Medicaid Managed Care
Opioid and Alcohol
Treatment Policy Study:
Preliminary Results from
a Nationwide Survey





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Connect with us

We are grateful to our many partners at Medicaid managed care plans and state Medicaid programs that make this work possible. We are always learning from our partners and look forward to continued collaborations.

We are eager to know more about the challenges and opportunities that Medicaid managed care plans encounter, and how our research can help plans improve addiction treatment service access and quality.

We welcome engagement from those who read this report and our other work. To connect with us, please reach out via email anytime or fill out this Qualtrics link with your contact information and we will reach out to you: https://bostonu.qualtrics.com/jfe/form/SV_3wNTqhiLzsrSVsa

Thank you,

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Project Overview

In the United States, substance use disorders and associated consequences are significant and costly public health concerns.¹ Substance use disorders are a critical issue for state Medicaid programs and Medicaid managed care plans. Rates of substance use disorders are higher among individuals enrolled in Medicaid compared to those with other health insurance,² and Medicaid finances nearly 40% of outpatient substance use disorder treatment episodes.³ Four in every 10 people with a diagnosed opioid use disorder are enrolled in Medicaid.² If left untreated, the costs of alcohol and opioid use disorders are substantial. Alcohol is a leading cause of preventable morbidity and mortality; complications of untreated alcohol use can affect nearly every organ system.⁴¬¹ In 2017, the opioid epidemic was declared a national public health emergency and it remains one to this day.8 Over 100,000 Americans died from an overdose in 2023.9 Access to evidence-based substance use disorder treatment is critical in addressing these conditions.

Medicaid managed care plans provide insurance for over three-quarters of the national Medicaid population¹⁰ and are therefore uniquely positioned to make a significant impact by facilitating treatment access for substance use disorders.¹¹ In 2021, there were 241 Medicaid managed care plans operating across 41 states and the District of Columbia that offered comprehensive (physical and behavioral health) benefits to non-dual eligible adults 18-64 years of age.

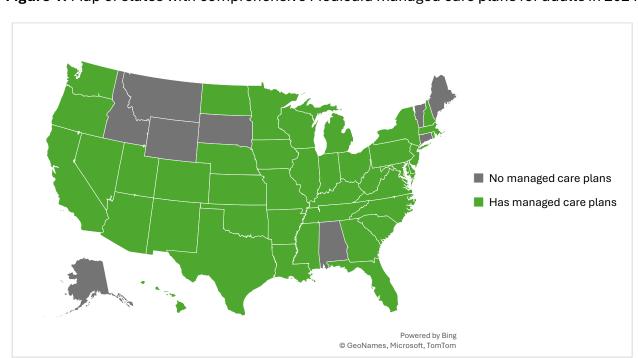


Figure 1. Map of states with comprehensive Medicaid managed care plans for adults in 2021

With funding from the National Institute on Drug Abuse (R01DA049776) and the National Institute on Alcohol Abuse and Alcoholism (R01AA029821), this study examined Medicaid managed care plan policies for alcohol and opioid use disorder treatment services in the 2021-2022 benefit years. As part of this effort, we conducted a national survey of Medicaid managed care plans inquiring about the following:

- 1. Plan organization and covered services
- 2. Provider networks
- 3. Quality measurement
- 4. Payment models
- 5. Integration of substance use treatment in primary care and other settings

The preliminary results presented in this report derive from the survey of Medicaid managed care plans and are descriptive. Differences shown may not be statistically significant.

Survey Respondents

For the purposes of this report and to demonstrate a comprehensive national picture of Medicaid managed care substance use disorder treatment policies, we weighted plan responses to the population of managed care plans (N=233). Table 1 highlights the characteristics of the full weighted sample.

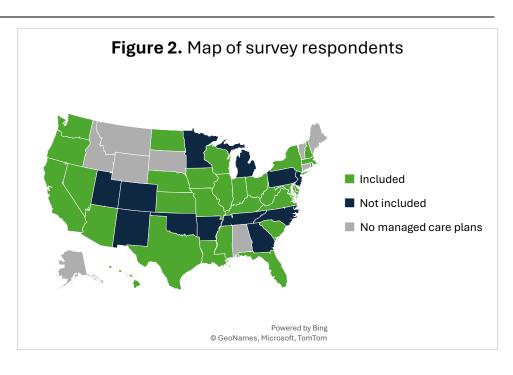


Table 1. Characteristics of the weighted sample

Characteristics	Weighted Sample	
	# Plans	% Plans
Total	233	100
Profit Status		
Non-profit	120	52
For profit	113	48
Accredited	166	71
Not accredited	67	29
Market share in the State		
Small (< 75 th percentile of market share)	161	69
Large (≥ 75 th percentile of market share)	72	31
Parent Company		
Plan has parent company	92	39
No parent company	141	61
Region of Operation		
Northeast	40	17
Midwest	54	23
South	74	32
West	65	28

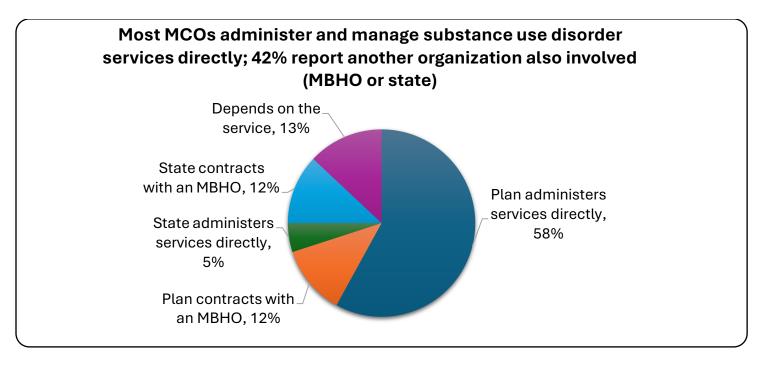
Note. 75th percentile market share is 24.98% market share

