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School of Medicine
Health Behavior and Policy

Addiction and Recovery Treatment Services

Evaluation Report for State Fiscal Years 2019 and 2020

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Disclaimer

The conclusions in this report are those of the authors, and no official endorsement by Virginia Commonwealth University or the Virginia Department of Medical Assistance Services is intended or should be inferred.

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Executive Summary

Fatal drug-related overdoses have surged during the COVID-19 pandemic, exceeding 100,000 overdoses in the U.S. and over 2,400 in Virginia in the year ending June 2021.¹ This represents a 20% increase nationally and 35% increase in Virginia, respectively, since the previous year. Pandemic-related economic and social stress, disruptions in access to health services, and greater availability of more lethal forms of opioids, such as fentanyl, are considered the primary reasons for the surge in overdoses, although no definitive causes have been identified.

As a result of the expansion of treatment services through the Addiction and Recovery Treatment Services (ARTS) benefit in April 2017, and increases in eligibility for these services through Medicaid expansion beginning in 2019, Virginia Medicaid was far better prepared for the increased prevalence in substance use disorders (SUD) than in previous years. The supply of treatment providers, the prevalence of members receiving SUD treatment, and the rate of treatment for diagnosed SUD increased dramatically after implementation of the ARTS benefit, and has continued through Medicaid expansion and the COVID-19 pandemic. While there was concern that COVID-19 related shutdowns and stay-at-home orders may negatively affect access to and use of SUD treatment services, the federal government and the Department of Medical Assistance Services (DMAS) implemented a number of initiatives and procedural flexibilities to offset these barriers, including increased use of telemedicine, allowing take-home dosages of methadone and buprenorphine for up to 28 days, allowing for 90 day prescriptions for buprenorphine products, and allowing a member's home to serve as the originating site for prescription of buprenorphine.

The objective of this report is to examine SUD prevalence, treatment utilization, and outcomes among Virginia Medicaid members during State Fiscal Years (SFY) 2019 and 2020, as well as the first two quarters of SFY 2021 (covering the period July 2018 through December 2020). Among the highlights of the report:

Increased prevalence of SUD

- About 100,000 Medicaid members had a diagnosed SUD in SFY 2020, an increase of almost 30% from SFY 2019. This reflects both an increase in enrollment from Medicaid expansion during the year, as well as a higher SUD prevalence rate, suggesting more members are being screened for SUD. SUD diagnoses increased from 5,218 per 100,000 members in SFY 2019, to 6,055 per 100,000 members in SFY 2020, a 16% increase.
- While opioid use disorder (OUD) continues to be the most frequently diagnosed SUD among Medicaid members (about 42% of all diagnosed SUD), the prevalence rate increased faster for other substances between SFY 2019 and 2020, including for hallucinogens (a 41% increase) and stimulants (a 33% increase).

Increase in the number of providers authorized to prescribe buprenorphine

- There were almost 1,500 practitioners authorized to prescribe buprenorphine (Substance Abuse Mental Health Services Administration (SAMHSA) authorized buprenorphine-waivered/prescribers) in Virginia as of April-June, 2020, a 39% increase from the previous year, and a 246% increase from the period prior to the ARTS benefit. The recent surge in buprenorphine

waivered prescribers has been driven by an increase in waivered nurse practitioners and physician assistants, who became eligible for waivers in 2016.

- The number of waivered prescribers in Virginia is similar to other states in the South, but low compared to other regions in the U.S. ARTS and Medicaid expansion may have helped boost the supply of waivered providers, as the increase in Virginia exceeds that of other states in the South that did not expand Medicaid.

Increase in use of ARTS services

- There was a 30% increase in the number of members using ARTS services between SFY 2019 and 2020, even after accounting for increased Medicaid enrollment. Outpatient treatment and pharmacotherapy are the most frequently used services, although there were larger increases in the use of residential treatment, partial hospitalization, intensive outpatient services, and care coordination services.
- Members with OUD are more likely to use ARTS services (67%) compared to members who have other SUD (between 8% and 25%).

Increase in use of Medications for Opioid Use Disorder (MOUD)

- MOUD treatment rates for members with OUD increased from 62% in SFY2019 to 69% in 2020, continuing a trend of increased MOUD treatment rates that began after implementation of the ARTS benefit.
- MOUD treatment rates remained stable after the beginning of the COVID-19 pandemic. Furthermore, following the onset of the pandemic, there was no apparent decrease in the percent of members initiating MOUD treatment after being diagnosed. However, there was a slight decrease in the percent of members remaining in MOUD treatment for at least 90 days.

Increases in SUD-related emergency department visits and OUD-related overdoses

- There was a sizeable increase in SUD-related emergency department (ED) visits between SFY 2019 and 2020 (28%), while ED visits overall decreased by 2.3% during this period.
- Similarly, OUD-related overdose rates (fatal and nonfatal) increased 57% between SFY 2019 and 2020, similar to state and national trends. The overdose rate peaked during the height of the COVID-19 pandemic in 2020 (July-September) before decreasing in October-December, 2020.
- Of the Medicaid members diagnosed with an OUD-related overdose, 80% did not receive MOUD treatment in the month or year prior to their overdose. However, there was a small increase between SFY 2019 and 2020 in the percent of members with overdoses who were receiving MOUD treatment in the month prior to their overdose.

Medicaid expansion greatly increased the number of Virginians receiving treatment for SUD through the ARTS benefit. As other studies have shown, Medicaid members enrolled through expansion have higher SUD prevalence compared to other eligibility groups, and are at higher risk for overdoses.² It is likely that many members who enrolled through Medicaid expansion were previously uninsured and were not receiving adequate treatment for SUD, although there were no data available to confirm this. National data show that uninsured people with SUD have much higher levels of unmet need for treatment services compared to people enrolled in Medicaid.³ By enrolling in Medicaid expansion, more Virginians gained access to the full continuum of outpatient, residential, inpatient, and pharmacotherapy services that are known to be effective in treating SUD, especially OUD.

Nevertheless, it is a paradox that OUD-related overdoses increased during a time that also saw gains in the supply of treatment services and increased rates of treatment for Medicaid members with a SUD diagnosis. Members with an OUD were initiating MOUD treatment at the same rate during the pandemic as before, although there was a small decrease in 90 day continuity of treatment after the pandemic started. The increase in overdose rates is not unique to Virginia Medicaid, but reflect statewide and national trends. The increase in overdoses likely reflects the changing nature of the opioid epidemic, from greater availability and use of more lethal forms of opioids – especially fentanyl – as well as higher levels of economic, social, and psychological distress during the COVID-19 pandemic that may be increasing the risk of recurrence and overdose.

Introduction

The COVID-19 pandemic has exacerbated problems with SUD in Virginia and the nation. In Virginia, fatal drug overdoses increased by 35% between State Fiscal Years (SFY) 2020 and 2021 (from 1,818 fatal overdoses in the year ending in June 2020 to 2,455 fatal overdoses in the year ending June 2021), and by 21% between SFY 2019 and 2020.⁴ Nationally, fatal overdoses increased by 20% and 22% during the same period. While opioids continue to account for the vast majority of overdose deaths in the U.S. and Virginia (83% projected in 2021), there has been a marked shift in the type of opioids responsible for overdoses. Deaths from fentanyl overdoses more than doubled between SFY 2019 and 2021 in Virginia (from 884 to 1,900), while there was little change in deaths due to prescription opioids, and even a small decrease in deaths from heroin.⁵ At the same time, overdose deaths in Virginia due to methamphetamines and cocaine increased by 219% and 73%, respectively, between SFY 2019 and 2021.⁵ An increase in alcohol use disorder is also contributing to increased mortality from substance use, accounting for 95,000 deaths nationally and 22.1% of prescription opioid overdose deaths.^{6,7}

There are a number of possible reasons for the surge in fatal overdoses and greater use of drugs and alcohol during the pandemic, including increases in the supply and availability of illicit drugs – especially fentanyl and methamphetamines – economic dislocation, unemployment, greater social isolation, and an increase in co-occurring mental health problems.⁸ Also, access to addiction treatment services may have become more difficult due to COVID-related shutdowns and more restrictions on face-to-face meetings with licensed behavioral health and medical professionals and peer recovery specialists, a health system that has been severely strained by the pandemic, and growing shortages of behavioral health providers in Virginia and the nation.⁹

The onset of the COVID-19 pandemic follows a major expansion of treatment services for SUD in the Virginia Medicaid program. In April 2017, the Addiction and Recovery Treatment Services (ARTS) benefit was implemented. ARTS expanded coverage of many addiction treatment services for Medicaid members aligning with the American Society of Addiction Medicine (ASAM) levels of care, including community-based services, short-term residential treatment and inpatient withdrawal management services. To allow federal Medicaid payment for addiction treatment services provided in inpatient and short-term residential facilities with 16 or more beds, a Section 1115 Demonstration Waiver for SUD was approved in December 2016 by the Centers for Medicare and Medicaid Services (CMS). ARTS also increased provider reimbursement rates for many existing services, and introduced a new care delivery model for treatment of Opioid Use Disorders (OUD), the Preferred Office-Based Opioid Treatment (OBOT) provider, which integrated medications for OUD (MOUD) with co-located behavioral and physical health by incentivizing increased use of care coordination activities. To further increase integration of addiction treatment services with other health services covered by Medicaid, SUD services are administered by the six managed care organizations (MCOs) that manage medical and behavioral health benefits for all Medicaid members, offering a comprehensive care delivery system.

