

Prepared by the UVM Center on Rural Addiction Surveillance & Evaluation Core May 2022

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Executive Summary

The mission of the University of Vermont Center on Rural Addiction (UVM CORA) is to expand substance use treatment capacity in rural counties by providing consultation, resources, training, and evidence-based technical assistance to healthcare practitioners and staff. With our baseline needs assessment, we aimed to identify current and future substance use disorder (SUD) treatment needs and barriers in Maine with direct input from practitioners and stakeholders. The online survey was conducted between April 2021 and June 2021. This report includes responses from practitioners and community stakeholders working in rural areas within all Maine counties; specifically, counties designated as fully rural by the Health Resources and Services Administration (HRSA) and rural census tracts within partially rural counties.

Respondents included 174 practitioners and 141 community stakeholders (people who interact with or provide services to persons with OUD through work in the community) working in rural areas of Maine. Among practitioners, the vast majority could prescribe medications (e.g., MD, DO, NP; 92%) and worked in clinical roles, including nurse practitioners (34%), primary care physicians (32%), and specialist physicians (11%). Of those who could prescribe medications, almost all (95%) reported having a waiver to prescribe buprenorphine for opioid use disorder (OUD). Throughout the report, we compare practitioner responses by whether they are currently treating patients with medications for OUD (MOUD). Stakeholder respondents worked in a variety of settings and were grouped into three primary categories by work stetting: first responder, school, and other settings (e.g., recovery community organizations, community health organizations). The majority of stakeholders reported working in fire and/or emergency medical services (34%) and schools (29%). Survey topics included concerns about substance use, comfort in treating SUD, training and support needs, practitioner and patient barriers to treatment, beliefs about substance use treatment, the impact of COVID-19, and UVM CORA resources of interest to practitioners.

Practitioners' greatest concerns about substance use among their patients related to the combinations of opioids with benzodiazepines or alcohol, fentanyl, and tobacco/e-cigarettes. Practitioners currently treating patients with MOUD reported greater concern about their patients' fentanyl, heroin, and combination opioid/stimulant use than prescribing practitioners not currently treating patients with MOUD. Community stakeholders were similarly concerned about fentanyl and the combination of opioids and alcohol in their community, in addition to heroin and prescription opioids. Community stakeholders working in other settings reported greater concern overall about most substances relative to stakeholders in school or first responder settings.

Rural practitioners in Maine reported a moderate to high level of comfort in treating patients with OUD. However, this reported comfort level decreased to the low range when asked about treating special populations such as adolescents or providing family-based interventions. Practitioners

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currently treating patients with MOUD reported greater comfort treating patients with OUD compared to prescribing practitioners not currently treating patients with MOUD. The former group also reported more training, experience, and support to induct patients on MOUD than those not currently treating with MOUD.

Practitioners overwhelmingly reported time/staffing constraints and concerns about medication diversion as the primary practitioner-related barriers to treating and retaining patients with OUD. They also identified lack of time, transportation, housing, or other supports as the top patient-related barrier to receiving and remaining in treatment. Consistent with practitioner respondents, community stakeholders identified lack of time, transportation, housing, and other supports as the primary barrier to patients receiving treatment for OUD. Within community stakeholder groups, "other" community stakeholders identified access challenges and stigma as greater barriers to treatment than first responders, whereas a greater proportion of those working in first responder settings noted fatigue and burnout as a challenge compared to those in school or other settings.

When asked about their beliefs, most practitioners (82%) agreed that MOUD are the most effective way to treat people with opioid use disorder, compared to fewer community stakeholders who agreed (37%). The proportion of agreement among practitioners currently treating patients with MOUD (91%) was greater than the proportion of those not currently treating patients with MOUD (68%). About half of practitioners (52%) agreed that people in the community where they work had adequate access to an effective form of SUD treatment compared to one-fifth (21%) of community stakeholders.

The majority of both practitioners (83%) and community stakeholders (82%) reported that substance use increased during the COVID-19 pandemic. While most practitioners (83%) and community stakeholders (69%) reported that opioid use had increased in their communities since the start of the COVID-19 pandemic, few practitioners (10%) and community stakeholders (9%) believed that access to MOUD had increased.

Finally, when practitioners were asked which UVM CORA resources they would like to learn more about, the resources most selected as a high priority included polysubstance use support, extended release buprenorphine medication and training, and support with managing and coordinating care for vulnerable populations.

Visit uvmcora.org to find more information about our baseline needs assessments in Vermont, Maine, New Hampshire, and northern New York, as well as resources and technical assistance on substance use treatment.

Abbreviations Used Throughout This Report

UVM CORA: University of Vermont Center on Rural Addiction

OUD: Opioid use disorder

SUD: Substance use disorder

MOUD: Medications for opioid use disorder

HRSA: Health Resources and Services Administration

Responses and Inclusion Criteria

Practitioners and community stakeholders working across Maine responded to our baseline needs assessment (Figure 1). The online survey was conducted from April 2021 to June 2021.

We received multiple contact lists from our partners at the University of Southern Maine's Catherine E. Cutler Institute, including lists from publicly available sources (e.g., school nurses, practitioners, legislators), lists made available through requests to specific agencies (e.g., Emergency Medical Service [EMS] list from the Maine State EMS office), and the Cutler Institute's internally held contact lists (e.g., practitioners and stakeholders who had participated in prior SUD/OUD related projects). From these lists, 1,255 practitioners and 1,532 stakeholders were invited by email to complete the survey (i.e., practitioner survey or community stakeholder survey). To maximize our response rate, those who had not yet responded to the survey received weekly reminders over the course of data collection.

This report includes responses from practitioners and community stakeholders working in rural areas of Maine. For



Figure 1. Areas of Maine designated as rural (green) by the Health Resources and Services Administration (HRSA), including fully rural counties and rural census tracts in partially rural counties. Light grey areas represent non-rural areas in partially rural counties.

Map Sources: Esri, U.S. Geological Survey, HRSA

our purposes, rural areas include counties designated as fully rural by HRSA¹ as well as rural census tracts in partially rural counties.² Throughout the report, we compare rural prescribing practitioners currently treating patients with MOUD to rural prescribing practitioners not currently treating patients with MOUD. Comparisons are also made among subgroups of community stakeholders, as well as between practitioners and community stakeholders.

Practitioners

Of the 1,255 individuals who were invited to complete the baseline needs assessment practitioner survey, 376 responded (response rate=30%). Of these, 62 responses were moved to the community stakeholder survey analysis due to the setting of their work (53 school nurses, one EMT, six school administrators, and two in other work settings). Similarly, two responses from nurse practitioners

¹Section I of the document linked below includes the counties that are designated as fully rural by HRSA. https://data.hrsa.gov/Content/Documents/tools/rural-health/forhpeligibleareas.pdf

²Section II of the document linked below includes rural zip codes in counties designated as partially rural by HRSA. https://data.hrsa.gov/Content/Documents/tools/rural-health/forhpeligibleareas.pdf

who responded to the community stakeholder survey were imported to the practitioner survey analysis. One additional respondent worked at a non-community work setting in which they would not be involved in patient care, so they were excluded from both survey analyses. Among these 315 practitioner responses, we excluded six duplicate responses, keeping the more complete survey response for each respondent. Of the 309 practitioner responses remaining, 289 provided substantive survey responses (i.e., any questions answered other than role, work setting, and work location). Among these, there were four retired respondents and one respondent working outside of the state of Maine that were excluded.

Of the remaining 284 practitioner respondents, 174 reported working in at least one area designated as rural by HRSA and are included in this report. Some findings presented in this report include all rural practitioners while others focus only on rural prescribing practitioners, identified through their selected role (e.g., physician, nurse practitioner). Practitioners who selected "other" for the role question were asked if they could prescribe medications. Among prescribing practitioners, we compare those currently treating and not currently treating patients with MOUD.

Community Stakeholders

Of the 1,532 community stakeholders who were invited to complete the baseline needs assessment survey, there were 204 initial responses (response rate=13%). As noted above, two responses to the community stakeholder survey were moved to the practitioner survey analysis, and 62 responses were moved from the practitioner survey to the community stakeholder survey analysis. Of the resulting 264 community stakeholder survey responses, 33 duplicate surveys were removed (i.e., the individual responded to both the practitioner and the community stakeholder survey; community stakeholder survey responses were kept in these instances). Of the 231 remaining responses, 202 included substantive responses. Two additional surveys were dropped because the community stakeholder worked outside of the state of Maine.

Of the 200 remaining community stakeholder respondents, 141 reported working in at least one area designated as rural by HRSA and are included in this report.

Rural County Location

Practitioners

Rural practitioner responses (n=174) included representation from all 16 Maine counties (Table 1). Approximately one quarter of respondents (26%) reported working in multiple Maine counties. Examining all counties where practitioners worked, the most represented county was Kennebec with 28% of all responses, followed by Cumberland (14%) and Lincoln counties (12%). The least represented county was Piscataquis (3%), consistent with it being the least populated county in the state.

Table 1. Rural Practitioner responses by Maine county.

	To	tal	All counties worked		
	(Choice of single		(Select all that apply;		
ME county in which practitioner works	county or	county or "multiple counties" category)		utually	
	counties"			usive)	
	Freq.	Percent	Freq.	Percent	
Rural counties					
Kennebec	32	18.4	48	27.6	
Lincoln	13	7.5	21	12.1	
Hancock	9	5.2	19	10.9	
Washington	10	5.8	19	10.9	
Somerset	10	5.8	18	10.3	
Aroostook	10	5.8	17	9.8	
Knox	6	3.5	16	9.2	
Waldo	9	5.2	16	9.2	
Franklin	5	2.9	10	5.8	
Oxford	4	2.3	10	5.8	
Sagadahoc	2	1.2	8	4.6	
Piscataquis	4	2.3	5	2.9	
Partially rural counties					
Cumberland	6	3.5	24	13.8	
York	4	2.3	15	8.6	
Penobscot	2	1.2	13	7.5	
Androscoggin	2	1.2	10	5.8	
Multiple counties	46	26.4	N/A	N/A	
Total	174	100	N/A	N/A	

Note: The left two results columns represent percentages from a single county or the category "multiple counties" and are mutually exclusive. The right two results columns represent percentages of all counties represented, with 46 practitioners endorsing more than one county.

Community Stakeholders

Rural community stakeholder responses (n=141) also included representation from all 16 Maine counties (Table 2). About one-fifth of respondents reported working in multiple Maine counties. The most represented county was Hancock with 19% of all responses, followed by Aroostook (17%) and Washington counties (16%). Piscataquis was again the least represented county (4%).

Table 2. Rural community stakeholder responses by Maine county.

	To	tal	All count	ies worked	
	(Choice	(Choice of single		(Select all that apply,	
ME county in which stakeholder works	county or	"multiple	not m	utually	
	counties"	counties" category)		exclusive)	
	Freq.	Percent	Freq.	Percent	
Rural counties					
Hancock	17	12.1	27	19.2	
Aroostook	19	13.5	24	17	
Washington	12	8.5	22	15.6	
Kennebec	11	7.8	20	14.2	
Knox	9	6.4	16	11.4	
Oxford	7	5.0	15	10.6	
Sagadahoc	5	3.6	14	9.9	
Lincoln	7	5.0	12	8.5	
Franklin	4	2.8	11	7.8	
Waldo	3	2.1	11	7.8	
Somerset	5	3.6	10	7.1	
Piscataquis	0	0	5	3.6	
Partially rural counties					
Cumberland	2	1.4	13	9.2	
Penobscot	6	4.3	11	7.8	
Androscoggin	0	0	10	7.1	
York	4	2.8	9	6.4	
Multiple counties	30	21.3	N/A	N/A	
Total	141	100	N/A	N/A	

Note: The left two results columns represent percentages from a single county or the category "multiple counties" and are mutually exclusive. The right two results columns represent percentages of all counties represented, with 30 community stakeholders endorsing more than one county.