Plan organization and covered services

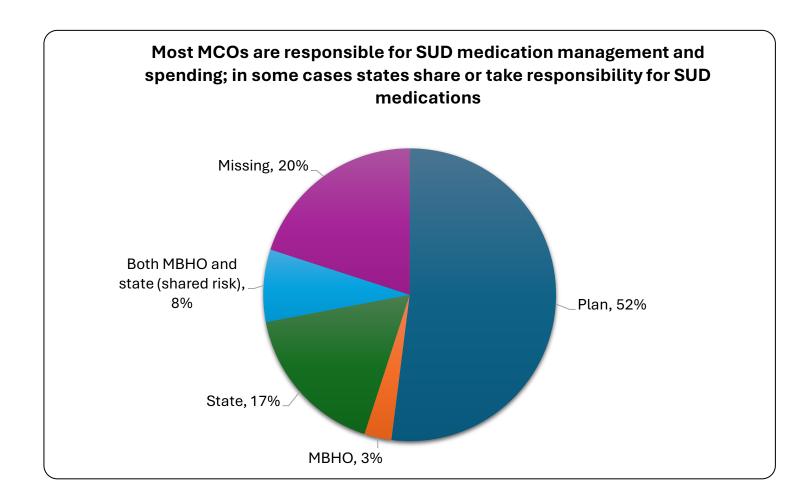
Plan Organization

The organizational structure of Medicaid managed care plans varies and may have important implications for enrollee access to behavioral health services. 12-14 Financial responsibility for addiction treatment varies by state Medicaid program design. States can manage services themselves (fee-for-service model), contract with a managed care plan to deliver and manage all services (comprehensive managed care), or contract with a managed care plan for most services but carve out to a separate specialty organization (e.g., a managed behavioral health organization or MBHO) for behavioral health services. A separate pharmacy benefits manager (PBM) may also be used, affecting substance use disorder pharmacotherapy. Separate financing models may result in fragmented funding for substance use disorder treatment. Involving multiple entities can complicate ensuring compliance with the federal Mental Health Parity and Addiction Equity Act.

We asked whether the plan directly administers and manages covered substance use disorder services (excluding medications), or carves-out to another entity:



• In the 2021-2022 coverage year, most plans administered and managed substance use disorder treatment services directly. In some instances, plans were responsible for specific substance use disorder treatment services (e.g., inpatient withdrawal management) but not others. Such complex arrangements have been noted as common the scientific literature.¹⁵

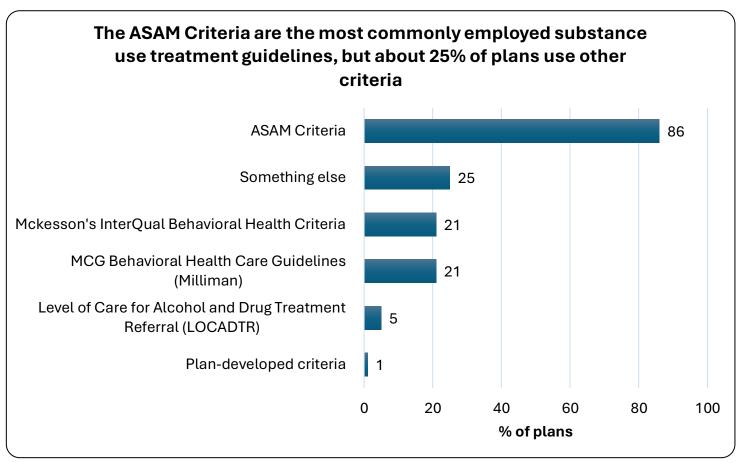


- In most cases, plans bear the financial risk for managing substance use disorder medications.
- There is limited research on how behavioral health carve-outs and financial risk arrangements in Medicaid managed care plans impact access to and quality of substance use disorder treatment.
 However, some research suggests that financial integration of physical and behavioral health services in Medicaid managed care is linked to more access to behavioral health services for enrollees with mental health conditions.¹²

Coverage of treatment services

Coverage policies play a key role in determining access to substance use disorder treatment services. Within federal and state requirements, Medicaid managed care plans have some discretion to create policies regarding which substance use disorder treatment services are covered. Most plans use medical necessity criteria to guide benefit approvals.

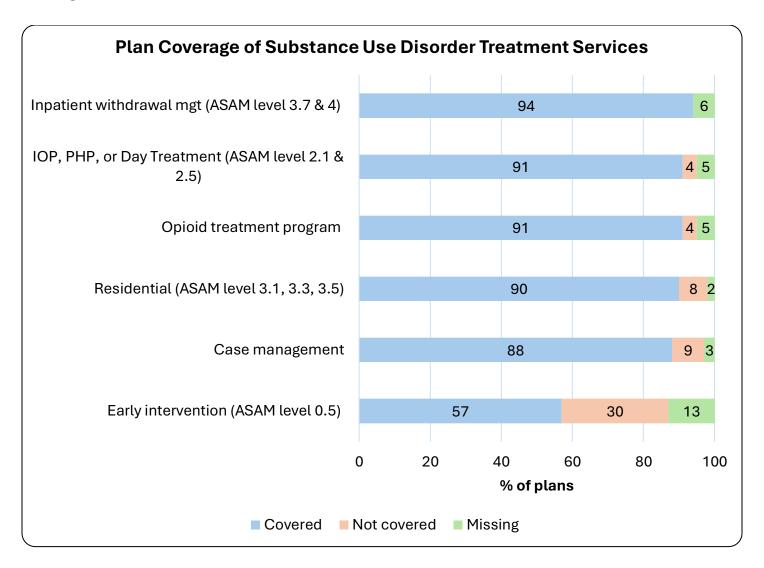
Plan reported use of various medical necessity criteria is summarized in the figure below:



Note. Items are not mutually exclusive.

