# Interprofessional Teams and the Office-Based Opioid Treatment (OBOT) Workforce

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## Abstract

**INTRODUCTION** The current opioid crisis in the U.S. has led to an increased number of office-based opioid treatment (OBOT) programs that provide medication for opioud use disorder (MOUD) in primary care settings. MOUD (formerly known as medication assisted treatment) requires a medication and psychosocial component of care and thus, expertise from multiple types of providers. To help inform workforce development policies and strategies to train the future OBOT workforce, this study examined: (1) the provider composition of OBOT teams, (2) team members' respective duties, and (3) communication patterns.

**METHODS** Interviews with a convenience sample (N=12) of providers working as members of OBOT teams in outpatient primary care settings across the U.S. Interviews were recorded and transcribed. Qualitative coding was used to identify patterns relevant to study objectives.

**RESULTS** OBOT teams always included (1) a Drug Enforcement Administration (DEA)-waivered prescriber (typically physicians) as is mandated federally. However, other team members included; (2) a behavioral health provider (typically licensed clinical social workers); (3) a MOUD registry coordinator (varied in degree/background); and (4) other operational staff (typically medical assistants). OBOT clinics offering therapeutic behavioral interventions were more likely to employ multiple behavioral health providers, though there was variation in the types of behavioral health interventions utilized.

**CONCLUSION** The demand for OBOT treatment teams presents a significant opportunity for interprofessional training of health professionals. Educators, policymakers, and researchers should evaluate the composition and service capacity of the current OBOT workforce in order to develop comprehensive interprofessional training programs that address the physical, psychopharmacological, behavioral health, and psychosocial components of care necessary for OUD treatment and recovery.

## Implications for Interprofessional Practice

- Our study observed variation in the professional backgrounds of behavioral health and psychosocial providers on OBOT teams. This finding demonstrates that perhaps other OBOT team members might not be aware of the full scope of practices deployed by others on their team generally. Increasing team communication and clearly defining roles might address a providers' reluctance to treat OUD patients (e.g., a perceived lack of expertise addiction or allied-health professionals to assist with care), by improving medication for opiouid use disorder (MOUD) uptake in OBOT settings and helping to prevent provider burnout.

- Our study found that currently behavioral health provider roles on OBOT teams might be performed most frequently by social workers. Given social workers' ability to provide discrete behavioral health interventions, care management, and referrals to community resources, social work programs should consider offering OBOT-related training opportunities to further strengthen social workers' ability to contribute to the future OBOT workforce.

- Our study found that the number of practices where DEA-waivered providers work in conjunction with behavioral health providers might be an important indicator of how many OBOT practice provide comprehensive medication for opiouid use disorder (MOUD) that includes behavioral health interventions. Future studies should gather state- and federal-level data on the number and distribution of these practices in order to better assess future OBOT workforce needs.

## Introduction

Every day, close to 130 people are estimated to die in the United States from an opioid overdose (Centers for Disease Control and Prevention, 2018) and two out of three drug overdose deaths in the past year involved an opioid (Centers for Disease Control and Prevention, 2018b). The opioid crisis, recognized as a national health emergency, has more than quadrupled the number of opioid-related deaths since 1999 (Centers for Disease Control and Prevention, 2018). While the number of drug overdose deaths saw a 4% national decline from 2017-2018, drug overdose remains the leading cause of injury-related death in the United States (Centers for Disease Control and Prevention, 2019). In 2017, nearly two million non-elderly adults in the United States had an opioid use disorder (OUD), and of these, only 34% received any type of treatment within the past year (Orgera & Tolbert, 2019). Given the increasing severity of OUD, expanding access to effective treatment options remains a critical priority (Knudsen, Abraham, & Roman, 2011; Orgera & Tolbert, 2019). Understanding the workforce necessary to treat OUD and the roles identified on these teams can help articulate workforce and practice trends. As poli-

cymakers in the United States consider how to scale up office based opioid treatment (OBOT) services and address the growing demand for treatment that includes medication for opioid use dirsoders (MOUD), also referred to as medication-assisted treatment (MAT), (Fanucchi, Springer, & Korthuis, 2019), interprofessional workforce configurations must be considered.