While ARTS greatly increased the availability and quality of treatment services to Medicaid members, eligibility for these services increased on January 1, 2019 when Virginia expanded Medicaid eligibility for adults ages 19-64 with family incomes of up to 138 percent of the federal

poverty level, as allowed for under the Patient Protection and Affordable Care Act. By December 2021, 493,662 low-income Virginians were enrolled through Medicaid expansion.¹⁰ During the COVID-19 pandemic, Medicaid expansion provided an important safety net for many people who lost their job and their employer-based private health insurance coverage.

Prior evaluation reports on the ARTS benefit have documented the impact of ARTS and Medicaid expansion on utilization of ARTS services. The number of Medicaid members using ARTS treatment services more than doubled, from 17,120 in 2017 to 46,520 in 2019.¹¹ Among those with OUD, the percent using MOUD treatment increased from 35% in 2016 to 53% in 2019, an increase that was far greater than for Medicaid members in twelve other states.¹¹ At the same time, ED visits among those with OUD decreased (relative to Medicaid members who did not have OUD), although this analysis preceded the more recent surge in overdose deaths.¹²

Increased prevalence of SUD during the COVID-19 pandemic has likely increased the demand for ARTS services. To offset potential barriers to treatment access due to pandemic-related restrictions, DMAS implemented a number of new initiatives and procedural flexibilities that the federal government permitted as part of the emergency response to COVID-19. These include allowing take-home dosages of methadone and buprenorphine for up to 28 days (which otherwise must be administered at Opioid Treatment Programs (OTPs)), allowing a member's home to serve as the originating site for prescription of buprenorphine, allowing a 90 day supply of buprenorphine, increased use of telehealth, waiver of drug copayments, and fewer restrictions on the use of certain unlicensed providers. In compliance with federal legislation, eligibility redeterminations and coverage cancellations have been suspended in order to increase continuity of coverage and prevent coverage lapses during the pandemic.

The objective of this report is to examine SUD prevalence, treatment utilization, and outcomes among Virginia Medicaid members during State Fiscal Year (SFY) 2019 and 2020, as well as the first two quarters of SFY 2021 (covering July 2018 through December 2020). This time period overlaps with the start of Medicaid expansion in January 2019 as well as the beginning of the COVID-19 pandemic in March 2020, which has led to substantial increases in the diagnosed prevalence and treatment of SUD among Medicaid members.

Methodology

Most of the analysis in this report is based on paid claims for services received by Virginia Medicaid members. As a consequence, the analysis excludes services received during periods in which individuals were not enrolled in Medicaid, services not covered by Medicaid, and claims that were submitted and denied or otherwise processed and not reimbursed at the time of data extraction and analysis for this report (October-December, 2021). In general, a "claims runout" period of 10-12 months is a sufficient period of time for the vast majority of claims to be processed for services received through December 2020.

Diagnosed prevalence of SUD is defined as a member having any claim during the study period with a primary or secondary diagnosis of SUD, based on ICD-10 codes. Measures of the utilization of ARTS services are based on the procedure codes and ICD10 diagnostic codes used by DMAS, MCOs, and treatment providers to bill for the various ARTS services. These services

correspond to the ASAM continuum of care, ranging from medically managed intensive inpatient services (ASAM level 4), residential care (ASAM 3), intensive outpatient and partial hospitalization (ASAM 2) and outpatient treatment services (ASAM levels 1 and 2).¹³ Services received in Preferred OBOT and OTP providers are identified separately, as are services for peer recovery support, case management, and care coordination. Pharmacotherapy services are identified through pharmacy claims based on National Drug Codes and Generic Sequence Numbers for prescriptions used to treat OUD (buprenorphine, naltrexone) and Alcohol Use Disorder (AUD), as well as procedure codes for methadone treatment in OTPs.

SUD-related ED visits are defined as ED visits with a primary or secondary diagnosis of SUD, as described above. OUD-related overdoses include fatal as well as nonfatal overdoses based on ICD-10 diagnosis codes for overdoses and poisonings that have been previously validated.¹⁴ It should be noted that only overdoses that are treated in health care settings and for which the submitted claim was reimbursed by Medicaid are included in this definition. Overdoses that occurred in the community, did not involve contact with health care providers nor receipt of a Medicaid claim are not included.

Supply of Addiction Treatment Providers

A broad range of addiction treatment facilities and practitioners are available to Medicaid members along the continuum of care, as defined by the ASAM placement criteria.¹³ These include hospital-based intensive inpatient facilities, residential treatment centers, and outpatient providers of varying types and treatment intensity. The ARTS benefit also introduced a new model of care delivery, the Preferred OBOT program that pays significantly higher reimbursement rates to qualified providers for medication-assisted treatment (including pharmacotherapy and behavioral health therapy) and coordination with other medical and social needs. Since ARTS was implemented in April 2017, Virginia has seen substantial increases across all types of addiction treatment providers and facilities that not only serve Medicaid members, but also individuals with other insurances or uninsured. The expansion of the provider network supported through ARTS has benefited all individuals in the Commonwealth through increased access to treatment and recovery services based on the ASAM Criteria.

Providers for ARTS services

Addiction Provider Type	# of Providers before ARTS	# of Providers as of December. 2020
Inpatient Detox (ASAM 4.0)	N/A	51
Residential Treatment (ASAM 3.1, 3.3, 3.5, 3.7)	4	123
Partial Hospitalization Programs (ASAM 2.5)	N/A	41
Intensive Outpatient Programs (ASAM 2.1)	49	252
Opioid Treatment Programs	6	40
Preferred Office-Based Opioid Treatment Providers	N/A	154
Outpatient practitioners billing for ARTS services (ASAM 1)	1,087	5,089

Buprenorphine waived prescribers

There are three Food and Drug Administration (FDA) approved medications for treatment of OUD: methadone, naltrexone and buprenorphine. Methadone for the treatment of OUD is federally limited to being dispensed in specially licensed clinics, although these restrictions were loosened during the COVID-19 pandemic to allow take-home dosages of up to a 28 day supply. Because buprenorphine treatment for OUD does not require that medication be administered at OTPs, it allows for greater access to MOUD treatment in a wider variety of treatment settings, provider types, and specialties. Virginia Medicaid has promoted the prioritization of patient choice in the selection of evidence-based medication for treatment of OUD. This includes a targeted effort to increase access to buprenorphine treatment through newly implemented Preferred OBOTs in 2017 – an integrated care model that receives enhanced reimbursement for OUD treatment – and more recently by eliminating the need for prior authorization for buprenorphine prescribing for

practitioners regardless if they are enrolled with DMAS, it’s contractors, or MCO networks. During the COVID-19 pandemic, DMAS also permits a member’s home to serve as the originating site via telemedicine for a prescription of buprenorphine, both for induction and maintenance dosing (prior to the pandemic, buprenorphine prescriptions for inductions could only be obtained through a face-to-face meeting with authorized prescribers as required by Substance Abuse and Mental Health Services Administration (SAMHSA) and the Drug Enforcement Agency).

Prescriptions for buprenorphine can only be received from practitioners who apply for and receive waivers through SAMHSA. Since the federal Comprehensive Addiction and Recovery Act (CARA) of 2016, nurse practitioners and physician assistants are also permitted to obtain waivers to prescribe buprenorphine. Research has shown that increases in the number of practitioners who receive waivers are associated with increases in the quantity of prescribing, the number of patients served, and fewer overdoses.^{15,16} Therefore, having an adequate supply of buprenorphine-waivered prescribers in the Commonwealth is crucial for patient access to OUD treatment and outcomes.

In April-June, 2020, Virginia had 1,495 buprenorphine-waivered prescribers, or 18.3 prescribers per 100,000 persons in the state. This includes 1,029 prescribers whose waiver limits them to treating no more than 30 patients (10.9 prescribers per 100,000 persons), and 466 prescribers with waiver limits of 100 or 275 patients (7.4 prescribers per 100,000 persons). The number of waived prescribers in Virginia is similar to the South region on average, but below the national average of 27 total prescribers per 100,000 persons. In general, states in the South have fewer waived prescribers compared to other regions, including the Northeast (45.4 prescribers per 100,000 persons), the West (30.5) and Midwest (23.2).

