



Addressing Opioid Use Disorder in Massachusetts Emergency Departments:

Results from a Mixed Methods Assessment



JSI Research
& Training
Institute, Inc.



Bureau of
Substance
Addiction
Services

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Executive Summary

INTRODUCTION

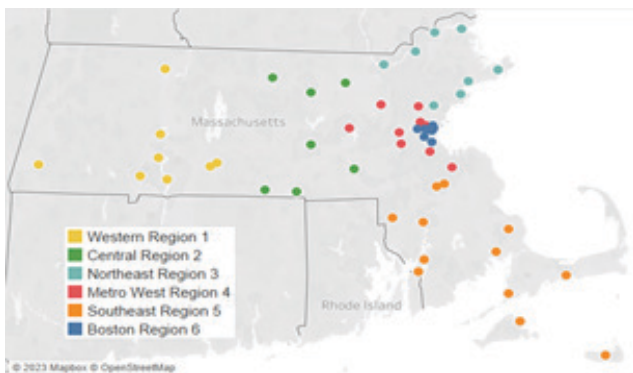
As part of the Massachusetts Department of Public Health Bureau of Substance Addiction Services (BSAS) commitment to addressing the opioid epidemic, BSAS engaged JSI Research & Training Institute, Inc. (JSI) to conduct the Massachusetts Emergency Department Opioid Use Disorder Care Survey and follow-up interviews with participating

emergency departments (EDs). The purpose of the survey and interviews was to identify the services for opioid use disorder (OUD) provided in Massachusetts EDs, hear directly from ED staff about strengths and challenges, and identify opportunities for the state to provide support to EDs to enhance services for patients with OUD.

METHODS

Survey

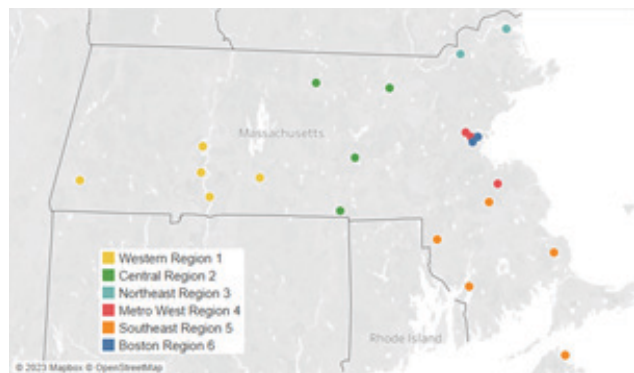
53 Hospitals Completed the 25-Item Survey
Nov 2021–Feb 2022



Purpose: To better understand the care and services provided to people with OUD who access Massachusetts EDs.

Interviews

21 Hospitals Completed 1-Hour Interviews
Aug 2022–Feb 2023



Purpose: To deepen understanding of substance use disorder (SUD) screening and referral practices, partnerships, barriers and facilitators, staff knowledge and training, and funding considerations.

OVERVIEW OF KEY FINDINGS

IDENTIFYING AND TREATING OUD IN THE ED

Universal and regular screening for substance problems among ED patients only occurred in about 60% in the EDs surveyed. When estimating the frequency of patients presenting with OUD in the ED, the majority of the EDs reported 21 or more patients each month. During interviews, alcohol

use disorder was commonly reported as more prevalent than OUD or other types of SUD. The most common OUD treatment medications reported were naloxone, buprenorphine, clonidine, and benzodiazepines, and less than half of the EDs reported using methadone to treat OUD.

TYPES OF PARTNERSHIPS

The most common and robust partnerships EDs had to support patients with OUD were with mental health treatment services. Bridge clinic, peer recovery support service, and office-based opioid treatment partnerships were more common among large hospitals and those with higher OUD patient volumes.

ALLIED HEALTH PROFESSIONAL SERVICES OFFERED AND FUNDED

Psychiatric and social work services were most likely to be provided to patients with OUD, with most EDs reporting that these services are bundled into an overall rate. About a third of EDs reported allied services are supported by grant funding to the hospital or ED; a few reported the services are funded by an external agency or philanthropy; and two reported funding by supplemental billing in the ED.

ED STAFF EDUCATION AND TRAINING

EDs appear prepared to treat OUD, with close to two-thirds of EDs reporting that most (75% or more) of their ED physicians were X-waivered when that requirement was in place. However, access to medication for OUD (MOUD) in the ED is still lacking; buprenorphine prescriptions and buprenorphine starter packs are often not offered to ED patients with OUD. In addition, only about half of EDs consistently offer naloxone kits to ED patients with OUD. Interviewees said that new generations of providers receive more SUD training during medical school, leading to increased acceptance of SUD as a chronic condition. The former requirement for X-waiver training increased the collective knowledge and comfort among providers to prescribe buprenorphine. Access to consultation services has also improved provider comfort in treating patients with SUD.

SUPPORT SERVICES OFFERED IN THE ED

Many interviewees spoke about the positive impact of having dedicated support staff (e.g., recovery coaches, recovery support navigators, and social workers) in the ED; they have time and expertise to connect patients with long-term treatment facilities and resources. Staff with lived experience offer additional benefits; their deep and personal understanding of addiction allows them to connect with patients in a way that other providers cannot. Despite the value that allied staff provide, consistently funding these positions was a challenge in most hospitals.

