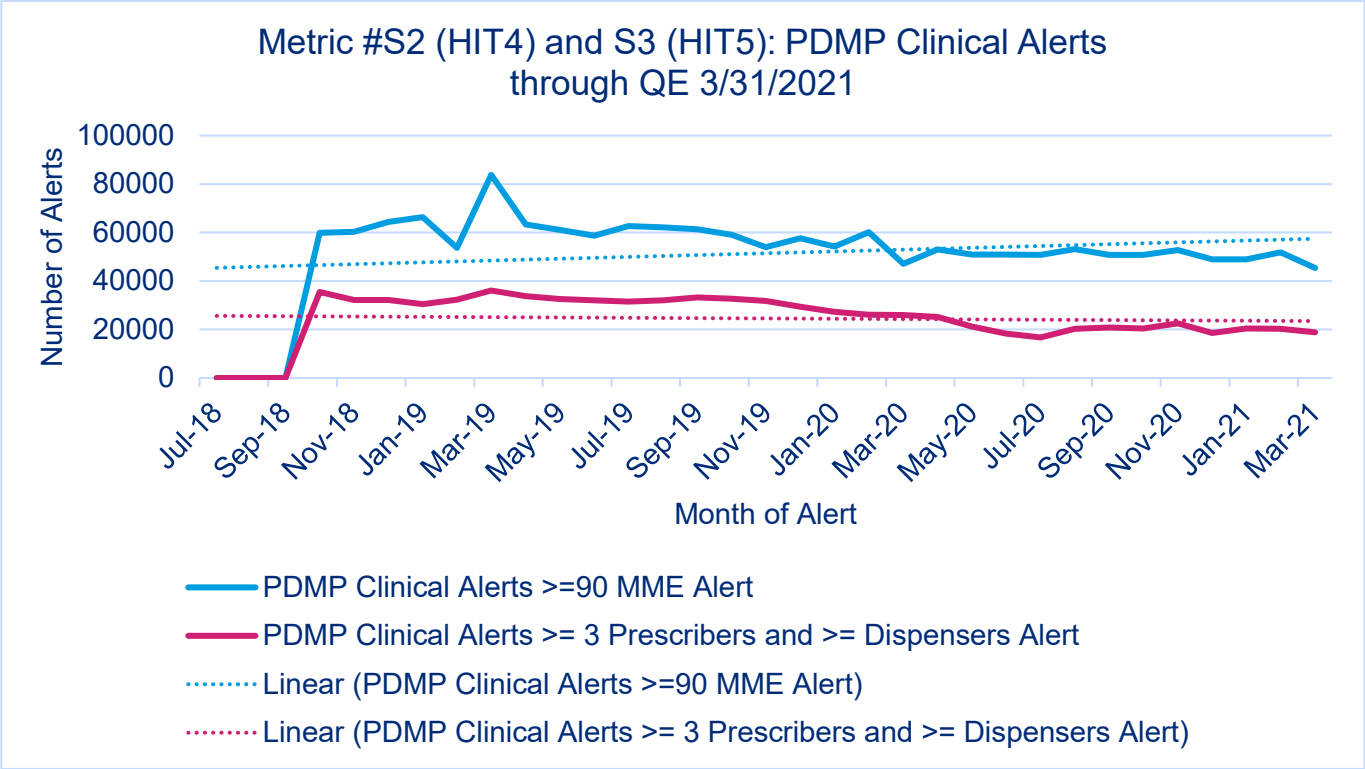




Question Area B: How is information technology being used to treat effectively individuals identified with SUD? The HIT Metrics S1, S2, and S3 demonstrate that the information technology is being used to treat effectively individuals identified with SUD. Actions tracked: Opioid prescriptions dispensed and alerts for high dosage. *Note: Alerts began in October 2018.*

- **S1 (HIT2):** Number of opioid prescriptions being dispensed continued to decrease as the number of PDMP queries continued to increase. There were significantly more opioids reported dispensed beginning in January 1, 2019, but the overall trend was still a decrease in dispensed opioids. Since October 2019, the number of opioid prescriptions dispensed has remained under 600,000 with January 2021 and February 2021, falling below 500,000.
- **S2 (HIT4):** The number of individuals who receive a dosage of greater than or equal to 90 morphine milligram equivalents (MMEs) per day continued to decrease as measured by number of "Patient Exceeds Opioid Dosage (MME/D) Threshold" alerts generated. The Centers for Disease Control and Prevention (CDC) recommends that prescribers should reassess evidence of the benefits and risks to the individual when increasing dosage to ≥ 50 MME/day (e.g., ≥ 50 mg hydrocodone; ≥ 33 mg oxycodone) and avoid increasing to ≥ 90 MME/day (≥ 90 mg hydrocodone; ≥ 60 mg oxycodone) when possible due to an increased risk of complications. The PDMP has reported fewer than 54,000 alerts since February 2020, dropping to 45,000 in March 2021.