Number of X-waivered prescribers, as of the April-June 2020.

Number of X-waivered prescribers per 100,000 persons			
	Total	30 patient limit	100 and 275 patient limit
Virginia	18.3	10.9	7.4
Total U.S.	27.0	19.7	7.3
South	18.0	11.9	6.2
Northeast	45.4	33.5	11.8
Midwest	23.2	16.8	6.4
West	30.5	24.0	6.4

Increase in number of waived prescribers

The expansion of benefits with ARTS, collaborative efforts with the Virginia Department of Health to train and encourage more providers to seek buprenorphine waivers, and the increase in Medicaid members eligible for ARTS services through Medicaid expansion has likely contributed to an increase in waived prescribers. Prior research has shown that Medicaid expansion in other states led to an increase in buprenorphine prescribing capacity.¹⁷

The number of waived prescribers in Virginia increased from 432 prescribers in 2015 to 1,495 in 2020 (a 246% increase).ⁱ This includes an 89.4% increase following implementation of the ARTS benefit in 2017, and an 82.8% increase following Medicaid expansion in 2019. Moreover, much of the increase since 2017 resulted from an increasing number of nurse practitioners and physician assistants receiving waivers. Between 2018 and 2020, buprenorphine-waivers among nurse practitioners increased by 283%, among physician assistants by 200%, and among medical doctors (MDs) by 54%. As of 2020, nurse practitioners and physician assistants comprise over one-fourth of waived practitioners in the Commonwealth.

Number of X-waivered prescribers in Virginia (as of April-June for each year).

	2015	2016	2017	2018	2019	2020	% change 2015-18	% change 2018-20	% change 2015-20
All prescribers	432	491	621	818	1,074	1,495	89.4%	82.8%	246%
Patient limit									
30	288	320	411	570	763	1,029	97.9%	80.5%	257%
100 or 275	144	171	210	248	311	466	72.2%	87.9%	224%
License type									
MD	432	491	605	708	863	1090	63.9%	54.0%	152%
Nurse practitioner	0	0	13	90	181	345	NA	283%	NA
Physician assistants	0	0	3	20	30	60	NA	200%	NA

The growth in waived prescribers among nurse practitioners is especially important, as research has shown they are twice as likely to treat Virginia Medicaid patients compared to MDs, and almost three times as likely to treat large numbers of Medicaid patients.¹⁸ As only about 40% of buprenorphine-waivered prescribers treated any Medicaid patients in 2019, continued growth in nurse practitioners and physician assistants with waivers will likely help to address gaps in supply of and access to buprenorphine treatment among Medicaid members.

The increase in the supply of waived prescribers in Virginia is similar to the average for other states (a 246% increase between 2015 and 2020). When compared to other states in the South, the supply of waived prescribers in Virginia increased at a similar rate to states that had expanded Medicaid by 2015 (DE, MD, DC, WV, KY). Virginia’s increase of 240% between 2015 and 2020 was far greater than for states in the South that had not expanded Medicaid by 2016 (166%). Between 2018 and 2020 (the year before and after Medicaid expansion in Virginia), the number of waived prescribers increased 82% in Virginia, compared to 61% in Southern states that had not expanded Medicaid.

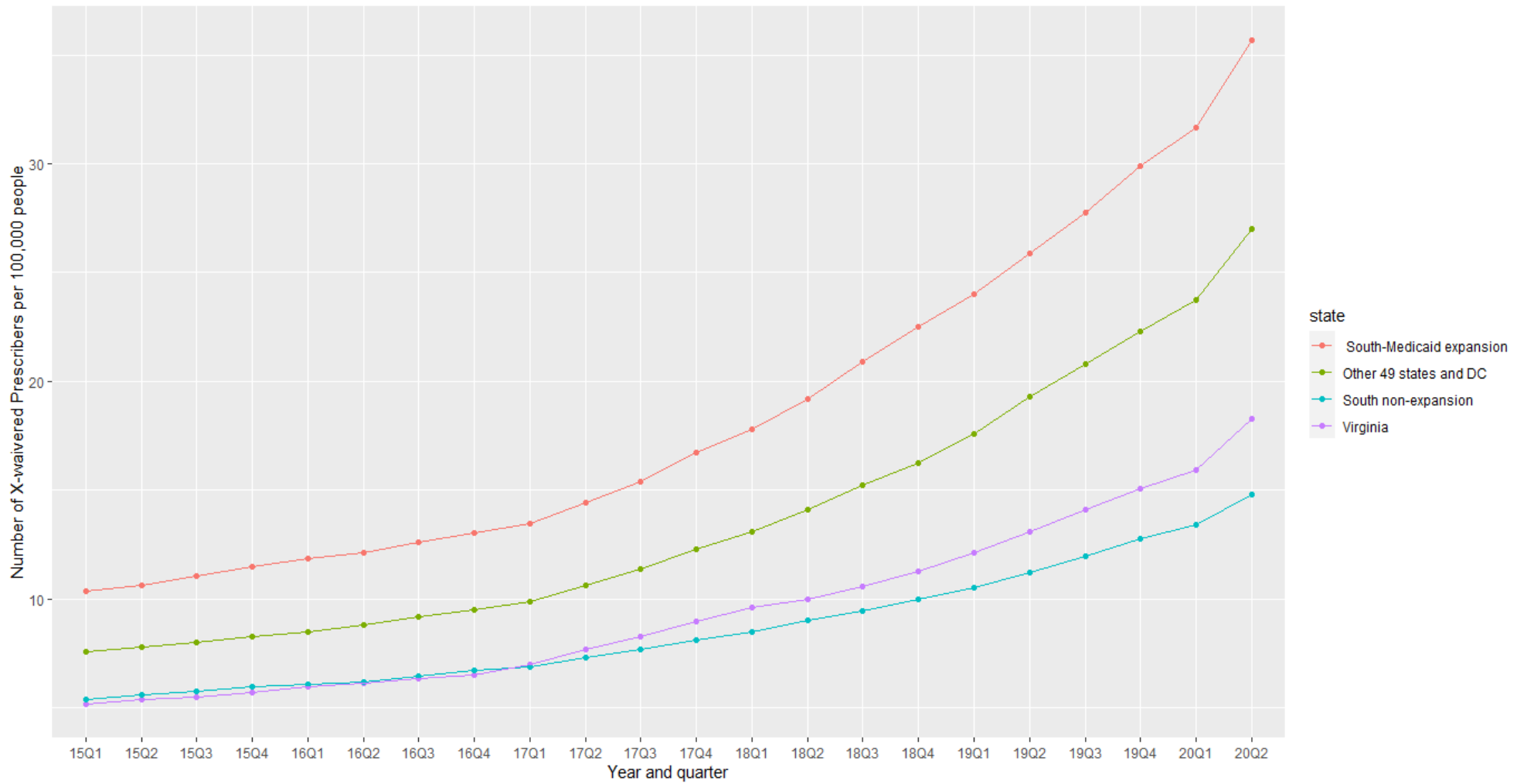
ⁱ Data on buprenorphine- waived prescribers was obtained from the Drug Enforcement Agency through a Freedom of Information Act (FOIA) request. Inactive prescribers are not excluded from the counts, so the number who are actually treating patients is likely to be lower than is reported in these findings.

Number of buprenorphine-waivered prescribers per 100,000 persons (as of April-June for each year)

	2015	2016	2017	2018	2019	2020	% change 2015-18	% change 2018-20	% change 2015-20
Virginia	5.4	6.1	7.7	10	13.1	18.3	87.3%	81.8%	240.4%
Non-expansion states in South	5.6	6.2	7.3	9	11.2	14.8	61.3%	65.1%	166.3%
Expansion states in South	10.6	12.1	14.4	19.2	25.9	35.7	80.9%	86.2%	236.9%
Total U.S.	7.8	8.8	10.6	14.1	19.3	27	81.5%	90.8%	246.2%

The following chart graphically illustrates the increase in buprenorphine waivered prescribers in Virginia compared to other states for all 22 quarters between 2015 and 2020. While Virginia and other Southern states that had not expanded Medicaid by 2015 had roughly similar levels of waiver provider supply prior to 2017 (about 5.5 per 100,000 persons), the increase in waivered prescribers appears to accelerate in Virginia in April-June of 2017 (at the time of the implementation of Virginia’s ARTS benefit) as well as Medicaid expansion in 2019. By April-June 2020, the increase in waiver supply since 2015 had clearly exceeded the increase for other states in the South that did not expand Medicaid during this period.

