

Impact of Medicaid Restrictions on Availability of Buprenorphine in Addiction Treatment Programs

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Objectives. To examine how utilization restrictions on state Medicaid benefits for buprenorphine are related to addiction treatment programs' decision to offer the drug.

Methods. We used data from 2 waves of the National Drug Abuse Treatment System Survey conducted in 2014 and 2017 in the United States to assess the relationship of utilization restrictions to buprenorphine availability.

Results. The proportion of programs offering buprenorphine was 43.2% in states that did not impose any utilization restrictions, 25.5% in states that imposed only annual limits, 17.3% in states that imposed only prior authorization, and 12.8% in states that imposed both. Programs in states requiring prior authorization from Medicaid had substantially lower odds of offering buprenorphine (odds ratio = 0.50; 95% confidence interval = 0.29, 0.87).

Conclusions. Medicaid prior authorization was linked to lower odds of buprenorphine provision among addiction treatment programs.

Public Health Implications. State Medicaid prior authorization requirements are linked to reduced odds of buprenorphine provision among addiction treatment programs and may discourage prescribing. (*Am J Public Health*. Published online ahead of print January 24, 2019; e1–e3. doi:10.2105/AJPH.2018.304856)

In 2015, more than 13 million US persons reported nonmedical use of opioids, and an estimated 2.5 million had an opioid use disorder (OUD).¹ Deaths related to opioid overdose now exceed those from firearms and motor vehicle accidents and are on track to outnumber suicide deaths by 2019.^{2–4} Among Medicaid enrollees, rates of OUD are especially high—about 8.9 per 1000 Medicaid enrollees compared with 3.3 per 1000 among the commercially insured and 4.9 per 1000 in the general population.² Approximately 40% of all adults younger than 65 years with OUD are covered by Medicaid.³

Expanding access to buprenorphine has emerged as a key strategy in the response to the opioid epidemic. Decades of evidence have established that treatment with buprenorphine reduces opioid-related morbidity and mortality and the risk of relapse and overdose during recovery.⁵ Nonetheless, access to buprenorphine remains limited. Only 2% of physicians hold the federally required waiver to prescribe buprenorphine

for treatment of OUD, and only 25% of specialty addiction treatment programs offer the medication.^{6,7} At present, most Medicaid enrollees with OUD do not receive buprenorphine. For example, in Pennsylvania, only 25% of Medicaid enrollees with an OUD diagnosis received buprenorphine prescriptions in 2012.⁸

More generous Medicaid benefits have been linked to broader availability of buprenorphine.^{9,10} Although all state Medicaid agencies now provide at least some coverage for buprenorphine, whether or not there are utilization restrictions varies

dramatically across states.^{10,11} In 2014, all 50 states imposed at least 1 utilization limit on buprenorphine: among standard Medicaid plans, 51% required copays, 25% imposed annual limits, and 69% required prior authorization for buprenorphine.¹¹ We assessed how the relationship of 2 types of utilization restrictions—prior authorization and annual limits—is related to buprenorphine availability in a nationally representative sample of addiction treatment programs.

METHODS

Treatment program data were collected via a 90-minute Internet-based survey of program directors and clinical supervisors conducted in 2014 and 2017 as part of the National Drug Abuse Treatment System Survey (NDATSS), a nationally representative panel survey of addiction treatment programs in the United States (response rate of 86% in each wave). Analyses were limited to programs that accepted Medicaid (n = 672). Data on buprenorphine utilization restrictions were collected as part of NDATSS through a 15-minute Internet-based survey of Medicaid agencies in all 50 states and the District of Columbia in 2014 and 2017 (response rate of 92% in each wave). Data were collected on benefits and utilization restrictions in standard Medicaid plans and did not include Medicaid managed care plans.

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We assessed 2 utilization restrictions commonly imposed on buprenorphine benefits: prior authorization and annual limits. We acquired data on these restrictions from the American Society of Addiction Medicine (ASAM), which collected data from state Medicaid agencies and published state formularies. If utilization restrictions were not specified in the ASAM data, we acquired prior authorization and annual limits for buprenorphine from NDATASS Medicaid survey data.

We used logistic regression with random effects to assess the relationship of prior authorization and annual limits and the interaction of both with buprenorphine availability. Regression models adjusted for a variety of treatment program characteristics (Table 1) as well as states' Medicaid expansion status, use of enrollee copays, and Medicaid requirements for programs to include a physician in the supervision or provision of OUD treatment.

RESULTS

Among the treatment programs in our sample, 24.7% offered buprenorphine. Programs that offered buprenorphine were less likely than were programs that did not to be located in states requiring prior authorization (41.8% vs 71.5%) and annual limits (12.8% vs 22.4%). A full account of the descriptive statistics can be found in Table 1. In states that did not impose either of the utilization restrictions on buprenorphine, 43.2% of programs offered buprenorphine. By contrast, the percentage of programs offering buprenorphine was 25.5% in states that imposed only annual limits, 17.3% in states that imposed only prior authorization, and 12.8% in states that imposed both types of restrictions.

