

Buprenorphine Prescribing Practices, Barriers & Facilitators

Survey Summary Report



MAY 2022

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List of Abbreviations

Abbreviation	Meaning
APRN	Advanced Practice Registered Nurse
ASAM	American Society of Addiction Medicine
CAIT	Prevention Services
COVID-19	Coronavirus disease
DATA 2000 Waiver	Drug Addiction Treatment Act of 2000 Waiver
DEA	Drug Enforcement Administration
e-gift	Electronic gift card
FREQ	Frequency
LARA	Michigan Department of Licensing and Regulatory Affairs
M	Mean
MAT	Medication assisted treatment
MOUD	Medications for opioid use disorder
n	Sample size
OTP	Opioid treatment program
OUD	Opioid use disorder
p	P-value
SAMHSA	Substance Abuse and Mental Health Services Administration
SARF	Screening, Assessment, Referral, Follow-Up
SD	Standard deviation
SUD	Substance use disorder
SUPPORT Act	SUPPORT for Patients and Communities Act of 2018
t	Student's t-test
X-waiver	Drug Addiction Treatment Act of 2000 Waiver

Executive Summary

The United States experienced a surge in opioid overdose deaths in 2020.* Michigan was one of 48 states that experienced an increase in overdose deaths with a 14% increase from 2019 to 2020.^{1,2} Medications for opioid use disorder (MOUD)—specifically buprenorphine and methadone—are most effective in reducing opioid overdoses. Therefore, it is critical that MOUD be accessible to anyone who is interested in this treatment—especially now as we seek to reverse this alarming increase in overdose deaths.

A 64-question survey was shared with all practitioners in Michigan who were waived to prescribe buprenorphine treatment for opioid use disorder (OUD) in an office-based setting. This survey explored the barriers that prevent practitioners from prescribing buprenorphine treatment to people with OUD and facilitators that would enable them to prescribe to additional patients.[†]

There were 695 participants who provided consent to participate, and 687 participants who completed at least one survey question. Among the survey participants, 54% were doctors of medicine, 19% were advanced practice registered nurses (APRNs), 16% were doctors of osteopathic medicine and 11% were physician assistants. These participants represented 63 out of Michigan's 83 total counties, and most described the locations in which they practiced as suburban.

Almost 97% of participants were waived to prescribe buprenorphine treatment and most had a waiver to treat up to 30 patients. Among participants with an X-waiver, about 4 in 5 had prescribed buprenorphine and three-quarters prescribed buprenorphine well below their respective X-waiver patient limits. Most participants reported prescribing both buprenorphine and naltrexone in their practices. The most common primary payment type accepted by survey respondents was Medicaid.

Telemedicine is one tool providers can use to increase access to buprenorphine treatment. The COVID-19 emergency encouraged participants who had never used telemedicine for prescribing buprenorphine (83%) to begin using this modality. Approximately 55% (n=263) initiated and/or continued using telemedicine during COVID-19.

* While many opioid involved overdoses include polysubstance use, for the purposes of this report, "opioid overdose" will be used.

† The Department of Licensing and Regulatory Affairs Bureau of Community and Health Systems Substance Use Disorder Programs administrative rules use the term "recipient" to describe an individual who receives services from a licensed substance use disorder services program in Michigan. The term "patient" will be used in this report.

Survey respondents' predominant perception that counseling is a required component of buprenorphine treatment could act as a barrier to treatment. While half of respondents (54%) reported recommending counseling services to their patients in buprenorphine treatment, 37% reported requiring counseling for their patients in buprenorphine treatment. When respondents were asked to identify barriers to expanding buprenorphine prescribing to additional patients, the most commonly identified barrier was lack of access to counseling capacity. On the other hand, the most commonly identified facilitator respondents reported that would enable expanding their practice to additional patients was greater coordination between medical and behavioral health services. This report concludes with seven recommendations to address the barriers identified by the survey.

Recommendations

1. Address geographically based barriers to buprenorphine treatment

2. Promote increased buprenorphine prescribing among X-waivered providers

3. Expand telemedicine use during COVID-19 and beyond

4. Adopt the Medication First approach

5. Explore strategies to simplify LARA's Substance Use Disorder License categories

6. Establish compassionate protocols that encourage treatment retention

7. Increase community outreach

Background

The state of Michigan experienced a 14% increase in overdose deaths in 2020—from 2,354 in 2019 to 2,684 in 2020.² The majority of these overdose deaths involved opioids.³ Studies suggest that OUD treatment involving buprenorphine or methadone is most effective in promoting treatment adherence, recovery maintenance and overdose risk reduction.⁴ The Drug Addiction Treatment Act of 2000 Waiver (DATA 2000 Waiver or X-waiver) and the SUPPORT for Patients and Communities Act of 2018 (SUPPORT Act) permit qualified practitioners to prescribe buprenorphine in office-based settings. Furthermore, in April 2021, the U.S. Department of Health and Human Services exempted eligible practitioners obtaining a waiver to treat up to 30 patients with buprenorphine from federal training and counseling service requirements. These initiatives allow more practitioners to prescribe one of the MOUD, buprenorphine, but access to this evidence-based treatment remains sparse and inequitable.

A 2018 Michigan Public Policy Survey revealed that 35% of counties in Michigan had no access to MOUD and only 18% had access to all recommended treatment options.⁵ Among the top 20 counties with the highest drug overdose rates in Michigan, six (Clare, Eaton, Iosco, Iron, Manistee and Roscommon) had no MOUD treatment services available within the county.⁵ Two approaches to reducing opioid overdose deaths in Michigan include: 1) ensuring MOUD treatment services are accessible in all communities, and 2) adopting strategies that enable current X-waivered providers to prescribe buprenorphine to additional patients.

Survey & Summary Report Objectives

The objective of the survey conducted among providers was to understand the buprenorphine prescribing practices, barriers and facilitators among X-waivered providers prescribing buprenorphine for OUD treatment in Michigan. This summary describes the most common barriers identified in the survey, and the facilitators that would enable buprenorphine treatment to be prescribed to more people with OUD.

Methodology

The Buprenorphine Prescribing Practices, Barriers and Facilitators Survey was emailed to buprenorphine prescribers who were X-waivered to treat OUD in Michigan under the DATA 2000 Waiver. The United States Drug Enforcement Agency (DEA) possesses information on all X-waivered providers. In the list of all 2,457 X-waivered providers in the state of Michigan as of December 2020, there were 2,246 (91%) valid email addresses. From among those with valid email addresses, 695 (31%) participants consented to participate, and 687 (31%) participants completed at least one survey question.

The 64-question survey was adapted from a survey tool that was developed and disseminated by Vital Strategies in Pennsylvania.† The survey was also developed using input from stakeholders in Michigan. Participants completed the survey on SurveyMonkey. The survey had four sections: 1) provider characteristics, 2) buprenorphine prescribing practices, 3) barriers to prescribing buprenorphine to additional patients, and 4) primary facilitators for prescribing buprenorphine to additional patients.

The data was collected between July 13, 2021 and August 16, 2021. An email was sent to all X-waivered providers in Michigan and subsequently resent to nonresponders each week—a total of five times—until the survey closing date. The email message contained a unique code for participants to enter at the beginning of the survey to ensure that only unique responses were collected. Reminder emails were sent to nonresponders each week of the data collection period. Participants received a \$20 e-gift card reward for completing the survey.

This analysis was approved by Vital Strategies' Research Division and was determined to be exempt from human subjects research.

† The Vital Strategies survey disseminated in Philadelphia was adapted from two articles: 1) Jones CM, McCance-Katz EF. Characteristics and prescribing practices of clinicians recently waived to prescribe buprenorphine for the treatment of opioid use disorder. *Addiction* 2019; 111: 471-482 and 2) Andrilla CHA, Coulthard C, Larson EH. Barriers rural physicians face prescribing buprenorphine for opioid use disorder. *Ann. Fam. Med.* 2017; 15: 359-362.

Results

Who participated in the survey?

Practitioners eligible for the X-waiver, including doctors of medicine, doctors of osteopathy, physician assistants and APRNs (clinical nurse specialists, certified registered nurse anesthetists and certified nurse midwives), were targeted for participation in this survey. Among the providers in the sample, 54% were doctors of medicine, 19% were APRNs, 16 % were doctors of osteopathic medicine and 11% were physician assistants (Table 1).

Credentials	Count	Percent
Doctor of medicine	371	54.16%
Advanced practice registered nurse	130	18.98%
Doctor of osteopathic medicine	107	15.62%
Physician assistant	73	10.66%
Other	4	0.58%
Grand total	685	100%

Table 1: Respondent Credentials

Respondents represented 63 out of Michigan’s 83 total counties. The highest percentage of respondents (17%) primarily practiced in Wayne County (Figure 1). The locations where respondents primarily practiced medicine represented 271 unique zip codes (Figure 2).

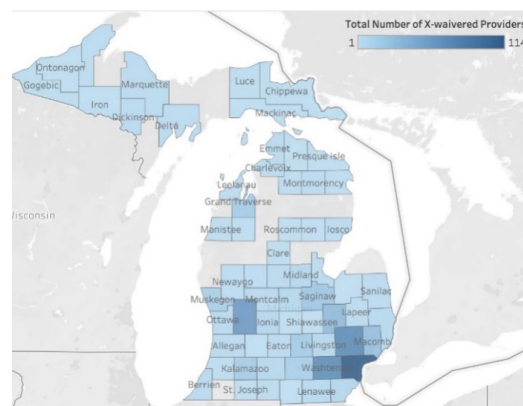


Figure 1: Distribution of Respondents by County

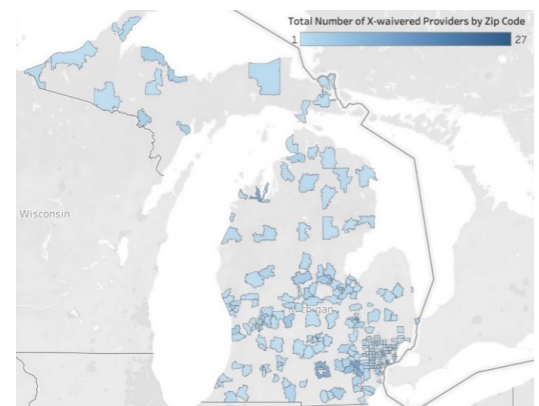


Figure 2: Distribution of Respondents by Zip Code

The percentage point difference between the sample population and true population of X-waivered providers is demonstrated in Figures 3 and 4. The largest percentage point reduction in population representation in the sample was a nearly 5% point reduction in Oakland County from the true population (15%) to the sample population (10%). The county most overrepresented in the sample was Genesee County, with approximately 4% of X-waivered providers existing in the true population and 5% of X-waivered providers from Genesee County in the sample.