Number of X-waivered Prescribers per 100,000 people from 2015Q1-2020Q2



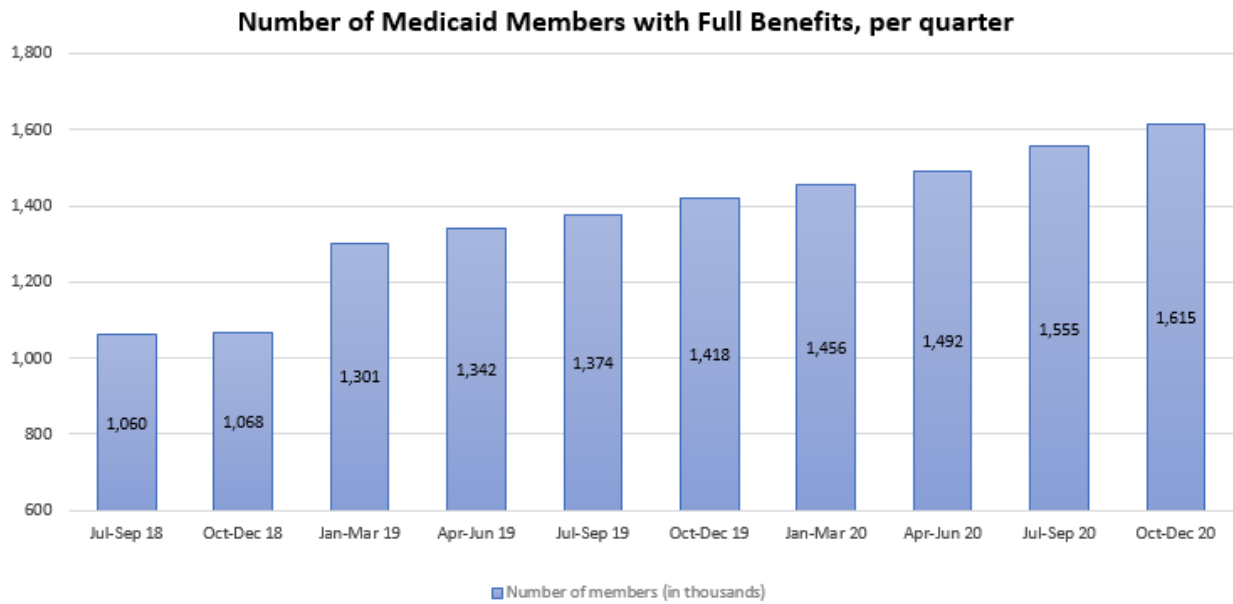
Medicaid Enrollment

There were 1,651,637 Virginians enrolled in full Medicaid benefits at some point during SFY 2020, a 12% increase from SFY 2019. Most of the increase occurred among those enrolling through Medicaid expansion, from 324,643 members in SFY 2019 to 505,666 members in SFY 2020, a 56 percent increase. Consistent with Medicaid expansion eligibility criteria, enrollment increases were concentrated among nonelderly adults ages 22-64. Increases were somewhat larger for males relative to females, and considerably larger among people reporting “other” racial/ethnic groups (non-White, non-Hispanic).

Enrollment in full Medicaid benefits at any time during the year.

	SFY 2019	SFY 2020	Percent change
Total number of Medicaid members	1,476,202	1,651,637	11.9%
Age			
LT 12	484,828	466,473	-3.7%
12-21	317,562	353,761	11.4%
22-34	233,800	293,885	25.7%
35-44	136,875	173,436	26.7%
45-54	106,041	133,810	26.2%
55-64	104,837	134,616	28.4%
65+	92,259	95,656	3.7%
Gender			
Male	638,411	723,019	13.3%
Female	841,731	930,939	10.6%
Race/Ethnicity			
White, non-Hispanic	766,331	853,091	11.3%
Black, non-Hispanic	531,970	580,863	9.2%
Hispanic	57,054	61,314	7.5%
Other	118,749	156,332	31.6%
Aid Category			
Medicaid Expansion	324,643	505,666	55.8%
Non-Disabled Adults	593,294	424,702	-28.4%
Pregnant Women	238,206	233,049	-2.2%
Low Income Children	775,969	784,336	1.1%
Aged Adults	90,293	92,639	2.6%
Blind/Disabled	173,469	166,581	-4.0%

On a quarterly basis, enrollment spiked at the start of Medicaid expansion in the third quarter of SFY 2019 (to around 1.3 million) and increased steadily thereafter. During the COVID-19 pandemic starting in January-March, 2020, quarterly enrollment increased by about 160,000 to around 1,652,000 by October-December 2020. Medicaid enrollment likely increased due to the loss of private insurance by those who became unemployed during the pandemic. Also, lapses in coverage likely decreased due to the suspension of eligibility redeterminations and coverage cancellations as part of the federal response to the pandemic emergency.



Diagnosed Prevalence of Substance Use Disorders

Just over 100,000 Medicaid members had a diagnosed SUD in SFY 2020, an increase of almost 30% from SFY 2019. As in prior years, OUD was the most frequently diagnosed SUD in SFY 2020 (40,465 members) followed by AUD (37,647 members), cannabis (27,290 members), and stimulants, which includes the use of methamphetamines (22,493 members).

Stimulant use is especially concerning given the almost 50% increase in Medicaid members with this diagnosis between SFY 2019 and 2020. During the same period, diagnosed OUD prevalence increased by 38.7%, AUD by 34%, and cannabis use by 38%. There was also a 58.4% increase in diagnoses related to hallucinogens, although overall prevalence of hallucinogens is still very low (only 822 members with diagnoses in SFY 2020).

The increase in SUD prevalence reflects in part increases in Medicaid enrollment between SFY 2019 and 2020, as noted earlier. However, the prevalence *rate* for SUD (calculated as the number of members with a SUD diagnosis per 100,000 members) increased by 16%, from 5,218 with a SUD diagnosis per 100,000 members in SFY 2019 to 6,055 per 100,000 members in SFY 2020. The increase in the prevalence rate was higher for SUD diagnoses related to stimulant use (33.8%), OUD (23.9%), AUD (19.8%), and cannabis use (23.4%).

Diagnosed prevalence of SUD, SFY 2019 and 2020

SUD diagnoses	Number of Medicaid members with diagnosis			Members with diagnosis per 100,000 members		
	SFY 2019	SFY 2020	Percent change	SFY 2019	SFY 2020	Percent change
Any SUD	77,030	100,005	29.8%	5,218	6,055	16.0%
Opioid use disorder (OUD)	30,520	42,317	38.7%	2,067	2,562	23.9%
Alcohol use disorder (AUD)	28,087	37,647	34.0%	1,903	2,279	19.8%
Cannabis	20,229	27,920	38.0%	1,370	1,690	23.4%
Hallucinogens	519	822	58.4%	35	50	41.6%
Inhalants	162	170	4.9%	11	10	-6.2%
Sedatives, hypnotics, etc.	3,659	4,725	29.1%	248	286	15.4%
Stimulants	15,021	22,493	49.7%	1,018	1,362	33.8%
“Other or unknown”	18,379	23,254	26.5%	1,245	1,408	13.1%

SUD prevalence rates are much higher among nonelderly adults compared to youth and elderly members. The percent of members with a diagnosed SUD ranges from 10.3% to 14.4% for members ages 22-64, compared to 2.2% for members ages 12-21, and 5.5% for members aged 65 and older. SUD prevalence rates are also higher for males compared to females, although OUD prevalence is similar for both gender groups. Diagnosed prevalence is also higher for White, non-Hispanic members (7.7%) compared to Black, non-Hispanic members (5.6%) and Hispanic members (2.5%), although the prevalence rate for cannabis diagnosis is higher for Black and Hispanic members compared to White members. Consistent with age-related differences in