To combat the OUD epidemic, primary care providers are expanding clients' access to treatment using MOUD (Korthuis et al., 2017; Lagisetty et al., 2017; SAMHSA, 2015). OBOT includes a combination of medication (i.e., buprenorphine) and behavioral treatments and is considered an evidence-informed intervention to treat OUD. The behavioral health component of OBOT can include individual counseling, peer-support, and support groups to help patients with resource or referral needs (Zerden, Guan, Lombardi, Sharma, & Garcia-Rico, 2020). The Society of Addiction Medicine (ASAM) national practice guidelines recommend psychosocial support in conjunction with MAT (Kampman & Jarvis, 2015) yet there is considerable variability in how the behavioral health and psychosocial interventions are operationalized in OBOT settings and the workforce responsible for providing this component of care

(Zerden et al., 2020). A systematic review by Lagisetty and colleagues (2017) included randomized controlled or quasi experimental trials, and observational studies evaluating OUD treatment in primary care to analyze the evidence of MAT interventions. Findings from this comprehensive review suggest multidisciplinary, coordinated models are an important component of implementing OUD treatment in primary care settings. Further, leaders from national offices such as the National Institute on Drug Abuse, National Institutes of Health and the Substance Abuse and Mental Health Service Administration, and the Centers for Disease Control and Prevention have shared their support for MAT in primary care settings, espousing the benefits of MAT such as increased retention in treatment, improved social functioning, and behavioral risk reduction related to OUD (Volkow, Frieden, Hyde, & Cha, 2014).

Using medications to support the recovery of OUD and other substance use disorders (SUD) is not new. For example, methadone is one of the most widely known pharmacological treatments for treating OUD (Abbott, Moore, Delaney & Weller, 1999; Sees et al., 2000) and continues to be used. In 2002, buprenorphine, was approved and has become a commonly used medications to treat OUD as it has fewer side effects and is more easily prescribed by those who work in primary care settings (Providers Clinical Support System, 2017). The expansion of treatment into primary care settings has presented as a key opportunity to introduce evidence-informed approaches to a setting that has been under-utilized in the treatment of OUD and SUD. Treatment in primary care settings can help engage populations who may not otherwise seek or received substance use treatment while potentially improving retention in treatment and promoting positive health outcomes (Ashford et al., 2019).

Therefore, as OBOT expands, understanding the workforce needed to effectively deploy this model of care, and how they function and communicate, is critical. Treatment teams are required to include a medical provider with a Drug Enforcement Administration (DEA) waiver to prescribe, as well as required to closely and monitor treatment involving MOUD (CDC, 2018). However, the optimal or even required mix of professionals involved in providing all aspects of care remains unclear (Zerden et al., 2020). Understanding the skill sets necessary for an effective OBOT workforce,

particularly those addressing the behavioral health and psychosocial components of MOUD in primary care, can help inform employers and educators of the workforce needed to effectively support OBOT models.

Although the use of team-based care is expanding for MOUD in primary care, less is known about the roles and responsibilities of each member of the team (beyond the DEA prescriber), or the communication patterns of teams in OBOT settings. Bringing together behavioral health and health providers to meet the needs of OUD patients requires an understanding of each-others responsibilities and expertise. Further, team-based care communication is vital to faicilate quality care (Buche et al., 2017). Yet, the formal and informal methods of communication amongst OBOT teams is not well-understood.

To describe the workforce commonly deployed on MOUD teams in primary care and to identify the workforce currently providing the behavioral health components of OBOT (and related psychosocial supports), this exploratory study was guided by three research questions: (1) Which professionals comprise the workforce that provides MOUD in primary care? (2) What are the behavioral components of MOUD provided in primary care settings and who provides them? (3) How do OBOT teams communicate about patient care?