- **S3 (HIT5):** The number of patients who received controlled substance prescriptions from three or more prescribers, and three or more pharmacists in a three-month period continued to decrease as measured by the PDMP Multiple Provider Alerts generated. The metric has stayed below 27,000 since February 2020, and has even dropped to 18,000 in March 2021.

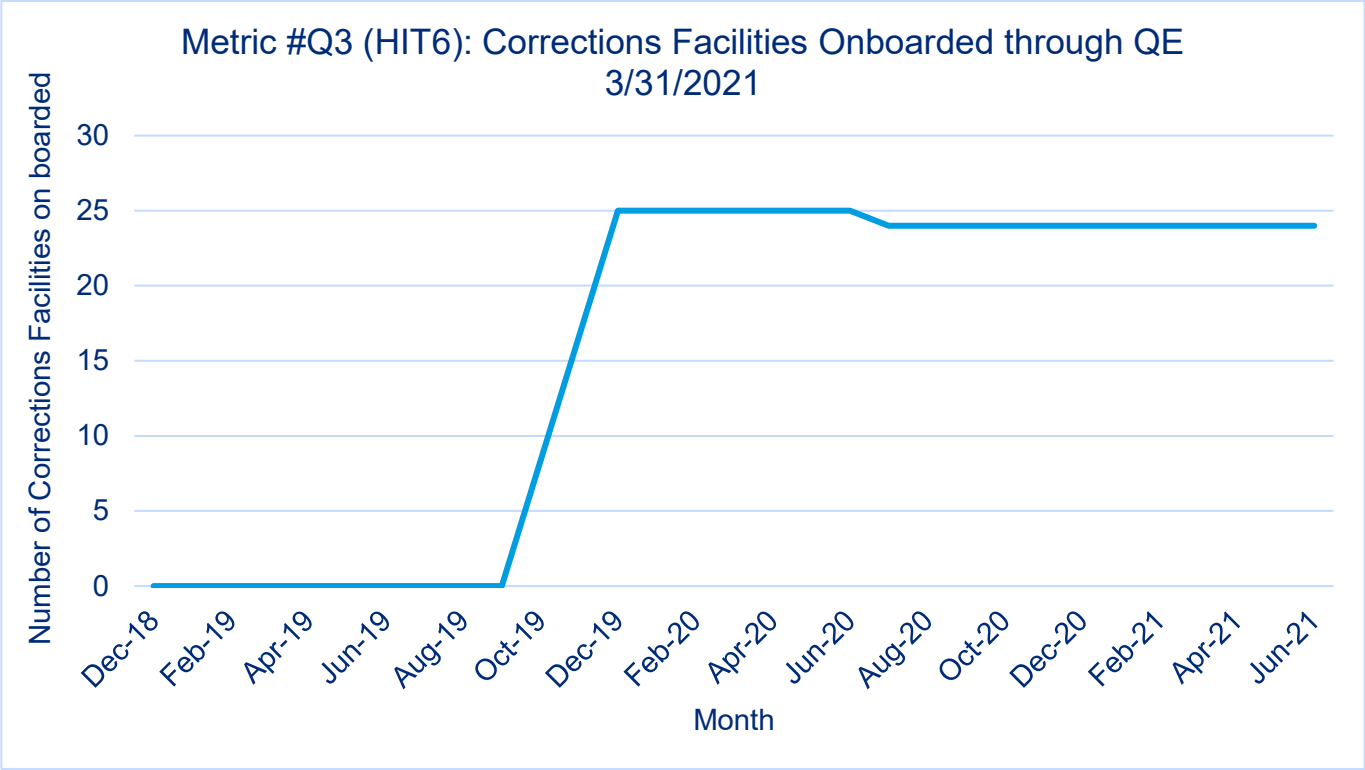


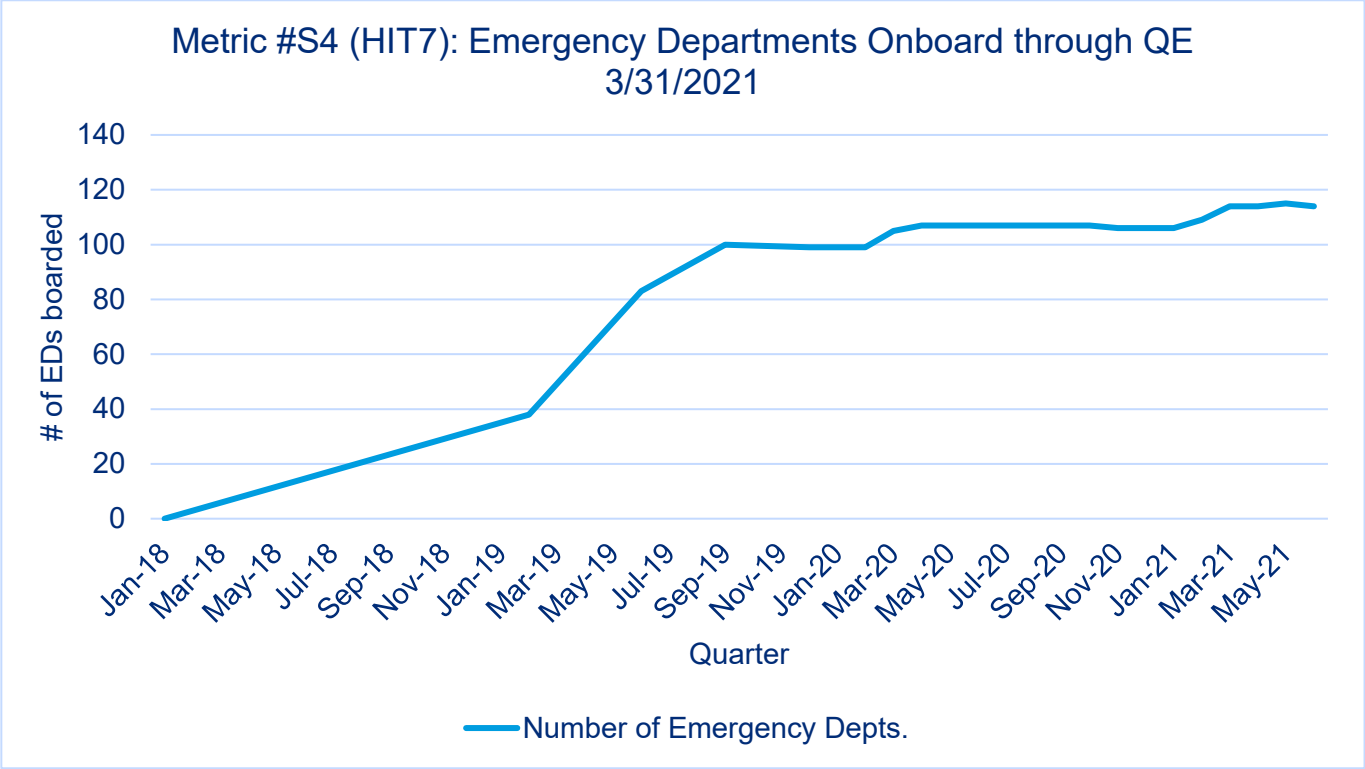
Question Area C: How is information technology being used to effectively monitor "recovery" supports and services for individuals identified with SUD? The HIT metrics (Q3 and S4) demonstrate that information technology is being used to effectively monitor "recovery supports and services" for individuals identified with SUD. This is occurring through improvements in the overall integration of corrections facilities and EDs with the HIE and PDMP and the increase in alerts sent.

- **Q3 (HIT6):** The number of corrections connections has increased over the demonstration. Pennsylvania eHealth is working on establishing connections between all prisons and the gateway, to be able to see information about inmates. This is an effort to use the PDMP through a portal and integrate with corrections medical records. Twenty-five corrections facilities have been on-boarded with the HIE. This represents all Commonwealth corrections facilities (*one corrections facility was closed in 2020*) and they are all on-boarded now to the Pennsylvania Patient & Provider Network, which is the HIE in the Commonwealth. The Commonwealth will now begin working with county facilities to begin on boarding those facilities.

- **S4 (HIT7):** The Commonwealth is tracking MAT to treat SUDs and prevent opioid overdose for the number of EDs connected to the HIE (HIT PM 7). This is the Hospital Quality Improvement Program which tracks the number of EDs that are connected to the HIE and sends Automated Admission, Discharge, and Transfer Alerts. The Commonwealth-wide alerting system tracks the volume of alerting messages over time. Actions tracked include identifying individuals connected to alternative therapies from other community-based resources for pain management or general therapy/treatment and the number of alerts sent.

Note: One hospital with an ED closed in DY2 Q2. This resulted in a slight drop in the number of EDs on-boarded with the HIE. Two hospitals began sending inpatient alerts in November 2019. The Health Information Organizations are working to get more hospitals to send inpatient alerts.





Grievance and Appeal reporting

Between SFY 2019/2020 and SFY 2018/2019, there was a decrease in complaints related to SUD treatment (called grievances by CMS) filed (numerator) and an increase of the overall MH and SUD complaints filed (denominator). There was an upward trend in quarterly percentages with one break over eight quarters. Four out of five BH-MCOs reported common themes, which are summarized in the body of this report.