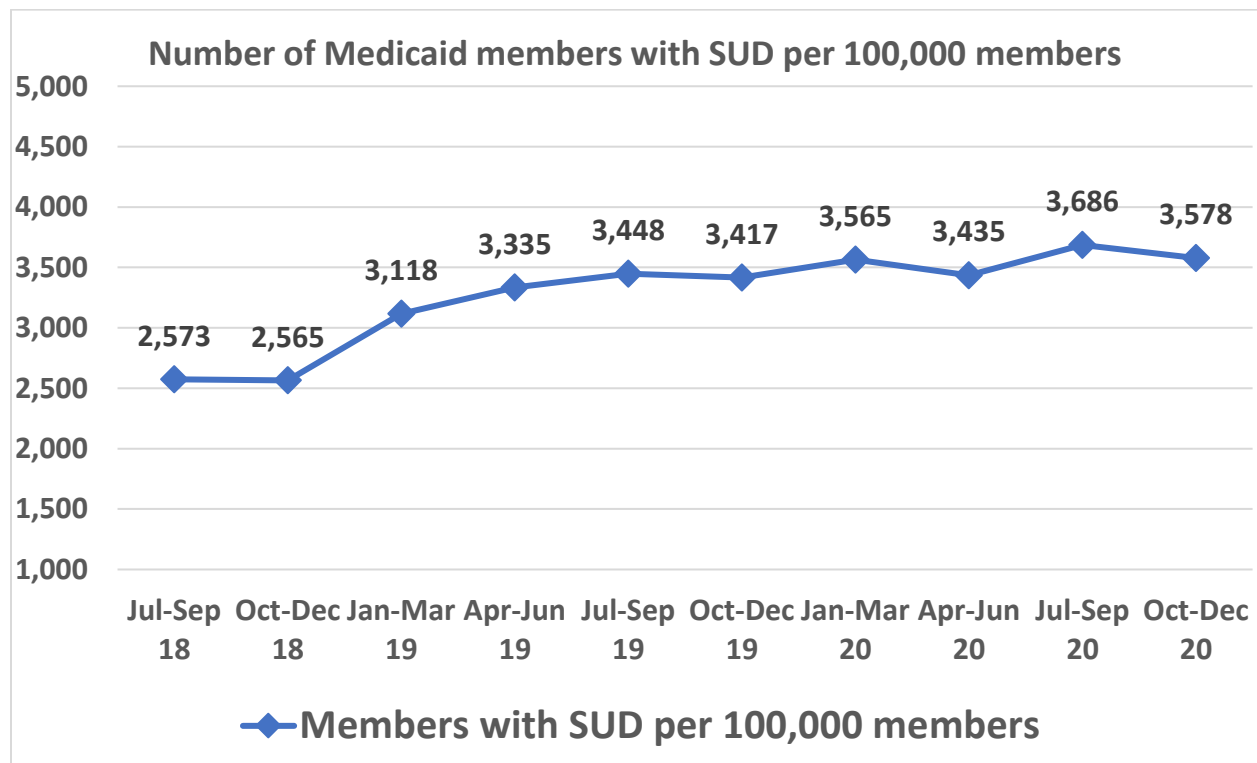
prevalence, prevalence rates are higher among Medicaid expansion and other non-disabled adults compared to members in other Aid categories.

It is important to note that differences by race/ethnicity, age, gender, and aid category are based on *diagnosed* prevalence of SUD, and does not account for the potential of underdiagnosis in some sub-populations. For example, racial/ethnic differences in access to treatment services, trust in providers due to historical discrimination and racism, stigma, and other factors may result in greater under-diagnosis of SUD among Black Medicaid members and other racial/ethnic minorities. By contrast, SUD prevalence based on patient self-reports (which does not depend on a clinician's diagnosis) shows little or no disparities by race/ethnicity.¹⁹

Prevalence of diagnosed SUD, by member characteristics, SFY 2020

	% with any SUD	% with OUD	% with AUD	% with cannabis diagnosis	% with stimulants diagnosis
All Medicaid members	6.1%	2.5%	2.3%	1.7%	1.4%
Age					
12-21	2.2%	0.3%	0.5%	1.5%	0.3%
22-34	10.3%	4.9%	2.9%	3.7%	2.7%
35-44	13.5%	7.1%	4.5%	3.5%	3.5%
45-54	14.3%	6.0%	6.5%	2.9%	3.5%
55-64	13.4%	4.1%	7.7%	2.1%	2.6%
65+	5.5%	1.9%	3.0%	0.4%	0.5%
Sex					
Male	7.4%	2.6%	3.4%	2.1%	1.7%
Female	5.4%	2.4%	1.6%	1.5%	1.2%
Race/ethnicity					
White, non-Hispanic	7.7%	3.6%	2.7%	1.8%	1.7%
Black, non-Hispanic	5.6%	1.5%	2.3%	2.0%	1.4%
Hispanic	2.5%	0.8%	0.9%	2.1%	0.5%
Other	2.6%	0.8%	1.2%	0.4%	0.5%
Aid category					
Medicaid expansion	10.8%	4.7%	4.3%	2.9%	2.7
Other non-disabled adults	9.1%	5.2%	2.1%	2.3%	1.9%
Pregnant members	6.0%	2.3%	0.7%	2.4%	1.1%
Low-income children	0.8%	0.1%	0.1%	0.3%	0.1%
Aged	4.9%	1.7%	2.7%	0.4%	0.5%
Blind/disabled	13.5%	5.0%	6.0%	3.7%	3.3%

On a quarterly basis, most of the increase in the SUD prevalence rate occurred between the October-December 2018 and July-September 2019 (corresponding to the first 9 months of Medicaid expansion). Since January-March 2020 at the start of the COVID-19 pandemic, changes in overall prevalence rates have been largely flat, even though the number of members with SUD continued to increase due to increasing enrollment during the pandemic. In sum, higher diagnosed SUD prevalence rates in recent years have been driven largely by the increase in nonelderly adults enrolled through Medicaid expansion, who tend to have much higher SUD prevalence rates compared to younger and older age groups. It is likely that many – if not most – of the Medicaid expansion members with SUD had pre-existing or undiagnosed SUD before enrolling. A prior report showed that in the first three months of Medicaid expansion in Virginia, over 12,000 expansion enrollees had a diagnosed SUD, comprising 4.4% of all new enrollees in the three months following the implementation of Medicaid expansion.²⁰



Medicaid Members Treated for Substance Use Disorders

Trends in use of ARTS services

Coverage of SUD services provided by the ARTS benefit is based on the ASAM National Practice Guidelines, which comprise a continuum of care from Early Intervention/Screening, Brief Intervention, and Referral to Treatment (SBIRT / Level 0.5), outpatient treatment (ASAM 1), intensive outpatient treatment and partial hospitalization (ASAM 2), residential treatment services (ASAM 3) and medically managed intensive inpatient services (ASAM 4).²¹ ARTS also emphasizes evidence-based treatment for OUD, which combines pharmacotherapy and counseling. In July 2017, DMAS added peer recovery support services as a covered service under the ARTS benefit, which serves to facilitate recovery from SUD. Care coordination services provided by Preferred OBOT and OTPs facilitate integration of addiction treatment services with physical health and social service needs.

Number of members using ARTS services, SFY 2019 and 2020.

	Number of members using services			Members using services per 100,000 members		
	SFY 2019	SFY 2020	Percent change	SFY 2019	SFY 2020	Percent change
Used any ARTS service	31,907	46,427	45.5%	2,161	2,811	30.1%
Type of service						
ASAM 1	23,278	36,159	55.3%	1,577	2,189	38.8%
OBOT/OTP	8,530	13,530	58.6%	578	819	41.8%
Care Coordination	5,542	9,543	72.2%	375	578	53.9%
ASAM 2	2,612	4,633	77.4%	177	281	58.5%
ASAM 3	2,517	4,300	70.8%	171	260	52.7%
ASAM 4	19	75	294.7%	1	5	252.8%
Pharmacotherapy	18,858	28,981	53.7%	1,277	1,755	37.4%
Case management	1,808	3,749	107.4%	122	227	85.3%
Peer recovery support services	601	1,124	87.0%	41	68	67.2%

In SFY 2020, 46,427 Medicaid members used some type of ARTS services, a 45.5% increase from SFY 2019. Most members who use ARTS services use ASAM 1 outpatient services (36,159 members, or 78 percent of all service users). Pharmacotherapy, almost all of which is MOUD treatment, is the second most frequently used service (28,981 members).

There was also a large increase (30.1%) in service use per 100,000 members, from 2,161 members per 100,000 using services in SFY 2019 to 2,811 members per 100,000 using services in SFY 2020. Increases in service use per 100,000 members was especially large for care coordination services (53.9%), ASAM 2 through ASAM 4 level services, and peer recovery support services (67.2%). Among members with a SUD diagnosis, the percent using any ARTS services increased from 41.4% in SFY 2019 to 46.4% in SFY 2020 (findings not shown).

Percent receiving any ARTS service, by type of diagnosis.

Members with OUD diagnoses are more likely to receive ARTS services compared to members with other SUD diagnoses. Among members with any OUD diagnosis, two-thirds (66.8%) used some type of ARTS service in SFY2020. ARTS utilization is considerably lower among members who had SUD diagnoses other than OUD, including 22.8% for those with AUD, 25.3% among those with a diagnosis of stimulant use disorder, and 12.1% among those with a diagnosis of cannabis use disorder. In contrast to OUD in which the clinical effectiveness of MOUD treatment has been well established, lower use of ARTS services among those with other SUD diagnoses may reflect less evidence about the effectiveness of treatment for other SUD, and greater reliance on non-medical treatment options, such as Alcoholics Anonymous and Narcotics Anonymous.

