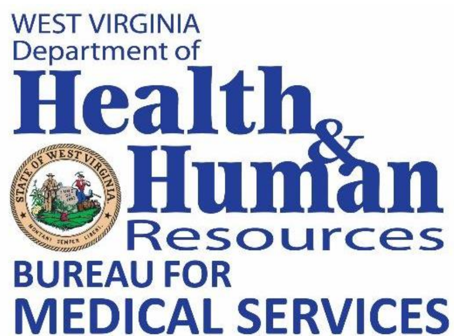
MEDICAID 101

Healthcare Indicators From the COVID-19 Pandemic



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Medicaid 101: Healthcare Indicators From the COVID-19 Pandemic

The following acronyms are used throughout this document:

Acronym	Definition
CY	Calendar Year
FQHC	Federally Qualified Health Center
MAT	Medication-Assisted Treatment
RAS	Residential Adult Services
RHC	Rural Health Clinic

Introduction

This document explores selected healthcare patterns and how the COVID-19 pandemic may have affected them pertaining to the Medicaid population. The duration of the COVID-19 pandemic is defined from the declaration of the national emergency (March 2020) to the end of the national emergency (May 2023). This period captures West Virginia's declaration of emergency in March 2020.

The pandemic and subsequent emergency declarations resulted in changes to the nation's healthcare policy and service delivery. West Virginia's Medicaid program also faced significant changes in response to the pandemic. This document does not attempt to examine all changes or to examine them in depth; instead, the focus is on broad areas of general interest: telehealth, inpatient hospitalizations, emergency room visits, behavioral health services, and enrollees receiving medication-assisted treatment.

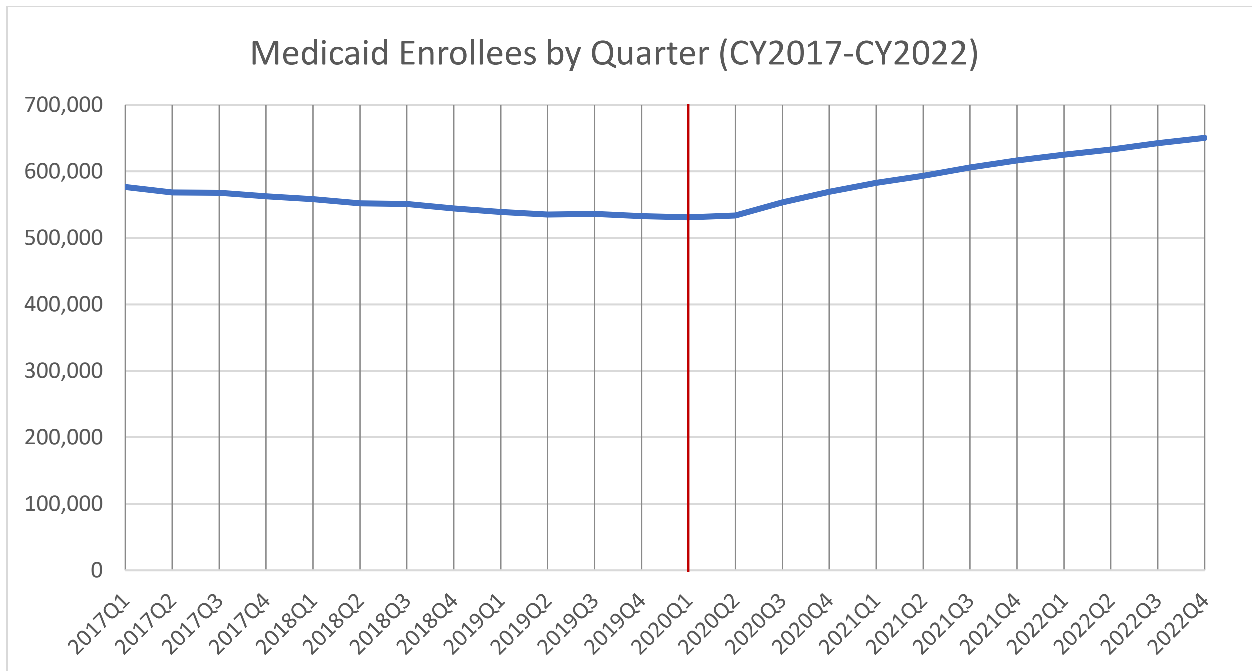
Portions of this work are based on previously completed deliverables that evaluated Medicaid policy changes during the pandemic and can be referred to for a more detailed perspective. Slight differences in the reports may be observed due to differences in timeline and/or methodology. Although the national emergency ended in the second quarter of 2023, this document examines claims data only through calendar year (CY) 2022 to reflect the quality of data available at the time of submission. Data are presented since the beginning of 2017 to provide a baseline comparison.

Trends Observed in the West Virginia Medicaid Program

Medicaid Enrollees

The West Virginia Medicaid program experienced a gradual increase in the number of enrolled beneficiaries since the declaration of the federal emergency in Q2 of 2020. The number of Medicaid enrollees in West Virginia had been on a gradual decline in the medium term from approximately 576,000 enrollees in Q1 of 2017 to a minimum of approximately 530,000 enrollees in the quarter prior to the federal emergency. This was followed by a continual increase in the number of beneficiaries enrolled in West Virginia Medicaid up to approximately 650,000 covered individuals in Q4 of 2022. This represents a 22.5 percent increase in the number of covered individuals from Q2 of 2020 to the end of the 2022 calendar year. This observed increase in the number of Medicaid enrollees potentially creates downstream effects when calculating rates of service utilization. For example, if new enrollees differ from those already existing in the coverage pool, either by being healthier or simply less inclined to seek care, then overall rates of utilization will decrease. However, it should be noted that the increased enrollment effect is unlikely to be the only factor influencing utilization, especially given its overlap with other effects of the COVID-19 pandemic.

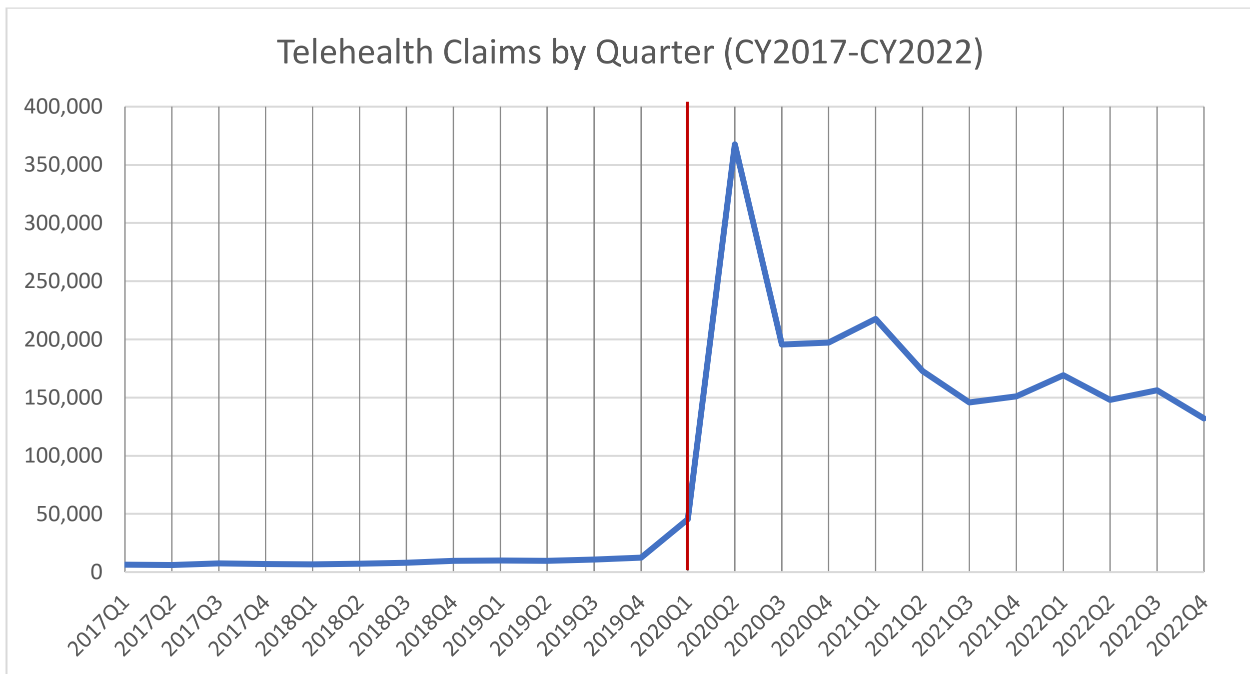
Figure 1: Medicaid Enrollees by Quarter (CY2017-CY2022)