The largest percentage point underrepresentation by zip code was in zip code 48109 in Ann Arbor, Washtenaw County, with X-waivered providers representing 7% of providers in the state, but 3% in the sample population. The largest overrepresentation by zip code was in zip code 48503 in Flint, Genesee County. The X-waivered providers in that zip code represent 1% of Michigan’s providers in the true population and 2% in the sample population. Overall, there were no considerable differences between the true and sample populations among most counties and zip codes.

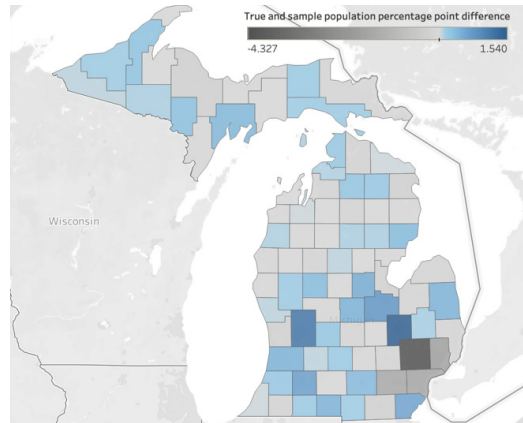


Figure 3: Percentage Point Differences Between the True and the Sample Population County Representation

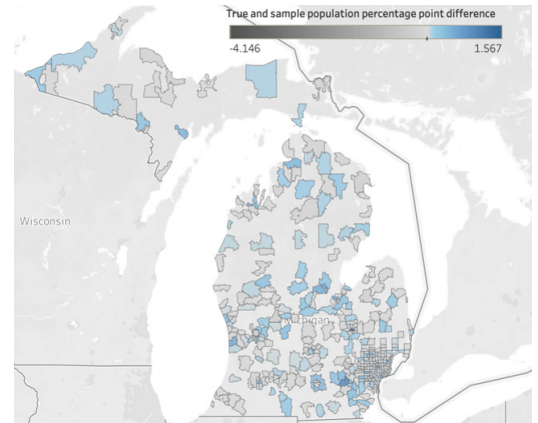


Figure 4: Percentage Point Differences Between the True and Sample Population Zip Code Representation

A 2018 study found that among Michigan’s counties that lacked MOUD treatment services, most counties were concentrated in the state’s northern and primarily rural areas.⁵ That study’s findings were corroborated by the locations and geographic areas of participants’ primary practices. Among survey participants in this sample, 304 (45%) described the type of geographic area in which they primarily practice in Michigan as suburban, 216 (32%) practiced in urban areas and 162 (24%) practiced in rural areas (Figure 5).

Distribution of Respondent Credentials by Geographic Locations

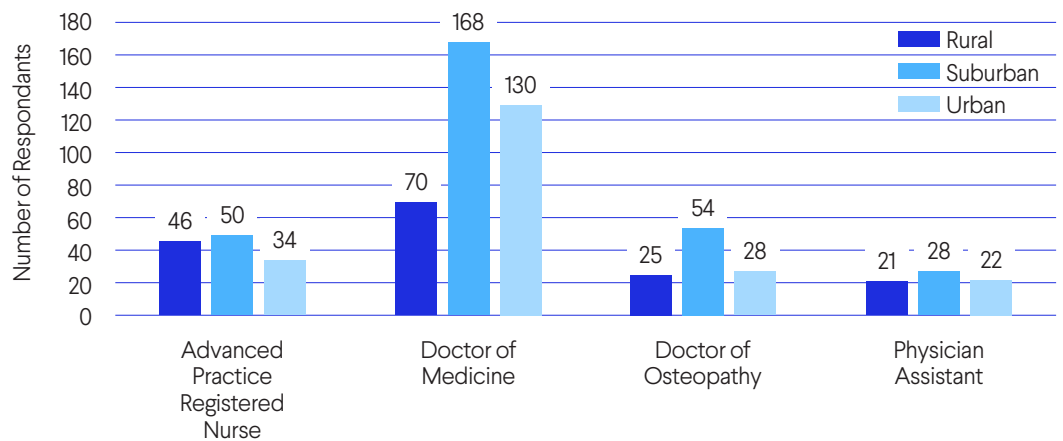


Figure 5: Respondent Credentials by Geographic Locations

Participants' primary practices were clinics (19%), emergency departments (15%), office-based group practices (15%) and hospital-owned outpatient practices (14%) (Table 2). The majority of participants' practices were operated by private nonprofit organizations (42%) and private for-profit organizations (32%).

Primary Practice Type	Count	Percent
Clinic (Federally Qualified Health Center, Rural Health Clinic, etc.)	129	18.97%
Emergency department	105	15.44%
Office-based group practice	102	15.00%
Hospital-owned outpatient practice	96	14.12%
Office-based solo practice	71	10.44%
Other (please specify)	55	8.09%
Hospital inpatient	49	7.21%
Correctional facility	32	4.71%
Licensed opioid treatment program (OTP)	26	3.82%
Specialty substance use treatment facility	15	2.21%
Grand total	680	100%

Table 2: Respondents' Primary Practice Types

On average, participants practiced in two locations, but half of respondents (55%) worked at only one location. A third of respondents (n=225) reported outpatient primary care as the primary service they provided at their primary practice (Table 3).

Primary Service Provided	Count	Percent
Outpatient primary care	225	33.19%
Medication for opioid use disorder—buprenorphine	89	13.13%
Outpatient mental health services	81	11.95%
General health care	80	11.80%
Inpatient (paired with licensed hospital only)	55	8.11%
Other	48	7.08%
Emergency department	38	5.60%
Pain management/palliative care	23	3.39%
Medication for opioid use disorder—methadone	19	2.80%
Medication for opioid use disorder—naltrexone	7	1.03%
Residential detoxification	5	0.74%
Residential	4	0.59%
Screening, Assessment, Referral, Follow-Up (SARF)/Prevention Services (CAIT)	4	0.59%
Grand total	678	100%

Table 3: Primary Services Provided at Primary Practice

What factors influence buprenorphine treatment providers' prescribing practices?

While X-waivered providers can prescribe buprenorphine and naltrexone in office-based settings, opioid treatment programs (OTPs) can prescribe methadone, buprenorphine and naltrexone. Twenty-six participants (4%) indicated that OTPs were their primary practices. Almost half of participants (n=305) in the sample prescribed both buprenorphine and naltrexone in their practice (Table 4). There are only 47 OTPs in Michigan, yet 70 respondents indicated that they prescribed methadone for OUD; it is possible some were confused by the question.

Medications Provided	Count	Percent
Buprenorphine and naltrexone	304	45.10%
Only buprenorphine	184	27.30%
None of the above	91	13.50%
Buprenorphine, methadone and naltrexone	52	7.72%
Only naltrexone	25	3.71%
Buprenorphine and methadone	14	2.08%
Only methadone	3	0.45%
Methadone and naltrexone	1	0.15%
Grand total	674	100%

Table 4: MOUD Provided at Respondents' Practice

Almost all respondents (97%) had an X-waiver. Most respondents received X-waivers within the last two years (54%): a quarter (23%) in 2019 and a third (31%) in 2020 (Table 5). Among those who did not have an X-waiver were retirees and practitioners who had not renewed their X-waivers. While about half (n=373) of respondents had the 30-patient waiver limit, almost a third (n=203) had the 100-patient waiver limit, and 12% (n=78) had the 275-patient waiver limit (Figure 6).

X-Waiver Status	Count	Percent
I have an X-waiver	660	96.77%
I do not have an X-waiver	22	3.23%
Grand total	682	100%

Table 5: Respondents' X-Waiver Status

Distribution of Respondent Credentials by X-Waiver Limit

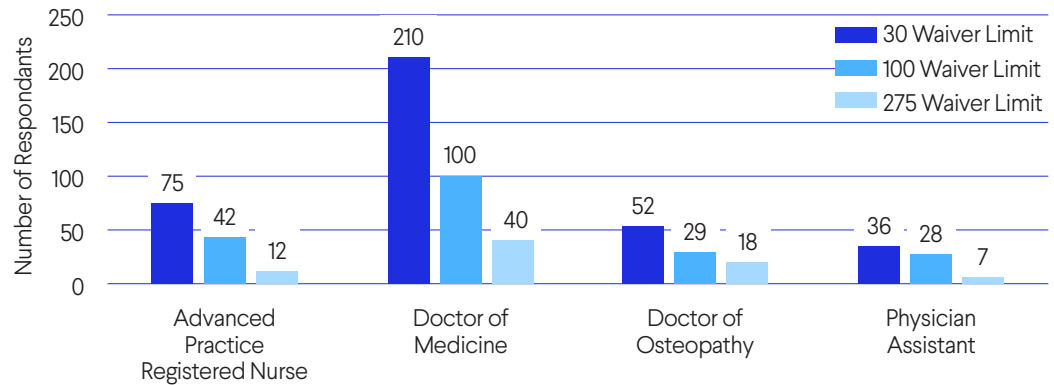


Figure 6: Distribution of Respondent Credentials by X-Waiver Limit

LARA requires an individual or individuals in a group practice providing buprenorphine or naltrexone for the treatment of OUD to more than 100 individuals at one time at a specific property to obtain a substance use disorder (SUD) program license to prescribe buprenorphine. Although LARA has distributed the license to fewer than 10 practices, half (49%, n=317) of the survey participants indicated they possessed the license (Table 6). The discrepancy between the perceived and true possession of the license suggests that participants were confused by the question and possibly by LARA’s SUD licenses. This assumption was reinforced by the 66 participants who stated that they were “unsure” or “did not know” if they possessed the license in the optional comment box.