Complaints (federally known as grievances)

	SFY 2018/2019	SFY 2019/2020	Rate	Description
N	975	879	9.85%	DECREASE in Numerator
D	2,968	3,595	1.21%	21% INCREASE in Denominator

Grievances (federally known as appeals)

	SFY 2018/2019	SFY 2019/2020	Rate	Description
N	117	343	2.93%	Almost a threefold INCREASE in SUD Grievances filed
D	975	2,052	2.10%	A two fold INCREASE in Grievances

In looking at SFY 2019/2020 compared to SFY 2018/2019, there was an increase in the SUD complaints filed (numerator) and a decrease in the overall MH and SUD complaints filed (denominator). There was an upward trend in quarterly percentages with one break over eight quarters.

BH-MCO reports concerning SUD Complaints (federally known as grievances):

- The BH-MCOs have noted an increase in SUD complaint numbers but these were smaller numbers than MH complaints.
- There were smaller clusters of SUD complaints in outpatient SUD providers that were newer or had turnover of staff.
- There has been an ongoing quality improvement effort related to complaints by having consistent collaboration between care management staff and providers.
- Of the SUD complaints, regarding COVID-19 precautions/protocols, in Q4 of SFY 2019/2020 were a newer complaint area as providers/members tried adjusted to the PHE (April, May, and June 2020).
- All of the BH-MCOs responding have active review processes to identify opportunities in collaboration when a provider or area has been identified.

In analyzing the above Commonwealth SUD grievance numbers in the 1115 waiver, we compared this to the data provided for SFY 2018/2019. We found a sharp decrease in the SUD grievances filed and the MH/SUD denominators in SFY 2019/2020 when compared to SFY 2018/2019.

BH-MCO reports concerning SUD Grievances (federally known as appeals):

- The waiver of pre-authorization requirements during the COVID-19 PHE went into effect in May 2020, decreasing denials and therefore grievances.
- There has been a consistent decrease in denials over this time period related to more frequent peer-to-peer consultations. This resulted in decreased grievance numbers.
- Provider and BH-MCO staff learned to apply ASAM guidelines together as part of the Commonwealth-wide transition initiative. This helped in the interpretation of medical necessity guidelines for SUD treatment therefore decreasing denials then grievances.
- One BH-MCO implemented a system for automated authorization and notification of several SUD LOCs through our provider portal, which lessened the need for prior authorization of SUD services.
- Another BH-MCO removed the precertification requirements for 2.5 LOC and on April 1, 2020 moved to an alternative payment arrangement because of the COVID-19 PHE; during this period no SUD pre-certifications were required.

Appendix E

Documentation of the Commonwealth's compliance with the public notice process set forth in 42 CFR §§431.408 and 431.420.

Post Award Forums

The Commonwealth held two post-award forums for the SUD 1115 on April 23, 2019 and February 16, 2021. No post-award forum was held in 2020 due to the PHE.

Summary of Pennsylvania SUD 1115 Demonstration Post-Award Forum Comments from April 23, 2019

Commenter 1: Supports the 1115 Waiver, but expressed serious concerns about the replacement of Pennsylvania Client Placement Criteria (PCPC) with ASAM Criteria. Stated using ASAM Criteria is in violation of Act 152 of 1988 and Pennsylvania constitution and that there are concerns in the Pennsylvania House and Senate regarding decision to transition to ASAM Criteria. The commenter cited a Pennsylvania Supreme Court ruling and said that ruling is about a situation similar to the constitutionality issue raised by ASAM Criteria implementation.

Commenter 2: Wholeheartedly endorses the life-saving objectives of the Waiver, but expressed concerns with the use of ASAM Criteria. Stated ASAM Criteria was developed for use with commercial insurance for less deteriorated individuals. The commenter, at a minimum, recommends altering/tailoring ASAM Criteria to use with the services and populations served by the Commonwealth agencies. Questions why Pennsylvania cannot make changes to ASAM Criteria when other states have. The commenter also expressed concerns about the training costs and productivity losses associated with training time. The commenter also stated that the ASAM Criteria implementation results in profits for a private entity (ASAM/The Change Company). Recommends Pennsylvania reverting to PCPC or obtain an agreement/commitment from ASAM/The Change Companies to allow the Commonwealth to modify ASAM Criteria to fit the needs of the population served.