Telehealth Utilization

There was a significant increase in the number of Medicaid claims administered via telehealth as providers serving Medicaid beneficiaries quickly adopted new technology to continue caring for their patients. West Virginia Medicaid had been billed for between 5,000 and 12,500 telehealth claims per quarter between Q1 of 2017 and Q4 of 2019, increasing to more than 365,000 claims in the first complete quarter of the federal emergency. Although claims for telehealth have decreased in the subsequent quarters, they remain more than 10 times higher than the observed pre-pandemic maximum.

Figure 2: Telehealth Claims by Quarter (CY2017-CY2022)



Of special interest is the adoption of telehealth by Federally Qualified Health Centers (FQHCs) and Rural Health Clinics (RHCs), as these providers serve an important role in providing care to some of the most high-risk segments of the West Virginia Medicaid population. Claims data analysis shows that both FQHCs and RHCs were very responsive in providing telehealth services to their clients at the initial onset of the pandemic with a drop-off beginning Q3 of 2020. Although telehealth claims have represented less than one percent of claims for both FQHCs and RHCs since that time, both provider types have demonstrated at least a five-fold increase in telehealth utilization compared to pre-pandemic levels.

Figure 3: Percentage of FQHC Claims Delivered via Telehealth by Quarter (CY2017-CY2022)

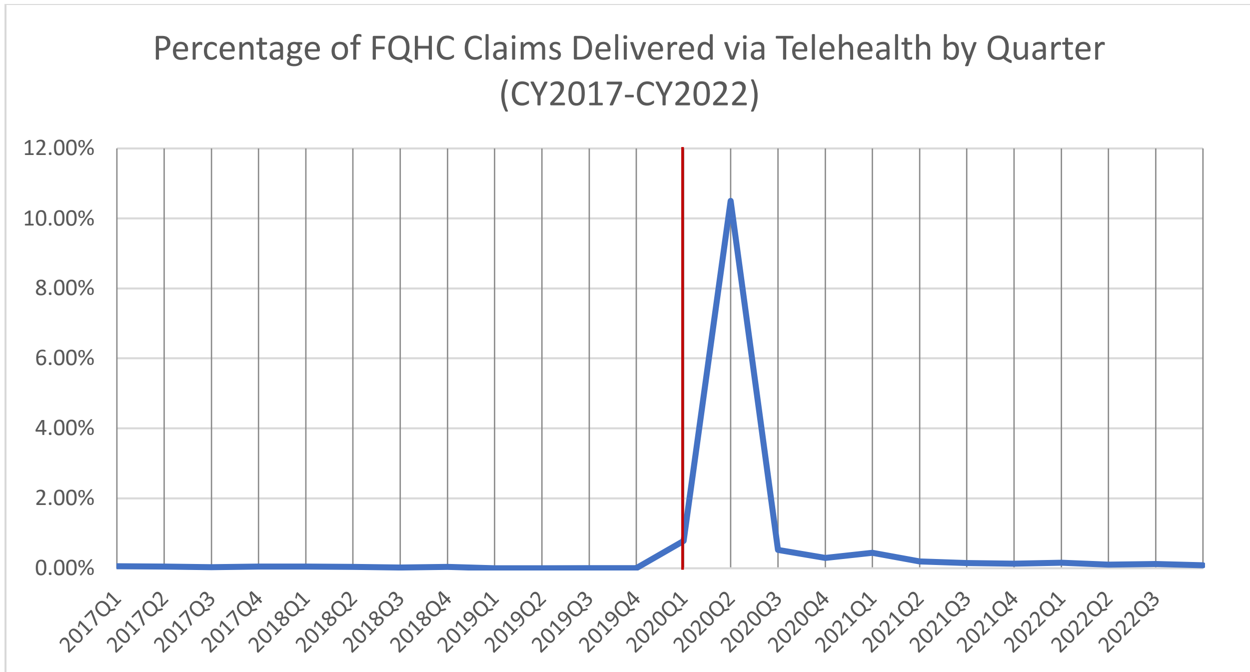
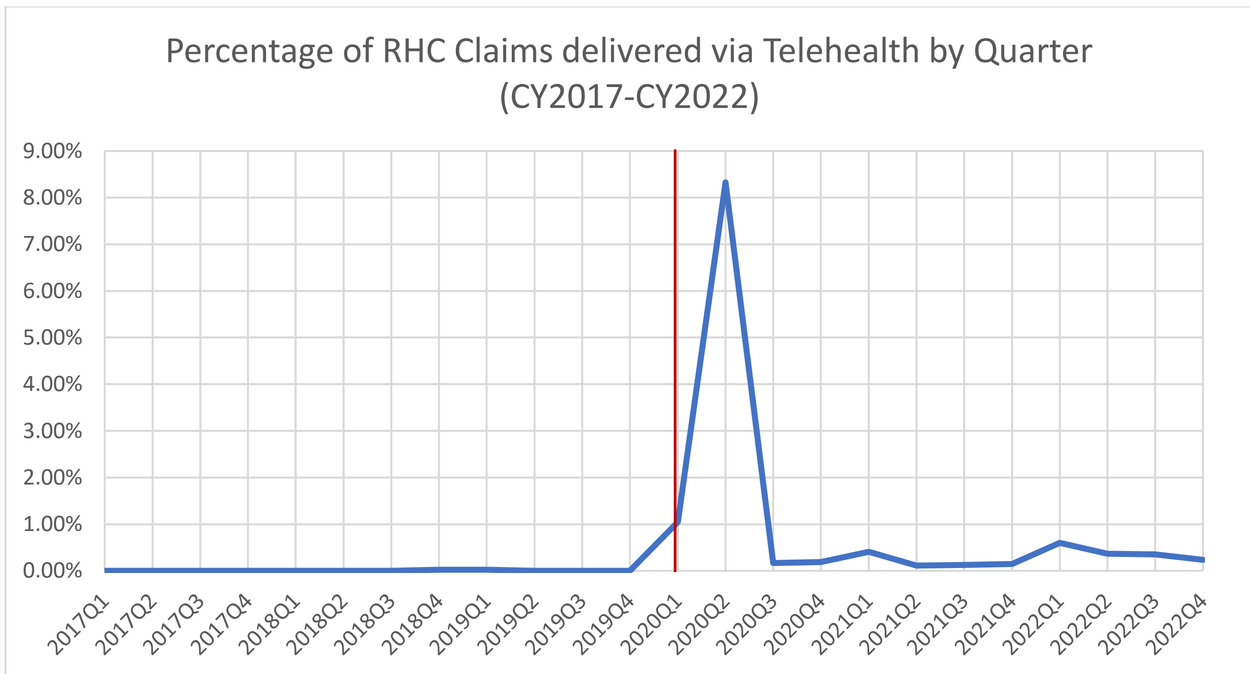


Figure 4: Percentage of RHC Claims delivered via Telehealth by Quarter (CY2017-CY2022)



Inpatient Hospitalizations

The rate of inpatient hospitalizations rose steadily prior to the pandemic, reaching a high of 331 hospitalizations per 1,000 enrollees by Q1 of 2020. The rate fell sharply to 240 the next quarter and continued to decline to lower levels than were seen in the previous six years. Similarly, the percentage of enrollees with inpatient hospitalizations ranged from 8.9 percent to 10.0 percent prior to the pandemic. This percentage sharply decreased after the first quarter of the pandemic, remaining at less than five percent since the last quarter of 2020. The change in the inpatient hospitalization rate may be at least partially attributable to the coinciding increase in Medicaid enrollment during the COVID-19 pandemic as discussed on page 2.