Number of members using ARTS services, by diagnosis

	Number of members	Members with any use of ARTS services ¹	Percent of members using ARTS services
All members	1,651,637	48,981	3.0%
Any SUD diagnosis	100,005	48,981	49.0%
Any OUD diagnosis	41,344	27,616	66.8%
No OUD diagnosis			
Had AUD diagnosis	32,182	7,322	22.8%
Had cannabis diagnosis	22,456	2,719	12.1%
Had stimulant diagnosis	13,207	3,335	25.3%
Had any other SUD diagnosis	16,006	1,297	8.1%

Use of Medications for Opioid Use Disorder

MOUD includes the use of buprenorphine, methadone and naltrexone as part of evidence-based treatment for OUD. This method is considered the gold standard of care for treating OUD, and has been found to be the most effective treatment in preventing OUD-related overdoses. A previous report showed MOUD treatment rates among members with OUD increased by over 20% following implementation of the ARTS benefit (from 33.6% in 2016 to 55.0% in 2018), compared to an 8.6% increase over the same time period for Medicaid members in other states that did not implement changes on the scale of the ARTS benefit.¹¹ To further increase access to buprenorphine treatment beginning in March 2019, DMAS removed prior authorization requirements for suboxone films for in-network prescribers.²²

Members receiving MOUD treatment continued to increase during Medicaid expansion and the onset of the COVID-19 pandemic. In SFY2020, 28,981 members received MOUD treatment, a 53.7% increase from SFY2019. As in prior years, buprenorphine treatment was the most common form of MOUD treatment (17,295 members, or 60 percent of all members receiving MOUD), followed by methadone treatment and naltrexone (9,577 and 3,583 members, respectively). The largest increase in MOUD between SFY 2019 and 2020 was for naltrexone (81.1%), although this medication remains less frequently used than other MOUD.

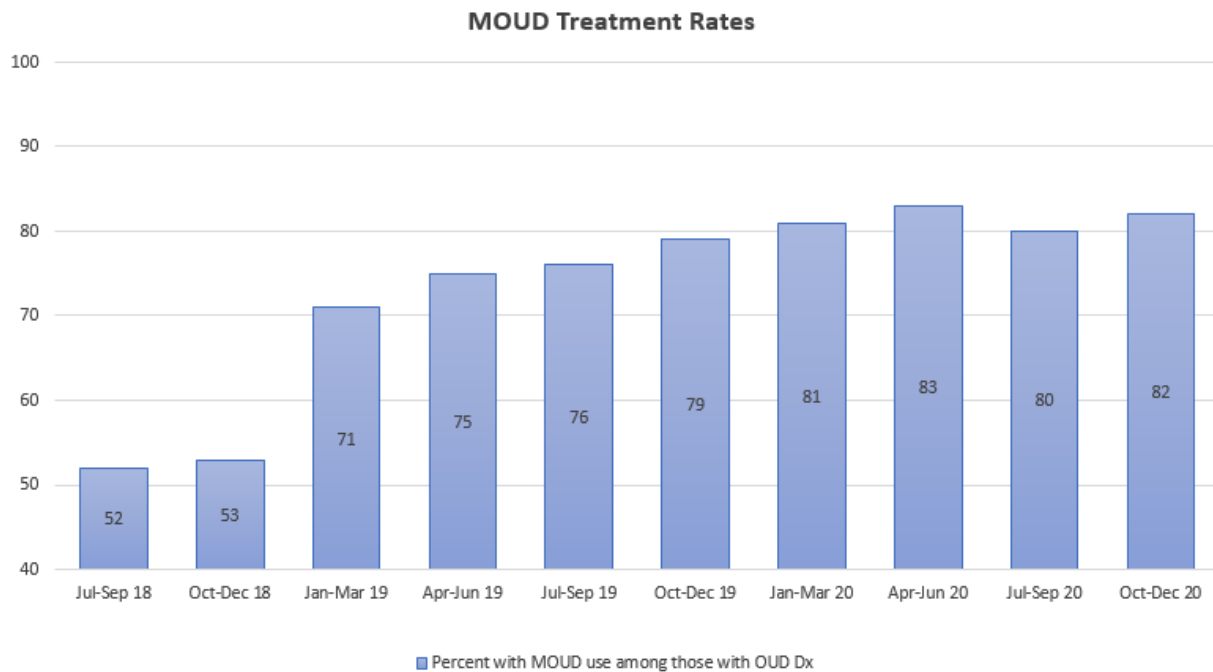
Medicaid members using MOUD treatment.

	SFY 2019	SFY 2020	Percent change
Number of members with any MOUD use*	18,858	28,981	53.7%
Buprenorphine	11,520	17,295	50.1%
Methadone	6,121	9,577	56.5%
Naltrexone	1,979	3,583	81.1%
MOUD treatment rate*	61.8	68.5	10.8%
Buprenorphine	37.7	40.9	8.3%
Methadone	20.1	22.6	12.8%
Naltrexone	6.5	8.5	30.6%

*Number of members with treatment / number of members with OUD diagnosis

MOUD treatment rates (the percent of members with OUD diagnoses who received MOUD treatment) also increased, from 61.8% in SFY 2019 to 68.5% in SFY 2020. As mentioned above, this is a continuation of a longer-term trend since implementation of the ARTS benefit in April, 2017.¹¹

On a quarterly basis, MOUD treatment rates increased from 52% in July-September 2018 to 82% October-December 2020.ⁱⁱ MOUD treatment rates surged in January-March 2019 – at the start of Medicaid expansion – and increased steadily through 2020 before leveling off. It is possible that the removal of prior authorization requirements for prescribing of suboxone films in March 2019 also contributed to increases in MOUD treatment rates.



Changes in MOUD initiation and continuity of treatment during COVID-19.

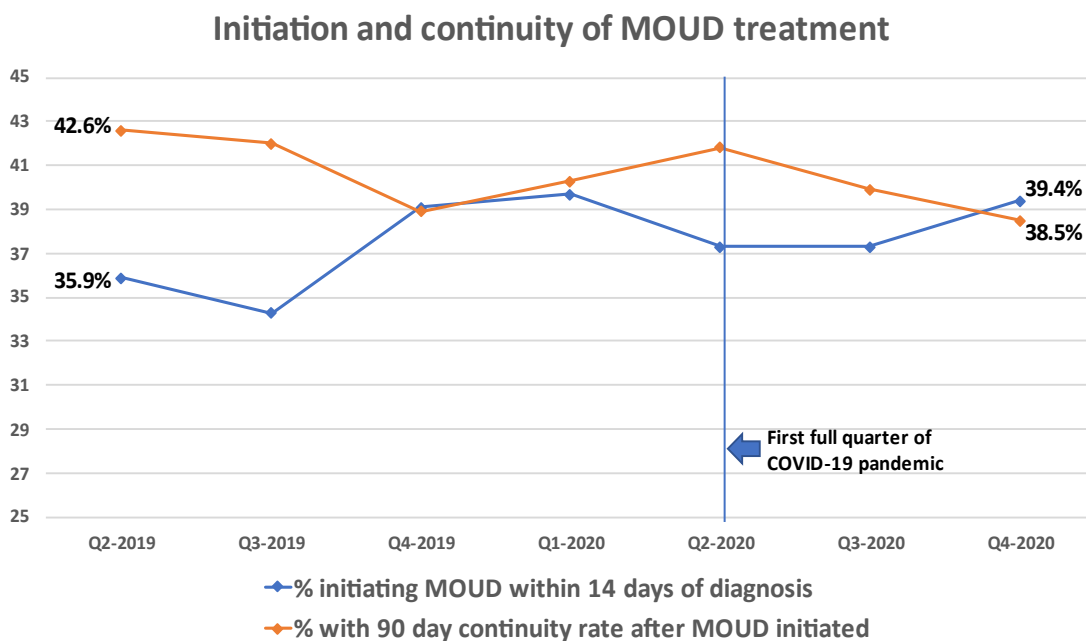
Additional analysis suggests there has been little change in MOUD treatment access and quality since the start of the COVID-19 pandemic. Since MOUD treatment usually requires in-person visits to treatment providers and clinics (e.g. for methadone administration and initiation of buprenorphine prescriptions), there was concern that pandemic-related shutdowns and the stay-at-home order issued by the Governor at the beginning of the pandemic to slow the rate of COVID transmission would limit face-to-face contact between patients and providers, leading to severe disruptions in access to MOUD and other SUD treatment. To mitigate against these potential barriers, the federal government and DMAS, with support from the Department of Health and Human Resources and the Governor, implemented a number of measures designed to allow greater flexibility on how treatment is initiated and received. These measures include allowing up to a 28 day supply of take-home dosages for methadone and buprenorphine dispensed at OTPs (which previously required patients to show up at the clinic for a daily dose), allowing a member’s home to

ⁱⁱ Rates by quarter do not correspond to rates for state fiscal year because of different time periods used to compute numerators and denominators.

serve as the originating site for a prescription of buprenorphine via telemedicine (both inductions and maintenance), and allowing for a 90 day supply of buprenorphine prescriptions.