Among participants who indicated that they did not have the license, 84% stated they did not plan to obtain it (Table 7).

LARA SUD License	Count	Percent
Yes	317	49.07%
No	329	50.93%
Grand total	646	100%

Table 6: Possession of a LARA SUD License to Prescribe Buprenorphine

Plan to Obtain LARA SUD License	Count	Percent
Yes	53	16.06%
No	277	83.94%
Grand total	330	100%

Table 7: Plan To Obtain LARA SUD License Among Those Who Did Not Have the License

Most respondents reported prescribing buprenorphine treatment for OUD at least once (81%) (Table 8). Among the survey respondents who had not prescribed buprenorphine in the past 30 days, 65% (n=70) planned to prescribe buprenorphine in the future.

Ever Prescribe Buprenorphine	Count	Percent
Yes	524	81.37%
No	120	18.63%
Grand total	644	100%

Table 8: Respondents Who Have Ever Prescribed Buprenorphine

Among those respondents who reported that they had never prescribed buprenorphine:

Characteristics of Never Prescribers

- All were X-waivered, and most (79%) were limited to treating 30 patients;
- Half (52%) were doctors of medicine;
- They worked in a range of practice types: 18% in clinics, 17% in hospital-owned outpatient practices, 16% in hospital emergency departments and 14% in correctional facilities;
- One quarter (25%) received an X-waiver in 2019, and 48% received an X-waiver in 2020; and
- 11% primarily prescribed in Washtenaw County and 10% primarily prescribed in Kent County.

While nearly 1 in 5 participants had never prescribed buprenorphine, approximately three-quarters of participants were prescribing buprenorphine but below their X-waiver limit in the 30 days prior to completing the survey (Table 9). Only 3% (n=17) of participants were prescribing buprenorphine treatment near or at the X-waiver limit. Prescribing near or at the waiver limit is defined as prescribing buprenorphine to 25 or more patients for the 30 patient X-waiver limit, 75 or more patients for the 100 patient X-waiver limit, and 250 or more patients for the 275 patient X-waiver limit.[§]

Prescribe Buprenorphine Below, Near or at X-Waiver Limit in the Last 30 Days	Overall	Percent	30 Waiver Limit	Percent	100 Waiver Limit	Percent	275 Waiver Limit	Percent
Prescribing buprenorphine but below the X-waiver limit	385	74.18%	172	63.24%	145	83.33%	68	93.15%
Not prescribing buprenorphine at all	117	22.54%	91	33.46%	22	12.64%	4	5.48%
Prescribing buprenorphine near or at X-waiver limit	17	3.28%	9	3.31%	7	4.02%	1	1.37%
Grand Total	519	100.00%	272	100.00%	174	100.00%	73	100.00%

Table 9: Respondents' Prescribing Below, Near or at X-Waiver Limit

§ The *near or at waiver limit* definition was derived from Jones C.M., McCance-Katz E.F. Characteristics and prescribing practices of clinicians recently waived to prescribe buprenorphine for the treatment of opioid use disorder. *Addiction* 2019; 111: 471-482.

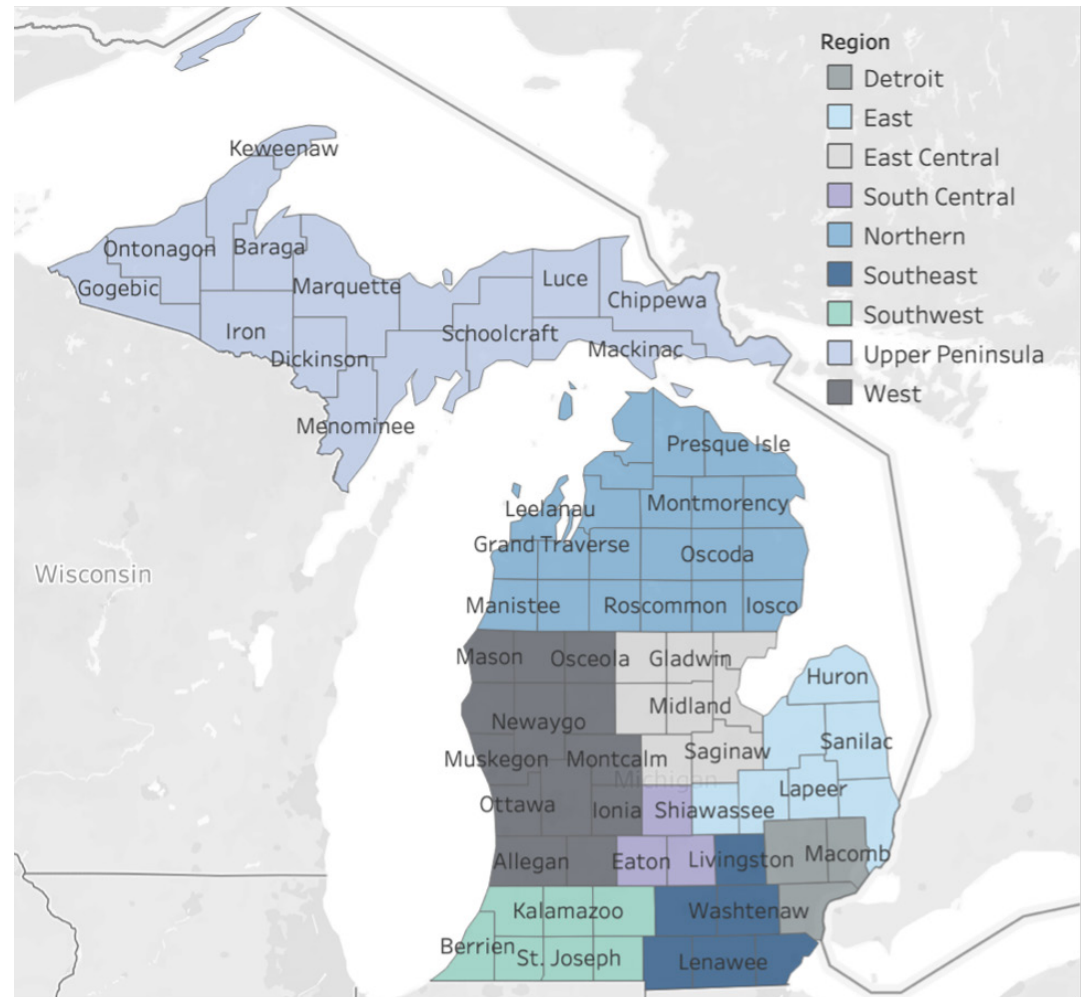


Figure 7: Michigan's Regions

At the time the survey was administered, respondents reported treating an average of 27 patients for OUD (SD=57), including an average of 19 patients receiving buprenorphine treatment (SD=38). On average, survey participants who were practicing physicians (doctors of medicine and doctors of osteopathy) had a significantly lower number of buprenorphine patients ($M = 17, SD = 37$) than APRNs and physician assistants ($M = 25, SD = 42, t(513) = 2.3, p = 0.02$).

There were also differences in the average number of patients receiving buprenorphine treatment across Michigan's Regions (Figure 7). Michigan's Northern Region had the highest average number of patients receiving buprenorphine ($M=29, SD = 45$) (Table 10). On the other hand, the participants practicing in the South Central Region had the lowest number of patients receiving buprenorphine on average ($M=9, SD = 18$).

Region	Mean Number of Patients	Standard Deviation	Count
Northern	29.43	44.54	36
Southwest	26.13	35.13	30
Detroit	23.47	48.02	174
West	19.83	35.23	79
Upper Peninsula	14.21	19.02	17
Southeast	12.31	33.33	78
East Central	12.01	20.92	29
East	11.36	18.87	29
South Central	8.70	17.51	19

Table 10: Average Number of Buprenorphine Treatment Patients in Each Region

The most common approach to prescribing buprenorphine treatment to patients was for maintenance used indefinitely or as long as the patient was benefiting (60%, n=300), followed by primarily prescribing buprenorphine for induction in the emergency room (13%, n=63), and primarily prescribing buprenorphine for short-term withdrawal management (10%, n=51).

Drug screening is a common practice in office-based buprenorphine treatment services. There are no federal requirements regarding the frequency of drug screening for office-based buprenorphine treatment. Consequently, drug screening practices may vary substantially among practices. Over a third of survey respondents (38%, n=186) employed urine drug screening at every buprenorphine treatment visit. The second and third most common practices were random urine drug screening (29%, n=141) and not requiring drug screening for patients receiving buprenorphine (13%, n=64).

Participants also described the most common circumstances in which they terminated buprenorphine treatment for patients. Nearly 1 in 5 participants (19%) terminated at least one patient from buprenorphine treatment for various reasons in the past year. Among the practices that had terminated buprenorphine treatment for at least one patient in the past year, 17% (n=86) of respondents indicated that the most common reason for terminating patients was a positive drug screening for illicit substance use, 15% (n=73) gave the reason of missed doctor's appointments, and 13% (n=66) gave the reason of diversion.

Who Is Receiving Buprenorphine Treatment?

Participants estimated the majority of their patients (68%) receiving buprenorphine were non-Hispanic/Latino white (Figure 8). The second-largest non-Hispanic/Latino recipient group was Black/African American (20%). It was estimated that the mean percentage of Hispanic/Latino patients was 8% while the estimated mean percentage of non-Hispanic/Latino patients was 84%.