Results of logistic regression (Table 1, model 1) indicate that prior authorization only was associated with significantly lower odds of an addiction treatment program offering buprenorphine (odds ratio [OR] = 0.503; 95% confidence interval

[CI] = 0.293, 0.865). Annual limits were not significantly associated with odds of offering buprenorphine when imposed on their own (OR = 0.730; 95% CI = 0.389, 1.369). The interaction to capture the combined effect of use of prior authorization and annual limits, included in model 2, was also not significant. The odds of offering buprenorphine were higher among private nonprofit programs (OR = 2.085; 95% CI = 1.224, 3.551). As expected, opioid treatment programs (OR = 3.789; 95% CI = 2.426, 5.919) were more likely to offer buprenorphine, as were programs that served a greater proportion of clients who used prescription opioids (OR = 1.015; 95% CI = 1.006, 1.023).

DISCUSSION

We found that prior authorization was strongly correlated with programs' decision about whether to offer buprenorphine. Programs may perceive the prior authorization process as burdensome and are thus hesitant to prescribe buprenorphine. Prior authorization may also restrict the number of people who are approved to receive buprenorphine, and, consequently, programs choose not to offer it because they view it as unprofitable or financially unsustainable. Our findings suggest the need to weigh the potential benefits of prior authorization against the potential negative influence of such policies on medication access. Future research is needed to identify the specific features of prior authorization policies—for example, the length of time required for review or the burden of documentation—that are most closely linked to low rates of buprenorphine availability.

We also found that the percentage of treatment programs offering buprenorphine was significantly lower in states that imposed annual limits on the medication's receipt. However, when we accounted for other prior authorization requirements and other covariates in regression analysis, we found that these limits were not related to buprenorphine availability. Considering that 68% of treatment programs in states subject to annual limits are also subject to prior authorization requirements, these limits may be less important than is prior authorization in discouraging buprenorphine availability.

TABLE 1—Availability of Buprenorphine Among Addiction Treatment Programs: United States, 2014 and 2017

Variable	Buprenorphine Availability ^a		AOR (95% CI)
	Yes, %	No, %	
Medicaid utilization restrictions^b			
Imposes annual limits	12.80*	22.41	0.730 (0.389, 1.369)
Requires prior authorization	41.77***	71.46*	0.503 (0.293, 0.865)
Other Medicaid design features			
Requires enrollee copays	34.36	40.47	1.290 (0.777, 2.144)
Requires physician treatment supervision	44.01	46.44	0.790 (0.472, 1.322)
Medicaid expansion state	74.55	61.63	1.128 (0.666, 1.914)
Provider-level covariates			
Private nonprofit	69.31	65.14**	2.085 (1.224, 3.551)
Publicly owned	12.68	13.00	2.078 (1.056, 4.089)
Private for-profit (Ref)	17.48	26.68	1.000
Average caseload (categorical)	2.50	2.66	0.913 (0.754, 1.106)
> 75% staff with professional degree	61.80	68.08	0.911 (0.616, 1.347)
Opioid treatment program	17.67***	7.25***	3.789 (2.426, 5.919)
Accredited	63.81	58.00	1.232 (0.801, 1.897)
Receives any block grant funds	43.80	53.62	1.336 (0.877, 2.034)
% privately insured patients	13.98	11.61	1.022 (1.008, 1.036)
% heroin patients	42.16**	29.37	0.998 (0.991, 1.005)
% prescription opioid patients	33.58	27.01**	1.015 (1.006, 1.023)
Year (2014 referent)	56.63	54.86	0.906 (0.604, 1.358)

Note. AOR = adjusted odds ratio; CI = confidence interval. Sample size was n = 672.

^aUnadjusted differences; all estimates are percentages unless otherwise noted.

^bInteraction between annual limits and prior authorization: AOR = 1.49 (95% CI = 0.41, 5.42).

* $P < .05$; ** $P < .01$; *** $P < .001$.

However, these findings do not rule out the possibility of an additive effect of utilization restrictions on the availability of buprenorphine or other medications for OUD treatment.

Limitations

It is important to note that our data cannot discern causal direction; it remains possible, for example, that sociocultural norms in the local treatment and recovery community that reject the use of medication for addiction treatment may have led to the imposition of limits and prior authorization in a particular state, rather than vice versa. Additionally, our data do not include information on benefits in Medicaid managed care plans. Although such plans are required to provide a set of minimum benefits defined by states, they often have some discretion regarding having utilization restrictions.

Public Health Implications

Treatment with buprenorphine is a key tool for addressing the opioid epidemic. By requiring prior authorization, states may inadvertently reduce buprenorphine's availability among addiction treatment programs. Considering that approximately 60% of the nation's 14 500 addiction treatment programs are operating in states requiring prior authorization, the dampening effects of these policies on buprenorphine availability may be wide reaching. State Medicaid agencies should consider lifting prior authorization requirements for this first-line treatment of OUD, as several major private insurers including Aetna, Anthem, and Cigna did in 2017. Doing so has the potential to increase the proportion of treatment programs offering this life-saving drug in the midst of this national public health epidemic. **AJPH**

CONTRIBUTORS

All authors conceptualized the brief. C. M. Andrews completed the analyses and led the writing. A. J. Abraham, C. M. Grogan, and M. A. Westlake contributed to the writing. H. A. Pollack and P. D. Friedmann reviewed and revised the brief and approved the final version.

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CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

HUMAN PARTICIPANT PROTECTION

This study was approved by the institutional review board at Baystate Medical Center.

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