- Most plans reported using the ASAM Criteria. The remaining plans use one of the three existing proprietary guidelines (i.e., MCG Behavioral Health Care Guidelines, McKesson's InterQual Behavioral Health Criteria, Level of Care for Alcohol and Drug Treatment Referral).
- One percent of plans in this study used a plan-developed set of criteria.

We asked plans about coverage of services included in the ASAM continuum of care. Key findings on plan coverage of treatment services include:

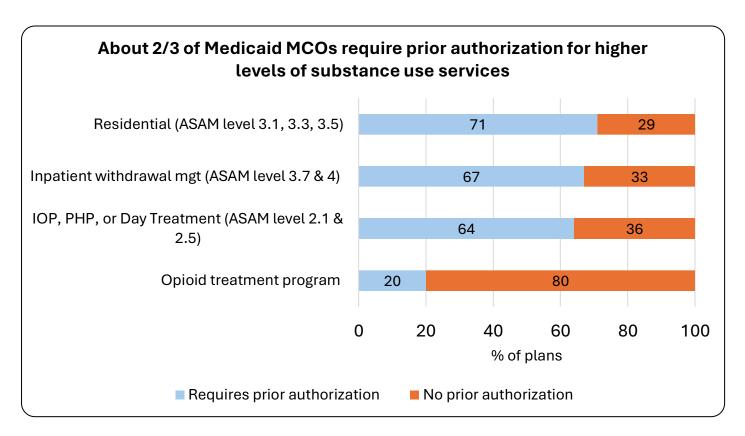


- Most plans report covering a full continuum of care.
- Many plans offer a range of services, which includes inpatient withdrawal/detoxification services, outpatient opioid treatment programs that include methadone, intensive outpatient, partial hospitalization, or day treatment, residential treatment, and case management.
- Fewer plans offer early intervention treatment, which is important for prevention, but not included in the ASAM continuum of care.
- We did not ask about outpatient care (ASAM level 1.0) because it is generally covered by all plans.

Utilization management

Utilization management policies (e.g., prior authorization, concurrent review) are used to manage access to high-cost services and medications. Beyond coverage policies, these added requirements can impact access to care, therefore it is important to understand their use and implications.

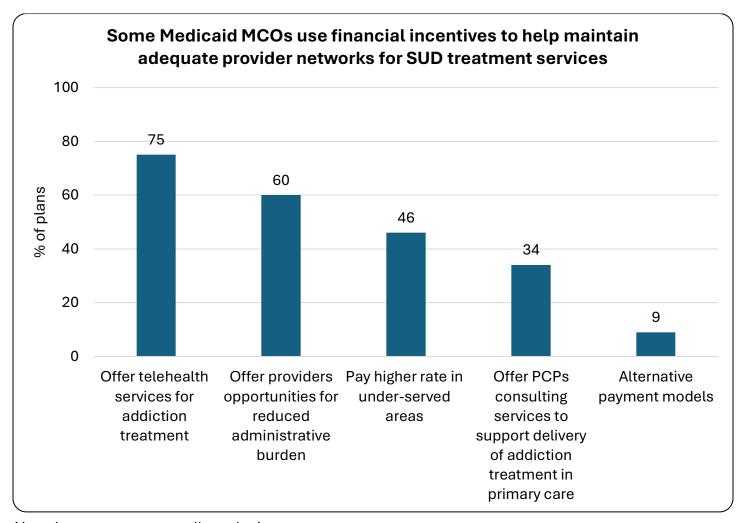
Prior authorization, a process through which providers and patients must gain managed care plan approval for treatment for it to be covered, is sometimes required for substance use treatment services. On the one hand, prior authorization may help connect enrollees with appropriate care, but on the other hand the administrative steps involved may delay timely access to care ^{16,17} and result in higher costs to the managed care plan. ^{18,19} The Mental Health Parity and Addiction Equity Act (MHPAEA) requires plans to document their use of prior authorization and to provide a comparative analysis that justifies the application of prior authorization for a service. Multiple states have limited or prohibited commercial health plans' use of prior authorization for certain behavioral health services. ²⁰



• More than half of plans require prior authorization for more intensive treatment.

Provider Networks

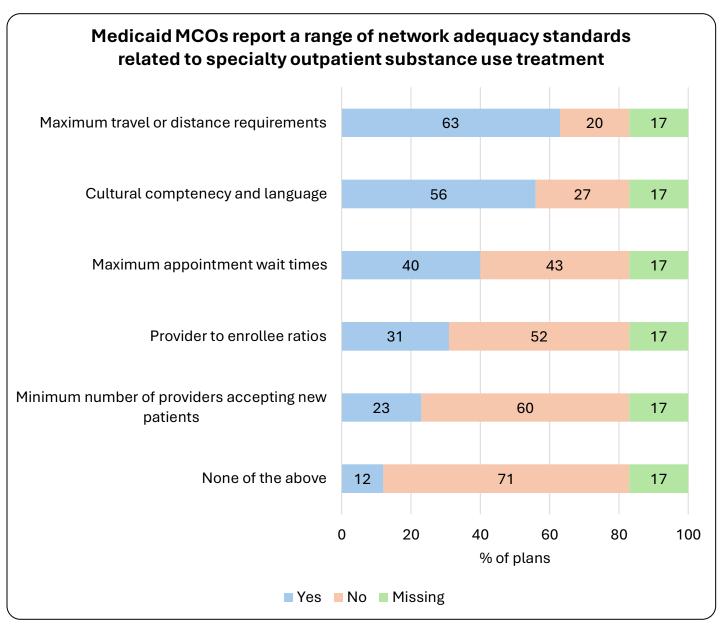
Provider networks are a key tool for managed care plans to manage access to and quality of care. Quality substance use disorder treatment services require access to both primary care and specialty providers. Most opioid use disorder treatment is provided in specialty programs, but capacity is limited; primary care providers are an effective and important additional resource. Access to and quality of substance use disorder treatment can be determined by the breadth of specialty and primary care provider networks. Network adequacy standards can be enforced by states through contractual requirements imposed on plans and can be encouraged through state-offered financial incentives.