Commenter 3: This BH-MCO serving nine counties collectively support the comprehensive implementation of the current ASAM Criteria to guide the clinical decision making for all SUD treatment and case management providers. Emphasizes that all treatment medical interventions must be tailored to the individual client and be based upon established medical criteria. ASAM Criteria are the internationally established standards for the medical process of creating individualized treatment services for those with addiction. Their reviews of the current SUD treatment provided in their region indicate that the vast majority of the residential SUD services have never fully advanced to be individualized under the PCPC resulting in high readmission rates. States that ASAM's evidence-based criteria will drive quality and outcomes that not only save lives, but provide cost savings to the taxpayers. Urges DHS to continue toward full and comprehensive implementation of the ASAM Criteria.

Commenter 4: Offered continued support to the SUD 1115 Demonstration, but expressed concerns primarily about the adoption of ASAM Criteria. The commenter asked what the Commonwealth doing to tailor ASAM Criteria to Pennsylvania service delivery system, since the Pennsylvania Act 152 of 1988 requires the Commonwealth to develop the placement criteria. According to the commenter, ASAM Criteria include a number of "fail first" criteria that are in violation of federal MH Parity Act. The commenter stated that the initial Demonstration application was modified after the public version and wanted to know how feedback can be provided for additional material. The commenter also wanted to know where the quarterly reports and draft Evaluation Design are published and what the stakeholder involvement was in the Development of the Evaluation Design. The commenter wanted to know if public venues will be provided regularly to have an open dialogue and when the commenter would receive response to the feedback provided to the Commonwealth. The commenter inquired when there would be an update to the May 2018 ASAM Guidance document issued by DDAP. Wants to know how Mercer was selected as the independent evaluator and why independent universities with expertise in SUD treatment evaluation such as Temple or Villanova were not selected. Asked if there is a process to track number of members at each LOC, length of stay (LOS), grievances, appeals etc. Wanted to know when data on some of the metrics will be available. The commenter says there is inconsistency on provider capacity issues with what the monitoring report says and what the Commonwealth needs assessment for the CURES Act says. Commenter states that the six-month post award public forum was delayed. The individual also stated that there is backlog in ASAM Criteria training and asked if Commission on Accreditation of Rehabilitation Facilities acceptable in place of ASAM Criteria. The individual also stated they are seeing changes in programming with difficulty admitting clients to residential LOCs and adverse effects on LOS with ASAM Criteria implementation.

Commenter 5: This provider did not provide any written comments, but in general spoke in favor of going back to PCPC while supporting the objectives of the 1115 Waiver. The commenter was of the opinion that ASAM Criteria adds a lot of complexity.

Commenter 6: Stated that ASAM Criteria for halfway houses are inconsistent with Pennsylvania halfway house program and that clients clinically recommended for halfway house were denied care based on funder's understanding of ASAM Criteria. The commenter stated that the restrictions in ASAM Criteria do not permit treatment and stabilization beyond acute withdrawal phases of the stabilization and recovery process and that the ASAM Guidance document issued by DDAP does not resolve the issues related to halfway houses and Women with Children program. The commenter was also of the opinion that the Pennsylvania ASAM Transition Workgroup does not adequately represent the treatment community. The individual also stated that the changes to PHP programs as required by ASAM Criteria may lead to the closure of these programs. The commenter said ASAM and its training are not reflective of the publicly funded treatment system and recommends 1115 Waiver with a change to PCPC from ASAM Criteria.

DHS' Overall Responses to Comments

Commonwealth response: PCPC to ASAM Transition: The use of ASAM Criteria as the assessment and LOC placement tool aligns with CMS requirements for a nationally recognized SUD specific program standard for residential treatment facilities, as well as with DDAP's decision to transition to the use of ASAM Criteria as the placement standard for Pennsylvania. This decision was announced by DDAP in March 2017 prior to the decision by DHS to submit an 1115 Demonstration application to CMS. DDAP issued guidance to the counties to use the ASAM admission criteria as of May 1, 2018 and ASAM

treatment planning, continuing stay, and discharge criteria as of March 1, 2019. The ASAM Transition Workgroup convened by DDAP assists with the transition to ASAM and addresses any issues related to the criteria that would require specific application guidance for providers. The ASAM Transition Workgroup continues to meet and discuss any identified transition needs.

Delay in the Post Award Forum: DHS requested and received approval from CMS to hold the first public forum at a later date to ensure information regarding budget neutrality and the monitoring data would be ready and available for the public to review in advance of the public forum. A public forum is required annually and DHS will continue to share all Waiver-related information and reports information to stakeholders.

Availability of Various Waiver-Related Reports for Public: The 1115 Demonstration requires quarterly and annual reporting on the specific milestones and measures to CMS. Part of the reporting also includes a summary of the public comments received at the post award forum to be provided to CMS. DHS posts all the required information on the DHS website, including budget neutrality information.