Figure 5: Rate of Inpatient Hospitalizations per 1,000 Medicaid Enrollees by Quarter (CY2017-CY2022)

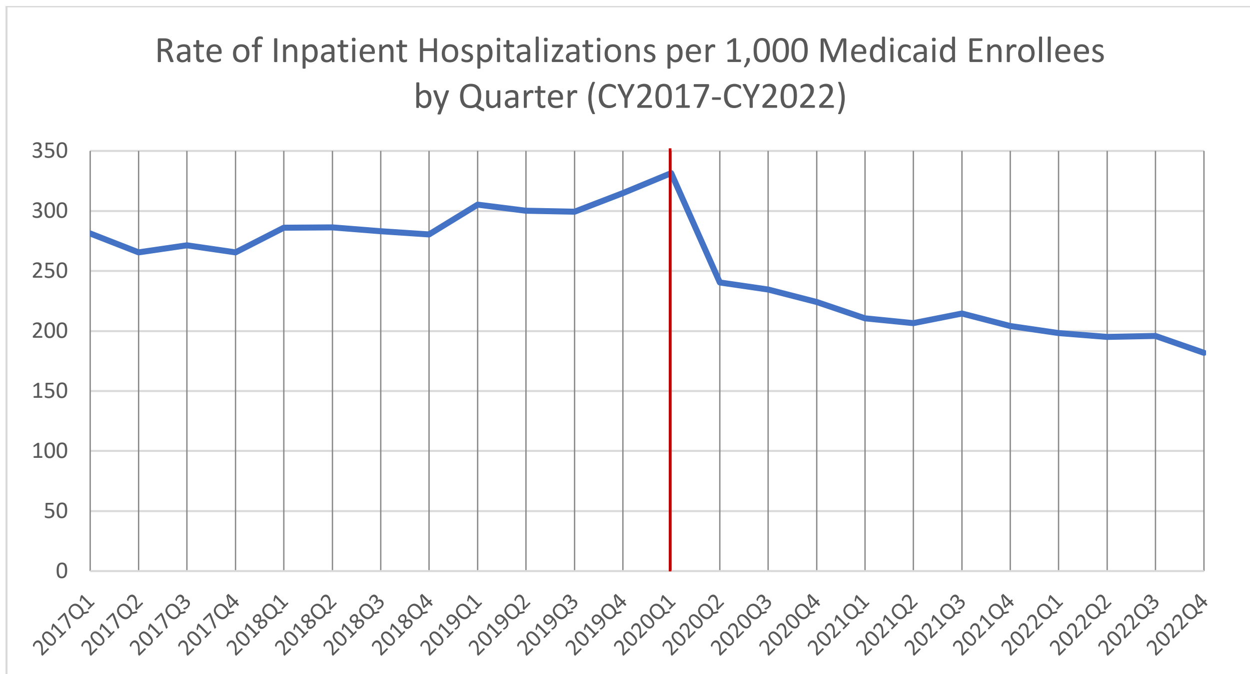
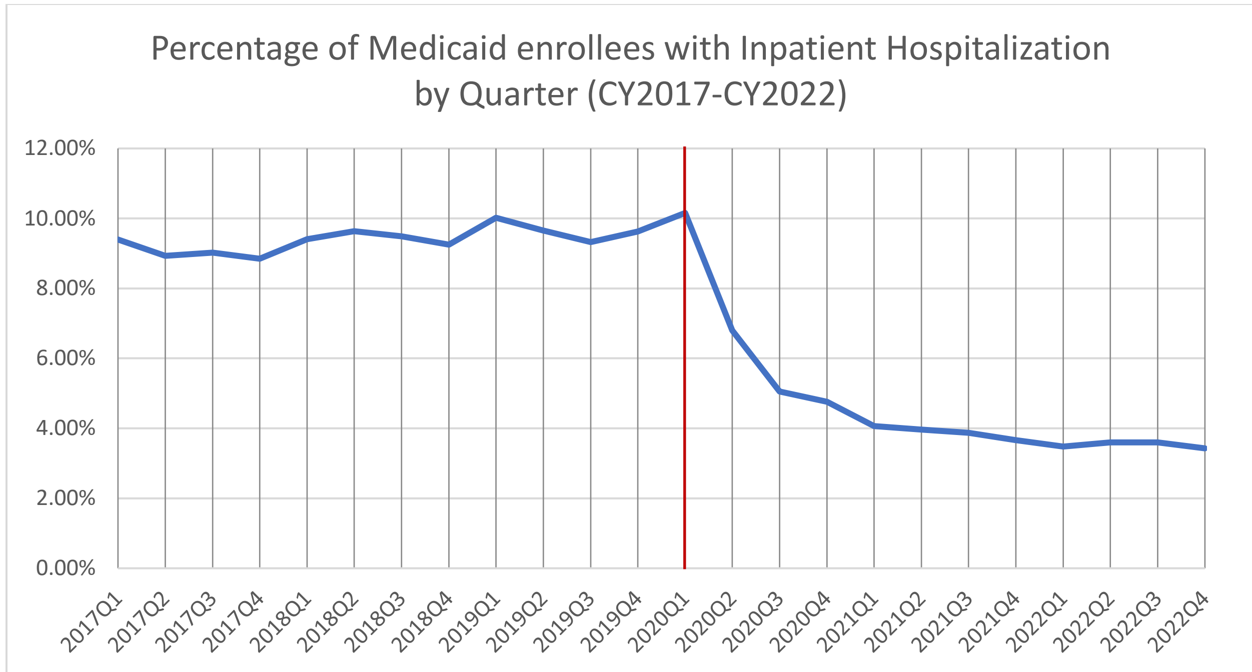


Figure 6: Percentage of Medicaid Enrollees with Inpatient Hospitalization by Quarter (CY2017-CY2022)



Emergency Room Visits

The rate of emergency room visits per 1,000 enrollees remained between 238 and 263 prior to the pandemic. It decreased to 153 in Q2 of 2020 and has since climbed marginally to 196 in Q4 of 2022, however, remaining below pre-pandemic levels. Similarly, the percentage of enrollees with an emergency room visit was fairly constant pre-pandemic, remaining between 15 and 17 percent. This percentage declined to 10 percent at the onset of the pandemic and rose but remained closer to pre-pandemic levels of 13 percent in Q4 of 2022. The change in the emergency room visit rate may be at least partially attributable to the coinciding increase in Medicaid enrollment during the COVID-19 pandemic as discussed on page 2.