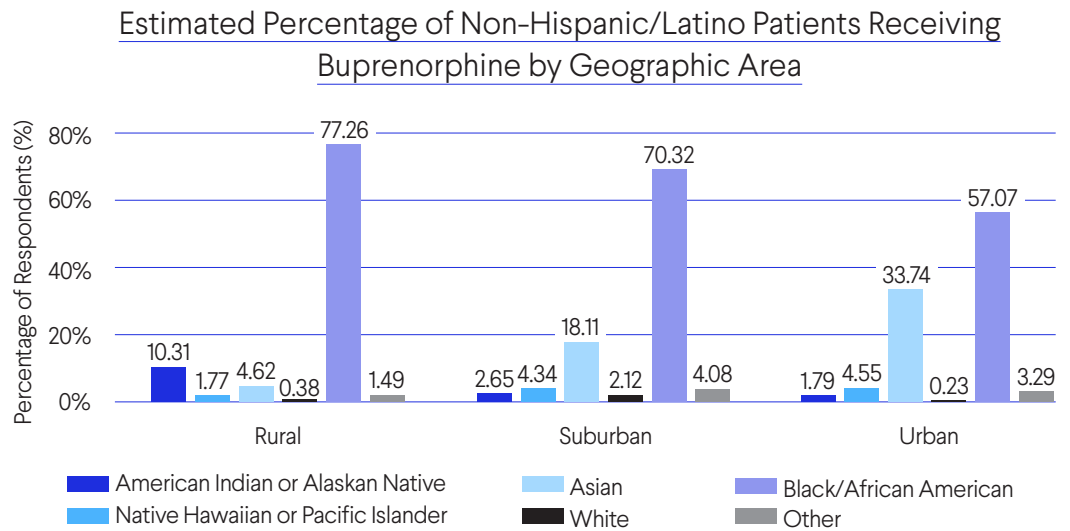


Figure 8: Estimated Percentage of Non-Hispanic/Latino Patients Receiving Buprenorphine by Geographic Area

More than 9 in 10 participants accepted multiple forms of payment for buprenorphine treatment. However, the most common primary payment type received for buprenorphine treatment was Medicaid (56%, n=280) (Table 11). This is complemented by a national analysis that found 54% of nonelderly adults with OUD who received treatment between 2016 and 2017 were covered by Medicaid.⁶ Commercial insurance was the second most common primary payment type accepted by participants (17%, n=83).

When participants indicated all of the payment types accepted at their respective practices, a third of participants accepted all of the following forms of payment at their practices: Medicaid, Medicare, commercial insurance and out-of-pocket payments (34%, n=150).

Primary Payment Types	Count	Percent
Medicaid	280	56.34%
Commercial insurance	83	16.70%
Other	37	7.44%
Medicare	34	6.84%
Unsure	27	5.43%
Out-of-pocket	17	3.42%
Veterans Affairs	17	3.42%
Indian Nations	1	0.20%
Worker's compensation	1	0.20%
Grand total	497	100%

Table 11: Primary Payment Types Accepted for Buprenorphine Treatment

Expanding Access Through Telemedicine Use

Telemedicine is the use of telecommunications technology to provide health care across a distance. Telemedicine can increase efficiency and access to health care services. Nearly 8 in 10 participants had used telemedicine to treat patients for any health concern in the past (79%, n=392). That ratio decreased when participants were asked if they had ever prescribed buprenorphine treatment using telemedicine (54%, n=267).

The COVID-19 emergency and federal relaxation of laws regarding the provision of buprenorphine using telemedicine were catalysts for increased use of telemedicine in OUD treatment. Most participants never used telemedicine to prescribe buprenorphine prior to COVID-19 (83%, n=405) (Table 12 and Table 13). Half (55%, n=263) used and continued using telemedicine during COVID-19. However, more than 1 in 10 (11%, n=55) used telemedicine during COVID-19 but discontinued. A third (34%) of participants never used telemedicine during COVID-19.

Nearly two-thirds of participants (64%, n=317) planned to use telemedicine in the future. This projected continued use of telemedicine after the COVID-19 emergency is analogous to the 65% of behavioral health and SUD providers who indicated plans to continue using telemedicine in a nationwide survey.⁷

Use Of Telemedicine	Overall	Percent	APRN	Percent	Physician	Percent	Physician Assistant	Percent
Use of telemedicine prior to COVID-19 for buprenorphine prescribing	487		96		335		56	
I never used telemedicine or telepsychiatry prior to the COVID-19 emergency	405	83.16%	78	81.25%	284	84.78%	43	76.79%
I used telemedicine or telepsychiatry prior to the COVID-19 emergency	73	14.99%	18	18.75%	44	13.13%	11	19.64%
I used telemedicine or telepsychiatry prior to the COVID-19 emergency but discontinued	9	1.85%	0	0%	7	2.09%	2	3.57%
Use of telemedicine during COVID-19 for buprenorphine prescribing	483		97		333		53	
I used and continued using telemedicine or telepsychiatry during the COVID-19 emergency	263	54.45%	61	62.89%	166	49.85%	36	67.92%
I never used telemedicine or telepsychiatry during the COVID-19 emergency	165	34.16%	22	22.68%	133	39.94%	10	18.87%
I used telemedicine or telepsychiatry during the COVID-19 emergency but discontinued	55	11.39%	14	14.43%	34	10.21%	7	13.21%
Future use of telemedicine for buprenorphine prescribing	492		98		338		56	
I plan to use telemedicine or telepsychiatry in the future	317	64.43%	75	76.53%	201	59.47%	41	73.21%
I do not plan to use telemedicine or telepsychiatry in the future	175	35.57%	23	23.47%	137	40.53%	15	26.79%

Table 12: Respondents' Use of Telemedicine To Prescribe Buprenorphine Treatment by Respondent Credentials

Use Of Telemedicine	Overall	Percent	Rural	Percent	Suburban	Percent	Urban	Percent
Use of telemedicine prior to COVID-19 for buprenorphine prescribing	489		111		224		154	
I never used telemedicine or telepsychiatry prior to the COVID-19 emergency	407	83.23%	93	83.78%	183	81.33%	131	85.06%
I used telemedicine or telepsychiatry prior to the COVID-19 emergency	73	14.93%	17	15.32%	35	15.56%	21	13.64%
I used telemedicine or telepsychiatry prior to the COVID-19 emergency but discontinued	9	1.84%	1	0.90%	6	2.67%	2	1.30%
Use of telemedicine during COVID-19 for buprenorphine prescribing	485		110		219		156	
I used and continued using telemedicine or telepsychiatry during the COVID-19 emergency	264	54.43%	63	57.27%	128	58.18%	73	46.79%
I never used telemedicine or telepsychiatry during the COVID-19 emergency	166	34.22%	28	25.45%	69	31.36%	69	44.23%
I used telemedicine or telepsychiatry during the COVID-19 emergency but discontinued	55	11.34%	19	17.27%	22	10.00%	14	8.97%
Future use of telemedicine for buprenorphine prescribing	494		113		223		158	
I plan to use telemedicine or telepsychiatry in the future	320	64.78%	75	66.37%	146	65.18%	99	62.66%
I do not plan to use telemedicine or telepsychiatry in the future	174	35.22%	38	33.63%	77	34.38%	59	37.34%

Table 13: Respondents' Use of Telemedicine To Prescribe Buprenorphine Treatment by Geographic Location

Provider Views on Counseling

Michigan's Public Health Code defines counseling as the rendering of a service involving psychotherapy, individual assessments, psychoeducational consulting, or counseling techniques for the purpose of achieving social, personal, career and emotional development. Traditionally, MOUD have been provided in combination with counseling, although buprenorphine alone is effective in reducing opioid overdoses.⁸ Roughly 3 in 4 participants believed that counseling should be required for patients receiving buprenorphine (73%, n=364). On the other hand, just about half of participants believed that patients should be able to choose for themselves whether they receive counseling (49%, n=243).

Approach To Counseling	Overall	Percent	APRN	Percent	Physician	Percent	Physician Assistant	Percent
I recommend to my patients receiving buprenorphine that they engage in counseling services	263	53.56%	45	45.92%	190	56.21%	28	50.91%
I require my patients receiving buprenorphine to engage in counseling services	181	36.86%	51	52.04%	105	31.07%	25	45.45%
I ask my patients if they're interested in receiving counseling	34	6.92%	2	2.04%	30	8.88%	2	3.64%
I do not require, recommend or ask any of my patients receiving buprenorphine to engage in counseling services	13	2.65%	0	0%	13	3.85%	0	0%
Grand total	491	100%	98	100%	338	100%	55	100%

Table 14: Respondents' Approach To Managing Counseling for Patients Receiving Buprenorphine Treatment by Respondent Credential

Participants' beliefs about counseling may have influenced the number of patients receiving buprenorphine treatment they had at a given time. There were notable differences in the average numbers of patients receiving buprenorphine over the past 30 days among participants who believed or did not believe that counseling should be required. The average number of patients was significantly lower among participants who believed that counseling should be required (M=17, SD=34) than among participants who did not (M=27, SD = 46), $t(494) = -2.5$, $p = 0.01$. But there was no statistically significant difference between the average numbers of patients receiving buprenorphine in the past 30 days among participants who agreed or disagreed that patients should be able to choose for themselves whether they received counseling.

While 73% of participants believed counseling should be required for buprenorphine treatment, fewer applied that approach to managing counseling in their practices. Half recommended counseling services to their patients receiving buprenorphine treatment (54%); however, only a third actually required counseling for buprenorphine treatment (37%) (Table 14).

Perceived Barriers and Facilitators To Prescribing Buprenorphine Treatment

Multiple research studies have identified common perceived barriers to buprenorphine prescribing among X-waivered providers.^{9,10} Some of the most prevalent barriers identified in these studies include lack of patient demand, time constraints on the practice, cumbersome reimbursement practices and lack of institutional support.¹⁰ There was some overlap between the perceived barriers identified in a 2018 study conducted by Jones and McCance-Katz and this survey; however, the most frequently selected perceived barriers in this survey included lack of access to counseling capacity (58%), lack of access to addiction medicine specialists or addiction psychiatrists for consultation of patient care (57%), time constraints on the facility (48%) and insufficient institutional leadership (36%) (Figure 9).