## Methods

This qualitative study was based on interviews conducted with professionals working in OBOT teams across the United States. Twelve experts from 11 outpatient primary care clinics in several Northeast, mid-Atlantic, Southeast, and Midwest states participated. Each interview lasted approximately 30 minutes, and all respondents received a gift card for their participation.

We deployed a two-pronged strategy to recruit a convenience sample of expert key informants: first, conducting purposive sampling by identifying OBOT teams via the academic literature; and second, using the research team's existing relationships with researchers and practitioners in the field. A semi-structured interview guide was utilized and focused on questions in five areas: (1) title and role of interviewee; (2) composition of OBOT team; (3) communication patterns among OBOT team members; (4) behavioral and psychoso-

cial components of MOUD offered and by whom; and (5) general patient demographics of the OBOT practice. All interviews were recorded and transcribed with the participant's consent (University of North Carolina at Chapel Hill IRB# 18-2579). Transcripts were checked against audio recordings for accuracy and completeness.

Using grounded theory, this qualitative study used an inductive approach to conceptualize the meaning of data collected. Qualitative analyses were performed through an iterative process that followed traditional procedures for qualitative research (Glaser & Strauss, 1967). This allowed researchers to simultaneously collect and analyze data to distill common themes that emerged around the inner workings of OBOT teams. This process involved repeated readings of transcripts by two members of the research team. A thematic code list was developed and members of the research team had weekly discussions to identify patterns relevant to study objectives. The use of the constant comparison methods between the research team followed protocols as clarified by Glaser and Strauss (1967).

## Results

Of the 11 clinics represented within the sample, clinical settings varied. Five sites were Federally Qualified Health Centers (FQHCs), four were primary care sites within an academic medical center system, one was an outpatient behavioral health clinic associated with an academic medical center system, and one was a non-teaching public hospital (see Table 1). Interviewees reported a mix of degrees and professions: five physicians who were trained in family medicine and addiction medicine, five master's-level social workers (MSWs), one clinical psychologist (PhD), and one licensed professional counselor (LPC).

The themes that emerged from conversations with providers enhanced our understanding of the inner workings of OBOT teams. For example, the types of providers that comprised the team (including their primary duties), how communication occurs within interprofessional teams, , and how behavioral health and medical teams work together to provide holistic care to patients, were findings that provided a more nuanced understanding of the workforce involved in OBOT.

### Team Composition and Workforce

Four primary roles within OBOT teams were identified

from key informant interviews: (1) DEA waivered prescriber, (2) behavioral health care provider, (3) MOUD registry coordinator, and (4) other assisting team members or operational staff (see Figure 1).

**Prescribers.** The role of the MOUD prescriber was clearly identified in all clinics. Ten of the 11 sites had physician prescribers. One site had a nurse practicioner (NP) as its only waivered prescriber and did not employ other types of providers (see Table 1). Six sites had physicians as the sole DEA waivered provider; four sites had a combination of physicians, NPs, and physician assistants (PAs) as the team of DEA waivered prescribers.

**Behavioral health providers.** In all 11 clinics, the OBOT team included a team member serving as the behavioral health provider. Social workers (MSW/LCSWs) were the most common type of behavioral health provider, followed by psychologists (PhD), counselors (LPC), addictions counselors (including one smoking cessation specialist where educational background was not available), and a peer navigator (for whom no educational background was available). Team members who delivered individual and group behavioral health treatments were most often social workers (MSW/LCSW), psychologists (PhD), and counselors (LPC), with one recovery support counselor (no educational qualification specified) serving in this capacity. Beyond leading clinical interventions, behavioral health providers also addressed patients' psychosocial needs, often by referring patients to additional resources and coordinating their care. Table 2 illustrates which providers commonly provided psychosocial support and referral-related tasks.