Figure 7: Rate of Emergency Room Visits per 1,000 Medicaid Enrollees by Quarter (CY2017-CY2022)

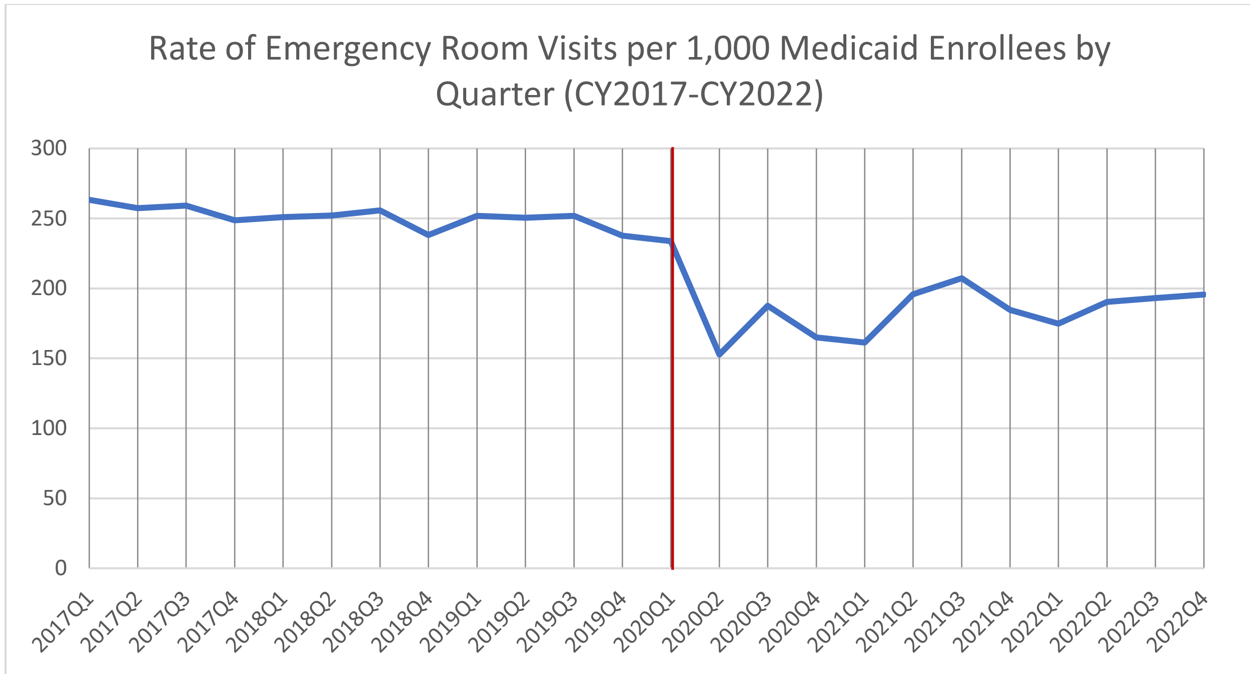
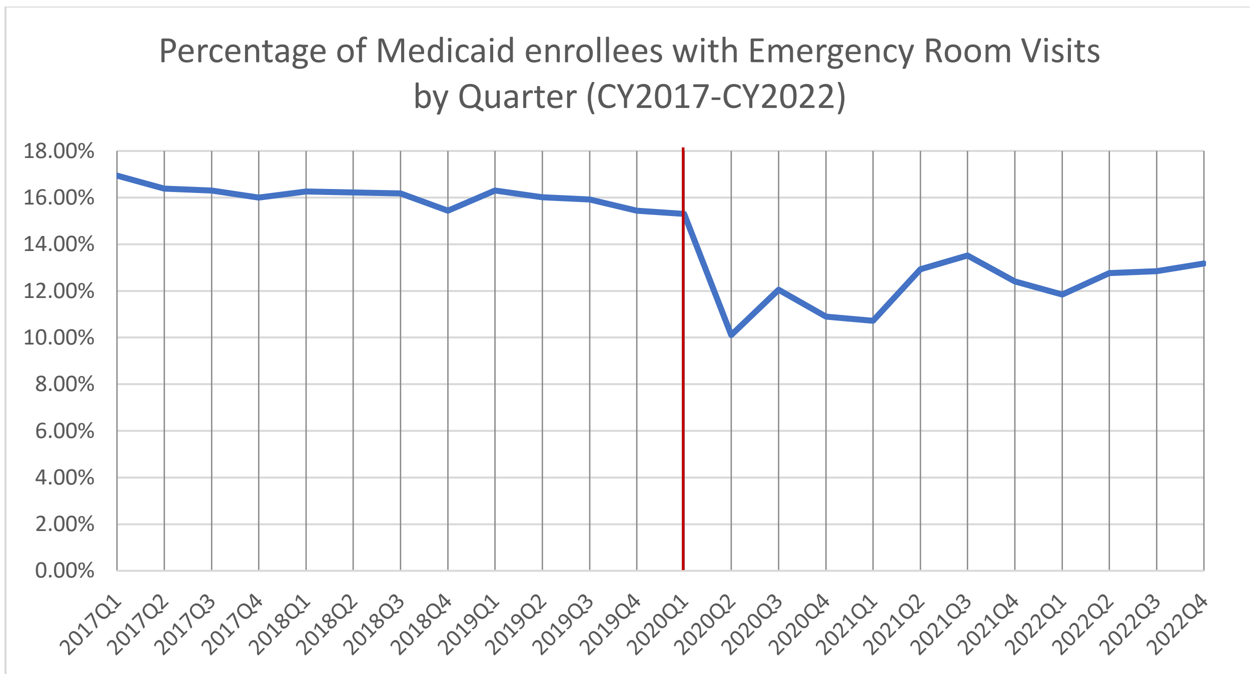


Figure 8: Percentage of Medicaid Enrollees with Emergency Room Visits by Quarter (CY2017-CY2022)



Behavioral Health Recipients

The rate of behavioral health services per 1,000 enrollees ranged from 1,195 to 1,468 pre-pandemic, reaching a high of 1,487 in Q1 of 2020. In the next quarter, the rate fell sharply to 1,068 at the onset of the pandemic and has since climbed to a rate of between 1,223 and 1,308 services per 1,000 enrollees in 2022. Similarly, the percentage of enrollees using behavioral health services ranged from 49 to 57 percent pre-pandemic, and again reached a high of 57 percent at the onset of the pandemic in Q1 of 2020. It decreased the next quarter to 43 percent and has since climbed slowly, remaining between 49 and 50 percent in 2022. The change in the behavioral health services rate may be at least partially attributable to the coinciding increase in Medicaid enrollment during the COVID-19 pandemic as discussed on page 2.

Figure 9: Rate of Behavioral Health Services per 1,000 Medicaid Enrollees by Quarter (CY2017-CY2022)