Work Setting & Role

Rural Practitioners

Table 3 shows the distribution of work settings among rural practitioner respondents (n=174). Practitioners reported working in a wide variety of settings ranging from hospital-owned primary care practices (24%), Federally Qualified Health Centers (FQHCs; 18%), and critical access hospitals (8%) to mental and behavioral health organizations/practices (8%) and privately-owned primary care practices (6%). Practitioner respondents also reported working in settings specializing in SUD treatment, including addiction specialty treatment sites (9%).

Table 3. Rural practitioner work settings.

	Freq.	Percent
Hospital-owned primary care practice	41	23.6
Federally Qualified Health Center	31	17.8
Addiction specialty treatment setting	15	8.6
Critical access hospital	13	7.5
Mental and behavioral health organizations, practices, and providers	13	7.5
Other	13	7.5
Privately-owned primary care practice	11	6.3
Rural Health Clinic	8	4.6
Privately-owned specialty practice	6	3.5
Academic medical center	5	2.9
Small rural hospital (≤49 beds, non-CAH)	5	2.9
Other hospital	5	2.9
Hospital-owned specialty practice	5	2.9
Tribal health center	2	1.2
Opioid Treatment Program (methadone clinic only)	1	0.6
Total	174	100

Table 4 shows the professional roles of rural Maine practitioner respondents (n=174). Among practitioner respondents, we grouped together 59 nurse practitioners, 56 primary care physicians, 19 specialist physicians, 13 physician assistants, one certified nurse specialist/certified nurse anesthetist/certified nurse midwife, nine in "multiple" roles, and three in "other" roles because they were able to prescribe medications (n=160; hereafter referred to as "prescribing practitioners"). The remaining non-prescribing practitioners (n=14) included seven nurses, two social workers, one pharmacy technician, three in "multiple" roles and one in an "other" role.

Table 4. Rural practitioner professional roles.

Table With the formation of procession and revest	Freq.	Percent
Prescribing practitioners		
Nurse practitioner	59	33.9
Primary care physician (MD, DO)	56	32.2
Specialist physician (e.g., psychiatrist, addiction medicine, emergency medicine)	19	10.9
Physician assistant	13	7.5
Certified Nurse Specialist, Certified Nurse Anesthetist, or Certified Nurse Midwife	1	0.6
Multiple	9	5.2
Other	3	1.7
Non-prescribing practitioners		
Nurse	7	4.0
Social worker	2	1.2
Pharmacy technician	1	0.6
Multiple	3	1.7
Other	1	0.6
Total	174	100

Among the prescribing practitioners that provided their specialty (n=158 of 160 total prescribing practitioners), 58% reported specializing in family medicine/general practice (Table 5). The remaining rural practitioners were distributed across a range of specialties including psychiatry (16%), addiction medicine (9%), internal medicine (8%), and emergency/urgent care (4%).

Table 5. Rural practitioner specialties.

	Freq.	Percent
Family medicine/general practice	91	57.6
Psychiatry	25	15.8
Addiction medicine	14	8.9
Internal medicine	12	7.6
Emergency/urgent care	7	4.4
Ob/gyn	4	2.5
Multiple/other	3	1.9
Pediatrics	2	1.3
Total	158	100

Rural Community Stakeholders

Table 6 shows the distribution of work settings among the 140 rural community stakeholders (of 141 total rural stakeholders) who provided this information. The most common work settings included fire and/or emergency medical services (34%) and schools (29%). In addition, there were community stakeholder respondents from community health organizations (5%), Recovery Community Organizations (RCOs) and recovery centers (5%), mental or behavioral health organizations (4%), and healthcare/hospital settings (4%). In subsequent sections of the report, we make comparisons between first responder (n=58), school (n=41), and "other" (n=41) community stakeholder work settings (Table 6).

Table 6. Rural community stakeholder work settings.

	Freq.	Percent
First responder setting (n=58)		
Fire and/or emergency medical services	48	34.3
Law enforcement (e.g., police, sheriff, trooper)	6	4.3
911/Emergency dispatch	4	2.9
School setting (n=41)		
School	41	29.3
Other setting (n=41)		
Recovery center/Recovery Community Organization	7	5.0
Community health organization	7	5.0
Mental or behavioral health organization	6	4.3
Other	6	4.3
Healthcare/hospital	6	4.3
Social service agency	3	2.1
ME Department of Health and Human Services	2	1.4
Department of Corrections, state prison system, or county jail	2	1.4
Court system (e.g., attorneys, judges, staff)	1	0.7
Recovery housing	1	0.7
Total	140	100

Practitioner Waiver Status and Current Treatment of Patients with OUD

Among rural prescribing practitioners who reported their waiver status (n=157), 95% reported having a waiver to prescribe buprenorphine to patients with OUD at the time of the survey (Table 7).

Table 7. Current waiver status for prescribing buprenorphine among rural practitioners that can prescribe medications (e.g., MD, NP).

	Freq.	Percent
Waivered	149	94.9
Not waivered	8	5.1
Total	157	100

Among prescribing practitioners who responded to the question (n=157), 120 (76%) indicated that they were currently treating patients with OUD using U.S. Food & Drug Administration-approved MOUD (e.g., methadone, buprenorphine, naltrexone; Table 8). Notably, all 120 of these practitioners were waivered to prescribe buprenorphine, and 97% of the 119 who responded reported primarily prescribing buprenorphine (Table 9). Of the 37 (24%) prescribing practitioners not treating patients with MOUD at the time of the survey (Table 8), 29 (78%) were waivered to prescribe buprenorphine.

Throughout this report, comparisons are made between rural practitioners currently treating patients with MOUD (n=120) and those not currently treating patients with MOUD (n=37). These analyses do not include non-prescribing practitioners.

Table 8. Rural prescribing practitioners currently treating patients with opioid use disorder (OUD) using U.S. Food & Drug Administration-approved medications for OUD (MOUD).

	Freq.	Percent
Treating patients with MOUD	120	76.4
Not treating patients with MOUD	37	23.6
Total	157	100

Table 9. Primary medication prescribed by rural practitioners currently treating patients with opioid use disorder (OUD) using U.S. Food & Drug Administration-approved medications for OUD (MOUD).

	Freq.	Percent
Buprenorphine	115	96.6
Naltrexone	3	2.5
Methadone	1	0.8
Total	119	100

Practitioner Difficulty Retaining Patients on MOUD

Practitioners currently treating patients with OUD using MOUD were asked how difficult they find it to retain patients on MOUD long enough to obtain the best patient outcomes. Those responding to the question (n=117 of 120 total currently treating practitioners) reported a moderate level of difficulty retaining patients on their recommended MOUD treatment regimen (mean score=4.4; scale 0–10; 0=not at all difficult; 10=extremely difficult). One-fifth of respondents (21%) reported a difficulty level of 7 or higher (Figure 2).

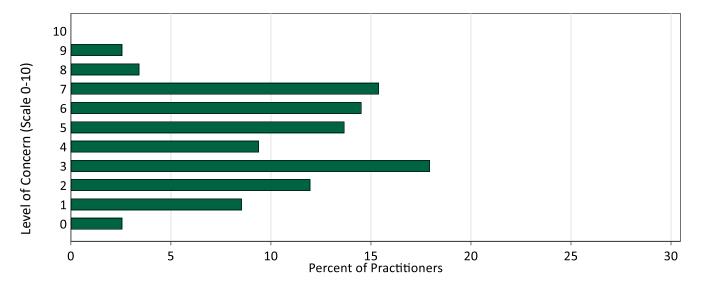


Figure 2. Distribution of reported difficulty retaining patients on their medication for opioid use disorder (MOUD) treatment regimens among rural practitioners currently treating patients using MOUD (n=117).

0-10 scale (0=not at all difficult; 10=extremely difficult).

Rural Practitioner Concern About Treatment Adherence

Figure 3 shows the distribution of rural practitioners' levels of concern regarding patients' non-adherence to their recommended MOUD treatment regimen, among practitioners currently treating patients using MOUD who responded to the question (n=118). On a 0–10 scale (0=not concerned; 10=extremely concerned), the average level of concern among these practitioners was moderate (mean score=4.6), with approximately one in five respondents (19%) reporting a level of concern of 7 or higher.

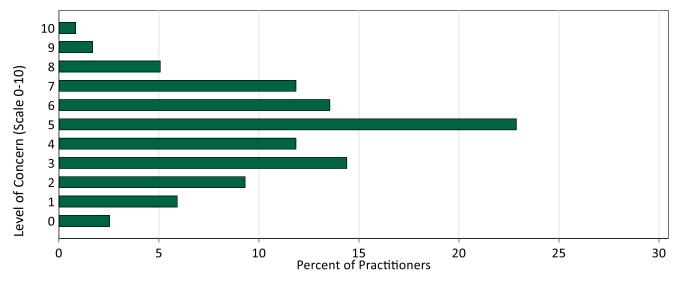


Figure 3. Distribution of concern regarding patient non-adherence to their recommended medication for opioid use disorder (MOUD) treatment regimen, among rural practitioners currently treating patients with MOUD (n=118). 0–10 scale (0=not concerned; 10=extremely concerned).

Rural Practitioner Number of Patients: Total and OUD Treatment

Practitioners were asked about the number of unique patients cared for each week for all reasons. Among all practitioners (including non-prescribing) that responded to the question (n=171 of 174 total practitioners), 31 practitioners (18%) reported caring for between 0–20 unique patients each week, 128 practitioners (75%) reported serving between 25–100 patients, four practitioners (2%) reported serving between 120–150 patients, and eight practitioners (5%) reported caring for over 150 unique patients each week. Table 10 shows the distribution of unique patients cared for each week (for all reasons) among prescribing practitioners only, reported separately for rural practitioners currently treating and not currently treating patients with MOUD.

Table 10. Distribution of unique patients cared for each week for all reasons by rural prescribing practitioners currently treating and not currently treating patients with opioid use disorder (OUD) with U.S. Food and Drug Administration-approved medications for OUD (MOUD).

	Patients treated for all reasons			
	Mean	Median	Min	Max
Currently treating patients with MOUD (n=119)*	58.9	50	0	600
Not currently treating patients with MOUD (n=37)*	48.8	40	5	200

^{*}Note: "n" refers to the sample size of practitioners responding to the question.

Table 11 shows the distribution of number of patients treated specifically for OUD at any one time, using any MOUD (e.g., methadone, buprenorphine, naltrexone), by rural practitioners currently treating patients with MOUD. Among practitioners who responded (n=111), one-quarter (25%) reported treating five or fewer patients, almost two-thirds (64%) reported treating 30 or fewer patients, ³ 14% reported treating between 35–85 patients, whereas one in five respondents (22%) reported treating 100 or more patients, including eight who reported treating 200 or more.

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³The federal Drug Addiction Treatment Act of 2000 (DATA 2000) waiver obtained by most practitioners allows them to treat up to 30 patients with buprenorphine. Practitioners must complete further training and meet additional criteria to be eligible for a waiver to treat a greater number of patients. More information available at: https://www.samhsa.gov/medication-assisted-treatment/become-buprenorphine-waivered-practitioner

Table 11. Distribution of patients with opioid use disorder (OUD) treated at any one time by rural prescribing practitioners who reported currently treating patients with opioid use disorder (OUD) with any U.S. Food and Drug Administration-approved medication for OUD (MOUD).

	Patients treated with MOUD			
	Mean	Median	Min	Max
Practitioners currently treating patients with MOUD (n=111)	49.7	20	1	250

Note: "n" refers to the sample size of practitioners responding to the question.

Concern About Substances

Rural Practitioners

Practitioners were asked about their level of concern (scale 0–10; 0=not at all concerned; 10=extremely concerned) regarding the use of different substances and substance combinations among their patients or in their practice (Table 12). Throughout this section, we use independent sample t-tests with a conservative cutoff of p<0.01 (to account for multiple comparisons) to determine statistical significance.

As shown in Table 12, practitioners were most concerned about the combination of opioids with benzodiazepines (mean score=7.8), the combination of opioids with alcohol (mean score=7.7), fentanyl (mean score=7.6), and tobacco/e-cigarettes (mean score=7.4). They were least concerned about misuse of over-the-counter or other (non-opioid) prescription medications (mean score=4.2). Sample sizes in Table 12 differ among substances because not all practitioners provided a level of concern for every substance.