**MOUD registry coordinators.** The DEA waiver regulations for dispensing MOUD require clinics to maintain a regularly updated registry of patients. The purpose of keeping a registry has allowed clinicians and researchers to "monitor patient comorbidities, care procedures and processes, and treatment effectiveness for the purpose of improving care quality" (Tai et al., 2014, p. 81). Because those prescribing methadone/buprenorphine/other medications for OUD have to be certified, a registry allows for compliance reports to be maintained and also to ensure that patients enrolled in MOUD are within regulated guidelines. Those responsible for maintaining this registry typically had a job titles such as *program manager*, *nurse coordinator*, *treatment coordinator*, *patient coordinator*, or *behavioral health coordinator*.

| Clinic (State) | Setting/Type of Practice | Waivered Providers | Behavioral Health Provider* | MOUD Registry Coordinator* | Other Medical Providers and Support Staff |
|---|---|---|---|---|---|
| 1 (NC) | Federally Qualified Health Center | MD | Social Worker (LCSW) | Behavioral Health Coordinator | Medical Assistant |
| 2 (CT) | Primary care located within an academic medical center | MD | Social Worker (LCSW) / Psychologist (PhD) | Co-Medical Director (MD) | Administration / RN / Medical Assistant / MD Resident |
| 3 (NC) | Federally Qualified Health Center | MD | Social Worker (LCSW-A, LCAS)** / Therapist (MA) | Social Worker (LCSW-A, LCAS) / Therapist (MA) | Administration |
| 4 (NY) | Primary care located within an academic medical system | MD / NP / PA | Social Worker (LCSW) / Psychologist (PhD) / Psychiatrist (MD) /Community Health Worker | Treatment Coordinator | Chronic Care Nurse / Pharmacist |
| 5 (NY) | Outpatient clinics associated within a public hospital (non-academic) | MD | None | Physician (MD) | Patient Care Asst / Addiction Counselor / Smoking Cessation Counselor / Medical Assistant |
| 6 (PA) | Primary care located in academic medical center | MD | Social Worker (LCSW) | Medical Secretary / Nurse Coordinator | Peer Navigator / Medical Assistant |
| 7 (PA) | Primary care associated with an academic medical center | MD | Social Worker (LCSW) / Psychologist (PhD) / Psychological Liaison | Psychological Liaison | Administration / Licensed Practical Nurse / Resident / Medical Assistant |
| 8 (CO) | Federally Qualified Health Center | NP | Therapist (LPC) | Nurse Care Manager | None |
| 9 (CO) | Federally Qualified Health Center | MD / NP | Social Worker (LCSW) | Director (PhD) | None |
| 10 (WV) | Outpatient behavioral health clinic associated with academic health system | MD / NP | Social Worker (LCSW) / Therapist (LPC) / Case Manager | Case Manager | Medical Assistant |
| 11 (CA) | Federally Qualified Health Center | MD / NP / PA | Recovery Support Counselor (degree unknown) / Case Manager | Program Manager | None |

*Degree indicated if known

**Licensed Clinical Addiction Specialist

**Table 1.** *Workforce Involved in Providing MOUD*
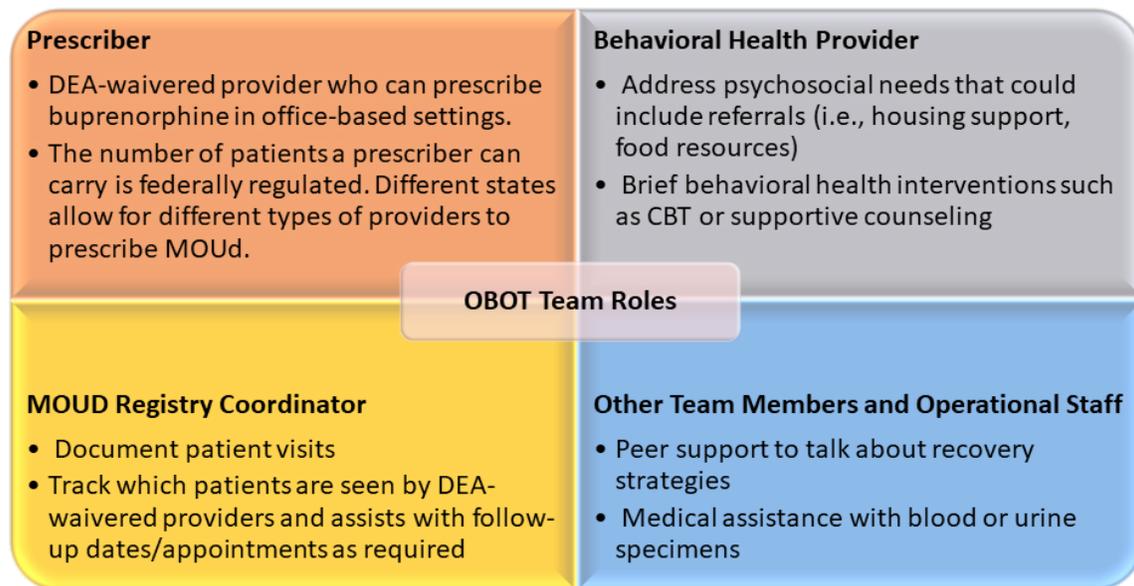
**Figure 1.** *Four primary roles comprising the OBOT team and examples of services they provide.*