Note. Items are not mutually exclusive.

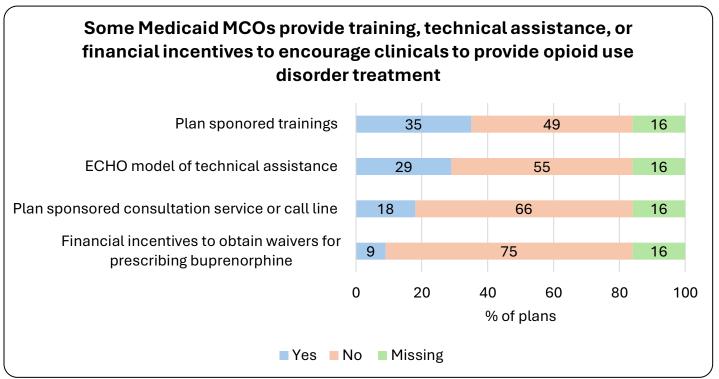
• The most common strategies to maintain an adequate provider network were to offer telehealth services for addiction treatment or to offer providers opportunities for reduced administrative burden.

As of July 2018, CMS required state Medicaid programs to establish and enforce adequacy standards for Medicaid managed care plan provider networks regarding beneficiaries' travel time and distance to care. However, states are permitted to exempt some plans from these requirements, as long as the state monitors network adequacy.

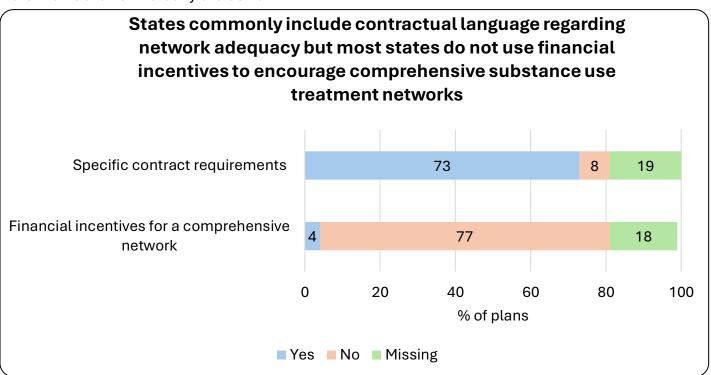


Note. Items are not mutually exclusive.

 More than half of plans have maximum travel or distance requirements in specialty outpatient substance use treatment.



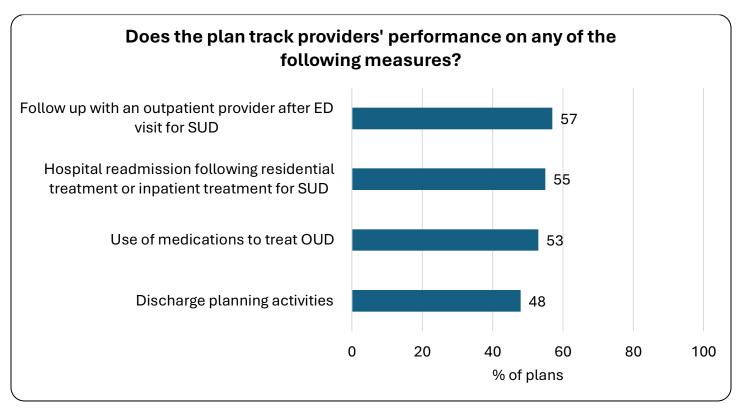
Note. Items are not mutually exclusive.



- Most plans were subject to specific contractual requirements related to network adequacy in the states where they operated.
- Few plans received financial incentives for comprehensive substance use disorder treatment networks.

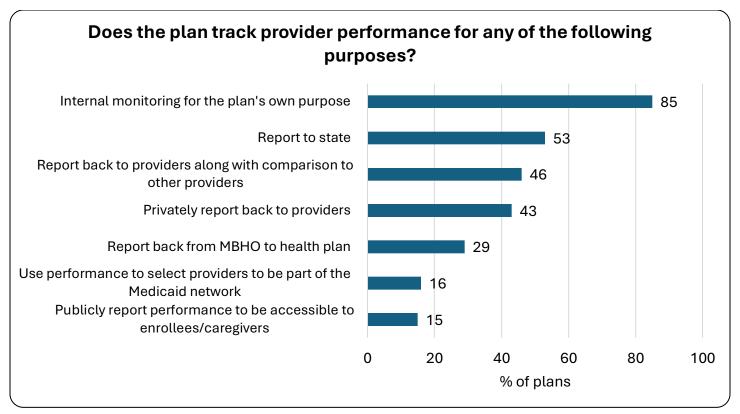
Quality Measurement

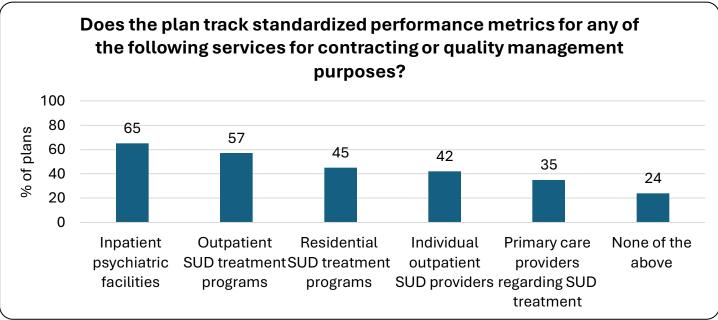
The National Academy of Medicine defines quality as the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with professional knowledge. Quality measures provide data to compare the quality of health care services to recognized standards. This data helps policymakers identify where gaps in care exist and create strategic plans to address those gaps. Adoption of quality measurement by Medicaid managed care plans can help systematically improve care. Little is known about Medicaid managed care use of performance measures in substance use disorder treatment.