Table 12. Rural practitioners' mean level of concern (scale 0–10) regarding use of various substances among their patients or in their practice.

Substance	N	Mean	ean Substance		Mean
Opioids + benzodiazepines	172	7.8	Benzodiazepines	173	6.7
Opioids + alcohol	171	7.7	Methamphetamine	169	6.5
Fentanyl	171	7.6	Prescription stimulants	170	5.7
Tobacco/e-cigarettes	173	7.4	Cocaine	170	5.6
Alcohol	172	7.3	Marijuana	172	5.3
Heroin	170	7.2	Other street drugs	169	4.7
Opioids + stimulants	170	7.2	Over-the-counter or other	169	4.2
Prescription opioids	172	7.0	prescription medications		

Figure 4 shows the mean level of concern regarding the use of different substances among practitioners currently treating (n=119–120) and not currently treating (n=36–37) patients with MOUD. Prescribing practitioners currently treating patients with MOUD reported greater concern about fentanyl use among their patients (mean score=8.2) compared to prescribing practitioners not currently treating patients with MOUD (mean score=5.6; p<0.0005). Similarly, those currently treating patients with MOUD reported greater concern about heroin use among their patients (currently treating mean=7.6; not currently treating mean=5.8; p=0.001) and the combination use of opioids and stimulants (currently treating mean=7.4; not currently treating mean=6.0; p=0.009).

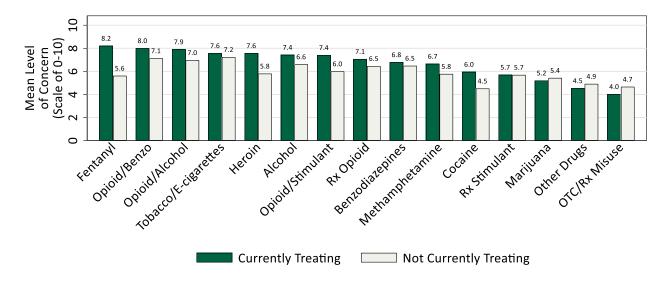


Figure 4. Mean level of concern regarding their patients' use of substances among rural prescribing practitioners currently treating (sample size range: n=119–120) and not currently treating (sample size range: n=36–37) patients with U.S. Food & Drug Administration-approved medications for OUD (MOUD). OTC: over-the-counter; Rx: prescription.

Rural Community Stakeholders

Table 13 shows community stakeholders' reported level of concern (scale 0–10) about use of substances and substance combinations in the communities in which they work. Like rural practitioners, primary concerns of rural community stakeholders included fentanyl (mean score=7.4) and the combination of opioids with alcohol (mean score=7.1). Heroin (mean score=7.2) and prescription opioids (mean score=7.1) were also top concerns, whereas stakeholders were least concerned about misuse of over-the-counter or other (non-opioid) prescription medications (mean score=4.7). Sample sizes differ among substances because not all stakeholders provided a level of concern for every substance.

Table 13. Rural community stakeholders' mean level of concern (scale 0–10) about use of substances in the communities in which they work.

Substance	N	Mean	Substance	N	Mean
Fentanyl	137	7.4	Cocaine	134	5.7
Heroin	137	7.2	Prescription stimulants	138	5.6
Prescription opioids	138	7.1	Tobacco/e-cigarettes	139	5.5
Opioids + alcohol	137	7.1	Marijuana	140	5.3
Opioids + stimulants	137	6.8	Other street drugs	137	5.2
Alcohol	141	6.6	Benzodiazepines	137	5.1
Methamphetamine	133	6.5	Over-the-counter or other	138	4.7
Opioids + benzodiazepines	137	6.4	prescription medications		

Figure 5, below, shows the mean level of concern among community stakeholders in first responder (n=55–58), school (n=40–43) and "other" (n=37–39) work settings regarding the use of different substances in the communities in which they work. The "other" work settings include recovery centers/recovery community organizations, community health organizations, and mental or behavioral health organizations, among others (see Table 6).

"Other" community stakeholders reported the highest level of concern for most substances, with greater reported concern compared to first responders (all p-values<0.01) for all substances except marijuana, heroin, prescription opioids, and over-the-counter or other prescription medications. Likewise, "other" community stakeholders reported greater concern compared to those working in school settings for all substances except tobacco and marijuana. For marijuana, those in school settings reported greater concern than those in "other" settings (p=0.005). Those in first responder settings, in turn, reported greater concern than those in school settings (all p-values<0.01) for most substances except alcohol, prescription stimulants, cocaine, over-the-counter or other prescription medications, marijuana and tobacco. For marijuana and tobacco/e-cigarettes those in school settings reported greater concern than first responders (all p-values<0.0005).

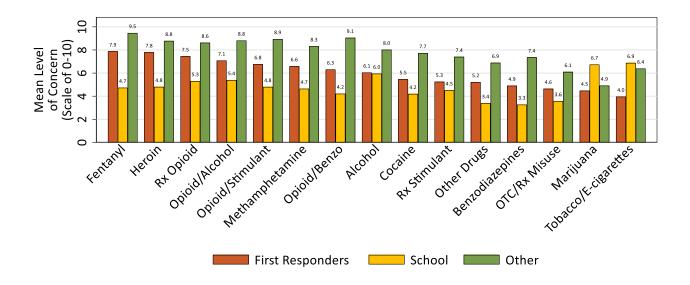


Figure 5. Mean level of concern about substance use in the communities in which they work among rural community stakeholders working in first responder (n=55–58), school (n=40–43), and other (n=37–39) settings.

OTC: over-the-counter; Rx: prescription.

Figure 6 shows the mean level of concern among practitioners (n=169-173) and community stakeholders (n=133-141) regarding substance use among the patients and communities with whom they work. Using independent samples t-tests with a conservative cutoff p-value of p<0.01 to account for multiple comparisons, practitioners had a 1.9-point greater average concern level about tobacco/e-cigarettes than community stakeholders (p<0.0005). Similarly, compared to community stakeholders, practitioners had a 1.6-point greater average concern about benzodiazepines (p<0.0005), a 1.4-point greater concern level for the combination of opioids and benzodiazepines (p<0.0005), and a 0.7-point greater concern level regarding the use of alcohol (p=0.008).

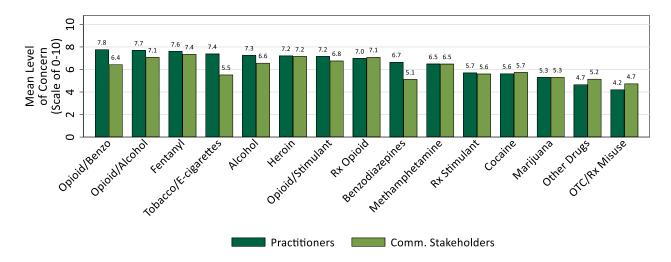


Figure 6. Mean level of concern among rural practitioners (sample size range: n=169–173) and rural community stakeholders (sample size range: n=133–141) about substance use among the patients and communities with whom they work.

OTC: over-the-counter. Rx: prescription.

Rural Practitioner Comfort Treating SUD

Practitioners were asked to report their comfort level treating patients with OUD and treating SUD in special populations. Throughout this section we use independent samples t-tests with a cutoff of p<0.05 to determine statistical significance. Figure 7 shows the distribution of practitioners' level of comfort treating patients with OUD (scale 0–10). Rural practitioner respondents (n=170) reported an average comfort level of 7.5, and the distribution of comfort levels skewed towards higher comfort. Notably, about one-quarter of practitioners (26%) rated their comfort as 10 out of 10, with 69% reporting their comfort level as 7 or higher.

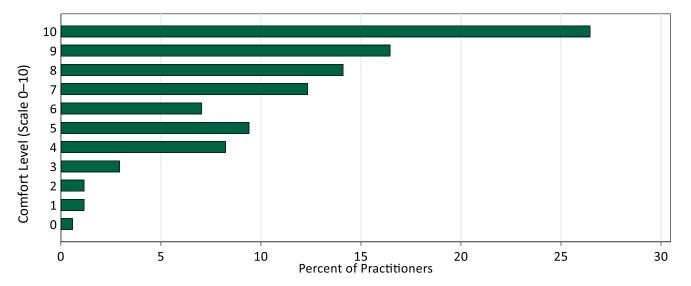


Figure 7. Distribution of rural practitioner responses to the question, "How comfortable are you addressing/treating opioid use disorder in your patients?" (Scale 0–10).

Figure 8 shows the distribution of prescribing practitioner comfort levels treating OUD based on whether the practitioner is currently treating patients with MOUD. Rural prescribing practitioners currently treating patients with MOUD (n=119) reported greater comfort treating patients with OUD (mean score=8.2) compared to prescribing practitioners not currently treating patients with OUD (n=37; mean score=5.8; p<0.0005).

In these plots, and subsequent box and whisker plots in the report, middle lines of the colored boxes represent median values, and left and right lines of the boxes represent 25th and 75th percentile values, respectively. The leftmost and rightmost lines represent the lower and upper adjacent values of the distribution, respectively, and dots outside the lines represent outlier values.⁴

⁴For further description of data distribution as described in boxplots, please consult: https://www.open.edu/openlearn/ocw/mod/oucontent/view.php?printable=1&id=YYYY



Figure 8. Box and whisker plot showing comfort level in treating opioid use disorder among rural prescribing practitioners currently treating (n=119) and not currently treating (n=37) patients with U.S. Food & Drug Administration-approved medications for OUD (MOUD). Middle lines of the colored boxes represent median values, left and right lines represent 25th and 75th percentile values, respectively. The leftmost and rightmost lines represent the lower and upper adjacent values of the distribution, respectively, and dots outside the lines represent outlier values.

Figure 9 shows practitioner respondents' (n=164–168) mean comfort levels treating SUD among special populations. Rural practitioners reported the highest comfort level in treating older adults (mean score=6.5), and the lowest comfort level in treating adolescents (mean score=3.5).

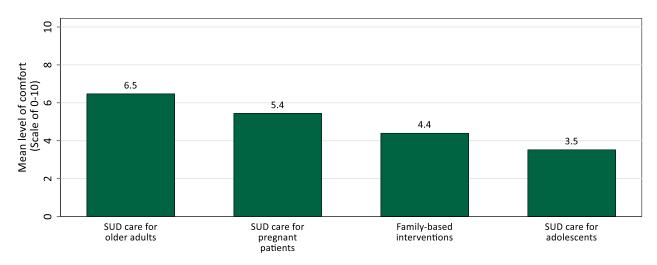


Figure 9. Comfort level in providing substance use disorder services to special populations among rural practitioner respondents (n= 164–168).

Figure 10 shows rural prescribing practitioners' comfort level providing SUD services to special populations among practitioners currently treating (n=115–117) and not currently treating (n=36–37) patients with MOUD. We used independent samples t-tests to compare the difference in mean comfort levels between the two practitioner groups.

In treating older adults, practitioners currently treating patients with MOUD had almost a three-point greater mean comfort level than practitioners not currently treating patients with MOUD (p<0.0005; Figure 10). Similarly, practitioners currently treating patients with MOUD had almost a three-point greater mean comfort level providing SUD care to pregnant patients than practitioners not currently treating patients with MOUD (p<0.0005; Figure 10).

There was no significant difference in mean comfort level between currently treating and not currently treating practitioners in providing family-based SUD interventions and support for families of individuals with SUDs or in providing SUD care or counseling for adolescents or minors, with similar low comfort level for both populations.

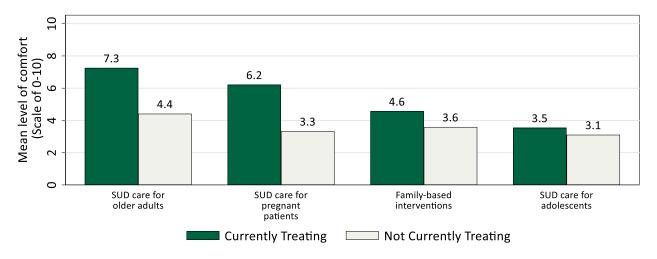


Figure 10. Comfort level providing substance use disorder (SUD) services to special populations among rural prescribing practitioners currently treating (n=115–117) and not currently treating (n=36–37) patients with U.S. Food & Drug Administration-approved medications for opioid use disorder (MOUD).