At times the MOUD registry coordinator also performed the role of behavioral health provider, highlighting the fact that in some OBOT settings providers performed multiple roles concurrently.

**Other team members and operational staff.** Many teams included medical assistants to aid the primary medical providers with blood draws, urinalysis, and other medical aspects of a patient's OBOT visit. Two teams described working with a pharmacist to dispense medications that patients needed during their visits. One team used peer navigators to help acclimate patients to their treatment processes. See Table 1 for other types of providers mentioned.

**Team variation.** Teams typically included multiple individuals in each of the four roles. However, some teams only included a prescriber, a behavioral health provider, and a MOUD registry coordinator. Of the teams described, physicians were the most common DEA-waivered provider (10 of 11 clinics), licensed clinical social workers were the most common behavioral health provider (9 of 11 clinics), and medical assistants were most likely to serve as the other types of providers or operational support staff (6 of 11 clinics).

*Psychosocial Treatment Availability*

OBOT clinics offering therapeutic behavioral interventions like brief cognitive behavioral therapy (CBT) or dialectical behavior therapy (DBT) were more likely to employ multiple, licensed, behavioral health providers on the team. Most clinics employed social workers, all of whom were licensed clinical social workers (LCSWs). LCSWs were primarily responsible for conducting individual therapy, referring patients to community recovery programs, or providing case management services including assistance with housing, insurance, or crisis situations. Other behavioral health providers were most likely to be PhD-trained psychologists and LPCs. One site had no designated behavioral health provider within the clinic. In this case, the prescriber referred patients to behavioral health providers outside the OBOT clinic who worked within their larger health system.

*Behavioral Health Components of MOUD in OBOT Settings*

The behavioral health components of MOUD were operationalized differently across sites and included both individual and group treatments, referrals to needed services, and case management services (see Table 2). All practices utilized evidence-based individual therapeutic interventions such as brief cognitive behavioral therapy (CBT) and motivational interviewing (MI), as well as components of other therapeutic models like acceptance and commitment therapy (ACT) or Seeking Safety (see Table 2). Clinics referred patients to resources or treatments (e.g., Narcotics Anonymous/Alcoholics Anonymous, community housing), transportation support services, or additional psychiatric services.

| Type of Intervention | No. Practices Using |
|---|---|
| Individual brief therapy/treatment | 11 |
| Cognitive behavioral therapy | 6 |
| Motivational interviewing | 6 |
| Dialectical behavioral therapy | 4 |
| Brief therapy | 4 |
| Other (ex: Seeking Safety, ACT) | 7 |
| Referrals | 9 |
| Case/Care management | 7 |
| Group treatment | 4 |

**Table 2.** *Behavioral Health Components of MOUD*

## MOUD Team-Based Communication

Based on interview data, it was evident that teams communicate and coordinate patient care in several formal and informal ways. In almost all interviews, team members reported using electronic health records (EHR) to communicate with other providers about patient care and follow-up treatments, and as a mechanism for messaging team members in between established meetings. However, EHRs were not used as the primary tracking mechanism for MOUD-enrolled patients. In the majority of the interviews conducted, interviewees shared how they use their own registry to track patient care and appointments. This allowed teams to understand patients' participation in MOUD treatment as well as the frequency of their appointments and follow-up treatments. It is interesting to note that each clinic did this their own way based on systems compatible with their workflow and it was not uniformly implemented across the clinical settings.