Note. Strategies are not mutually exclusive.

• Just over half of plans track providers' performance on the Healthcare Effectiveness Data Information Set (HEDIS) measure. "Follow up with an outpatient provider after and emergency department visit for substance use disorder". This measure is important because post emergency department visit for a substance use disorder is a high-risk time for overdose and losing contact with the health care system.²¹ Tracking performance measures alone will not improve care. We asked plans for which purposes they track provider performance on quality measures and in what settings:

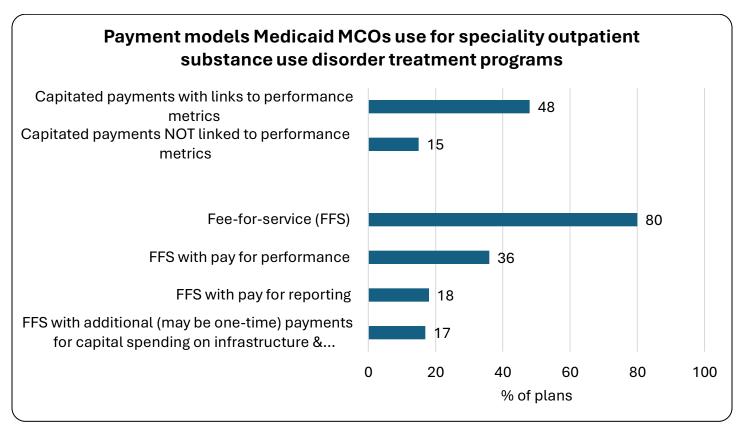




- Most plans report tracking performance measures for their own internal monitoring and about half had to report this information to their respective state.
- Most plans track performance metrics in inpatient psychiatric facilities and outpatient substance use disorder treatment programs.

Payment Models

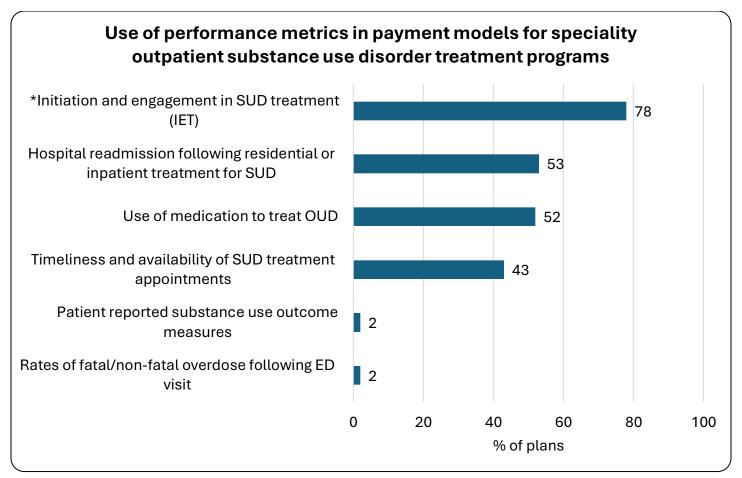
Managed care plans determine payment models and rates for network providers. Payment models represent an opportunity for plans to innovate the traditional method of paying for health care services and advance health equity. Alternative payment models (APMs) are an approach that accounts for both the quality and cost-efficiency of treatment in determining payment to providers. In 2021, the Centers for Medicaid and Medicare Services announced a goal to have all Medicaid beneficiaries in a "care relationship with accountability for quality and total cost of care by 2030." ²²



Note. Strategies are not mutually exclusive.

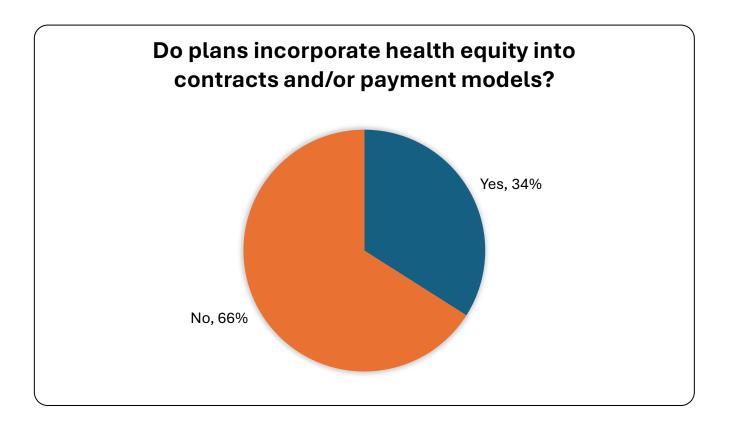
- Fee-for-service was the dominant payment model for outpatient substance use disorder treatment programs.
 - o Some plans are combining the fee-for-service model with pay for performance incentives.

Some plans incorporate performance metrics into payment models for outpatient substance use disorder treatment programs. We asked plans which performance metrics are used in payment:



Note. Items are not mutually exclusive. * Indicates a HEDIS measure.

• When incorporating performance metrics into payment models, most plans used the National Committee for Quality Assurance metric Initiation and Engagement in Substance Use Disorder Treatment (IET). This is a broad measure of early treatment for all enrollees with substance use disorder. There are versions of this measure specifically for opioid use disorder and alcohol use disorder. Many plans also used the National Committee for Quality Assurance measure Continuity of Pharmacotherapy for Opioid Use Disorder. Both measures are mandatory Medicaid Adult Core Set Health Care Quality Measures starting in 2025.