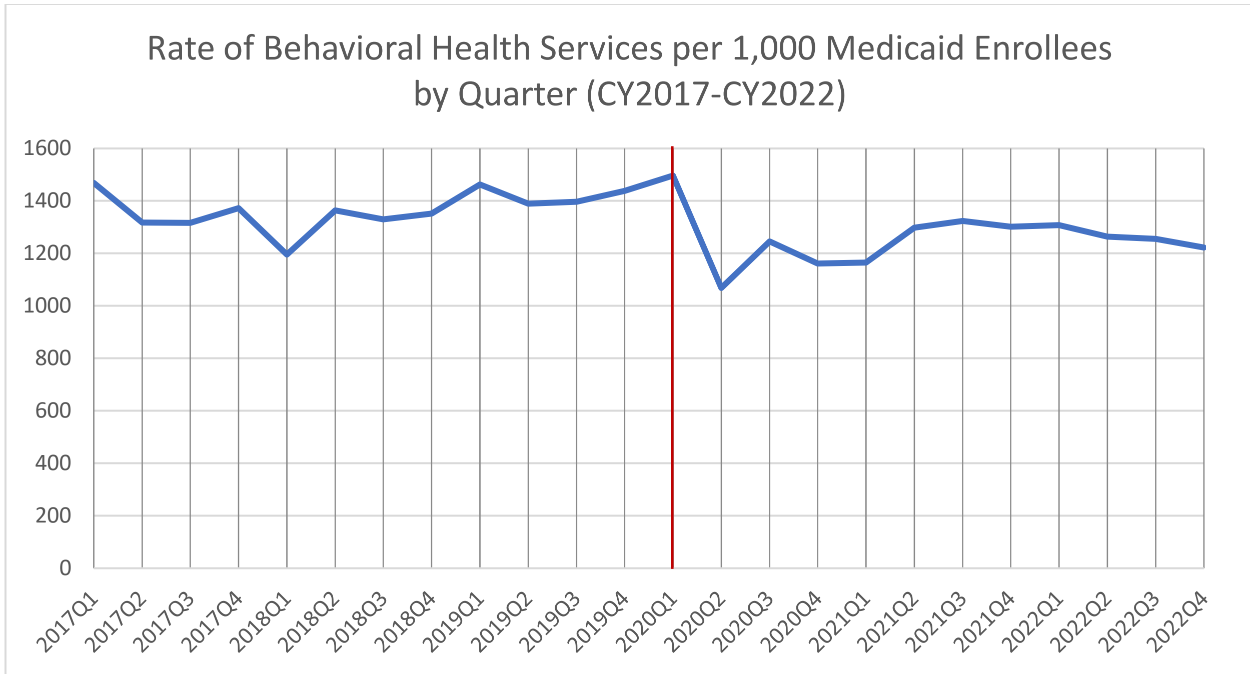
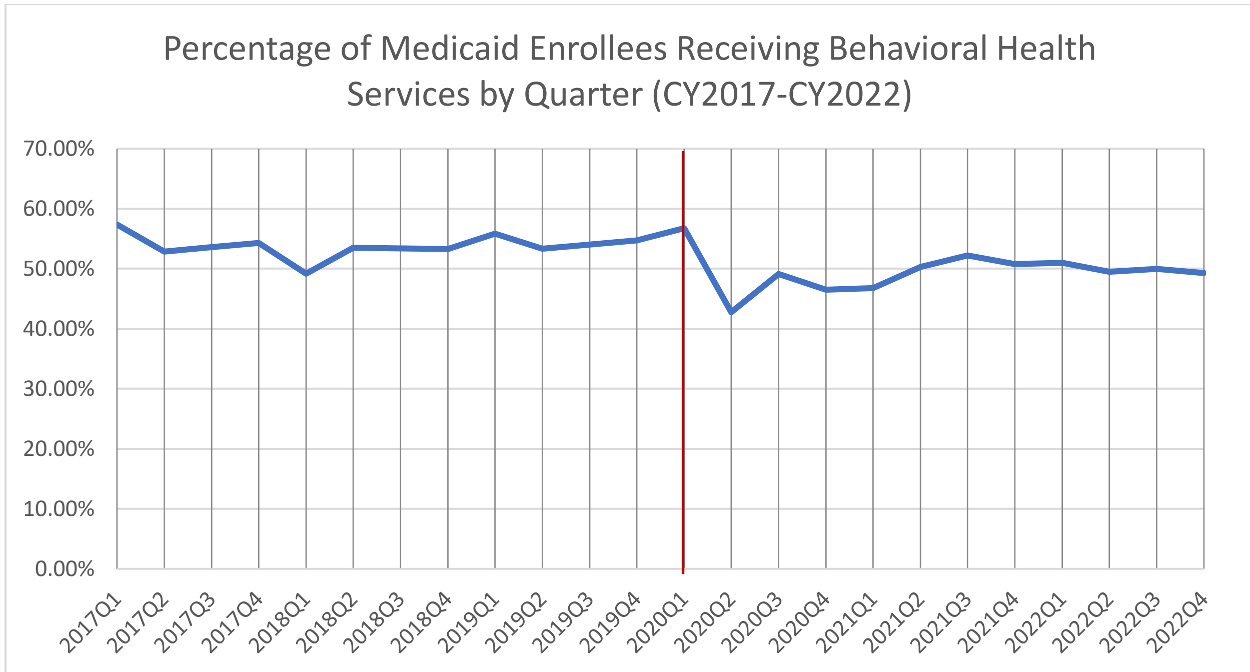


Figure 10: Percentage of Medicaid Enrollees Receiving Behavioral Health Services by Quarter (CY2017-CY2022)



Medication-Assisted Treatment (MAT) Claims

The rate of MAT encounters per 1,000 enrollees rose nearly 275 percent from 96 in Q1 of 2017 to a high of 262 in Q4 of 2020, three months after the beginning of the COVID-19 national emergency. In the following quarters, the rate decreased slightly, reaching 231 in Q4 of 2020. Similarly, the percentage of enrollees receiving MAT rose steadily from 1.7 percent in 2017, reaching 3.3 percent in Q4 of 2020, and remaining fairly static thereafter. Utilization indicators for MAT recipients may be especially useful for a policy audience and are presented in the following sections. The change in the MAT encounter rate may be at least partially attributable to the coinciding increase in Medicaid enrollment during the COVID-19 pandemic as discussed on page 2.

Figure 11: Rate of MAT Encounters per 1,000 Medicaid Enrollees by Quarter (CY2017-CY2022)

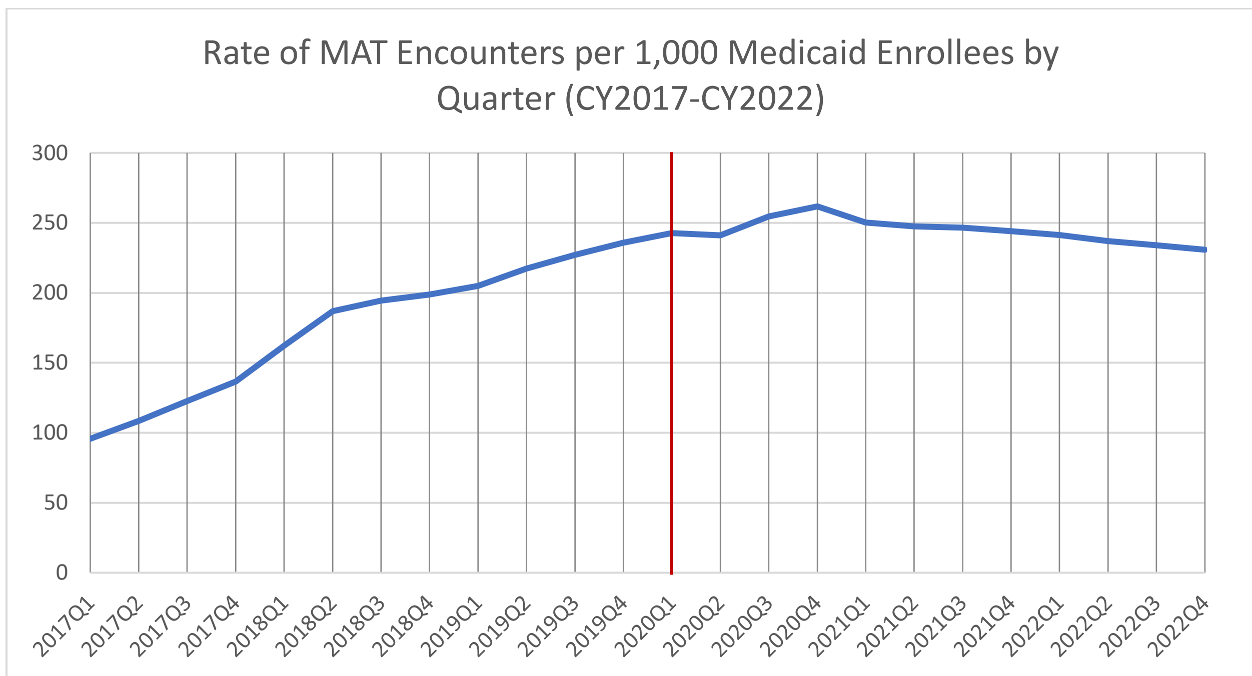
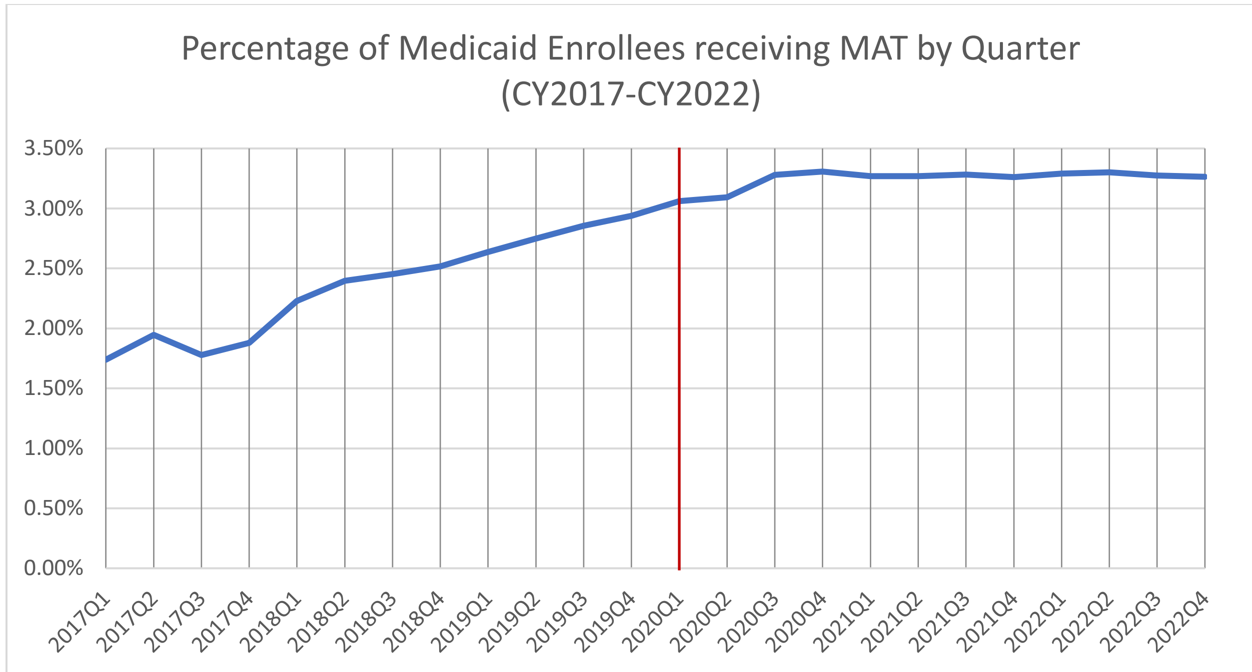