Not surprisingly, beyond the EHR, interviewees frequently used confidential e-mail to communicate with other team members. Many found e-mail helpful because sometimes colleagues were not available to communicate at the same time. Other types of communication included text-messaging on HIPAA-compliant cell phones and using a shared space on a server to store notes accessible to all team members. In-person communication occurred with varying frequency, ranging from daily (as needed) to weekly/monthly structured team meetings. Occasionally, in-person opportunities for team-based communication included monthly addictions-focused grand-rounds for all members of the team (i.e., not only for medical providers) and an addictions-focused journal group (also for all providers involved in care) to further understand MOUD services in OBOT settings.

## Discussion

This study focused on understanding the services and workforce configurations of practices providing OBOT. By nature, MOUD provided in an OBOT setting is interprofessional. The four most common primary roles of OBOT team members that this study identified are consistent with those identified by other studies that have reviewed MAT models, now referred to as MOUD, for OUD in primary care settings (Korthuis et al., 2017). In this sample, the prescribers were mainly physicians. However, this may be a function of NPs and PAs state scope of practice restrictions concerning prescribing authority that varies by state (Muench et al., 2019; Spetz et al., 2019). For example, although NPs and PAs can prescribe MOUD, recent research found lower levels of NPs participation as part of the OUD treatment workforce associated with state scope of practice regulations (Spetz et al., 2019). By contrast, findings from the present exploratory study reveal that behavioral health roles were performed by a mix of social workers, nurses, and other behavioral health professionals. Based on study findings, team members leading behavioral health interventions varied by provider type and the interventions they deployed. A systematic review by Dugosh and colleagues (2016) noted a dearth of empirical research on the optimal psychosocial interventions to be used in conjunction with MOUD practices—an area that requires further investigation.

Other than the inclusion of medical assistants and, occasionally, nurses, the practices examined in this study

did not demonstrate a uniform workforce configuration. While every OBOT team must include a DEA-waivered medical provider, there is less regulation or guidance concerning the types of behavioral health providers necessary to optimize OBOT treatment. This study suggests that social workers might be the professionals most commonly working in these roles in OBOT settings. Their ability to provide discrete behavioral health and evidence-based interventions, care management, and referrals to community resources (Fraser et al., 2018) makes social workers an ideal fit for OBOT teams (Lombardi et al., 2019; Zerden et al., 2020).

### Content and Scope of Services Provided

There was significant variation in the disciplinary background of behavioral health providers working on OBOT teams. Including a range of behavioral health professionals on OBOT teams can be a strength, particularly in behavioral health shortage areas (Health Resources and Services Administration, 2019), but it might also be a function of practice size or alignment with an academic health center with the staffing and resources to include more integrated team members. However, the kinds of addiction treatment and recovery programs likely differ based on the legal scope of practice and training of behavioral health providers. For example, the "person-in-environment" perspective of social work is essential for understanding the systems affecting a person's life and will likely influence which interventions are implemented and how. A psychologist might be more likely to understand an individual's substance use through the lens of their personal history, whereas a peer provider without formalized academic training might mobilize shared life experiences to assist patients in their addiction treatment and recovery. The observed variation in behavioral health and psychosocial providers likely indicates that other members on OBOT teams are not aware of the full scope of practices deployed either by the non-prescribing providers they work with across health systems and in primary care settings.