While our analysis did not directly test the effects of these new flexibilities on treatment, there was very little change in MOUD treatment initiation rates after the start of the pandemic.ⁱⁱⁱ As of April-June 2019, 35.9% of members who had been diagnosed with OUD had initiated MOUD treatment within 14 days of the diagnosis. While there was some fluctuation from quarter to quarter, MOUD initiation rates did not noticeably decrease after the start of the pandemic, and were slightly higher by October-December 2020 (39.4%).

Among those who initiated MOUD treatment in April-June 2019, 42.6% were continuously in treatment for at least 90 days following initiation.^{iv} While increasing slightly between January-March 2020 and April-June 2020, 90 day continuity rates decreased somewhat thereafter – from about 41% in April-June 2020 to 38.5% in October-December 2020. It is unclear to what extent this decrease was COVID-19 related or reflecting part of a seasonal trend. For example, there was a similar decrease in 90 day continuity rates during the same period in 2019, before the pandemic.



ⁱⁱⁱ All results shown in the following chart are limited to members ages 18-64 with at least 90 days of continuous, full Medicaid eligibility as of the initial diagnosis. New diagnoses and MOUD claims required a 90 day “wash-out” period with no other OUD diagnoses or MOUD claims within 90 days of the index OUD diagnosis.

^{iv} Continuity is defined as allowing no more than a 7 day gap between MOUD prescription refills or office dates of surplus.

Emergency Department Use Related to SUD

Hospital ED visits related to SUD include fatal and nonfatal overdoses as well as other acute events directly or indirectly related to SUD. Previous analyses of the ARTS benefit showed a marked decrease in ED visits among members with OUD following implementation of the ARTS benefit relative to members who did not have a diagnosed OUD,¹² suggesting improved access to SUD treatment services. However, SUD-related ED visits among Medicaid members have increased substantially in recent years.

In SFY 2020, there were 72,417 SUD-related ED visits, a 43.0% increase from SFY2019. In addition, there were 14,084 OUD-related ED visits, representing a 47.0% increase from the prior year. By comparison, ED visits for all causes increased only 9.3%, amounting to 1,170,313 visits in SFY 2020.

Emergency department visits among Medicaid members, SFY 2019 and 2020

	SFY 2019	SFY 2020	Percent change
ED visits (all cause)			
Number of members with a visit	503,983	544,884	8.1%
Total number of visits	1,070,703	1,170,313	9.3%
SUD-related ED visits			
Number of members with a visit	29,635	39,930	34.7%
Total number of visits	50,643	72,417	43.0%
OUD-related ED visits			
Number of members with a visit	7,009	9,858	40.6%
Total number of visits	9,578	14,084	47.0%
ED visits per 1,000 members (all cause)			
Number of members with visit	341.4	329.9	-3.4%
Total visits	725.3	708.6	-2.3%
SUD-related ED visits per 1,000 members			
Number of members with visit	20.1	24.2	20.4%
Total visits	34.3	43.8	27.8%
OUD-related ED visits			
Total members with visit	4.7	6.0	25.7%
Total visits	6.5	8.5	31.4%

SUD-related ED visits increased even after adjusting for increases in Medicaid enrollment during the period. There were 43.8 SUD-related ED visits per 1,000 members in SFY 2020, a 27.8% increase from the prior year. Also, there were 8.5 OUD-related ED visits per 1,000 members in SFY 2020, a 31.4% increase from the prior year. By comparison, the overall number of ED visits per 1,000 Medicaid members *decreased* by 2.3% between SFY 2019 and 2020.

On a quarterly basis, the largest increases in SUD-related ED visits per 1,000 members occurred during SFY 2019, and is therefore likely related to Medicaid expansion when large numbers of new adult members enrolled, of whom a disproportionately large number had SUD. Since the first quarter of SFY 2020 (July-September 2019), the rate of SUD-related ED visits per 1,000 members has leveled off, and even decreased in some quarters.

Since the onset of the COVID-19 pandemic (January-March, 2020), there has been little change in the rate of SUD-related ED visits. However, the overall number of ED visits per 1,000 members decreased sharply during the same time period, likely reflecting pandemic-related restrictions on access to hospital services. In sum, despite the lack of change, SUD-related ED visits increased *relative* to ED visits overall after the onset of the pandemic.

Emergency department visits per 1,000 members, by quarter.

	SFY 2019				SFY 2020				SFY 2021	
	JUL-SEP 2018	OCT-DEC 2018	JAN-MAR 2019	APR-JUNE 2019	JUL-SEP 2019	OCT-DEC 2019	JAN-MAR 2020	APR-JUNE 2020	JUL-SEP 2020	OCT-DEC 2020
All ED visits (all cause)										
Members with any ED visit	139.5	147.2	167.3	159.3	152.5	160.6	156.8	91.1	112.6	107.7
Total number of ED visits	206.4	211.1	241.5	232.6	225.0	233.8	227.7	132.6	165.8	156.4
SUD-related ED visits										
Members with any ED visit	6.2	5.9	8.5	9.6	9.7	8.9	9.0	8.5	9.4	8.3
Total number of ED visits	8.5	7.8	11.7	13.4	13.7	12.3	12.5	12.0	13.1	11.5
OUD-related ED visits										
Members with any ED visit	1.4	1.3	1.8	2.1	2.1	2.0	2.1	2.0	2.4	2.0
Total number of ED visits	1.6	1.6	2.1	2.6	2.5	2.4	2.5	2.4	2.8	2.4

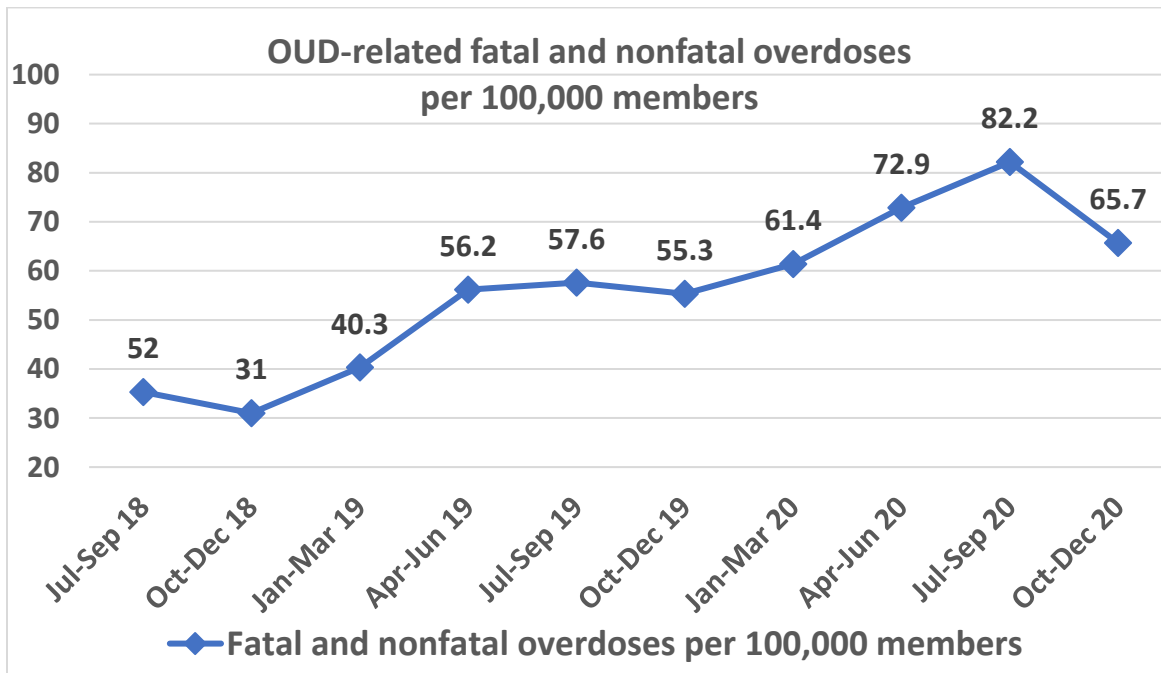
OUD-Related Overdoses

In SFY 2020, there were 3,292 opioid-related overdoses (fatal and nonfatal) among Medicaid members, as reported in the claims data. Consistent with state and national increases in overdose deaths, this represents a 75.7% increase from SFY 2019. The rate of opioid-related overdoses also increased by 57.1%, from 127 overdoses per 100,000 Medicaid members in SFY 2019 to 199 overdoses per 100,000 members in SFY 2020. Even among those who had an OUD diagnosis at some time during the year, the proportion with an overdose increased from 6.1% in SFY 2019 to 7.8% in SFY 2020.