Figure 12: Percentage of Medicaid Enrollees Receiving MAT by Quarter (CY2017-CY2022)



Inpatient Hospitalizations Among MAT Recipients

The rate of inpatient hospitalizations per 1,000 MAT recipients experienced a gradual increase prior to the onset of the COVID-19 pandemic, rising from a pre-pandemic low of 337 to 508 in Q3 of 2019. The rate has dropped to below 400 in every quarter since Q1 of 2020. The percentage of MAT recipients with claims for at least one inpatient hospitalization has decreased from a pre-pandemic range of 11 to 13 percent to six to seven percent since Q4 of 2020. Both the rate of inpatient admissions and the percentage with inpatient claims remain approximately 50 percent higher among MAT recipients compared to the entire West Virginia Medicaid population. Note that the inpatient admissions in these graphs exclude Residential Adult Services (RAS) admissions. The change in the inpatient hospitalization rate among MAT recipients may be at least partially attributable to the coinciding increase in Medicaid enrollment during the COVID-19 pandemic as discussed on page 2.

Figure 13: Rate of Inpatient Hospitalizations per 1,000 MAT Recipients by Quarter (CY2017-CY2022)

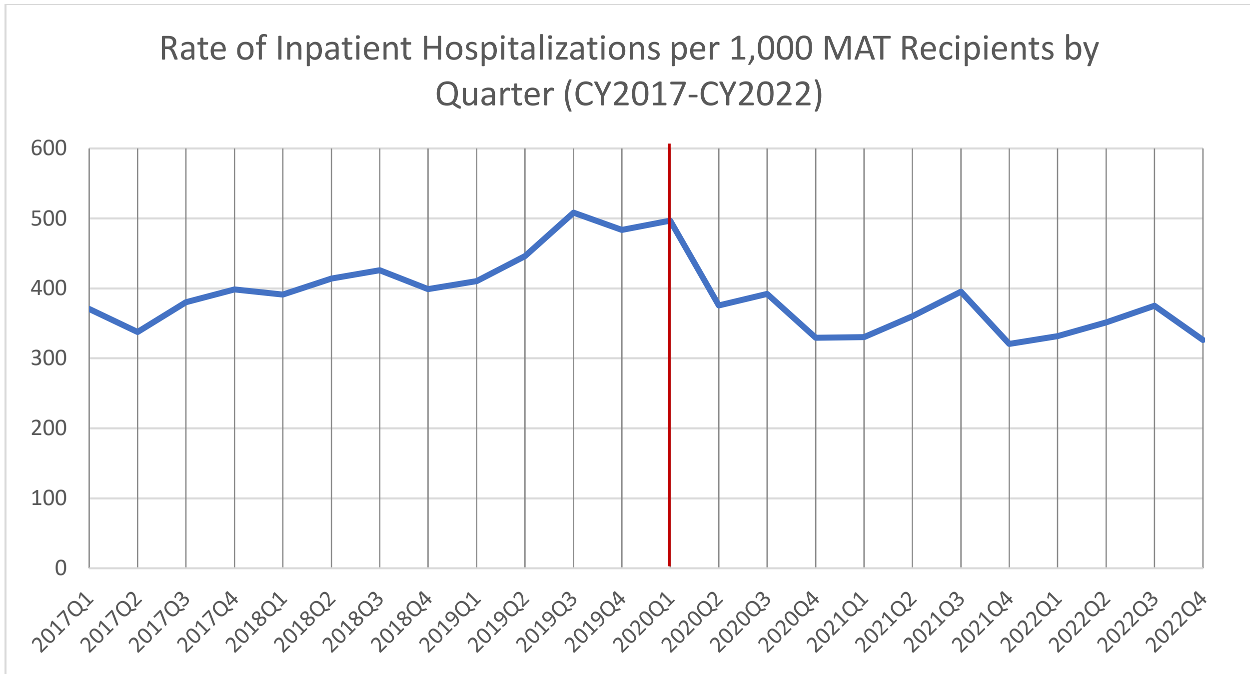
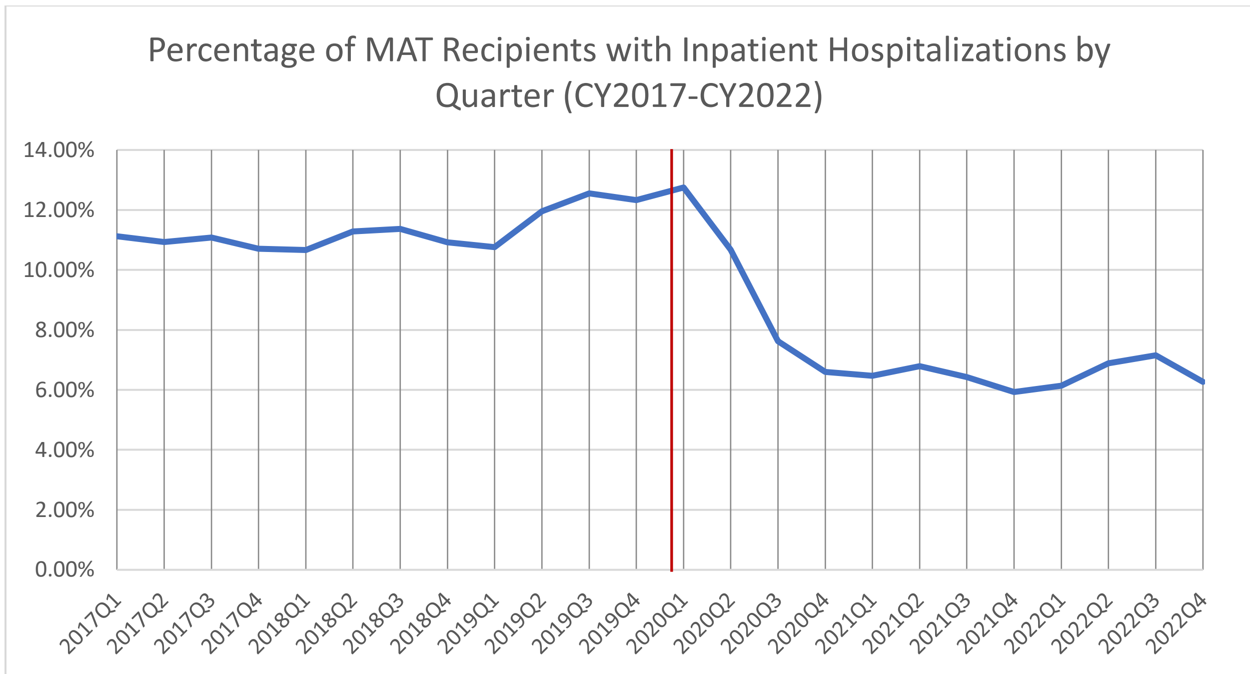