Selection of Independent Evaluator: The Special Terms and Conditions (STCs) of the SUD 1115 Waiver approval require DHS to arrange with an independent party to conduct an evaluation of the Demonstration to ensure necessary data is collected at the level of detail needed to research the approved hypotheses in the Evaluation Design. Mercer, through a request for proposal process, contracts to provide technical assistance to DHS' OMHSAS. Mercer, through their contract with DHS, has assured that it presently has no interest and will not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of its services. DHS/OMHSAS selected Mercer to function as the Independent Evaluators based on the following qualifications:

- Experience working with federal programs and Demonstration waivers.
- Experience evaluating effectiveness of complex, multi-partnered programs.
- Familiarity with CMS federal standards and policies for program evaluation.
- Familiarity with nationally-recognized data sources.
- Analytical skills and experience with statistical testing methods.

Summary of Pennsylvania SUD 1115 Demonstration Post-Award Forum Comments from February 16, 2021

Commenter 1: Will the ASAM compliance review process be separate from the licensing survey, or will the two be combined? If a provider is found to be out of compliance with ASAM standards, what will be expected by DDAP and/or DHS?

Answer: Licensing is one element, but there will be separate reviews. DDAP/DHS will require alignment when contracted with SCA. Case-by-case basis on Provider's plan to come into compliance.

Commenter 2: What is the timing around Medication for Opioid Use Disorder (MOUD)? For example, are all SUD agencies required to offer MOUD rapidly or can agencies offer MOUD upon discharge from a LOC?

Answer: DDAP/DHS is requiring MOUD available at every level by every contractor. We cannot expect every Provider to have MOUD, but must have inside/outside referrals available.

Commenter 3: ASAM is recommending induction of agonist medications in place of detoxification from opioids as a first line of treatment for OUD; has there been any discussion on how to create a 3.7 WM standard that allows funding for WM, while also allowing for induction on agonist medications?

Answer: Short answer is yes. ASAM 3.7 includes WM that would be considered as treatment going into this LOC.

Commenter 4: Measuring continuity of MOUD. In future, there will be more medication down the line. How would we measure that? Variations on dosing, and some people are taken off medications. MCOs are struggling due to not being able to share all information with the Outpatient facilities.

Answer: DHS may have access to show how long individuals have taken said medications. Moving forward, this is definitely something we need to look into as we develop and discover more medications that can help individuals. We are just not there with the quality of pieces. There is a metric being planned alongside Medicaid Management Information System.

Commenter 5: This written comment is concerned with the implementation of ASAM to place patients in treatment for the following reasons:

- ASAM is unnecessarily complicated.
- ASAM focuses on acute conditions instead of chronic history.
- ASAM does not line up with the actual Pennsylvania treatment system.
- The PCPC is more appropriate and was based off ASAM. The PCPC is a criteria that was developed as a requirement of Act 152 of 1988 and is specifically for this patient population. The PCPC links the criteria to the treatment system.

Commenter 6: This written comment supports Pennsylvania's 1115 waiver agreement but believes it does not go far enough in addressing the alcohol and drug addiction. This commenter believes that the real remedy must start with the repeal of the IMD exclusion because it is a violation of the federal Mental Health Parity and Addiction Equity Act of 2008. This commenter supports longer length of time in treatment. Supports the 1115 Waiver, but expressed serious concerns about the replacement of PCPC with ASAM Criteria. The commenter stated that using ASAM Criteria is in violation of Act 152 of 1988 and Pennsylvania constitution and that their concerns in the Pennsylvania House and Senate regarding decision to transition to ASAM Criteria. Finally, as per the prior discussion, length of stay in treatment is the single most important predictor of success and strong recovery. For this reason, we searched the Metrics Workbook and Monitoring Reports for this important measure and could find little information. The Metrics Workbook and reports are quite challenging to review, so perhaps we missed the information on this metric. (Metric #36, length of stay) The absence of this critical information was

identified as a problem and a deviation as far back as the DY1 Q2 Metrics Workbook and as far as we can tell, this has still not been corrected. This is an area of deep concern. In closing, addiction that is not properly treated moves forward with simple, predictable, and fatal certainty. Once again, overdose death rates are approaching historically high levels in the Commonwealth, even as life-saving Narcan® is in widespread use.

Department's Responses to Comment 5 and Comment 6

PCPC to ASAM Transition: The use of ASAM Criteria as the assessment and LOC placement tool aligns with CMS requirements for a nationally recognized SUD specific program standard for residential treatment facilities, as well as with DDAP's decision to transition to the use of ASAM Criteria as the placement standard for Pennsylvania. This decision was announced by DDAP in March 2017 prior to the decision by DHS to submit an 1115 Demonstration application to CMS. DDAP issued guidance to the counties to use the ASAM admission criteria as of May 1, 2018 and ASAM treatment planning, continuing stay, and discharge criteria as of March 1, 2019. The ASAM Transition Workgroup convened by DDAP assists with the transition to ASAM and addresses any issues related to the criteria that would require specific application guidance for providers. The ASAM Transition Workgroup continues to meet and discuss any identified transition needs.