Training and Supports

Prescribing practitioners were asked, "To what degree do you feel you have the training, experience, and supports you need to induct patients on opioid treatment medication? (Scale 0–10)." Of those who responded to the question (n=155), the average self-rated training, experience, and support level was 6.4, with 58% of practitioners reporting scores of 7 or higher. Table 14 shows prescribing practitioner training, experience, and support to induct patients on MOUD separately for those currently and not currently treating patients with MOUD. Figure 11 shows the distribution of training, experience, and support levels among all prescribing practitioners (n=155). Throughout this section we use independent samples t-tests with a cutoff of p<0.05 to determine statistical significance.

Table 14. Rural prescribing practitioner perceptions of having adequate training, experience, and support to induct patients on medications for opioid use disorder status (scale 0–10).

	N	Mean
All Prescribing Practitioners	155	6.4
Currently treating patients with MOUD	118	7
Not currently treating patients with MOUD	37	4.5

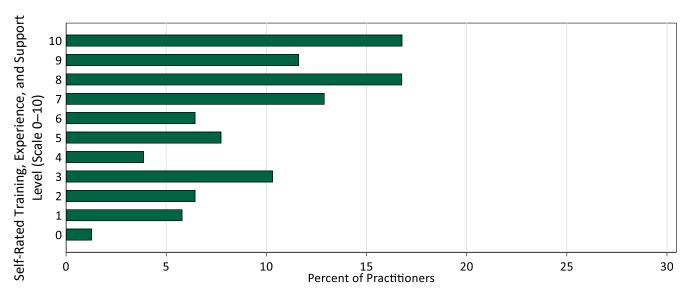


Figure 11. Perceptions of having adequate training, experience, and supports to induct patients on medications for opioid use disorder (MOUD), among rural prescribing practitioners (n=155).

Figure 12 shows the distribution of self-rated training, experience, and support levels among prescribing practitioners currently treating (n=118) and not currently treating (n=37) patients with MOUD. Practitioners currently treating patients with MOUD reported a two and one half-point greater training, experience, and support (mean=7.0) than practitioners not currently treating patients with MOUD (mean=4.5; p<0.0005).

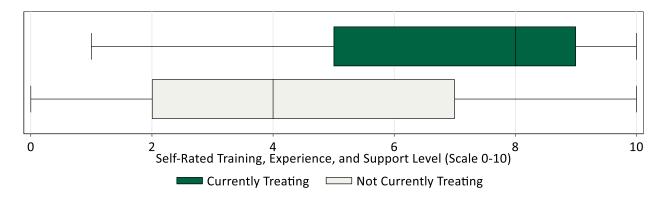


Figure 12. Box and whisker plot showing the distribution of self-rated training, experience, and support to induct patients on medications for opioid use disorder (MOUD), among rural prescribing practitioners currently treating (n=118) and not currently treating (n=37) patients with MOUD.

Middle lines of the colored boxes represent median values, left and right lines represent 25th and 75th percentile values, respectively. The leftmost and rightmost lines represent the lower and upper adjacent values of the distribution, respectively.

Treatment Barriers

Rural Practitioners

All practitioners were asked about barriers to their practices treating patients with OUD whereas prescribing practitioners currently treating patients with MOUD were also asked about barriers to their practices retaining patients in OUD treatment (i.e., practitioner barriers). Additionally, all practitioners were asked about patient-related barriers to OUD treatment. Throughout this section, we use chi-square tests of independence to examine the relationship between practitioner characteristics and reported barriers to treating patients with OUD. For all statistical tests in this section, we use a conservative cutoff of p<0.01 to account for multiple comparisons. Fisher's exact tests were used whenever expected values were less than or equal to five.

Figure 13 shows practitioner-identified top barriers to their practices treating patients with OUD and retaining patients in OUD treatment (i.e., practitioner barriers). Nearly half of Maine rural practitioners who responded to the question (n=168) identified time or staffing constraints (46%) and medication diversion concerns (45%) as top barriers to treating patients. Prescribing practitioners currently treating patients with MOUD who responded to the question (n=115) similarly identified medication diversion (49%) and constraints on time or staffing (42%) as top barriers to retaining patients.

Notably, approximately one in five practitioners identified "other" barriers as among their top-three barriers to treating (18%) and retaining patients (17%) with OUD. Examples of these other barriers included a need for behavioral/counseling services or continued care, comorbid psychiatric condition and SUD, lack of resources on the part of patients (e.g., transportation, phone, housing), lack of resources on the part of practitioners (e.g., support, availability of programs, other practitioners with whom to collaborate) and work setting not conducive to treatment (e.g., emergency department).

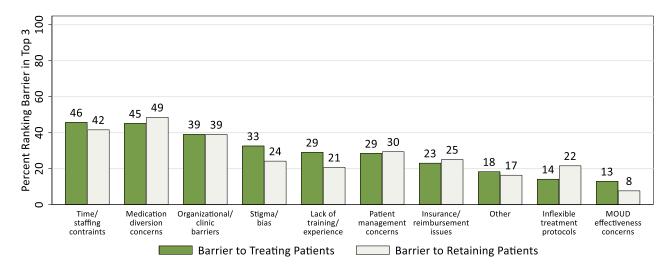


Figure 13. Rural practitioner-identified top barriers to their practices treating patients with opioid use disorder (OUD) (n=168) and retaining patients (n=115) in OUD treatment. Barriers to retaining patients were only asked of practitioners that reported currently treating patients with medications for opioid use disorder (MOUD).

Figure 14 shows the top barriers to treating patients with OUD identified by prescribing practitioners currently treating (n=117) and not currently treating (n=37) patients with MOUD. Although a greater proportion of currently treating practitioners selected stigma/bias as a top barrier, and a greater proportion of not currently treating practitioners selected lack of training/experience, these differences were not statistically significant (ps≥0.01).

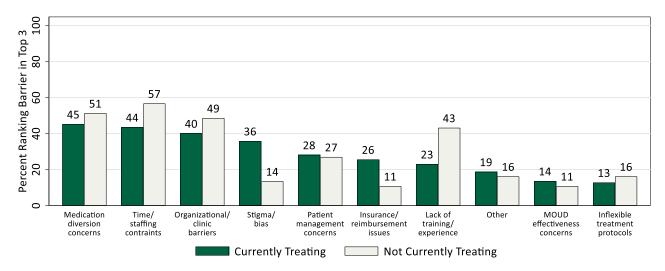


Figure 14. Top barriers identified by rural practitioners currently treating (n=117) and not currently treating (n=37) patients with medications for opioid use disorder (MOUD).

Figure 15 shows the proportion of practitioners that identified various top barriers to patients receiving (n=167) and remaining in (n=167) OUD treatment (i.e., patient barriers). Lack of time, transportation, housing, or other supports was identified by most practitioners as a top barrier to patients receiving (84%) and remaining in (86%) OUD treatment. Among those identifying a lack of time, transportation, housing, or other supports as their primary concern for patients receiving treatment (n=66), 60 (91%) noted transportation or other access issues, 51 (77%) identified lack of social supports, 46 (70%) noted lack of stable housing, and 36 (55%) noted lack of time due to employment or childcare needs. Other frequently endorsed top barriers included stigma (receiving treatment: 50%, remaining in treatment: 49%), insurance issues (receiving treatment: 46%, remaining in treatment: 45%), concerns about treatment and co-occurring health issues (receiving treatment: 32%, remaining in treatment: 36%), and family or parenting demands (receiving treatment: 22%, remaining in treatment: 34%).

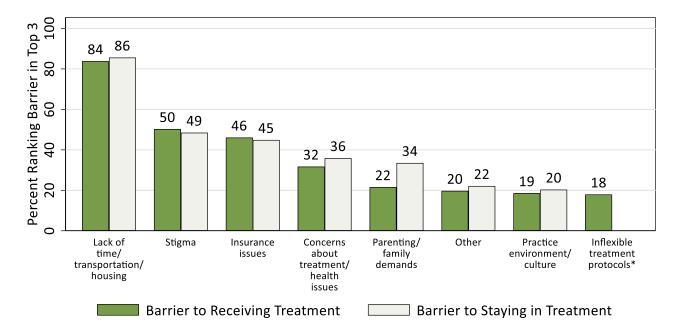


Figure 15. Patient-related barriers to patients receiving and remaining in opioid use disorder (OUD) treatment identified by rural practitioners (n=167).

^{*}Option not offered in survey responses as a barrier to staying in treatment.

Figure 16 shows patient-related barriers to receiving OUD treatment as identified by practitioners currently treating (n=117) and not currently treating (n=36) patients with MOUD. There were no statistically significant associations between practitioner treating status and reported patient-related barriers to receiving OUD treatment.

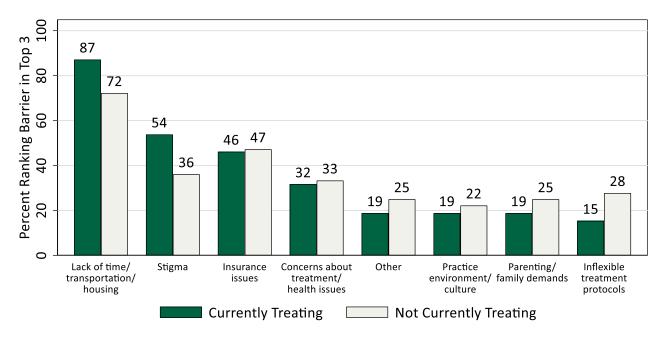


Figure 16. Patient-related barriers to receiving opioid use disorder (OUD) treatment identified by rural practitioners currently treating (n=117) and not currently treating (n=36) patients with medications for opioid use disorder (MOUD).

Rural Community Stakeholders

Community stakeholders were asked to report the greatest challenges to treating OUD in the communities in which they work. In this section, we use chi-square tests of independence to examine the relationship between stakeholder characteristics and reported challenges to treating OUD with a conservative cutoff of p<0.01 to account for multiple comparisons.

Table 15 shows the proportion of community stakeholders (by work setting) who responded to the question (n=116) that identified different challenges among their top-three challenges to the treatment of OUD in their communities. Over half (54%) of community stakeholders identified patient access barriers (e.g., transportation, time, housing, and childcare) as a top challenge. This is consistent with the opinions of practitioner respondents who similarly were most likely to identify time, transportation, housing, and other supports as a top-three barrier to patients receiving treatment. Other important challenges reported by community stakeholders included not enough care coordination for individuals with complex needs (39%), not enough capacity to treat patients in their communities (35%), and difficulties getting individuals to adhere to the requirements of their treatment (35%).

There were some key differences among the three stakeholder groups regarding these challenges. For example, a greater proportion of "other" community stakeholders (74%) identified barriers to accessing treatment for patients as a challenge compared to first responder community stakeholders (41%; p=0.002). Likewise, a greater proportion of "other" community stakeholders (43%) identified stigma of OUD as a challenge compared to first responder community stakeholders (10%; p<0.0005). Additionally, a greater proportion of first responders (24%) identified fatigue/burnout as a challenge compared to school (0%; p=0.003) and "other" (3%; p=0.009) community stakeholders. Finally, a lower proportion of "other" community stakeholders (11%) identified difficulty getting individuals to adhere to the requirements of their treatment as a challenge compared to first responder (39%; p=0.005) and school (53%; p<0.0005) community stakeholders. There were no other statistically significant differences in challenges identified by stakeholder groups.

Table 15. Rural community stakeholder (n=116) identified challenges to treatment for patients with opioid use disorder in their communities.