Figure 14: Percentage of MAT Recipients with Inpatient Hospitalizations by Quarter (CY2017-CY2022)



Emergency Room Visits Among MAT Recipients

The rate of emergency room visits per 1,000 MAT recipients appears to demonstrate seasonal variation ranging between 361 and 439 in 2017 to 2019. Since the beginning of the pandemic, utilization continued to fluctuate but at a lower level of 293 to 376. Similarly, the percentage of MAT recipients with at least one emergency room visit per quarter decreased from its pre-pandemic range of 21 to 25 percent to 18 to 21 percent. The rate of emergency room visits is approximately 50 percent higher for MAT recipients than for the entire West Virginia Medicaid population, with a smaller but noticeable gap in the percentage of emergency room visits per quarter. The change in the emergency room visit rate among MAT recipients may be at least partially attributable to the coinciding increase in Medicaid enrollment during the COVID-19 pandemic as discussed on page 2.

Figure 15: Rate of Emergency Room Visits per 1,000 MAT Recipients by Quarter (CY2017-CY2022)

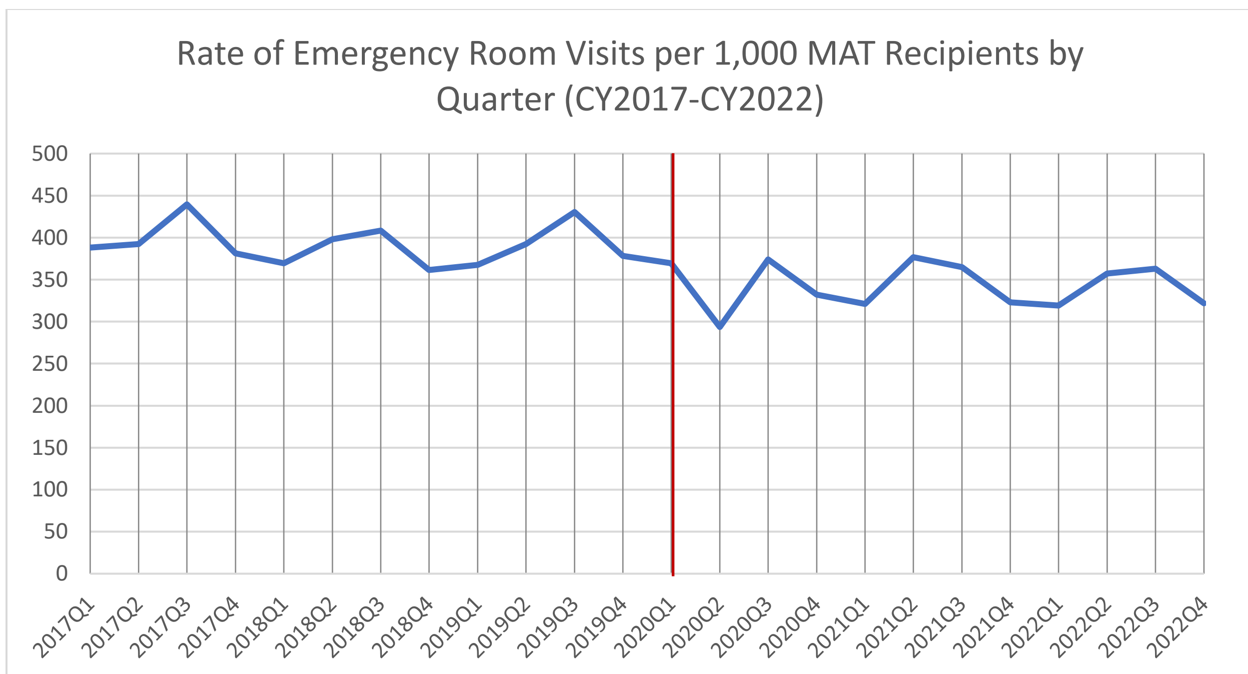
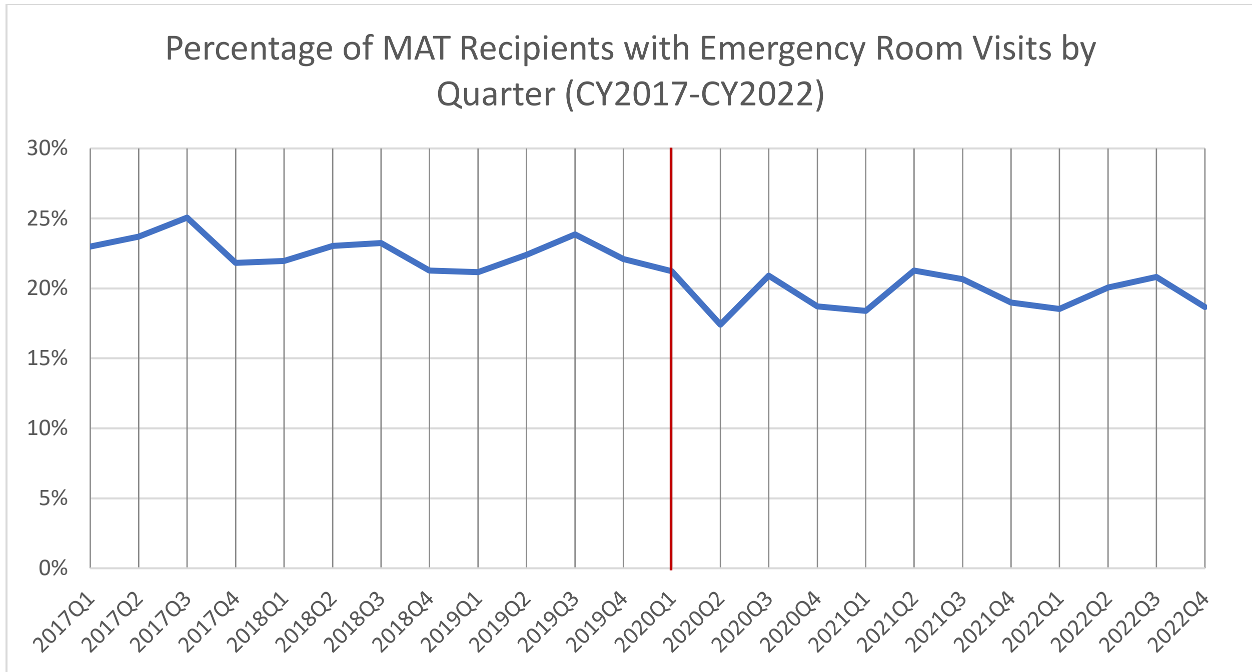