Perceived Barriers Limiting Respondents From Managing Additional Patients on Buprenorphine

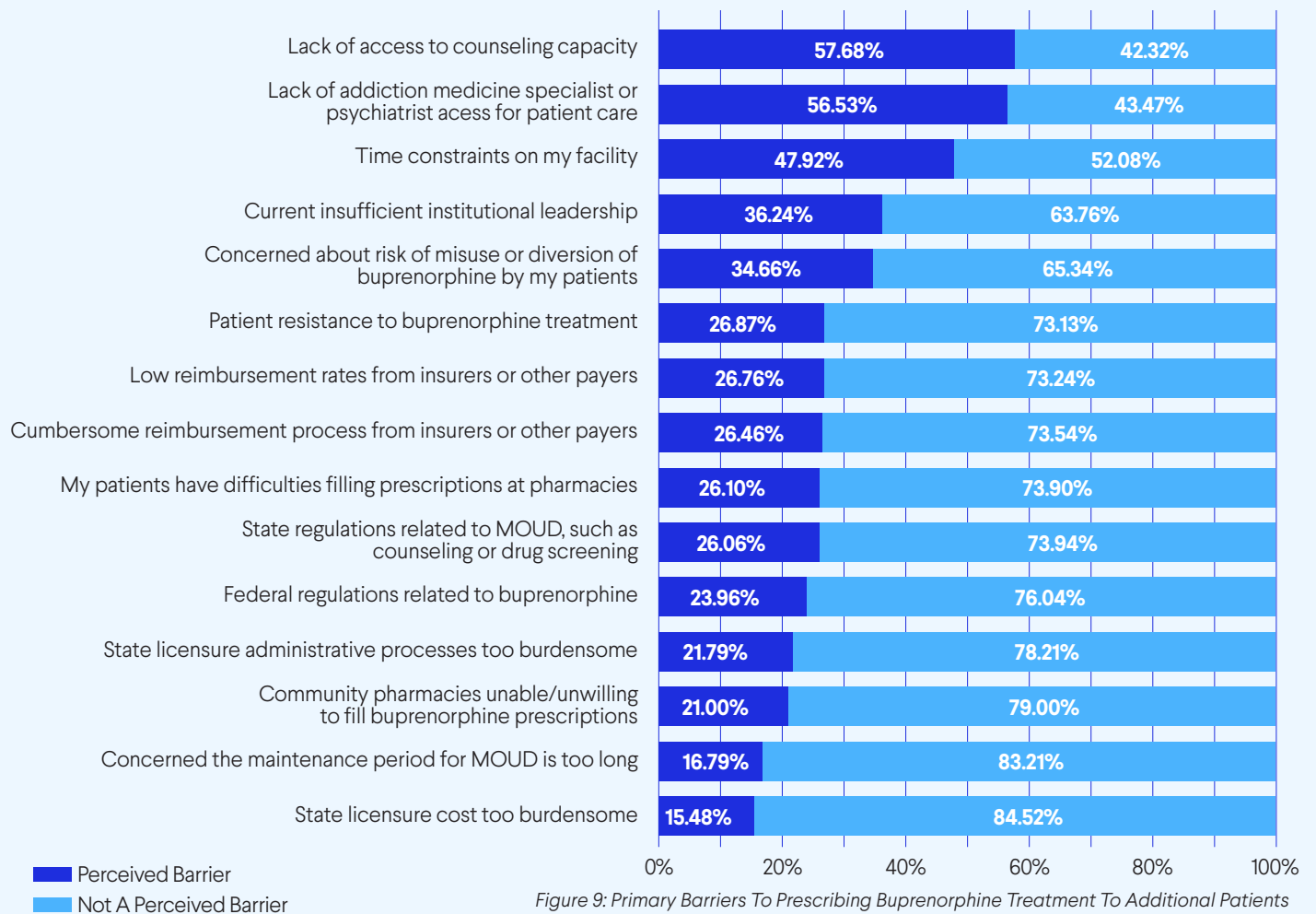
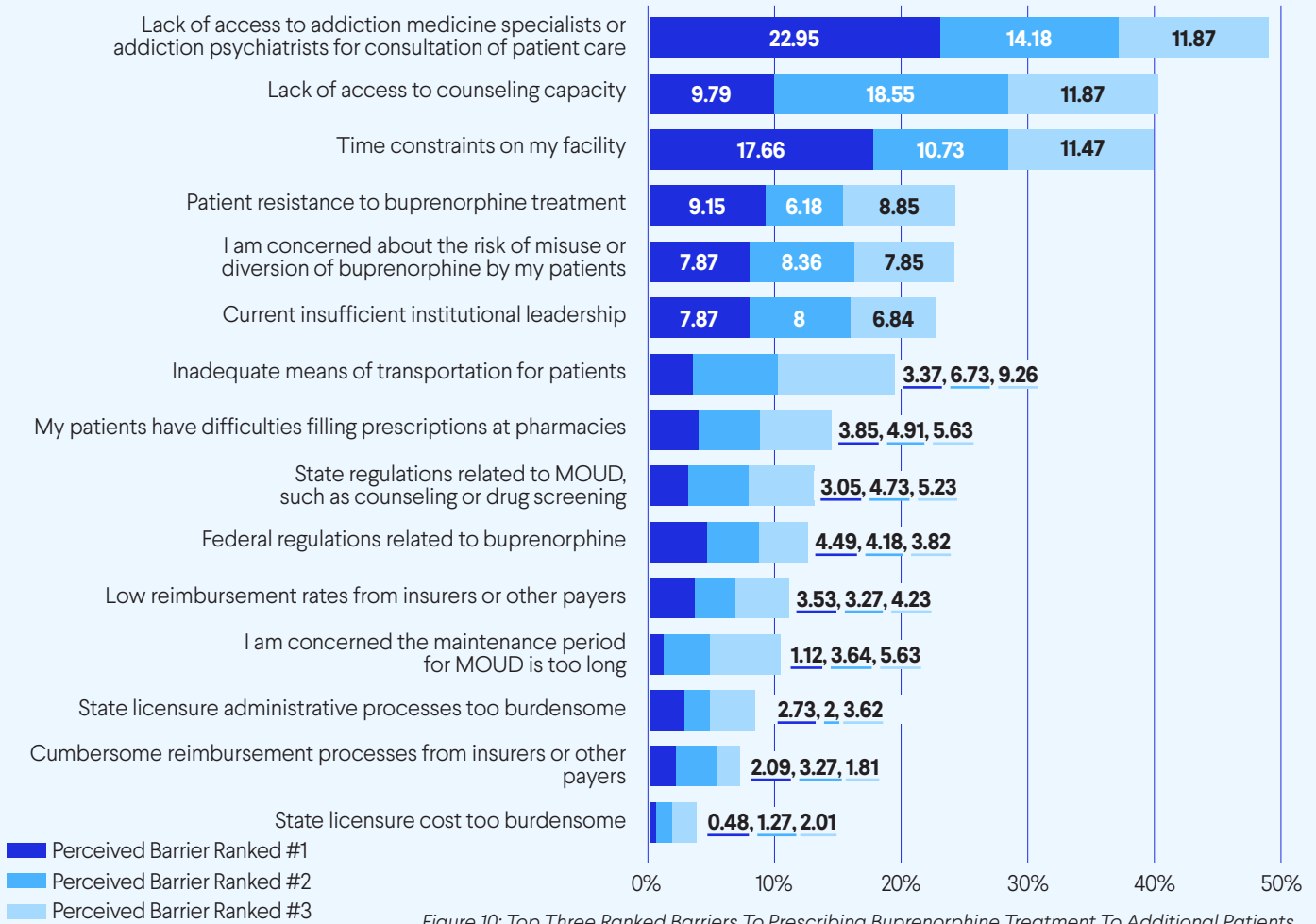


Figure 9: Primary Barriers To Prescribing Buprenorphine Treatment To Additional Patients

Respondents' Top Three Ranked Perceived Barriers Limiting Them From Managing Additional Patients on Buprenorphine



Using the perceived barriers that participants selected in Figure 9, participants subsequently ranked the top three of the perceived barriers for the greatest effect on their practice (Figure 10). Nearly a quarter of participants selected lack of addiction medicine specialist or psychiatrist access for patient care as the top perceived barrier (23%). The most common perceived barrier ranked as having the second greatest effect on their practice was lack of access to counseling capacity (19%). The most common perceived barriers ranked third among three barriers were lack of addiction medicine specialist or psychiatrist access for patient care and lack of access to counseling capacity (12%).

Perceived Barriers To Buprenorphine Prescribing	Perceived Barrier			Not A Perceived Barrier		
	Mean Number of Patients	SD	FREQ	Mean Number of Patients	SD	FREQ
Low reimbursement rates from insurers or other payers	31.23	51.26	103	18.67	36.43	252
Pharmacies in community unable or unwilling to fill buprenorphine prescriptions	28.34	45.93	89	20.55	38.98	312
Federal regulations related to buprenorphine	27.40	51.96	97	19.49	35.74	309
Cumbersome reimbursement processes from insurers or other payers	25.46	49.59	104	21.14	36.64	240
State regulations related to MOUD, such as counseling or drug screening	24.26	45.45	104	20.44	39.09	291
My patients have difficulties filling prescriptions at pharmacies	22.65	42.52	114	22.39	40.27	292
State licensure administrative processes too burdensome	21.86	43.29	97	20.53	39.28	316
State licensure cost too burdensome	21.67	41.35	63	20.6	40.10	339
Concerned about risk of diversion or misuse	21.27	38.59	140	21.27	40.72	291
Lack of access to counseling capacity	20.47	40.84	239	21.53	38.48	199
Time constraints on my facility	17.48	35.97	195	24.33	42.59	239
I am concerned the maintenance period for medications for opioid use disorder is too long	17.43	35.49	61	22.12	40.57	362
Current insufficient institutional leadership	15.5	33.16	122	23.52	41.65	280
Lack of access to addiction medicine specialists or addiction psychiatrists for consultation of patient care	14.67	31.39	226	26.78	45.27	209
Patient resistance to buprenorphine treatment	12.79	39.39	120	24.6	39.71	312

Table 15: Average Number of Patients Receiving Buprenorphine Treatment by Perceived Barriers

Participants' most frequently selected barriers in Figure 9 were more common among participants with the fewest number of patients (Table 15). The most frequently selected barrier was lack of access to counseling capacity. On average, participants who selected this barrier had 20 patients receiving buprenorphine in the last 30 days. The perceived barrier associated with the lowest average number of patients was patient resistance to buprenorphine treatment with a mean of 13 patients. This perceived barrier was the sixth most frequently selected barrier.