	First responder (n=51)		School (n=30)		Other (n=35)		Total (n=116)	
Challenge to treating OUD	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
Barriers to accessing treatment for patients (e.g., transportation, time, housing, childcare)	21	41.2	16	53.3	26	74.3	63	54.3
Not enough care coordination for individuals with complex needs (linkages to social supports / community resources)	14	27.5	15	50	16	45.7	45	38.8
Not enough capacity to treat patients	24	47.1	7	23.3	10	28.6	41	35.3
Difficulty getting individuals to adhere to the requirements of their treatment	20	39.2	16	53.3	4	11.4	40	34.5
Stigma of opioid use disorder	5	9.8	8	26.7	15	42.9	28	24.1
Difficulty retaining individuals in treatment once they are enrolled (low retention)	14	27.5	7	23.3	6	17.1	27	23.3

Insurance barriers (e.g., lack of coverage, prior authorization requirements, fail first requirements)	10	19.6	6	20	7	20	23	19.8
Providers need more supports for treating OUD (training, resources, assistance with waiver process)	8	15.7	6	20	6	17.1	20	17.2
Provider fatigue/burnout	12	23.5	0	0	1	2.9	13	11.2
Concerns about diversion of treatment medications (methadone, buprenorphine)	4	7.8	5	16.7	2	5.7	11	9.5
Other challenges	5	9.8	0	0	5	14.3	10	8.6
Misconceptions of medications used to treat OUD (e.g., buprenorphine, methadone)	1	2.0	3	10	3	8.6	7	6.0
Not enough administrative support for providers (billing, reimbursement, scheduling)	4	7.8	1	3.3	1	2.9	6	5.2
Rigid requirements for treatment attendance	3	5.9	0	0	2	5.7	5	4.3
Administrative / organizational buy-in or support	3	5.9	0	0	1	2.9	4	3.5
Lack of adequate language support or interpretive services	3	5.9	0	0	0	0	3	2.6
Pharmacy restrictions	0	0	0	0	0	0	0	0

Beliefs

Rural practitioner (n=163-169) and community stakeholder (n=126-129) respondents reported the degree to which they agreed with different statements about SUD and SUD treatment. Sample sizes vary because not all respondents answered each question. For all results presented in this section, we combined responses of "somewhat agree" and "strongly agree" (also referred to as "agree/strongly agree" in the text and figure legends below) and "somewhat disagree" and "strongly disagree" (also referred to as "disagree/strongly disagree" in the text and figure legends below). Throughout this section we use chi-square tests of independence with a statistical significance threshold of p<0.05 to compare the proportion of respondents indicating that they agree/strongly agree across groups (e.g., practitioners vs. stakeholders, practitioners currently treating with MOUD vs. practitioners not currently treating with MOUD, and first responder vs. "other" vs. school community stakeholder groups). For these comparisons, those who responded that they somewhat disagree/strongly disagree were combined with those who selected "neither agree nor disagree." The proportion of practitioners (52%) that agreed or strongly agreed with the statement, "People in the community where I work have adequate access to an effective form of substance use disorder treatment when they need it," was higher than that of community stakeholders (21%; p<0.0005; Figure 17).



Figure 17. Distribution of agreement among rural practitioners (n=168) and community stakeholders (n=126) with the statement, "People in the community where I work have adequate access to an effective form of substance use treatment when they need it."

There was no significant difference in the proportion of prescribing practitioners that agreed or strongly agreed with the statement, "People in the community where I work have adequate access to an effective form of substance use disorder treatment when they need it," based on practitioner MOUD treatment status (Figure 18).

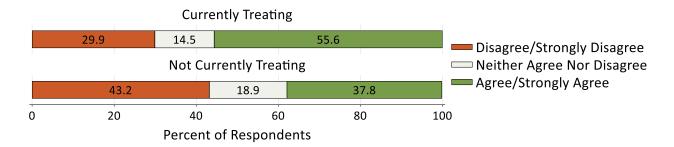


Figure 18. Distribution of agreement with the statement, "People in the community where I work have adequate access to an effective form of substance use disorder treatment when they need it," among rural practitioners currently treating (n=117) and not currently treating (n=37) patients with MOUD.

Figure 19 shows the distribution of agreement among community stakeholders working in first responder (n=53), school (n=36), and "other" (n=36) work settings with the statement, "People in the community where I work have adequate access to an effective form of substance use disorder treatment when they need it." The proportion of community stakeholders working in "other" settings (39%) that agreed or strongly agreed with this statement was higher than that of community stakeholders working in first responder settings (9%; p=0.001).

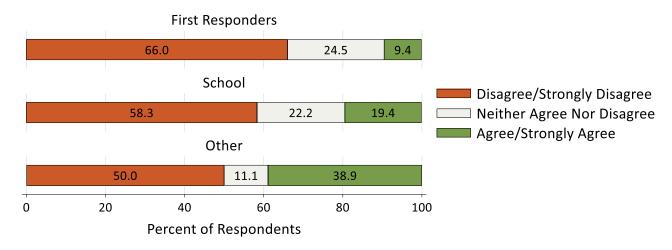


Figure 19. Distribution of agreement among rural community stakeholders working in first responder (n=53), school (n=36), and other (n=36) settings with the statement, "People in the community where I work have adequate access to an effective form of substance use disorder treatment when they need it."

Figure 20, Figure 21, and Figure 22 show the distribution of responses among practitioners (n=169) and community stakeholders (n=127) with the statement, "If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that I would know where to refer them for treatment."

The proportion of practitioners (86%) that agreed or strongly agreed with this statement was higher than that of community stakeholders (58%; p<0.0005; Figure 20).

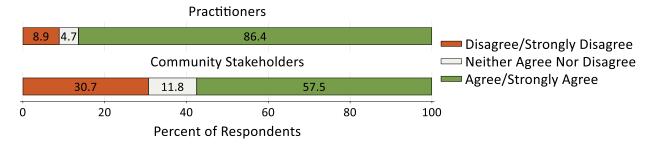


Figure 20. Distribution of agreement among rural practitioners (n=169) and community stakeholders (n=127) with the statement, "If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that I would know where to refer them for treatment."

Figure 21 shows the comparison between practitioners currently treating (n=117) and not currently treating (n=37) patients with MOUD. The proportion of currently treating practitioners (93%) that agreed or strongly agreed with the statement, "If a person came to me and confided that they were suffering from opioid addiction, I feel confident that I would know where to refer them for treatment," was higher than the proportion not currently treating patients with MOUD (62%; p<0.0005).

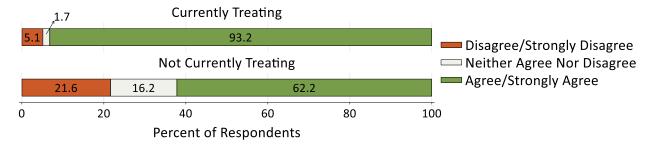


Figure 21. Distribution of agreement with the statement, "**If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that I would know where to refer them for treatment," among rural practitioners currently treating (n=117) and not currently treating (n=37) patients with medications for opioid use disorder (MOUD).**

Figure 22 shows the distribution of agreement among community stakeholders working in first responder (n=53), school (n=37), and "other" (n=36) settings with the statement, "If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that I would know where to refer them for treatment." The proportion of community stakeholders working in "other" settings that agreed with this statement (86%) was higher than that of those working in school (49%; p=0.001) and first responder settings (43%; p<0.0005).

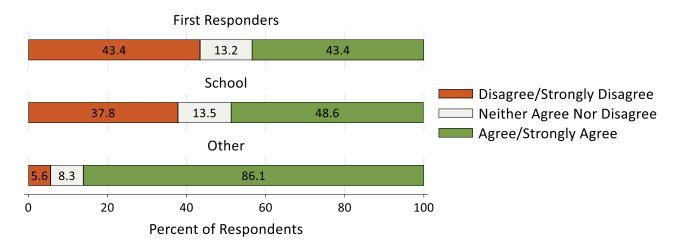


Figure 22. Distribution of agreement among rural community stakeholders with the statement, "If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that I would know where to refer them for treatment," by work setting (first responder: n=53; school: n=37; other: n=36).

Figure 23, Figure 24, and Figure 25 show the distribution of responses among practitioners (n=169) and community stakeholders (n=128) with the statement, "If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that they would have access to services from the place where I referred them for treatment." The proportion of practitioners (73%) that agreed or strongly agreed with this statement was higher than that of community stakeholders (38%; p<0.0005; Figure 23).

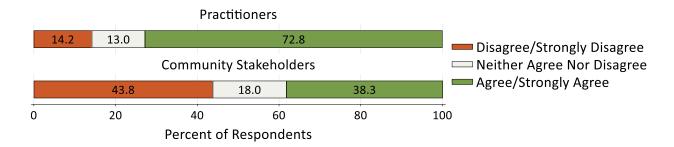


Figure 23. Distribution of agreement among rural practitioners (n=169) and community stakeholders (n=128) with the statement, "If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that they would have access to services from the place where I referred them for treatment."

Figure 24 shows the comparison between practitioners currently treating (n=117) and not currently treating (n=37) patients with MOUD. The proportion of currently treating practitioners (81%) that agreed or strongly agreed with the statement, "If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that they would have access to services from the place where I referred them for treatment," was higher than the proportion not currently treating patients with MOUD (46%; p<0.0005).

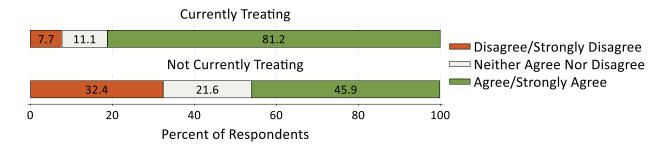


Figure 24. Distribution of agreement with the statement, "If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that they would have access to services from the place where I referred them for treatment," among rural practitioners currently treating (n=117) and not currently treating (n=37) patients with medications for opioid use disorder (MOUD).

Figure 25 shows the distribution of agreement among community stakeholders working in first responder (n=55), school (n=37), and "other" (n=35) settings with the statement, "If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that they would have access to services from the place where I referred them for treatment." The proportion of community stakeholders working in "other" settings (49%) that agreed or strongly agreed with this statement was higher than that of those working in school settings (24%; p=0.032).

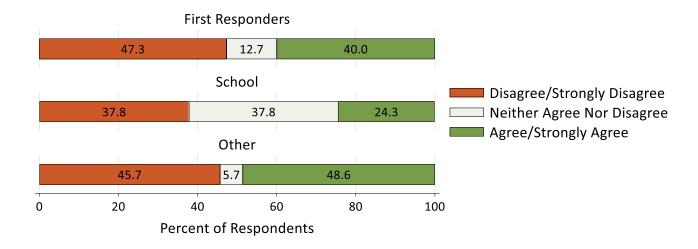


Figure 25. Distribution of agreement among rural community stakeholders with the statement, "If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that they would have access to services from the place where I referred them for treatment," by work setting (first responder: n=55; school: n=37; other: n=35).

Figure 26, Figure 27, and Figure 28 show the distribution of responses among practitioners (n=168) and community stakeholders (n=126) with the statement, "If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that they would receive high quality services from the place where I referred them for treatment." The proportion of practitioners (68%) that agreed or strongly agreed with this statement was higher than that of community stakeholders (37%; p<0.0005; Figure 26).

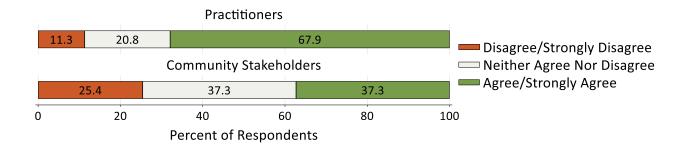


Figure 26. Distribution of agreement among rural practitioners (n=168) and community stakeholders (n=126) with the statement, "If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that they would receive high quality services from the place where I referred them for treatment."

Figure 27 shows the comparison between practitioners currently treating (n=116) and not currently treating (n=37) patients with MOUD. The proportion of currently treating practitioners (73%) that agreed or strongly agreed with the statement, "If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that they would receive high quality services from the place where I referred them for treatment," was higher than the proportion not currently treating patients with MOUD (49%; p=0.005).

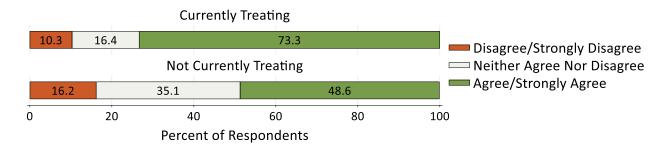


Figure 27. Distribution of agreement with the statement, "If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that they would receive high quality services from the place where I referred them for treatment," among rural practitioners currently treating (n=116) and not currently treating (n=37) patients with medications for opioid use disorder (MOUD).