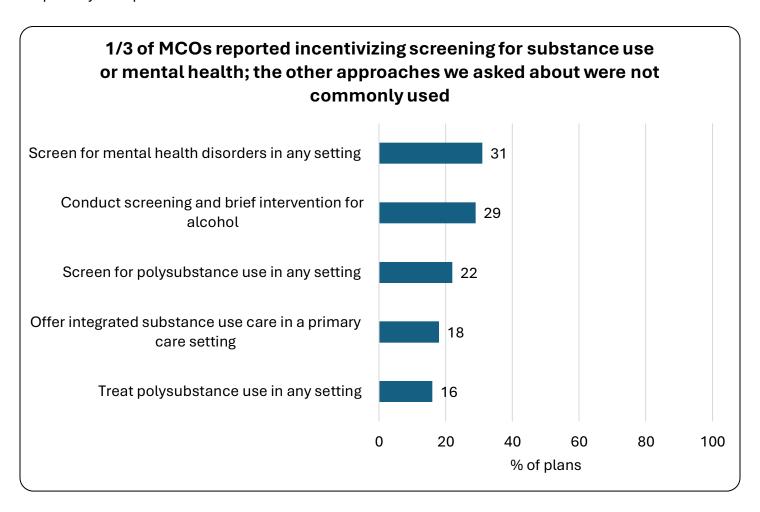


- In 2021, less than half of plans were incorporating health equity into contracts and payment models with providers.
- For the 34% of plans using this strategy, we asked plans' approaches to incorporating health equity into contracts and payment models. Some plans:
 - o Incentivize providers to screen for social determinants of health.
 - Use alternative payment models that include care gap closure for health equity and disparities.
 - Use the Culturally and Linguistically Appropriate Services Standards.
 - o Integrate health equity quality measures.

Integration of substance treatment in primary care & other settings

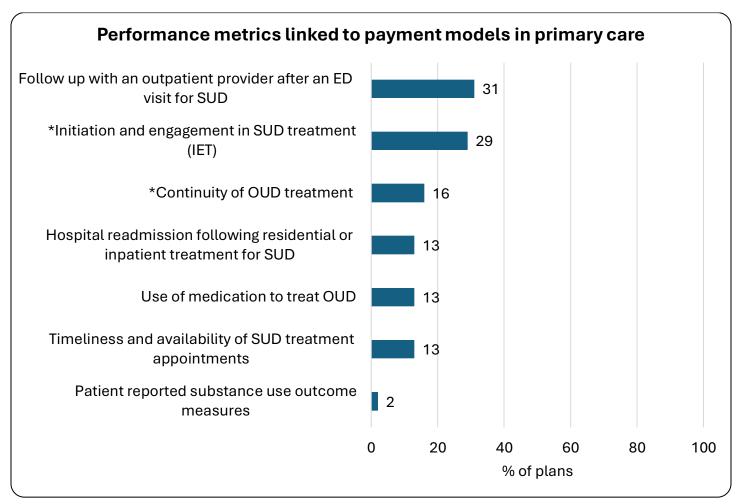
Integration of substance use treatment in primary care and other settings is important for access to care. Buprenorphine is one medication for opioid use disorder that can greatly reduce the risk of mortality after a non-fatal opioid-related overdose.²³ Strong evidence suggests improved clinical outcomes with integration of buprenorphine treatment in primary care, hospital, and emergency department settings.^{24–28} Low-threshold access to buprenorphine is critical to addressing the overdose epidemic.

People with substance use disorders tend to be more willing to enter treatment in a primary care setting.²⁹ It is important to adequately compensate providers for the time it takes to evaluate and monitor addiction treatment in primary care. We examined whether plans offered financial incentives, beyond the base rate, for primary care providers to offer substance use disorder treatment services.



• Only 1/3 of plans reported incentivizing providers to screen for mental health disorders.

One strategy to increase access and quality of care is to link performance metrics with the payment model used in primary care. When plans implemented this strategy, they were most likely to use metrics for initiation and engagement in substance use disorder treatment, or for follow-up with an outpatient provider after an emergency department visit for substance use disorder.

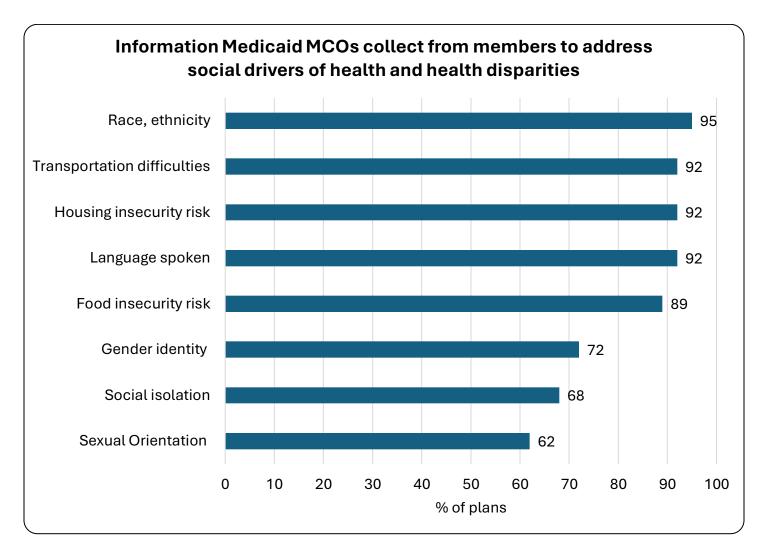


Note. * Indicates a HEDIS measure.