Availability of Various Waiver-Related Reports for Public: The 1115 Demonstration requires quarterly and annual reporting on the specific milestones and measures to CMS. Part of the reporting also includes a summary of the public comments received at the post award forum to be provided to CMS. DHS posts all the required information on the DHS website, including budget neutrality information.

Public Notice for the Extension Request

1. Pennsylvania provided an open comment period for public comments from January 15, 2022 through February 15, 2022.

2. Pennsylvania published a Public Notice in *Pennsylvania Bulletin* on January 15, 2022. Pennsylvania Bulletin is the state's official gazette. The notice can be found at https://www.pacodeandbulletin.gov/Display/pabull?file=/secure/pabulletin/data/vol52/52-3/98.html. The notice included a summary description of the Demonstration, the location and times of the public hearings, information on different ways to provide comments, and an active link to the full public notice document on the State's Web site.

3. On January 14, 2022, the State also published on its website the full public notice with information about public input process and planned hearings, the draft Demonstration renewal application, and a link to the Demonstration page on the CMS Web site. This can be found at https://www.dhs.pa.gov/Services/Assistance/Pages/Medicaid-Coverage-Former-Foster-Care-Youth-Different-State-Substance-Use-Disorder-Section-1115.aspx.

4. Pennsylvania conducted two virtual public hearings on the 1115 Demonstration renewal application. These public hearings were held on February 2, 2022 and February 4, 2022. Additionally, the state also presented updates on the Demonstration renewal application at the Medical Assistance Advisory Committee (MAAC) meeting on January 27, 2022.

5. Pennsylvania certifies that it used an electronic mailing list to notify the public. Pennsylvania used the electronic mailing list that is used for the Income Maintenance Advisory Committee and MAAC.

6. The 30-day public comment period began on January 15, 2022, and was originally slated to end on February 15, 2022. The Commonwealth extended the public comment period to March 10, 2022. Written comments at any of the public hearings or submitted by email were accepted until February 15, 2022. As of close of our comment period, the following comments have been received that pertain to the 1115 Demonstration submission: There was a single verbal comment submitted by the Drug and Alcohol Service Providers Organization of Pennsylvania regarding how residential SUD treatment should be getting longer not shorter. There was one written comment submitted by the same party as outlined below:

   These demonstration projects are once again evidence of the federal government's abject refusal to address the treatment of addiction head-on. It is evidence of the ongoing discrimination and stigma that surrounds the care of people with this illness.

   States have clamored for many years for the federal government to get rid of the IMD Exclusion in regard to addiction treatment.

   I was thinking of this history as I listened to your presentation on 2/4/22. All throughout the Reagan administration there was a national push to eliminate this life endangering barrier to addiction treatment. At the last minute, the government announced Demonstration projects allegedly to see if residential addiction treatment worked and to see if there were cost savings. As preliminary outcome data came to the fore demonstrating success on both counts, the Demonstration projects were abruptly stopped.

   The outcomes that emerged were of no surprise to anyone with knowledge of this issue. No surprise - treatment works!

   My point is that demonstration grants are not new and if properly implemented, the outcome is always the same -treatment works(!), cost benefits are ignored and then, the IMD barrier to care is maintained anyway.

   This is truly puzzling. Why doesn't the federal government simply follow the research including its own?

   There are numerous studies - including the federal government's own studies -demonstrating that residential addiction treatment is highly effective and saves money in terms of health care and crime.

   Long term studies of both doctors with addictions and criminal justice populations find the same thing - long term addiction treatment, including 3 to 6 months residential addiction treatment, lots of outpatient, support groups, drug testing and monitoring - are highly effective.

   And, according to the National Institute on Drug Abuse (NIDA, 2018), "Research indicates that the majority of individuals need at least 90 days of treatment to significantly reduce or stop using substances." This finding cannot be emphasized enough, particularly with individuals who are deteriorated enough to be dependent on Medicaid including pregnant addicted women, addicted

women with dependent children, addicted veterans, homeless individuals and lowlevel drug offenders sent to treatment as part of sentencing.

In this context, it is hard to understand why PA's 1115 Demonstration Waiver reports lengths of stay of only 6.8 days. Why is this acceptable? What plans does the Department have to remedy this problem?

There is no research out there anywhere that shows 6.8 days of residential rehabilitation is effective for people that need residential addiction treatment.

Pennsylvania and the Department of Drug & Alcohol Programs are currently involved in a large statewide campaign to reduce stigma and discrimination. And well, here it is - the face of discrimination itself - the IMD Exclusion.