The Jones and McCance-Katz study also explored perceived facilitators to prescribing buprenorphine treatment to the maximum patient limit among X-waivered providers.¹⁰ The most frequently cited perceived facilitators in previous studies included increased patient demand, institutional support for buprenorphine treatment, increased reimbursement, and an integrated system with direct access to addiction specialists and behavioral health providers.

Perceived Facilitators Enabling Respondents To Manage Additional Patients on Buprenorphine Treatment

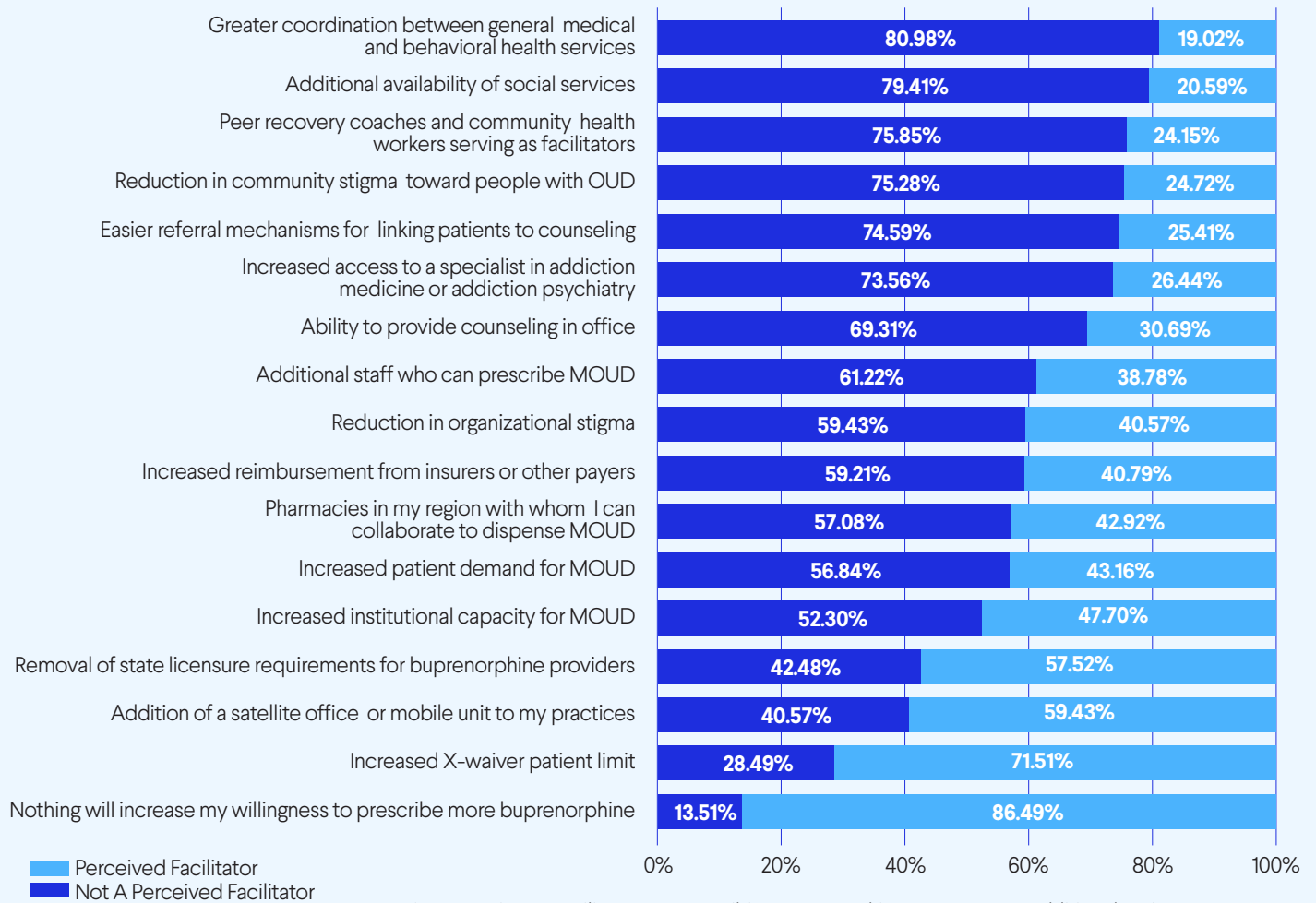


Figure 11: Primary Facilitators To Prescribing Buprenorphine Treatment To Additional Patients

In this survey, the most frequently selected perceived facilitators included greater coordination between medical services and behavioral health services (81%), additional availability of social services (79%), peer recovery coaches and community health workers serving as facilitators (76%), and reduction in community stigma toward people with OUD (75%) (Figure 11).

Utilizing the perceived facilitators participants selected in Figure 11, participants were asked to rank three of the perceived facilitators for the greatest potential effect on their practice (Figure 12). The most common facilitator ranked first among three facilitators was increased access to a specialist in addiction medicine or addiction psychiatry (29%). The most common facilitator ranked second among three facilitators was easier referral mechanisms for linking patients to counseling (15%). The most common facilitator ranked third among three facilitators was additional availability of social services (11%).

Respondents' Top Three Ranked Perceived Facilitators Enabling Them To Manage Additional Patients on Buprenorphine

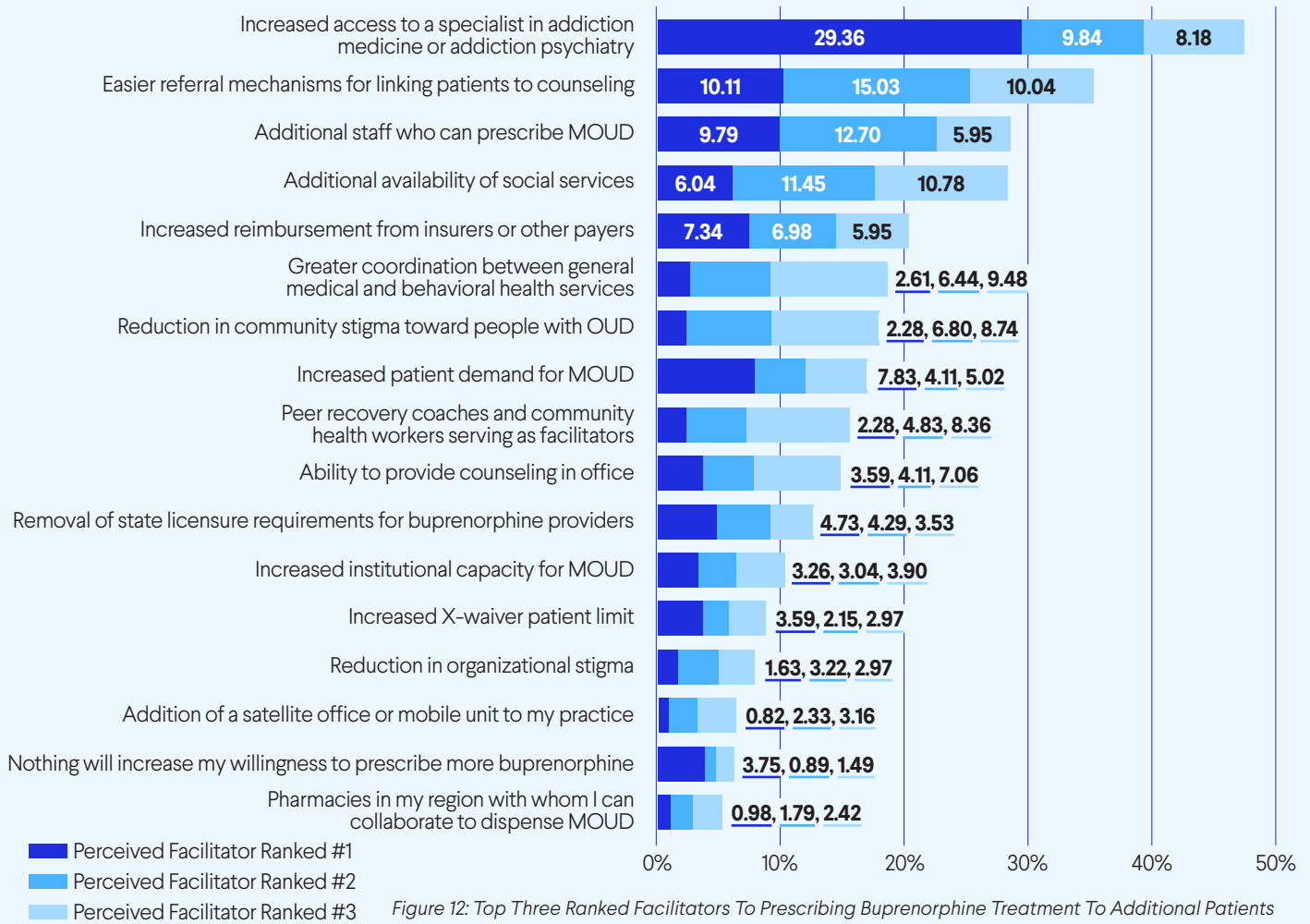


Figure 12: Top Three Ranked Facilitators To Prescribing Buprenorphine Treatment To Additional Patients

Recommendations

No.	Recommendation	Page Number
1	<p>Address Geographically Based Barriers To Buprenorphine Treatment</p> <ul style="list-style-type: none"> Expand access to buprenorphine in Michigan's northern and more rural areas Encourage more physician assistants and APRNs to obtain X-waivers Address transportation barriers Explore the added benefits of mobile transportation units 	26
2	<p>Promote Increased Buprenorphine Prescribing Among X-Waivered Providers</p> <ul style="list-style-type: none"> Consider deregulating buprenorphine treatment services Increase access to education and mentorship opportunities for the wealth of providers who recently received X-waivers Support infrastructure for provider-to-provider telecommunication mentorship Develop incentives to encourage practitioners to obtain X-waivers and prescribe buprenorphine to more patients 	28
3	<p>Expand Telemedicine Access During Covid-19 And Beyond</p> <ul style="list-style-type: none"> Encourage greater telemedicine use among buprenorphine prescribers Consider requiring telemedicine payment parity for OUD treatment 	30
4	<p>Adopt The Medication First Approach</p> <ul style="list-style-type: none"> Educate providers on the effectiveness of buprenorphine treatment alone Implement best practices from Missouri's Medication First Approach 	31
5	<p>Explore Strategies To Simplify LARA's Substance Use Disorder License Categories</p>	32
6	<p>Establish Compassionate Protocols That Encourage Treatment Retention</p> <ul style="list-style-type: none"> Discourage patient termination from treatment solely based on return to use Find solutions to retain patients who miss appointments 	33
7	<p>Increase Community Outreach</p> <ul style="list-style-type: none"> Reduce community stigma Achieve racial and ethnic equity in buprenorphine treatment access 	34