- Few plans linked performance metrics to payment models in primary care.
- The performance metric that was most included in plans' payment models was the follow-up with an outpatient provider after an emergency department visit for substance use disorder.

Efforts to address social drivers of health and disparities in health

There is growing recognition that social drivers of health affect a range of health outcomes and risk factors. Medicaid managed care plans are increasingly focused on addressing social drivers of health as part of a holistic approach to healthcare and addressing health inequities that drive disparities.^{30–32}



- Most, but not all plans collected member race and ethnicity directly from enrollees.
- 62% of plans collected member sexual orientation. There are well documented health disparities
 among people who identify as lesbian, gay, bisexual, transgender, queer, intersex, and asexual.
 These individuals tend to have higher rates of smoking, substance use disorders, and other mental
 health conditions.

Selected publications from the study team

Our research focuses on policy and system level approaches to improve access to and quality of alcohol and drug treatment services and to reduce racial, ethnic, gender, and geographic disparities in substance use treatment services. Select recent publications are listed below:

- Stewart MT, Andrews CM, Feltus SR et al. Medicaid managed care restrictions on medications for the treatment of opioid use disorder. Health Services Research. 2024. https://pubmed.ncbi.nlm.nih.gov/39390740/
- 2. Acevedo A, Sayko Adams R, Le Cook B, Feltus SR, Panas L, Stewart MT. Disparities in alcohol treatment use at the intersection of race, ethnicity, gender, and insurance. *Substance Use & Addiction Journal*. 2025. https://pubmed.ncbi.nlm.nih.gov/39344041/

The results shared in this report build on our teams' four previous NIDA and NIAAA funded studies, led by Dr. Connie Horgan, examining access to behavioral health treatment services in commercial insurance plans. Select publications from previous projects include:

- 1. Stewart MT, Horgan C, Garnick DW et al. The role of health plans in supporting behavioral health integration. *Administration and Policy in Mental Health and Mental Health Services Research*. 2017. https://pubmed.ncbi.nlm.nih.gov/28646242/
- 2. Horgan CM, Stewart MT, Reif S et al. Behavioral health services in the changing landscape of private health plans. *Psychiatric Services*. 2016. https://pubmed.ncbi.nlm.nih.gov/26876663/
- 3. Horgan C, Hodgkin D, Stewart MT et al. Health plans' early response to federal parity legislation for mental health and addiction services. *Psychiatric Services*. 2015. https://pubmed.ncbi.nlm.nih.gov/26369886/
- 4. Hodgkin D, Horgan CM, Stewart MT et al. Federal parity and access to behavioral health care in private health plans. *Psychiatric Services*. 2018. https://pubmed.ncbi.nlm.nih.gov/29334882/

Acknowledgements & Contact Information

We sincerely appreciate the interest and support provided by the executive leaders and staff members of the Medicaid managed care organizations included in our study. We also thank the state Medicaid directors who helped distribute this survey to plans in their respective states. We are grateful for the support of many executive leaders of Medicaid managed care interest groups who assisted in distributing the survey. Without your support, this research would not have been possible.

This project was informed by the expertise and insight of many advisors and colleagues including, Stephanie Jordan Brown, Pamela Greenberg, Dr. Haiden Huskamp. A special thanks to Christie Hager who supported efforts to disseminate the survey.

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To provide feedback on this report, please contact us or complete this form: https://bostonu.qualtrics.com/jfe/form/SV_3wNTqhiLzsrSVsa

References

- 1. Substance Abuse and Mental Health Services Administration. *Highlights of The Surgeon General's Report on Alcohol, Drugs, and Health: At-a-Glance*. Accessed October 11, 2024. https://www.hhs.gov/sites/default/files/report-highlights.pdf
- 2. KFF. Medicaid's Role in Addressing the Opioid Epidemic. KFF. June 3, 2019. Accessed September 9, 2024. https://www.kff.org/infographic/medicaids-role-in-addressing-opioid-epidemic/
- 3. Access to Substance Use Disorder Treatment in Medicaid. MACPAC. June 14, 2018. Accessed September 11, 2024. https://www.macpac.gov/publication/access-to-substance-use-disorder-treatment-in-medicaid/
- 4. LoConte NK, Brewster AM, Kaur JS, Merrill JK, Alberg AJ. Alcohol and Cancer: A Statement of the American Society of Clinical Oncology. *J Clin Oncol*. 2018;36(1):83-93. doi:10.1200/JCO.2017.76.1155
- 5. Rock CL, Thomson C, Gansler T, et al. American Cancer Society guideline for diet and physical activity for cancer prevention. *CA Cancer J Clin*. 2020;70(4):245-271. doi:10.3322/caac.21591
- 6. Crabb DW, Im GY, Szabo G, Mellinger JL, Lucey MR. Diagnosis and Treatment of Alcohol-Associated Liver Diseases: 2019 Practice Guidance From the American Association for the Study of Liver Diseases. *Hepatology*. 2020;71(1):306-333. doi:10.1002/hep.30866
- 7. American Psychiatric Association. Alcohol Use Disorder. Accessed September 11, 2024. https://www.psychiatry.org:443/patients-families/alcohol-use-disorder
- 8. Salmond S, Allread V. A Population Health Approach to America's Opioid Epidemic. *Orthop Nurs*. 2019;38(2):95-108. doi:10.1097/NOR.00000000000521
- National Center for Health Statistics. U.S. Overdose Deaths Decrease in 2023, First Time Since 2018. May 14, 2024. Accessed September 11, 2024. https://www.cdc.gov/nchs/pressroom/nchs_press_releases/2024/20240515.htm
- 10. KFF. Total Medicaid MCO enrollment. KFF. 2021. Accessed March 11, 2021. https://www.kff.org/other/state-indicator/total-medicaid-mco-enrollment/
- 11. Donohue JM. Meeting the Needs of Medicaid Beneficiaries With Substance Use Disorders in Managed Care. JAMA Health Forum. 2022;3(7):e221722. doi:10.1001/jamahealthforum.2022.1722
- 12. Charlesworth CJ, Zhu JM, Horvitz-Lennon M, McConnell KJ. Use of behavioral health care in Medicaid managed care carve-out versus carve-in arrangements. *Health Serv Res.* 2021;56(5):805-816. doi:10.1111/1475-6773.13703
- 13. Ettner SL, Xu H, Azocar F. What Happens When Employers Switch from a "Carve-Out" to a "Carve-In" Model of Managed Behavioral Health? *J Ment Health Policy Econ*. 2019;22(3):85-94.
- 14. Xiang X, Owen R, Langi FLFG, et al. Impacts of an Integrated Medicaid Managed Care Program for Adults with Behavioral Health Conditions: The Experience of Illinois. *Adm Policy Ment Health Ment Health Serv Res*. 2019;46(1):44-53. doi:10.1007/s10488-018-0892-8
- 15. Silverman AF, Westlake MA, Hinds OM, et al. Substance use disorder treatment carve outs in Medicaid managed care. *J Subst Use Addict Treat*. 2024;161:209357. doi:10.1016/j.josat.2024.209357
- 16. When health plans delay and deny, they must say why. American Medical Association. June 11, 2024. Accessed September 20, 2024. https://www.ama-assn.org/practice-management/prior-authorization/when-health-plans-delay-and-deny-they-must-say-why
- 17. Prior authorization delays care—and increases health care costs. American Medical Association. August 12, 2024. Accessed September 20, 2024. https://www.ama-assn.org/practice-management/prior-authorization-delays-care-and-increases-health-care
- 18. Bergeson JG, Worley K, Louder A, Ward M, Graham J. Retrospective database analysis of the impact of prior authorization for type 2 diabetes medications on health care costs in a Medicare Advantage Prescription Drug Plan population. *J Manag Care Pharm JMCP*. 2013;19(5):374-384. doi:10.18553/jmcp.2013.19.5.374