Figure 28 shows the distribution of agreement among community stakeholders working in first responder (n=52), school (n=37), and "other" (n=36) settings with the statement, "If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that they would receive high quality services from the place where I referred them for treatment." The proportion of community stakeholders working in "other" settings (53%) that agreed or strongly agreed with this statement was higher than that of those working in a school setting (22%; p=0.006).

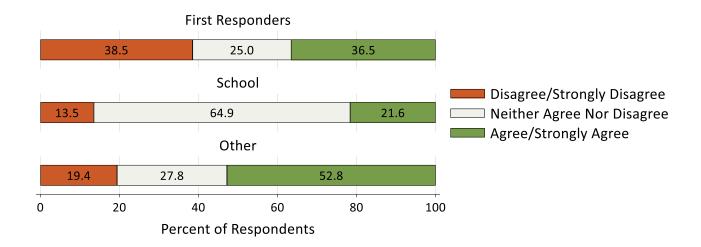


Figure 28. Distribution of agreement among rural community stakeholders with the statement, "If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that they would receive high quality services from the place where I referred them for treatment," by work setting (first responder: n=52; school: n=37; other: n=36).

Figure 29, Figure 30, and Figure 31 show the distribution of responses among practitioners (n=168) and community stakeholders (n=127) with the statement, "If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that they would receive timely access to services from the place where I referred them for treatment." The proportion of practitioners (55%) that agreed or strongly agreed with this statement was higher than that of community stakeholders (21%; p<0.0005; Figure 29).

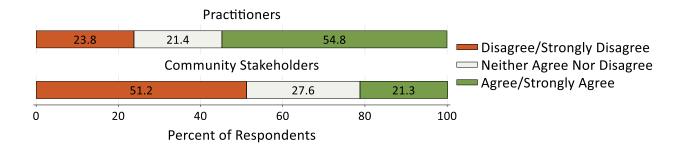


Figure 29. Distribution of agreement among rural practitioners (n=168) and community stakeholders (n=127) with the statement, "If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that they would receive timely access to services from the place where I referred them for treatment."

Figure 30 shows the comparison between practitioners currently treating (n=116) and not currently treating (n=37) patients with MOUD. The proportion of currently treating practitioners (61%) that agreed or strongly agreed with the statement, "If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that they would receive timely access to services from the place where I referred them for treatment," was higher than the proportion not currently treating patients with MOUD (35%; p=0.006).

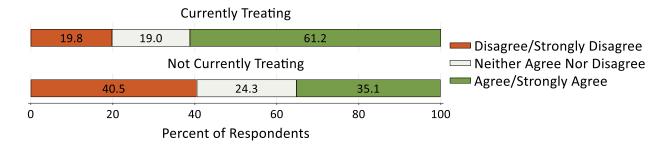


Figure 30. Distribution of agreement with the statement, "If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that they would receive timely access to services from the place where I referred them for treatment," among rural practitioners currently treating (n=116) and not currently treating (n=37) patients with medications for opioid use disorder (MOUD).

There was no significant difference between the proportion of community stakeholders working in first responder (n=53), school (n=37), and "other" (n=36) settings that agreed or strongly agreed with the statement, "If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that they would receive timely access to services from the place where I referred them for treatment" (Figure 31).

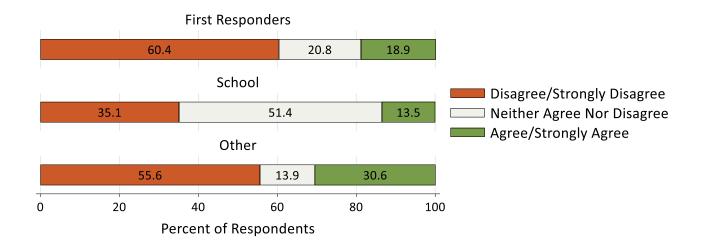


Figure 31. Distribution of agreement among rural community stakeholders with the statement, "If a person came to me and confided that they were suffering from opioid use disorder, I feel confident that they would receive timely access to services from the place where I referred them for treatment," by work setting (first responder: n=53; school: n=37; other: n=36).

Figure 32, Figure 33, and Figure 34 show the distribution of responses among practitioners (n=169) and community stakeholders (n=129) with the statement, "Medications (like methadone, buprenorphine, and naltrexone) are the most effective way to treat people with opioid use disorder." The proportion of practitioners (82%) that agreed or strongly agreed with this statement was higher than that of community stakeholders (37%; p<0.0005; Figure 32).

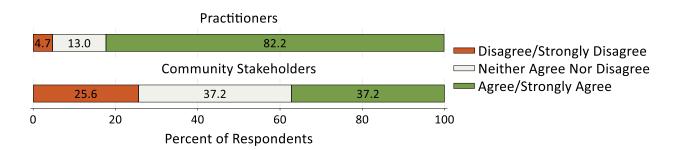


Figure 32. Distribution of agreement among rural practitioners (n=169) and community stakeholders (n=129) with the statement, "Medications (like methadone, buprenorphine, and naltrexone) are the most effective way to treat people with opioid use disorder."

Figure 33 shows the comparison between practitioners currently treating (n=117) and not currently treating (n=37) patients with MOUD. The proportion of currently treating practitioners (91%) that agreed or strongly agreed with the statement, "Medications (like methadone, buprenorphine, and naltrexone) are the most effective way to treat people with opioid use disorder," was higher than the proportion not currently treating patients with MOUD (68%; p=0.001).

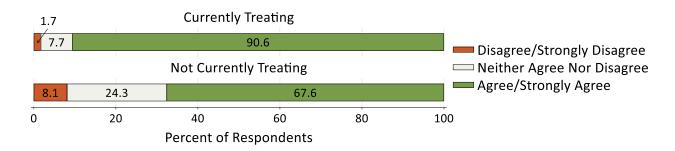


Figure 33. Distribution of agreement with the statement, "Medications (like methadone, buprenorphine, and naltrexone) are the most effective way to treat people with opioid use disorder," among rural practitioners currently treating (n=117) and not currently treating (n=37) patients with medications for opioid use disorder (MOUD).

Figure 34 shows the distribution of agreement among community stakeholders working in first responder (n=54), school (n=37), and "other" (n=37) settings with the statement, "Medications (like methadone, buprenorphine, and naltrexone) are the most effective way to treat people with opioid use disorder." The proportion of community stakeholders working in "other" settings (68%) that agreed or strongly agreed with this statement was higher than that of those working in school settings (35%; p=0.005) as well as those working in first responder settings (17%; p<0.0005). Additionally, the proportion of community stakeholders working in school settings (35%) that agreed or strongly agreed with this statement was higher than that of those working in first responder settings (17%; p=0.043).

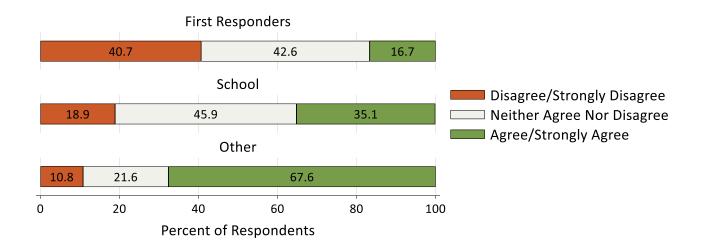


Figure 34. Distribution of rural community stakeholder agreement with the statement, "Medications (like methadone, buprenorphine, and naltrexone) are the most effective way to treat people with opioid use disorder," by work setting (first responder: n=54; school: n=37; other: n=37).

Figure 35, Figure 36, and Figure 37 show the distribution of responses among practitioners (n=166) and community stakeholders (n=128) with the statement, "Treatment involving detoxification/ abstinence should be tried before medications (like methadone and buprenorphine)." The proportion of community stakeholders (38%) that agreed or strongly agreed with this statement was higher than that of practitioners (10%; p<0.0005; Figure 35).



Figure 35. Distribution of agreement among rural practitioners (n=166) and community stakeholders (n=128) with the statement, "Treatment involving detoxification/abstinence should be tried before medications (like methadone and buprenorphine)."

There was no significant difference in the proportion of currently treating (n=115) and not currently treating (n=36) practitioners that agreed or strongly agreed with the statement, "Treatment involving detoxification/abstinence should be tried before medications (like methadone and buprenorphine)" (Figure 36).

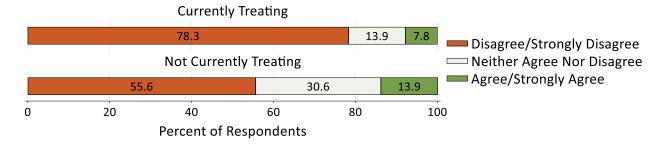


Figure 36. Distribution of agreement with the statement, "Treatment involving detoxification/abstinence should be tried before medications (like methadone and buprenorphine)," among rural practitioners currently treating (n=115) and not currently treating (n=36) patients with medications for opioid use disorder (MOUD).

Figure 37 shows the distribution of agreement among community stakeholders working in first responder (n=54), school (n=37), and "other" (n=36) settings with the statement, "Treatment involving detoxification/abstinence should be tried before medications (like methadone and buprenorphine)." The proportion of community stakeholders working in school settings (51%) and first responder settings (44%) that agreed or strongly agreed with this statement was higher than that of those working in "other" settings (14%; first responder vs. other, p=0.002; school vs other, p=0.001). There was no significant difference in agreement with the statement between those in first responder and school settings.

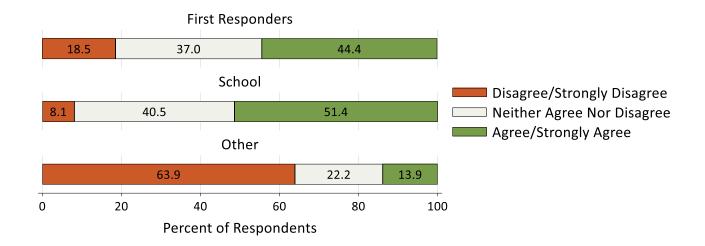


Figure 37. Distribution of agreement among rural community stakeholders with the statement, "**Treatment involving detoxification/abstinence should be tried before medications (like methadone and buprenorphine),"** by work setting (first responder: n=54; school: n=37; other: n=36).

Figure 38, Figure 39, and Figure 40 show the distribution of responses among practitioners (n=163) and community stakeholders (n=127) with the statement, "Medications given to treat people with opioid use disorder (specifically methadone and buprenorphine) replace addiction to one kind of drug with another." The proportion of community stakeholders (41%) that agreed or strongly agreed with this statement was higher than that of practitioners (17%; p<0.0005; Figure 38).

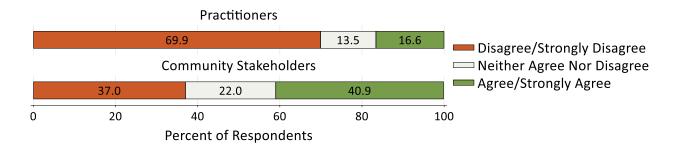


Figure 38. Distribution of agreement among rural practitioners (n=163) and community stakeholders (n=127) with the statement, "Medications given to treat people with opioid use disorder (specifically methadone and buprenorphine) replace addiction to one kind of drug with another."

Figure 39 shows the comparison between practitioners currently treating (n=112) and not currently treating (n=36) patients with MOUD. The proportion of not currently treating practitioners (31%) that agreed or strongly agreed with the statement, "Medications given to treat people with opioid use disorder (specifically methadone and buprenorphine) replace addiction to one kind of drug with another," was higher than the proportion of those currently treating patients with MOUD (10%; p=0.002).

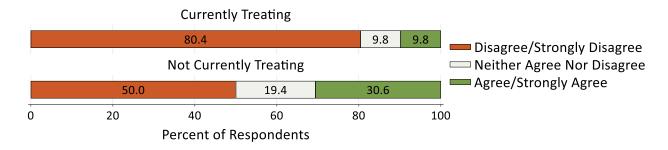


Figure 39. Distribution of agreement with the statement, "Medications given to treat people with opioid use disorder (specifically methadone and buprenorphine) replace addiction to one kind of drug with another," among rural practitioners currently treating (n=112) and not currently treating (n=36) patients with medications for opioid use disorder (MOUD).