Figure 16: Percentage of MAT Recipients with Emergency Room Visits by Quarter (CY2017-CY2022)



Behavioral Health Services Among MAT Recipients

The rate of behavioral health services per 1,000 MAT recipients has demonstrated a slight decrease from its pre-pandemic levels of 4,600 to 6,954 and 5,091 to 5,595 since the beginning of 2021. Similarly, the percentage of MAT recipients engaging with at least one behavioral health service per quarter remained constant and very high between 86 and 89 percent since Q2 of 2018. Both the rate of behavioral health services and the percentage with behavioral health services are much higher among MAT recipients than for the West Virginia Medicaid population as a whole, representing high levels of engagement with treatment. The change in the behavioral health service rate among MAT recipients may be at least partially attributable to the coinciding increase in Medicaid enrollment during the COVID-19 pandemic as discussed on page 2.

Figure 17: Rate of Behavioral Health Services per 1,000 MAT Recipients by Quarter (CY2017-CY2022)

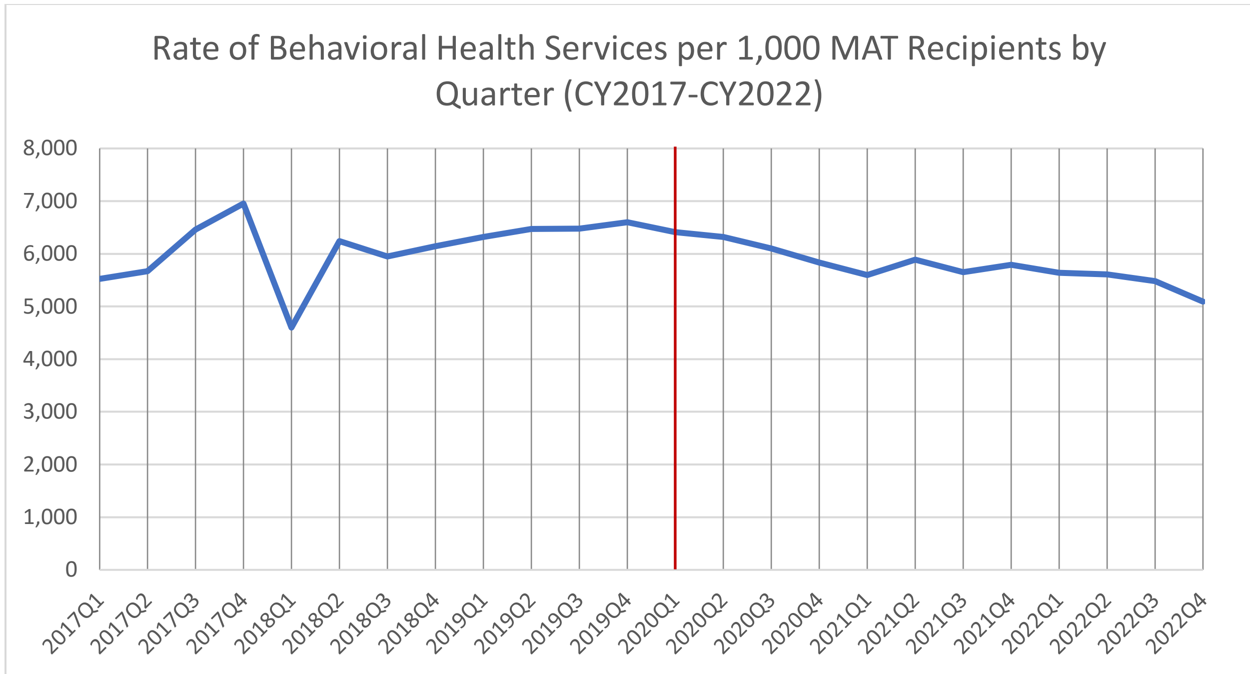
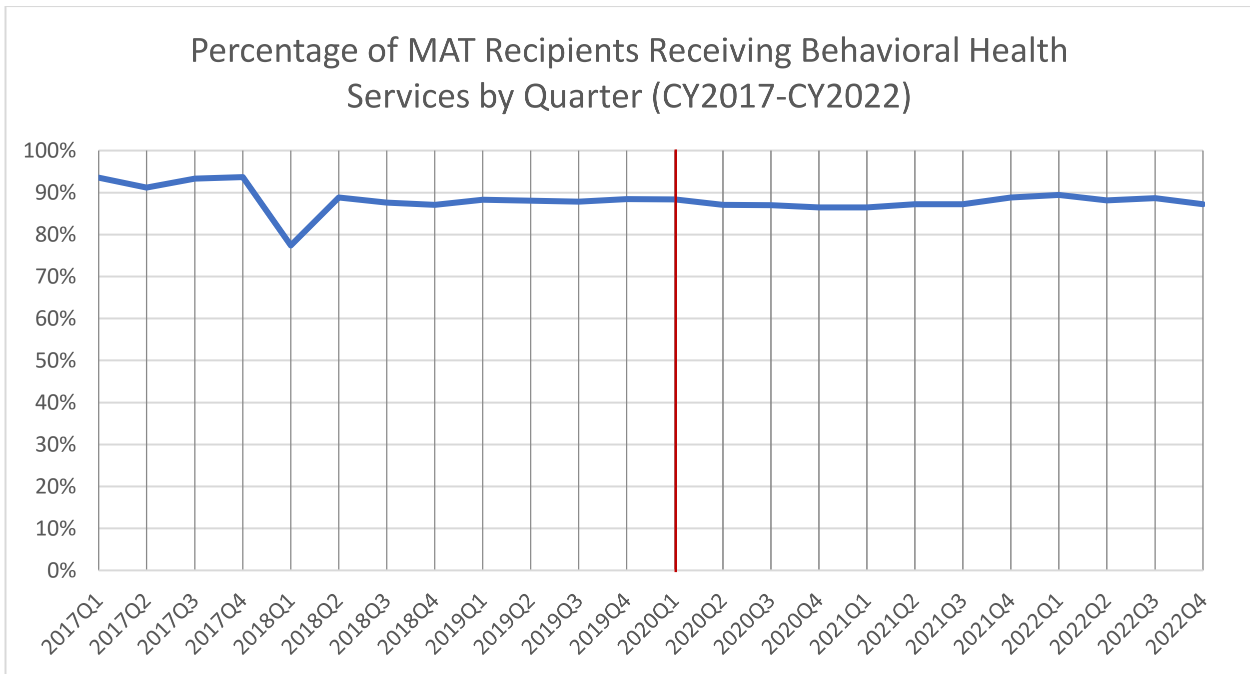


Figure 18: Percentage of MAT Recipients Receiving Behavioral Health Services by Quarter (CY2017-CY2022)



For additional information about the West Virginia Medicaid program, please contact the West Virginia Department of Health and Human Resources, Bureau for Medical Services at 304-558-1700.

For additional information pertaining to the preparation of this manual, please contact Shyama Mahakalanda at shyama.mahakalanda@hsc.wvu.edu.

Further reading:

West Virginia University Office of Health Affairs. *COVID-19 Evaluation Findings: Evaluation of the Bureau for Medical Services Response to the COVID-19 Pandemic. Implementation Phase 2b*; 2022.

West Virginia University Office of Health Affairs. *COVID-19 Evaluation Findings Addendum: Evaluation of the Bureau for Medical Services Response to the COVID-19 Pandemic. Implementation Phase 2b;* 2022.