OUD-related overdoses among Medicaid members, SFY 2019 and 2020

	SFY 2019	SFY 2020	Percent change
Number of OUD-related overdoses	1874	3292	75.7%
OUD-related overdoses per 100,000 members	126.9	199.3	57.1%
Percent with OUD-related overdose among those with OUD diagnosis	6.1%	7.8%	27.9%

A closer look at overdose rates by quarter shows a sharp increase in overdoses between the end of 2018 and the first two quarters of CY 2019, which reflects in part the increase in adult enrollment through Medicaid expansion, of whom a disproportionate number had OUD. Also, there was an additional surge beginning near the start of the COVID-19 pandemic in April-June, 2020. After peaking at 82.2 overdoses per 100,000 members in July-September 2020, the overdose rate decreased to 65.7 per 100,000 during October-December 2020. It is unknown whether this decrease is a temporary fluctuation or the beginning of a longer-term decrease.



Consistent with trends in OUD prevalence, overdose rates tend to be higher among nonelderly adults, males, and Non-Hispanic Whites. Among Medicaid eligibility categories, overdose rates are highest among Medicaid expansion members and other nondisabled adults (consistent with the higher rates among nonelderly adults) as well as members in the blind and disabled eligibility group. The overdose rate increased across most demographic groups and eligibility categories, with the exception of elderly members who experienced a 10.2% decrease in overdose rates between SFY 2019 and 2020. However, increases in overdose rates were by far the greatest among nonelderly adults, including a 174% increase in the overdose rate among members ages 35-44. In sum, the increase in the overall overdose rate among Medicaid members reflects both an increase in the number of nonelderly adults – who tend to have higher prevalence of OUD – and increases in the overdose rate among nonelderly adult members.

OUD-related overdoses, by member characteristics

	SFY 2019			SFY 2020			Percent change in overdose rate between SFY 2019 and 2020
	All Medicaid members	Medicaid members with overdoses	Overdose rate per 100,000 members	All Medicaid members	Medicaid members with overdoses	Overdose rate per 100,000 members	
All members¹	1,476,202	1,871	126.7	1,651,637	3,292	199.3	72.6
Age							
< 12	484,828	55	11.3	466,473	32	6.9	-38.9
12-21	317,562	96	30.2	353,761	161	45.5	15.3
22-34	233,800	561	239.9	293,885	1,150	391.3	151.4
35-44	136,875	401	293.0	173,436	810	467.0	174.1
45-54	106,041	338	318.7	133,810	591	441.7	122.9
55-64	104,837	290	276.6	134,616	423	314.2	37.6
65+	92,259	130	140.9	95,656	125	130.7	-10.2
Sex							
Male	638,411	864	135.3	723,019	1,852	256.1	120.8
Female	841,731	1,001	118.9	930,939	1,432	153.8	34.9
Race/ethnicity							
White, NH	766,331	1,255	163.8	853,091	2,064	241.9	78.2
Black, NH	531,970	525	98.7	580,863	1,058	182.1	83.5
Hispanic	57,054	29	50.8	61,314	51	83.2	32.3
Other	118,749	55	46.3	156,332	119	76.1	29.8
Aid category							
Medicaid expansion	324,662	638	196.5	505,678	2,025	400.5	203.9
Other non-disabled adults	164,194	359	218.6	162,178	411	253.4	34.8
Pregnant women	50,141	27	53.8	47,204	25	53.0	-0.9
Low income children	626,486	82	13.1	635,922	84	13.2	0.1
Aged Adults	90,294	115	127.4	92,643	109	117.7	-9.7
Blind/Disabled	173,473	584	336.7	166,584	587	352.4	15.7

Most with overdoses were not receiving MOUD treatment.

Most members who had OUD-related overdoses were not receiving MOUD treatment prior to the overdose. Of the 3,285 overdoses in SFY 2020, 78.5% had not received any MOUD treatment in the 12 months prior to the overdose, while 88.5% did not receive MOUD treatment in the month prior to the overdose.

However, there was an increase in members with overdoses who had received MOUD treatment in the 12 months prior to the overdose, from 14.3% among overdoses that occurred in SFY 2019 to 21.6% in SFY 2020. There was a smaller increase in the proportion of members with overdoses who received MOUD in the month prior to the overdose, from 8.3% in SFY 2019 to 11.5% in SFY 2020. Of the total increase in 1,414 members with an OUD-related overdose between SFY 2019 and 2020, 31% of the increase is accounted for by members who received MOUD treatment in the 12 months prior to the overdose, while 16% is accounted for by members who received MOUD treatment in the month prior to the overdose.

OUD-related overdoses that involved MOUD treatment

	SFY 2019		SFY 2020	
	Number	Percent	Number	Percent
Total number of overdoses	1,871	100.0	3,285	100.0
Any MOUD use in 12 months prior to date of overdose				
Yes	267	14.3	708	21.6
No	1,604	85.7	2,577	78.5
Any MOUD use in 30 days prior to date of overdose				
Yes	156	8.3	378	11.5
No	1,715	91.7	2,907	88.5

Conclusion

Medicaid expansion greatly increased the number of Virginians receiving treatment for SUD through the ARTS benefit. As other studies have shown, Medicaid members enrolled through expansion have higher SUD prevalence compared to other eligibility groups, and are at higher risk of overdoses. It is likely that many members with SUD who enrolled through Medicaid expansion had pre-existing SUD for which they were not receiving adequate treatment, although there were no data available on diagnoses and utilization prior to enrolling in Medicaid to confirm this. National data clearly show that uninsured people with SUD have much higher levels of unmet need for treatment services compared to people enrolled in Medicaid.³ By enrolling in Medicaid, more Virginians with SUD gained access to the full continuum of services offered through the ARTS benefit, including outpatient, residential, inpatient, and pharmacotherapy services.

Nevertheless, it is a paradox that OUD-related overdoses increased during a time that also saw gains in the supply of treatment services, increased rates of treatment for Medicaid members with a SUD diagnosis, and no observable disruptions in initiation of treatment after the beginning of the COVID-19 pandemic. Although there was only a small decrease in 90 day continuity for MOUD during COVID-19 during the study period, perhaps the more notable finding is that most members with an OUD diagnosis still do not get initiated into MOUD treatment within 14 days, and most who are initiated do not have at least 90 day continuity of MOUD treatment.

The effectiveness of MOUD treatment is demonstrated by the fact that most of the members with overdoses (almost 90%) did not receive MOUD treatment in the month prior to their overdose. On the other hand, the percent of members with overdoses who had been receiving MOUD treatment increased somewhat between SFY 2019 and 2020. This may suggest either an increase in the severity of addiction problems or disruptions in treatment not observed in the claims data. While MOUD continues to be highly effective in preventing overdoses, the changing nature of the opioid epidemic may be having an impact on the effectiveness of treatment. This may be due to the greater use and availability of more lethal forms of opioids – especially fentanyl – as well as higher levels of economic, social, and psychological distress that may increase the likelihood of recurrence of drug use among some members.

Although a crucial measure of treatment outcomes, overdoses do not tell the entire story of how members have benefitted from SUD treatment services through the ARTS program, as few members with an OUD diagnosis have an overdose. Surveys of members with OUD who received ARTS services show high levels of satisfaction with these services, and more than three-fourths report improvements in their personal, family, and social lives, as well as their ability to find employment and housing.²³ Moreover, experiences with treatment and the outcomes of treatment were just as positive among members interviewed during the COVID-19 pandemic as members who were interviewed prior to the pandemic.

In sum, this report found no major systematic disruptions in access to treatment during the COVID-19 pandemic that could explain the surge in overdose rates. Access to and utilization of ARTS treatment services continued to increase during the pandemic, and even though rates of initiation and continuity of treatment were largely maintained, significant gaps remain. As SUD prevalence rates continue to increase along with more lethal forms of opioids and other substances,

there will be a need for continued growth in the supply and availability of ARTS services to members, although greater supply and provision of services alone are unlikely to turn the tide of an increasing number of overdoses. Prevention efforts, interdiction of the supply of illegal drugs, and more person-centered treatment approaches that address the social and psychological risk factors for recurrence of drug use and overdose will also need to be considered.

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