Figure 40 shows the distribution of agreement among community stakeholders working in first responder (n=54), school (n=36), and "other" (n=36) settings with the statement, "Medications given to treat people with opioid use disorder (specifically methadone and buprenorphine) replace addiction to one kind of drug with another." The proportion of community stakeholders working in first responder (57%) and school (47%) settings that agreed or strongly agreed with this statement was higher than that of those working in "other" settings (11%; first responder vs. other, p<0.0005; school vs other, p=0.001).

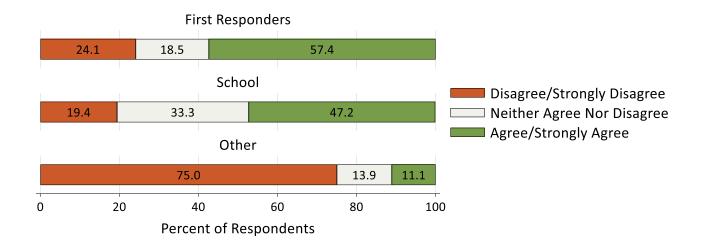


Figure 40. Distribution of agreement among rural community stakeholders with the statement, "Medications given to treat people with opioid use disorder (specifically methadone and buprenorphine) replace addiction to one kind of drug with another," by work setting (first responder: n=54; school: n=36; other: n=36).

Figure 41 shows the distribution of responses among prescribing practitioners currently treating (n=114) and not currently treating (n=37) patients with MOUD. A higher proportion of practitioners not currently treating patients with MOUD (32%) agreed or strongly agreed with the statement, "I would prefer to prescribe extended-release Vivitrol/naltrexone instead of extended-release buprenorphine," than practitioners currently treating patients with MOUD (8%; p<0.0005; Figure 41). Reasons for Vivitrol preference included reduced chance of medication diversion/misuse, patient preference, less abuse potential, and perceived addictiveness of buprenorphine.

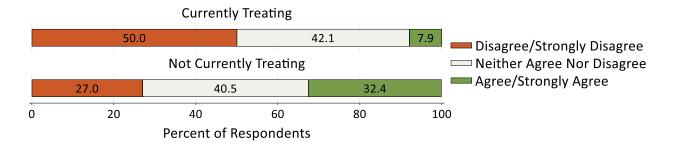


Figure 41. Distribution of agreement with the statement, "I would prefer to prescribe extended-release Vivitrol/naltrexone instead of extended-release buprenorphine," among rural practitioners currently treating (n=114) and not currently treating (n=37) patients with medications for opioid use disorder (MOUD).

COVID-19 Impact

Our survey included questions about the COVID-19 pandemic and its impact on health, substance use, and treatment access. In this section, we use chi-square tests of independence with a significance threshold of p<0.05 to compare the proportion of practitioner and stakeholder respondents indicating that substance use or treatment access increased (Tables 17–19). For these comparisons, those who responded that substance use or treatment access decreased were combined with those who responded that substance use or treatment access "stayed the same." Those who responded "I don't know" or "Other" were excluded.

Rural Maine practitioners and community stakeholders were asked about their concern about the health of people in their practice/community with regard to the COVID-19 pandemic (scale 0–10; 0=not at all concerned, 10=extremely concerned). Table 16 shows the distributions of these levels of concern among all practitioners (n=162) and community stakeholders (n=127) who responded to this question. The level of concern among all practitioners (mean score=7.2) and community stakeholders (mean score=6.3) was generally high, with practitioners indicating a 0.9-point greater concern level. There was no significant difference between rural practitioners treating (mean score=7.1) and not currently treating (mean score=7.2) patients with MOUD in their concern about the COVID-19 pandemic and the health of their patients. Non-prescribing practitioners reported the greatest level of concern (mean score=7.6) about COVID-19 and the health of their patients.

With regard to community stakeholders, those working in "other" settings reported more COVID-19 health-related concerns of those in their community (mean score=7.2) compared to those working in first responder settings (mean score=5.3; p=0.002). Similarly, those working in school settings reported higher concern (mean score=6.7) than those in working in first responder settings (mean score=5.3; p=0.022). There was no significant difference in mean concern level between those working in school versus "other" settings.

Table 16. Distribution of practitioner and community stakeholder responses to the question, "How concerned are you about the coronavirus pandemic (COVID-19) in relation to the health of your patients (those in your community)?"

	N	Mean
All practitioners	162	7.2
Prescribing practitioners	148	7.1
Currently treating patients with MOUD	112	7.1
Not Currently treating patients with MOUD	35	7.2
Non-prescribing practitioners	14	7.6
All community stakeholders	127	6.3
First-responder settings	53	5.3
School settings	36	6.7
Other settings	37	7.2

Table 17 shows practitioner (n=149) and community stakeholder (n=113) perceptions of substance use changes during the COVID-19 pandemic. The majority of practitioners (83%) and community stakeholders (82%) reported that substance use had increased since the start of the COVID-19 pandemic. Of note, none of the practitioners or community stakeholders reported that substance use decreased. Proportions were similar across practitioners and community stakeholders.

Table 17. Distribution of rural practitioner and community stakeholder responses to the question, "How do you think substance use has changed in (your patients/community) since you learned about the coronavirus pandemic (COVID-19)?"

	Practitioners		Communi	ty Stakeholders	Total	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
Substance use increased	124	83.2	93	82.3	217	82.8
Substance use stayed the same	25	16.8	20	17.7	45	17.2
Substance use decreased	0	0	0	0	0	0
Total*	149	100	113	100	262	100

^{*}Excludes responses of "I don't know" (practitioner frequency=13, community stakeholder freq.=9) and "Other" (practitioner frequency=3, community stakeholder freq.=5)

Table 18 shows all rural practitioner (n=142), including non-prescribing, and community stakeholder (n=105) perceptions of changes in opioid use during the COVID-19 pandemic. The majority of practitioners (83%) and community stakeholders (69%) reported that opioid use had increased during the COVID-19 pandemic, although the proportion of practitioners that reported opioid use increased was higher than that of community stakeholders (p=0.007).

Table 18. Distribution of rural practitioner and community stakeholder responses to the question, "How do you think opioid use has changed in your community since you learned about the coronavirus pandemic (COVID-19)?"

	Practitioners		Communit	y Stakeholders	Total	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
Opioid use increased	118	83.1	72	68.6	190	76.9
Opioid use stayed the same	23	16.2	32	30.5	55	22.3
Opioid use decreased	1	0.7	1	1.0	2	0.8
Total*	142	100	105	100	247	100

^{*}Excludes response of "I don't know" (practitioner frequency=21, community stakeholder freq.=19) and "Other" (practitioner frequency=1, community stakeholder freq.=3)

Table 19 shows practitioner (n=137) and community stakeholder (n=102) perceptions of changes in access to opioid treatment during the COVID-19 pandemic. Few practitioners (10%) and community stakeholders (9%) reported that access to opioid treatment increased since the start of the COVID-19 pandemic. Proportions were similar across practitioners and community stakeholders.

Table 19. Distribution of rural practitioner and community stakeholder responses to the question, "How do you think access to opioid treatment for your patients (community) has changed since you learned about the coronavirus pandemic (COVID-19)?"

	Practitioners		Community Stakeholders		Total	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
Access to opioid treatment increased	13	9.5	9	8.8	22	9.2
Access to opioid treatment stayed the same	66	48.2	34	33.3	100	41.8
Access to opioid treatment decreased	58	42.3	59	57.8	117	49.0
Total*	137	100	102	100	239	100

^{*}Excludes response of "I don't know" (practitioner frequency=20, community stakeholder freq.=21) and "Other" (practitioner frequency=8, community stakeholder freq.=4)

Figure 42 shows the proportion of rural practitioners (n=164) that reported taking various measures to ensure continued treatment for SUD during the COVID-19 pandemic. Most practitioners (87%) reported utilizing telehealth for individual appointments, while fewer engaged in other measures, including changing their prescription patterns (33%), using telehealth for group sessions (30%), and conducting appointments outside (16%).

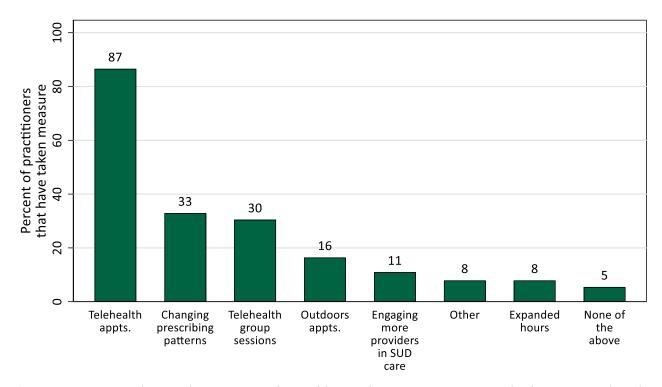


Figure 42. Measures that rural practitioners (n=164) have taken to ensure continued substance use disorder (SUD) treatment for patients during the COVID-19 pandemic.

Figure 43 shows the distribution of responses practitioners had to the question, "What has your experience been with changes in substance use disorder treatment services during the coronavirus pandemic (COVID-19)? What has been working or not working for you?" Practitioners generally said that getting paid or reimbursed for telehealth services (76%), patient attendance at visits (74%), and patients having enough phone data/minutes to attend telehealth appointments (71%) were working for them. In contrast, over half (57%) of practitioners reported that random pill counts were not working during COVID-19.

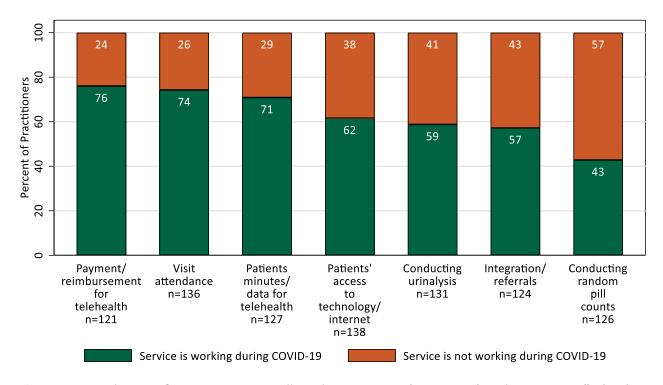


Figure 43. Distribution of responses among all rural practitioners (n=121-138) to the question, "What has your experience been with changes in substance use disorder treatment services during the coronavirus pandemic (COVID-19)? What has been working or not working for you?"

Practitioner UVM CORA Resource Requests

Our survey included questions about which UVM CORA resources would be most helpful to practitioners. Throughout this section we use chi-square tests of independence with a significance threshold of p<0.05 to assess differences between groups.

Practitioners were asked, "Which of the following resources available through the UVM Center on Rural Addiction would you like to learn more about for your own clinical practice?" For each item, practitioners were asked to choose between "high priority" and "low priority." Figure 44 shows the proportion of practitioners (n=169) that endorsed various UVM CORA trainings or resources as "high priority," and Table 20 provides in-depth descriptions of these resources. The resources most endorsed as "high priority" by practitioners were polysubstance support (79%), extended-release buprenorphine medication and training (71%), and support with managing and coordinating care for vulnerable populations (e.g., pregnant patients with SUDs, families, patients with co-occurring conditions; 70%; Figure 44).

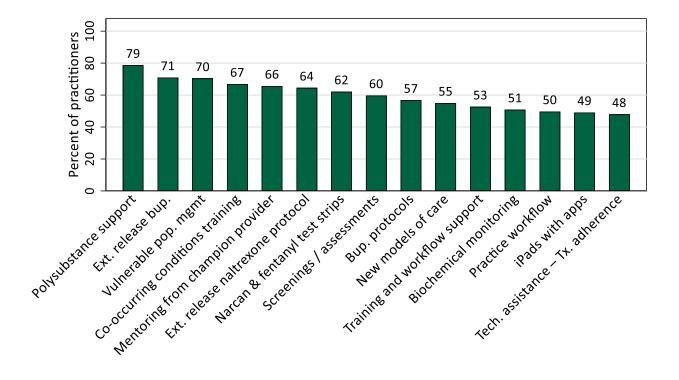


Figure 44. Percent of rural practitioners (n=169) indicating "high priority" interest in University of Vermont Center on Rural Addiction (UVM CORA) resources.