Pennsylvania, the Departments and the addiction treatment field have been forced to yield and participate in a discriminatory practice. We have become the agents of discrimination.

What plans does the Department have to challenge and to eliminate this discriminatory life-threatening federal rule?

7. After review of the comments and concerns, no changes to the renewal were made.

Redline Version of STCs #57 and #67

57. Reporting Member Months. The following describes the reporting of member months for demonstration populations.

a. For the purpose of calculating the budget neutrality expenditure limit and for other purposes, the state must provide to CMS, as part of the budget neutrality Monitoring Tool required under STC 52, the actual number of eligible member months for the each MEG defined in subparagraph D below. The state must submit a statement accompanying the budget neutrality Monitoring Tool, which certifies the accuracy of this information. To permit full recognition of "in-process" eligibility, reported counts of member months may be subject to revision.
b. The term "eligible member/months" refers to the number of months in which persons are eligible to receive services. For example, a person who is eligible for 3 months contributes 3 eligible member months to the total. Two individuals who are eligible for 2 months each contribute 2 eligible member months to the total, for a total of 4 eligible member/months.
c. The state must report separate member month totals for individuals enrolled in the Medicaid Coverage for Former Foster Care Youth from a Different State and Substance Use Disorder Demonstration and the member months must be subtotaled according to the MEGs defined in STC 57(d)(i).
d. The required member month reporting MEGs are:
    i. SUD IMD TANF: SUD IMD Member Months are months of Medicaid eligibility during which the TANF individual is an inpatient in an IMD under terms of the demonstration for any day during the month and must be reported separately for each SUD IMD MEG, as applicable.
    ii. SUD IMD SSI Duals - NFCE: SUD IMD NFCE Member Months are months of Medicaid eligibility during which the SSI Dual individual who is nursing facility eligible is an inpatient in an IMD under terms of the demonstration for any day during the month and must be reported separately for each SUD IMD MEG, as applicable.
    iii. SUD IMD SSI Duals - NFI: SUD IMD NFI Member months are months of Medicaid eligibility during which the SSI Dual individual who is not nursing facility eligible is an inpatient in an IMD under terms of the demonstration for any day during the month and must be reported separately for each SUD IMD MEG, as applicable.
    iv. SUD IMD SSI Non-Duals: SUD IMD Member Months are months of Medicaid eligibility during which the SSI Non-Dual individual is an inpatient in an IMD under terms of the demonstration for any day during the month and must be reported separately for each SUD IMD MEG, as applicable.
    v. SUD IMD HCE: SUD IMD HCE Member Months are months of Medicaid eligibility during which the HCE individual is an inpatient in an IMD under terms of the demonstration for any day during the month and must be reported separately for each SUD IMD MEG, as applicable.

67. Main Budget Neutrality Test. The trend rates and per capita cost estimates for each EG for each year of the demonstration are listed in the table below.

Approved

MEG	TREND	DY 1 PMPM	DY 2 PMPM	DY 3 PMPM	DY 4 PMPM	DY 5 PMPM
SUD IMD TANF	4.80%	$520.37	$545.35	$571.53	$598.96	$627.71
SUD IMD SSI Duals	4.80%	$252.46	$264.58	$277.28	$290.59	$304.54
SUD IMD SSI NON-DUALS	4.80%	$2,024.02	$2,121.17	$2,222.99	$2,329.69	$2,441.52
SUD IMD HCE	4.80%	$741.38	$776.97	$814.26	$853.34	$894.31

Proposed

MEG	TREND	DY1 PMPM	DY2 PMPM	DY3 PMPM	DY4 PMPM	DY5 PMPM	DY6 PMPM	DY7 PMPM	DY8 PMPM	DY9 PMPM	DY10 PMPM
SUD IMD TANF	4.80%	$520.37	$545.35	$571.53	$598.96	$627.71	$657.84	$689.42	$722.51	$757.19	$793.54
SUD IMD SSI Duals	4.80%	$252.46	$264.58	$277.28	$290.59	$304.54					
SUD IMD SSI Duals — NFCE	4.80%						$6,887.91	$7,218.53	$7,565.02	$7,928.14	$8,308.69
SUD IMD SSI Duals — NFI	4.80%						$263.19	$275.83	$289.07	$302.94	$317.48
SUD IMD SSI Non-Duals	4.80%	$2,024.02	$2,121.17	$2,222.99	$2,329.69	$2,441.52	$2,558.71	$2,681.53	$2,810.24	$2,945.13	$3,086.50
SUD IMD HCE	4.80%	$741.38	$776.97	$814.26	$853.34	$894.30	$937.23	$982.22	$1,029.37	$1,078.77	$1,130.56