Understanding one's own scope of practice and those of one's treatment team is an important component of team cohesion and effectiveness. Role confusion and a lack of knowledge about others team members' professional scope of practice has been shown to impede efficient teamwork (Buche et al., 2017; Brown, Craw-

ford, & Darongkamas, 2000). Professionals might not efficiently delegate tasks among or communicate with team members who have roles they do not understand (Ladden et al., 2013). In this study, interviewees discussed who was part of their team but schedules differed and there was not always in-person overlap. Interviewees clearly knew who was on their team and the workflow appropriate for patient care despite not sharing the same clinical hours; this makes non-in-person communication processes an important component to consider. Increased team communication and clear distinction of roles has been identified as a best practice in behavioral health (Buche et al., 2017).. Clarity in the responsibilities of each team member and communication protocols can result in improved OBOT care. Additionally, providers' negative perceptions associated with OUD treatment may present as a barrier to MOUD implementation (Atterman et al., 2018; Livingston, Adams, Jordan, MacMillian, & Herring, 2018). Previous studies have identified medical providers reluctance to treat patients with OUD for many reasons—a lack of expertise in addiction, a lack of allied-health professionals to assist with care, and patient-related factors that cause care providers to presume that this population is too complicated or difficult to work with (Kennedy-Hendricks et al., 2016; Livingston et al., 2018).

The diverse skill sets of MOUD prescribers, behavioral health providers, and other OBOT team members overall can help offset some of these barriers to treating people with OUD. If OBOT teams were required to be structured in a way that included multiple team members with diverse skill sets and clarified these team members' distinct roles within the primary care setting, it might improve MOUD uptake in primary care settings and mitigate provider burnout.

### Role Flexibility

Findings suggest there is a great deal of role flexibility among members of OBOT teams, particularly in terms of those providing behavioral health and psychosocial supports to people with OUD. Many team members were often responsible for multiple tasks associated with MOUD and substance use care. For example, in two clinics the physician prescribers also directed their clinic and were heavily involved in maintaining and coordinating the patient registry. In two different clinics, social workers served as the MOUD registry co-

ordinators and provided specific behavioral health and psychosocial interventions. Notably, not every provider was working in the OBOT unit in a full-time capacity and might have had other clinical duties with patients not receiving MOUD. Nonetheless, our exploratory study shows that OBOT team configuration is important when considering federal regulations governing patient panels and the number of patients that can be seen. For instance, first-time DEA-waivered providers can have a maximum of 30 patients during the first year and, after submitting a second request, can treat up to 100 patients annually in subsequent years (SAMHSA, 2018). Given this more than three-fold increase in year two, having a team member who can track patients receiving MOUD and their associated follow-up needs is one way to ensure compliance as a DEA-waivered provider.

The number of practices where DEA-waivered providers work in conjunction with behavioral health providers can be an important indicator of how many OBOT practices provide comprehensive MOUD that includes behavioral health. As the number of DEA-waivered providers increases, they will likely need additional behavioral health professionals to assist with a higher volume of patients to meet their needs for sustained recovery. Given that the number of patients a first-time DEA-waivered physician can manage increases from 30 to 100 patients in their second year, and subsequently up to a maximum of 275 patients annually (U.S. Department of Health and Human Services, 2016; SAMHSA, 2018), the number and type of team members to support additional patients receiving MOUD will also need to be scaled accordingly. Moreover, it is important to note that these patient increases are set for physicians but do not apply to other medical providers such as NPs and PAs (Barnett, Lee, & Frank, 2019). Future work to align behavioral health workforce training and job placement with DEA-waivered providers will help ensure that clinics are optimally staffed with providers for various roles, and with diverse skill sets that will enable these clinics to more holistically address the needs of patients with OUD.