Table 20. Descriptions of University of Vermont Center on Rural Addiction (UVM CORA) Resources.

Reso	urce	Description				
A.	Polysubstance support*	Support treating patients who use multiple substances				
В.	Extended-release	Providing medication & training on extended-release buprenorphine				
	buprenorphine*	(e.g., monthly depot formulation) for potential use with patients				
C.	Vulnerable population	Support with managing and coordinating care for vulnerable				
	management*	populations (e.g., pregnant patients with SUDs, families, patients with				
		co-occurring conditions)				
D.	Co-occurring conditions	Training in manualized treatments for addressing co-occurring				
	training*	conditions (i.e., smoking cessation, stimulant use, PTSD)				
Е	Mentoring from champion	Consultation & support from community "champion" providers (e.g.,				
Ε.		mentoring, coaching, consultations around complex patients,				
	providers*	medication management)				
F.	Extended-release naltrexone	Protocols for extended-release naltrexone induction and				
	protocols*	maintenance				
G.	Narcan® & fentanyl test	Providing intranasal naloxone (Narcan®) & materials on its use;				
	strips*	fentanyl testing strips				
- 11	Screening/assessments*	Screening/assessments to help identify patients' substance use				
п.		treatment needs				
ı.	Buprenorphine protocols	Protocols for buprenorphine induction, stabilization, maintenance,				
1.	Buprenorphine protocols	taper, etc.				
		Consultations on new models of care for opioid use disorder				
J.	New models of care	treatment (e.g., hub-and-spoke model, buprenorphine initiation in				
		ED)				
K.	Training and workflow	Training and workflow support for office staff and revenue cycle				
	support	Training and worknow support for office start and revenue eyele				
	Biochemical monitoring	Help with biochemical monitoring of recent drug use (e.g., urine				
L.	assistance	toxicology support, hand-held alcohol breath monitors, hand-held				
	ussistance	smoking monitors)				
M.	Practice workflow	Consultation or practice workflow or practical implementation opioid				
	consultation	treatment				
N	iPads with apps	iPads pre-loaded with automated apps on opioid overdose, HIV,				
	ii aas witii apps	Hepatitis C prevention that can be used by patients while waiting				
		Technology-assisted hardware & software to support opioid use				
0.	Technical assistance on	treatment adherence in patients (e.g., portable computerized				
	treatment adherence	medication dispensers, IVR system for making automated telephone				
		calls to patients for clinical monitoring, random call backs, etc.)				

^{*}Rated as high priority by at least 60% of practitioners who responded to the question (n=169).

Figure 45 shows practitioner respondents' preferences regarding how they would like to receive UVM CORA resources, trainings, and support to serve more patients with SUDs. Practitioners were asked to rate each mode as "preferred" or "non-preferred." The most-preferred methods among practitioners were webinars/online trainings (78%) and provider-to-provider consultations (73%).

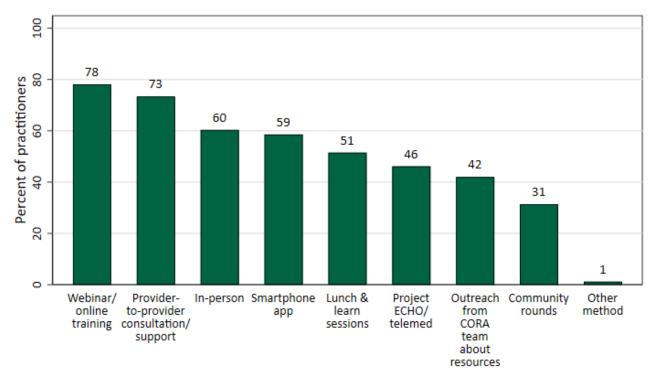


Figure 45. Rural practitioners' (n=169) preferred methods for receiving University of Vermont Center on Rural Addiction (UVM CORA) resources and trainings.

Almost all (95%) prescribing practitioners reported being waivered to prescribe buprenorphine. The small group of non-waivered prescribing practitioners were asked, "What resources or services would help you to become waivered to prescribe buprenorphine?" Among these non-waivered prescribing practitioner respondents (n=8), resources and services selected as helpful for becoming waivered included on-site waiver training workshops (n=6; 75%), provider-to-provider consultation/ support (n=5; 63%), ongoing webinar trainings (n=5; 63%), financial support or incentives to complete the waiver application (n=4; 50%), and one write-in response "making in office time available to complete training."

Practitioner Ability to Provide Data for Evaluation Efforts

One of the services that UVM CORA provides is assistance with surveillance and evaluation efforts for practitioners. Practitioners were asked to select the types of de-identified data they could provide (e.g., number of patients treated for OUD, average number of patients using MOUD per practitioner). Table 21 shows the distribution of practitioner responses to the question, "What support would you most need to be able to collect and share these data with UVM CORA?" Of those who responded (n=162), 17% indicated assistance with data collections systems while 11% reported assistance with data entry and analysis. The most frequent response to this question was "not sure" (49%). While respondents were not prompted to specify their unsure response, over one-third of the "other" text entry responses indicated the need for institutional/administrative approval.

Table 21. Rural practitioner-identified supports needed to collect and share data with University of Vermont Center on Rural Addiction (UVM CORA; single choice).

	Freq.	Percent
Not sure	79	48.8
Data collection system	28	17.3
Other	20	12.4
Data entry and analysis	17	10.5
Financial support	10	6.2
Help chart audit	8	4.9
Total	162	100

Figure 46 shows the types of de-identified data that practitioners reported being willing and able to share as part of UVM CORA evaluation efforts. Nearly one-half (49%) of practitioners reported that it would be feasible to share the number of patients treated for OUD as well as the number of practitioners at their practice who have prescribed MOUD (46%). One-quarter (25%) of practitioners reported being unsure of the data they could provide.

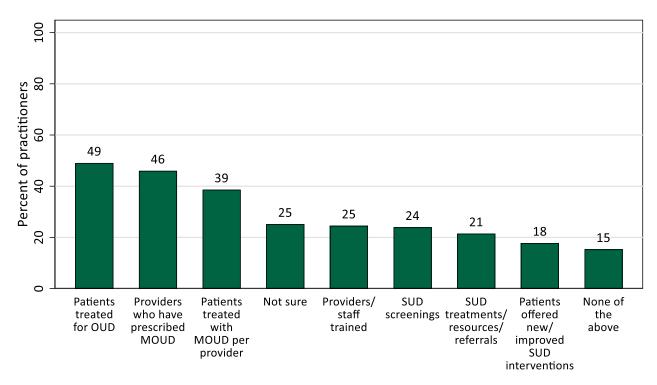


Figure 46. Percent of rural practitioners (n=163) reporting evaluation measures as feasible to collect and share with the University of Vermont Center on Rural Addiction (UVM CORA).

OUD: opioid use disorder; SUD: substance use disorder; MOUD: medications for opioid use disorder.

Unique Barriers for Rural Patients

Rural practitioners were asked, "Thinking just about your patients that live in isolated rural areas, what are the unique barriers that they face in accessing treatment or being retained in treatment for opioid use disorder?" Below is a selection of responses to the question.

"Transportation is a huge issue. We have no reliable public transport."

- Rural practitioner currently treating with MOUD

"Long drive to clinic, no childcare, random tox screens, stigma (less when coming to primary care office), lack of counseling/support."

- Rural practitioner currently treating with MOUD

"The chief issue I face is lack of access to psychiatric care for co-morbid mental illness."

– Rural practitioner currently treating with MOUD

"Job insecurity/no paid time off, no public transport, weak childcare infrastructure, stigma, lack of insurance."

- Rural practitioner not currently treating with MOUD

"Lack of providers."

- Rural practitioner not currently treating with MOUD

"Inability to escape/avoid environmental causes of abuse."

- Rural practitioner not currently treating with MOUD

Most Important Improvement Needed

Rural practitioners and community stakeholders had varied responses to the question, "What would you recommend as the <u>SINGLE</u> most important improvement to increase access to opioid use disorder treatment in your community?" Below is a selection of responses to the question.

"Training on the impact of shame. Shame should never be used to change a patient's poor health behaviors. However, I too often see this in clinical practice. Many patients experience tremendous shame around their OUD. We, as healthcare providers,

should not heap more shame on top of the patient's shame. Instead, we should create open, honest, transparent, nonjudgmental practice cultures and learn how to skill up for difficult, vulnerable conversations with our patients with OUD."

- Rural practitioner currently treating with MOUD

"More providers needed to expand capacity to take on more patients. Also more support staff."

- Rural practitioner currently treating with MOUD

"I believe we should develop a network of providers who partner with local emergency departments where induction therapy can begin. Then we should have warm hand-offs to primary care docs with strong support who can provide continuity care that is comprehensive."

Rural practitioner currently treating with MOUD

"Comfort with prescription of suboxone or naltrexone."

- Rural practitioner not currently treating with MOUD

"Easy access to treatment, by providing the community with more information about available treatment options."

- Rural practitioner not currently treating with MOUD

"More providers including NPs to be able to prescribe these meds for OUD, easier access to the certification."

- Rural practitioner not currently treating with MOUD

"Get boots on the ground and do outreach to the areas we know are hardest hit... AND, address stigma."

- Rural community stakeholder

"More facilities, particularly in northern Maine. The wait lists are long, and we lose many people during the short window after they decide to enter recovery."

- Rural community stakeholder

"More treatment facilities, more outpatient options, more family practice MDs doing MAT."

- Rural community stakeholder

"Awareness of facilities to refer to."

- Rural community stakeholder

Share and Learn

Rural practitioners and community stakeholders were asked, "Is there anything else you would like to share with us?" Below is a selection of responses to the question.

"I am the only provider and am overwhelmed with the demand for care. I need help!"

Rural practitioner currently treating with MOUD

"I'm glad we are not alone in this fight. I hope we can get some kind of relationship off the ground between UVM [CORA] and [our organization]."

- Rural practitioner currently treating with MOUD

"Need for adolescent information and focus."

- Rural practitioner not currently treating with MOUD

"I would like to get a program started here. I'm alone. I'd need all support possible. In addition, it would be after hours or off day work."

- Rural practitioner not currently treating with MOUD

"First responders need more education about opioid/substance abuse and its treatment."

- Rural community stakeholder

"The need for a multidisciplinary team to make recommendations regarding the overhaul of our strategy for SUD, and then the implementation and funding of those recommendations, is essential. It must be science based and free from antiquated conclusions regarding SUD."

- Rural community stakeholder

"The state doesn't have enough credentialed provider resources and the funding to pay them is inadequate to incentivize individuals to enter the field when they can work [in fast food] for the same wage."

-Rural community stakeholder

"Yes, funding needs to be flexible (to address social determinants of health) and braided (departments working together) in order to put a period on this crisis. Thank you for the opportunity to respond."

-Rural community stakeholder

Acknowledgements

We would like to thank the many Maine practitioners and community stakeholders that participated in UVM CORA's Maine baseline needs assessment. Their responses to our questions and their comments will help us as we continue to develop and improve our ability to support rural communities.

We would also like to thank our colleagues within UVM CORA and at the University of Southern Maine's Catherine E. Cutler Institute. UVM CORA faculty, staff, Clinician Advisory Board members, partners in Maine and New Hampshire, and representatives from the State of Maine Governor's Office of Policy Innovation and the Future and Department of Health and Human Services provided helpful suggestions and guidance as we were developing the questions for this baseline needs assessment. We look forward to continued collaboration.

Questions

Please contact us at cora@uvm.edu with any questions or for more information.

Suggested Reference

University of Vermont Center on Rural Addiction (2022). *Maine Baseline Needs Assessment: Rural Practitioners and Stakeholders.* Retrieved from: www.uvmcora.org/resources.