1. Address Geographically Based Barriers To Buprenorphine Treatment

Expand access to buprenorphine in Michigan's northern and more rural areas

An Office of Inspector General report revealed that 72% of U.S. counties with low to no patient capacity for buprenorphine treatment were in rural areas.¹¹ According to a University of Michigan study, 25 out of 29 Michigan counties without access to MOUD were located in Michigan's Northern Region and Upper Peninsula—two largely rural regions of the state.⁵ Among the remaining four counties, three were rural and the fourth was largely rural. This relationship between geographic areas and access to MOUD services was reflected in the survey whereby there were fewer prescribers in the Northern Region and Upper Peninsula. Although the survey respondents in the Northern Region had the highest average number of patients receiving buprenorphine treatment per respondent, more X-waivered providers are needed in this region to prevent patients from traveling long distances to access treatment services. While there are gaps in treatment access in rural, suburban and urban areas throughout the state that need to be addressed, these findings underscore the need for targeted efforts to encourage existing local providers in Michigan's northern and more rural areas to obtain X-waivers and prescribe buprenorphine treatment.

Encourage more physician assistants and APRNs to obtain X-waivers

A study found that between 2016 and 2019, the number of X-waivered providers in rural areas increased by 111%.¹² A majority of the increase can be attributed to nurse practitioners and physician assistants who were also the first X-waivered providers in 285 rural counties.

In the survey sample, there were 2.3 times as many X-waivered physicians (doctors of medicine and doctors of osteopathic medicine) as there were X-waivered physician assistants and APRNs combined. The disproportion is even higher in the true population as there are 3.4 times more X-waivered physicians in Michigan than physician assistants and APRNs. While only 20% of physicians in the survey practiced in rural areas, nearly a third of APRNs and physician assistants practiced in rural areas. Physician assistants and APRNs in the survey were fairly evenly distributed across rural, suburban and urban areas. Additionally, this survey found that, on average, physician assistants and APRNs have nearly 1.5 times as many patients receiving buprenorphine as physicians.

Civil society organizations and academic institutions have largely focused on creating educational and mentoring networks for physicians who prescribe MOUD. But physician assistants and APRNs are likely to bridge gaps in access to treatment in rural communities and prescribe to more patients on average. Therefore, it is vital to encourage and create networks for X-waivered physician assistants and APRNs. One participant reinforced this argument:

“ Make independent [nurse practitioners] practice throughout the states so we can step in to fill the void of services without having to find a physician who is willing to go through the training. It is ridiculous to have restrictions on practice in this age of medicine.

Michigan’s Public Health Code enables physician assistants to prescribe buprenorphine for OUD treatment.¹³ On the other hand, there must be physician involvement for APRN prescriptive authority in Michigan. When APRNs prescribe buprenorphine, the prescription must include the names of both the nurse and the physician along with the physician’s DEA registration number.¹⁴ Legislative changes could eliminate this barrier. This would, in turn, ensure that Michigan joins other states in empowering APRNs to independently prescribe buprenorphine and expand treatment access.

Address transportation barriers

Equitable access to OUD treatment can be supported through addressing transportation barriers. Because inadequate access to OUD treatment in Michigan is concentrated in rural areas, rural residents need to travel farther than urban and suburban residents to access treatment services. While these transportation barriers exist, only 46% of SUD treatment facilities in the U.S. offer transportation assistance.¹⁵ A study in Vermont found that 23% of OTP patients missed at least one appointment due to transportation barriers.¹⁶ In this survey, among the top three barriers ranked for the greatest effect on participants’ practices, the seventh most common perceived barrier was inadequate means of transportation for patients. One participant stated:

“ There are no supports at my clinic for concerns for social determinants of health. No transportation help to get to the clinic. Rides from insurance companies are inconsistent. Housing continues to be a major problem, childcare services to attend group meetings and the clinic visits would help.

Some participants suggested that greater investments in case management could facilitate increased buprenorphine prescribing. Case management services could, in turn, facilitate transportation to treatment centers. Addressing transportation barriers is necessary to secure equitable access to treatment.

Explore the added benefits of mobile treatment units

Approximately 41% of participants indicated that the addition of a satellite office or mobile unit to their practice could facilitate increased buprenorphine prescribing. There is a dearth of research regarding the effectiveness of mobile units for the treatment of OUD. However, several research studies have discovered that mobile health clinics have been successful in offering general health care to underserved populations.¹⁷ Mobile treatment has the potential to expand access to buprenorphine treatment services for rural and underserved communities in Michigan. As more providers offer OUD services through mobile units, it is essential to evaluate the effectiveness and disseminate best practices.

2. Promote Increased Buprenorphine Prescribing Among X-Waivered Providers

Consider deregulating buprenorphine treatment services

The LARA Substance Use Disorder Programs administrative rules require licensing for an individual, or individuals in a group practice, providing buprenorphine or naltrexone treatment to more than 100 individuals at any 1 time at a specific property. Nearly 1 in 5 survey participants perceived state licensure to be a barrier to managing additional patients on buprenorphine treatment. There is a need for targeted strategies to reduce the effects of this perceived barrier. One strategy includes deregulating buprenorphine treatment services to facilitate increased buprenorphine prescribing.

Increase access to education and mentorship opportunities for the wealth of providers who recently received X-waivers

When participants offered comments on additional facilitators that would enable them to prescribe buprenorphine to more patients, most of the comments were about greater access to mentorship and education. Nineteen participants specifically indicated a need for greater access to experienced professionals to provide mentorship, and 13 participants specifically indicated a need for more education and training regarding SUD and buprenorphine prescribing. One participant stated:

“I think actually requiring the substance abuse training for everyone would help remove some of the negativity surrounding substance abuse and MAT [Medication assisted treatment].”

As 54% of participants received their X-waivers in 2019 or 2020, these more recent prescribers are likely to be less confident about managing several patients receiving buprenorphine. Offering more mentorship opportunities to providers would undoubtedly benefit these prescribers.

Support infrastructure for provider-to-provider telecommunication mentorship

One way to achieve this demand for mentorship is to connect prescribers to peer mentorship opportunities. The New York City Department of Health and Mental Hygiene has a program for X-waivered providers that offers mentorship through in-person meetings, telephone calls, email and videoconferencing.¹⁸

A few survey participants have even requested a resource person from the state who can offer technical assistance regarding buprenorphine prescribing in various locations. As most participants recently received their X-waivers, some indicated low confidence in their ability to manage patients on MOUD. One participant detailed what would be needed to increase confidence in prescribing buprenorphine:

“ More comfortable with a mentor who can walk me through the first couple [patients].

Develop incentives to encourage practitioners to obtain X-waivers and prescribe buprenorphine to more patients

States have implemented incentive programs to encourage practitioners to prescribe buprenorphine to treat OUD. The two primary incentive programs are financial and informational.

FINANCIAL INCENTIVES

- Financial incentives can increase the number of X-waivered practitioners. Three hospitals in Philadelphia offered \$750 incentives to emergency department (ED) physicians to complete the required training to obtain an X-waiver.¹⁹ Prior to the incentive program, only 6% of ED physicians received the X-waiver training. During the incentive program, the percentage of ED physicians receiving training rose to 89%.

INFORMATIONAL INCENTIVES

- A study of practitioners in North Carolina compared the effectiveness of various informational incentives to expand the OUD workforce.²⁰ The most successful informational incentive offered to practitioners highlighted X-waiver provider shortages and presented customized overdose figures for their respective regions. When financial reimbursement was mentioned, it only moderately increased response rates.

Incentive programs to promote increased buprenorphine prescribing have been insufficiently researched. However, the incentive programs in North Carolina and Philadelphia illustrated that some of these programs can increase the OUD workforce. A program that combines financial and informational incentives should be piloted in Michigan to increase the number of X-waivered providers in underserved areas and encourage increased buprenorphine prescribing.



3. Expand Telemedicine Access During Covid-19 And Beyond

Encourage greater telemedicine use among buprenorphine prescribers

Telemedicine is one tool that can expand access to buprenorphine treatment. Rural communities in which there are few X-waivered providers could benefit substantially from telemedicine. The use of telemedicine proliferated during the COVID-19 emergency when DEA authorized providers to prescribe buprenorphine using audio or video telemedicine— even without conducting an initial in-person evaluation.²¹ Despite these benefits, some clinics have reservations about permitting practitioners to prescribe buprenorphine treatment using telemedicine.

“ My telehealth employer does not allow this prescription. I feel this condition is a serious situation in our country and I would like to help out but it just isn’t an option at this time. Create a MDHHS website where credentialed physicians like myself (MD, Board Certified, XDEA licensed etc.) can sign up to see patients who also sign up and are seen via telehealth and MDHHS provides the physician pay, liability insurance and video platform in addition to services. I think providers would sign up.

Studies examining the OUD treatment delivered through telemedicine have generally found that telemedicine renders similar or improved treatment retention as in-person OUD services.²² Education campaigns highlighting the effectiveness of buprenorphine treatment provided using telemedicine could foster greater uptake of this treatment modality.