- 19. The Council for Affordable Quality Healthcare. The CAQH Index Report. Accessed September 20, 2024. https://www.caqh.org/insights/caqh-index-report
- 20. Pestaina K, Published KP. Examining Prior Authorization in Health Insurance. KFF. May 20, 2022. Accessed September 20, 2024. https://www.kff.org/policy-watch/examining-prior-authorization-in-health-insurance/
- 21. Follow-Up After Emergency Department Visit for Substance Use. NCQA. Accessed December 11, 2024. https://www.ncqa.org/hedis/measures/follow-up-after-emergency-department-visit-for-substance-use/
- 22. Centers for Medicare & Medicaid Services. *Innovation Center Strategy Refresh*. https://www.cms.gov/priorities/innovation/strategic-direction-whitepaper
- 23. Larochelle MR, Bernson D, Land T, et al. Medication for opioid use disorder after nonfatal opioid overdose and association with mortality: a cohort study. *Ann Intern Med*. 2018;169(3):137-145. doi:10.7326/M17-3107
- 24. Fiellin DA, Barry DT, Sullivan LE, et al. A Randomized Trial of Cognitive Behavioral Therapy in Primary Carebased Buprenorphine. *Am J Med*. 2013;126(1):74.e11-74.e17. doi:10.1016/j.amjmed.2012.07.005
- 25. Liebschutz JM, Crooks D, Herman D, et al. Buprenorphine Treatment for Hospitalized, Opioid-Dependent Patients: A Randomized Clinical Trial. *JAMA Intern Med*. 2014;174(8):1369-1376. doi:10.1001/jamainternmed.2014.2556
- 26. D'Onofrio G, O'Connor PG, Pantalon MV, et al. Emergency department-initiated buprenorphine/naloxone treatment for opioid dependence: a randomized clinical trial. *JAMA*. 2015;313(16):1636-1644. doi:10.1001/jama.2015.3474
- 27. Walley AY, Palmisano J, Sorensen-Alawad A, et al. Engagement and Substance Dependence in a Primary Care-Based Addiction Treatment Program for People Infected with HIV and People at High-Risk for HIV Infection. *J Subst Abuse Treat*. 2015;59:59-66. doi:10.1016/j.jsat.2015.07.007
- 28. Bhatraju EP, Grossman E, Tofighi B, et al. Public sector low threshold office-based buprenorphine treatment: outcomes at year 7. *Addict Sci Clin Pract*. 2017;12:7. doi:10.1186/s13722-017-0072-2
- 29. Barry CL, Epstein AJ, Fiellin DA, Fraenkel L, Busch SH. Estimating demand for primary care-based treatment for substance and alcohol use disorders. *Addict Abingdon Engl*. 2016;111(8):1376-1384. doi:10.1111/add.13364
- 30. Apenteng BA, Kimsey L, Opoku ST, Owens C, Peden AH, Mase WA. Addressing the Social Needs of Medicaid Enrollees Through Managed Care: Lessons and Promising Practices from the Field. *Popul Health Manag.* 2022;25(1):119-125. doi:10.1089/pop.2021.0142
- 31. Shrank WH, Keyser DJ, Lovelace JG. Redistributing Investment in Health and Social Services-The Evolving Role of Managed Care. *JAMA*. 2018;320(21):2197-2198. doi:10.1001/jama.2018.14987
- 32. Gottlieb LM, Quiñones-Rivera A, Manchanda R, Wing H, Ackerman S. States' Influences on Medicaid Investments to Address Patients' Social Needs. *Am J Prev Med*. 2017;52(1):31-37. doi:10.1016/j.amepre.2016.07.028