### Interprofessional Education and Communication

Socializing the future workforce to understand and treat addiction can occur through interprofessional education (IPE) that breaks down rigid disciplinary boundaries and trains various providers together to address substance use and addiction. Specifically, programs that address addiction can more intentionally offer courses or didactic learning, and clinical rotations that include a combination of medical students, residents, and other medical providers (e.g., NPs) along with behavioral health providers such as social workers, counselors, and psychology trainees. Slowly, models to include opioid-related curricula are being introduced into medical education (Wallace, Warrier, Kahn, Welsh, & Fischer, 2019), but more specific efforts to deliver this content through an interprofessional lens are necessary. The training of new professionals in discipline specific schools may also be enhanced by asking professors from other disciplines to teach. For example, pharmacy and medical students may benefit from social work faculty discussing the social determinants of health or trauma-informed care in relation to people with substance use. Likewise, behavioral health trainees' education could be enhanced with lectures by a pharmacy faculty member to discuss MOUD treatment in OBOT settings, psycho-pharmacological properties of the medication(s), and common side-effects. The education of medical and behavioral health providers could occur simultaneously in order to show emerging practitioners how essential collaborative team-based care and communication skills are to OBOT teams' functioning and their efficient delivery of MOUD services.

Another way interprofessional education can improve OUD treatment is by considering the addiction-specific training and fellowship programs and how to pair these with behavioral health training programs that focus on substance use and behavioral health. For example, as the number of addiction medicine fellowships continues to increase, partnerships with behavioral health programs at the same institutions granting these fellowships could increase opportunities for collaborative learning and fill training gaps within medical training curricula (Schwartz, Frank, Welsh, Blankenship, & DeJong, 2018). This would allow trainees the opportunities to work with other learners in a team-based approach helping to socialize them for collaborative practice. Further, while current practitioners may not have benefited from formalized interprofessional curricula depending on when they went to school and how their training was structured, offering interprofessional continuing education opportunities, training, and coaching by professions across disciplines can help reinforce the message that treating addiction is multi-faceted and re-

quires the expertise of multiple disciplines.

*Study Limitations*

Our findings are conditioned on several study limitations. First, this study did not assess whether each clinic enrolled the maximum number of patients they could see annually based on federal regulations. This would be valuable for future research to consider in order to determine optimal treatment teams' size and capabilities necessary for clinics operating at different capacities. Our findings are also not broadly generalizable as the study sample included interviewees from only 11 clinics across seven states, and most were in urban areas in eastern cities in the United States. Additionally, data were based on individual interviewee perspectives, and the details they provided about their OBOT workforces were not verified by a second source.

## Conclusion

As OBOT expands in primary care settings across the United States, a better understanding of the workforce required as well as currently deployed is critical. This exploratory study identified the roles and functions within local workforces providing MOUD in outpatient primary care (particularly the psychosocial components of treatment) and sought to understand how OBOT teams communicate. Key informant interviews identified four primary roles that comprise the OBOT team: (1) the prescriber; (2) the behavioral health provider; (3) the MOUD registry coordinator; and (4) other team members or operational staff. A diverse array of behavioral health providers serve as members of OBOT teams providing multiple types of behavioral health and psychosocial interventions. The most commonly employed psychosocial interventions echoed Fraser and colleagues' (2018) identification of three primary roles performed by social workers on integrated behavioral health teams: individual behavioral health treatment, case management, and referral services. For OBOT teams to function most effectively, purposeful, structured communication and defined meeting times can help ensure well-coordinated, comprehensive substanuse care.

As the treatment needs of people with OUD continue to warrant national attention, we must make intentional efforts to develop the diverse, interprofessional workforce needed to address the complexities of OUD treatment. Improving MOUD acess across primary care set-

tings requires workforce researchers, health systems, and educators to recognize how the services provided by different providers contributes individually and collectively to comprehensive OBOT. Effectively incorporating behavioral health providers' skill sets will require greater understanding of the unique contributions of various types of behavioral health providers, from peer-support specialists to LCSWs. The literature on the preferred psychosocial components of MOUD remains inconclusive regarding who is responsible for their delivery and requires further examination. Future research on workforce needs, team effectiveness based on patient outcomes, and types of behavioral health interventions is necessary, particularly concerning the psychosocial components of MOUD in OBOT settings. Clarifying these issues could provide much-needed guidance in meeting the complex needs of patients with OUD and help reverse national trends.

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