Consider requiring telemedicine payment parity for OUD treatment

More than 1 in 3 participants indicated that they do not plan to use telemedicine in the future. One reason why prescribers may be disinclined to use telemedicine in the future is the disparity in reimbursement payments for telemedicine and in-person OUD visits. Although Michigan offers telehealth coverage for behavioral health services, the state does not have private insurance and Medicaid reimbursement parity for telehealth and in-person mental health services.²¹

Nearly 1 in 5 of participants specified increased reimbursements from insurers and other payers as one of their top three perceived facilitators to prescribing buprenorphine to additional patients (Figure 11). Because payment affects prescribers’ willingness to treat additional patients, Michigan should consider requiring telemedicine visits covered by Medicaid and commercial insurance to be paid at the same rate as analogous in-person visits.²³

4. Adopt the Medication First Approach

Educate providers on the effectiveness of buprenorphine treatment alone

The second most commonly referenced perceived facilitator that would enable participants to prescribe buprenorphine to more patients was greater access to counseling and other behavioral health resources. While many providers who offered counseling services in their clinics believed that this improved their working conditions, many other providers who did not have those resources in their office noted it as a barrier to prescribing buprenorphine.

One survey respondent stated:

“ Michigan needs more mental health providers. Having mental health counseling services within the clinic helps, but need multiple addiction mental health specialists to make this happen. Increasing the pay for social workers to do this would be a big benefit for retention.

This perceived barrier may stem from providers' beliefs that receiving buprenorphine is conditional on whether patients engage in counseling. While federal guidelines encourage patients receiving buprenorphine to engage in counseling, counseling is not mandatory. The Substance Abuse and Mental Health Services Administration (SAMHSA) cautions prescribers facing difficulties linking patients to counseling services to not deny buprenorphine to patients, because buprenorphine is effective as a stand-alone treatment.²⁴ Studies have demonstrated that buprenorphine alone was associated with a higher reduction in drug overdoses than the combination of buprenorphine and counseling.⁸ Organizations providing mentorship and training to X-waivered providers should consider informing them about the effectiveness of prioritizing the provision of buprenorphine and not restricting access if patients choose not to engage in counseling services.

Implement Best Practices from Missouri's Medication First Approach

The Missouri Department of Mental Health developed a model to guide MOUD providers under the State Opioid Response Grant: the Medication First Approach for the treatment of OUD.²⁵ This approach recognizes the effectiveness of buprenorphine treatment alone. It also does not make buprenorphine treatment conditional upon patients' participation in counseling, adherence to their treatment regimen or negative drug screen for illicit drug use.

The Four Principles of the Missouri Department of Mental Health's Medication First Approach

1. People with OUD receive pharmacotherapy treatment as quickly as possible, prior to lengthy assessments or treatment planning sessions;
2. Maintenance pharmacotherapy is delivered without arbitrary tapering or time limits;
3. Individualized psychosocial services are continually offered but not required as a condition of pharmacotherapy;
4. Pharmacotherapy is discontinued only if it is worsening the person's condition.

Nearly 1 in 5 participants in this survey terminated buprenorphine treatment for patients over the past year. Their primary reasons for terminating treatment included a positive drug screening for illicit drug use and missed appointments. Considering accessibility issues and the overdose risks associated with no treatment, it is essential that providers meet patients where they are and not involuntarily remove them from treatment. The state of Michigan should consider developing and disseminating a treatment approach to OUD similar to Missouri's to set a standard for how practices should respond to noncompliance to treatment.

5. Explore Strategies To Simplify LARA's Substance Use Disorder License Categories

Some MOUD providers in Michigan must apply for the Controlled Substance License, Drug Control License and Drug Treatment Prescriber License in addition to LARA's SUD Service Program License in order to provide buprenorphine. There are fewer than 10 practices that possess LARA's SUD Service Program License to provide buprenorphine and naltrexone; however, 317 participants indicated that they possessed the license.

The most common optional comment about this license was that participants were "unsure" whether they possessed the license (n=66). Because there are four licenses that providers could potentially acquire to prescribe buprenorphine, there was some confusion regarding the purpose of each license. LARA should consider conducting an internal review of the licenses and developing strategies to reduce confusion among buprenorphine prescribers. This confusion could lead to prescribers not being in compliance with State Enforcement Agencies or deter providers from treating patients for SUD out of fear of being out of compliance.

6. Establish Compassionate Protocols That Encourage Treatment Retention

Discourage patient termination from treatment solely based on return to use

Approximately 1 in 5 participants indicated that they had terminated buprenorphine treatment for at least one patient in the past year. The most common reason for terminating treatment was a positive drug screening for illicit drug use (18%). A nationally representative study found that nearly 6 in 10 people with OUD had multiple substance use disorders.²⁶ As patients with OUD are likely to present with polysubstance use, they are at increased risk for being terminated from treatment as a result of positive urine drug screens. A retrospective national cohort study of Veterans found that patients of the US Veterans Health Administration with OUD and at least one other SUD were less likely to receive buprenorphine than the patients with OUD only.²⁷ The primary goals of SUD treatment are to keep patients engaged in treatment and improve their general wellbeing over time. When patients with OUD present with polysubstance use, practitioners should consider referring the patients to treatments that address their other SUDs while continuing to offer buprenorphine treatment.

Furthermore, frequent urine screening increases the likelihood of detecting substance use which, in turn, makes it a pathway to expelling people from treatment. Over one third of participants conducted urine drug screening for each patient during every buprenorphine treatment visit. According to the American Society of Addiction Medicine (ASAM), “drug screening should be used as a tool for supporting recovery rather than exacting punishment.”²⁸ Instead of conducting excessive drug screening and subsequently terminating buprenorphine treatment when patients return to use, practitioners should offer those patients adaptive treatment regimens that emphasize harm reduction.

Find solutions to retain patients who miss appointments

The second most common circumstance in which participants terminated buprenorphine treatment for patients was missing appointments (15%). Given the inequitable access to buprenorphine treatment prescribers in some counties, some patients may be more likely to miss appointments as a result of excessive travel times. Policies to protect patients from being terminated from treatment should not only take patients who have positive drug screenings into account, but also take into account patients who miss appointments.



7. Increase Community Outreach

Reduce community stigma

Stigma regarding OUD can discourage medical practices from offering OUD treatment services and foster patient resistance to buprenorphine treatment. Provider- and practice-level stigma can influence providers' willingness to screen for OUD and prescribe buprenorphine. Patient-level stigma was exhibited in participants' top three ranked barriers to prescribing buprenorphine to additional patients. The fourth most common leading ranked barrier indicated was patient resistance to buprenorphine treatment. Additionally, the fourth most frequently selected perceived facilitator that would enable respondents to manage more patients on buprenorphine was the reduction in community stigma toward people with OUD. Some providers also alluded to administrative barriers to prescribing buprenorphine to additional patients. One participant noted:

“ Most of my limitations are related to additional support including the need for less [stigma] surrounding substance abuse treatment and more openness to the idea that substance abuse is something that should be treated. There is a strong focus here that MAT is not an appropriate way to treat substance abuse disorder. There is a lack of mental health and addiction support services in addition to the lack of other providers currently able to provide MAT.

Advocates for access to buprenorphine treatment should consider providing education and training to professionals even beyond X-waivered practitioners. Education on topics such as the consequences of SUD related stigma and the effectiveness of MOUD should be provided to personnel in law enforcement, personnel in the judicial system, pharmacy stakeholders and the healthcare workforce in general.²⁹ Offering high-quality education and training to these professionals could reduce barriers and potentially expand treatment capacity in underserved communities.²⁹ Similarly, communication campaigns targeting these professionals along with X-waivered practitioners, medical practice administration and community members could reduce stigma's burden on access to and quality of care.

Achieve racial and ethnic equity in buprenorphine treatment access

On average, survey participants estimated that nearly 7 in 10 of their patients receiving buprenorphine treatment were non-Hispanic/Latino white. The second-largest non-Hispanic/Latino group receiving buprenorphine treatment was estimated to be Black/African American (20%). Previous studies have revealed significant racial disparities in access to buprenorphine treatment. Just as treatment is effective in preventing overdoses, inequitable treatment access can lead to the proliferation of overdoses. A University of Michigan study found that only 1 in every 35 buprenorphine treatment appointments were for patients of color between 2012 and 2015 even as national research suggests that Black and white populations have the same rates of OUD.³⁰

Correspondingly, from 2017 to 2018, as the opioid overdose mortality rate reduced by 5% among white Michigan residents, overdose mortality rates among Black Michigan residents increased by 20%.³¹ At the national level, a 2019 study found that non-Hispanic American Indians or Alaska Natives had a higher drug overdose mortality rate than any other racial or ethnic group.³² This data suggests that inequitable access to buprenorphine could significantly contribute to the racial and ethnic disparities in opioid overdose mortality rates.

To reverse the direction of this trend, interventions should be developed to target communities of color and ensure these Michigan residents with OUD have sufficient access to MOUD. Some suggested interventions include encouraging more prescribers to accept Medicaid and Indian Nations payment types to cover treatment costs and developing culturally relevant communication campaigns to reduce stigma.

Limitations

This study had some limitations. The degree to which survey participants represented all X-waivered practitioners in Michigan is limited. The response rate for this survey was adequate (31%); however, there may have been notable differences in the characteristics, perceptions and prescribing practices between respondents and nonrespondents. Survey responses may have also been influenced by the federal flexibilities in response to the COVID-19 emergency which allowed buprenorphine treatment for OUD to be prescribed without an initial in-person evaluation.

Another limitation was the misinterpretation of the survey question regarding possession of the required LARA SUD program licensure to prescribe buprenorphine to more than 100 patients at one time in a single location. This misinterpretation may have influenced responses to other survey questions such as their perception of state licensure as a barrier or facilitator to managing additional patients on buprenorphine treatment.

Additionally, the survey dissemination strategy may have introduced some response bias. The DEA list of X-waivered practitioners in Michigan was used to disseminate the survey to all X-waivered practitioners in Michigan and reduce bias. We also partnered with several organizations and programs to disseminate the survey. Partnering with the Michigan Medicaid Program instead of commercial insurers may have encouraged more practitioners who primarily accept Medicaid coverage to participate in the survey. While these practitioners may differ from practitioners who primarily accept commercial insurance, the effect of this limitation may have been small as most respondents accepted both commercial insurance and Medicaid.

This survey did not include practitioners who were not X-waivered. Future studies should consider exploring the barriers and potential facilitators to obtaining an X-waiver. The barriers and facilitators indicated by the X-waivered practitioners in this study may have differed for practitioners who were not X-waivered.

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