CHALLENGES WITH THE ED SETTING FOR INITIATING TREATMENT AND SUPPORTING RECOVERY

Interviewees reported that the ED environment is not best-suited for initiating complex OUD care. Many ED staff do not have the experience and training to support these patients. This points to a need for consistent OUD training across a broader range of topics to combat stigma associated with OUD and to increase provider confidence in treating OUD. The stigma surrounding OUD contributes to inequitable and discriminatory policies, procedures, and care for ED patients with OUD. Compared to other diseases, OUD carries unique requirements for prescribing, limited reimbursement for services, and less provider education. However, given the ED's inherent focus on volume and acuity, training improvements alone will not be sufficient to meet the needs of patients with OUD. It is also crucial that EDs have collaboration, partnerships, and referrals in place to provide ongoing, comprehensive services once patients leave the ED.

REFERRAL PARTNERSHIPS TO SUPPORT PATIENT CARE

Interview participants noted that established partnerships result in stronger referral networks, providing greater likelihood for patients to receive ongoing treatment and resources that support recovery. Presence of referral pathways increased provider comfort in initiating OUD care in the ED. However, there are limitations in the type, capacity, and distribution of referral

partnerships. Other challenges include the limited use of the “warm handoff” method between the ED and the referral organization as well as inconsistent follow-up communication from referral agencies to the ED. Barriers such as transportation, insurance, and identification also limit patients’ ability to access referral resources.

OPPORTUNITIES TO ENHANCE CARE IN THE ED FOR PATIENTS WITH OUD

Despite current ability to care for patients with OUD, strengthening ED infrastructure through staff training and the development of community partnerships among other strategies is still needed. Financial and human

resources must be sustainably allocated to support the provision of quality OUD and linkage to ongoing treatment. Results suggest the following opportunities for improvement:

- Provide consistent and expanded training.

- Pursue a sustainable model to place peer recovery support services in the emergency departments.

- Facilitate medications dispensed at the point of care for take-home use (e.g., naloxone, buprenorphine).

- Establish funding for transportation from the ED to inpatient or long-term treatment facilities.

- Formalize and implement an ED addiction specialist position.

- Establish bridge clinics.

- Simplify state and federal funding mechanisms.

- Fund planning grants.

- Create metrics and quality improvement goals specifically related to OUD in ED settings.

Addressing Opioid Use Disorder in Massachusetts Emergency Departments: Results from a Mixed Methods Assessment

INTRODUCTION

As part of the Massachusetts Department of Public Health Bureau of Substance Addiction Services' (BSAS) commitment to addressing the opioid epidemic, BSAS engaged JSI Research & Training Institute, Inc. (JSI) to conduct the Massachusetts Emergency Department Opioid Use Disorder Care Survey, as well as follow-up interviews with participating emergency departments (ED).

The survey and interviews are part of a body of research investigating the ED as a point of entry into care for people with opioid use disorder (OUD).^{1,2,3,4} The purpose of the survey and interviews was to identify the OUD services provided in Massachusetts EDs, to hear directly from ED staff about strengths and challenges, and to identify opportunities for the state to support EDs in enhancing services to patients with OUD.

METHODS

MASSACHUSETTS EMERGENCY DEPARTMENT OPIOID USE DISORDER CARE SURVEY

To better understand the care and services provided to people with OUD who access Massachusetts EDs, JSI administered the 25-item Massachusetts Emergency Department Opioid Use Disorder Care Survey (MA ED Survey). This survey was drafted by JSI in collaboration with BSAS. Several partners reviewed and provided feedback on the survey, including the Massachusetts Health & Hospital Association (MHA), the Health Policy Commission, MassHealth, and additional subject matter experts identified by BSAS. JSI reviewed all feedback and facilitated discussions with reviewers and BSAS before finalizing the survey and obtaining approval from BSAS.

The survey was administered using Alchemer (formerly SurveyGizmo) software. All data were collected between November 2021 and February 2022.

Survey Recruitment

BSAS provided a comprehensive list of all 68 Massachusetts EDs. JSI and BSAS engaged MHA in November 2021 to introduce hospital administrators to the survey scope and purpose, and to encourage their completion of the survey. MHA also sent two reminders to its members asking them to complete the survey.

By February 2022, a total of 63 responses were received. However, some hospitals submitted more than one response. For these, only one response per hospital was kept for the purposes of analysis. After this cleaning step, the analytic file contained 53 unique responses for a response rate of 78%.

These hospitals span all regions of the state (see *Survey Findings: Hospital Characteristics* section).

Survey Analysis

Survey data were downloaded from Alchemer and joined with secondary data obtained from the Massachusetts Center for Health Data and Analysis 2020 hospital profiles⁵ and the American Hospital Directory.⁶ Secondary data from these two sources included region, city, hospital designation, and total hospital number of staffed beds.

If hospital designation and staffed beds was not available, we referenced the hospital website.

Data were cleaned and restructured in Microsoft Excel using the Tableau add-in. Data were then analyzed using the Tableau data exploration and visualization software. For single-select and multi-select questions, the number of responses was calculated and presented in both distinct count and percentages. Single-select questions have percentages that sum to one hundred. Multi-select questions may have percentages that sum to over one hundred because a respondent was able to select more than one response option.

All questions were stratified by four variables, including three secondary data variables: region, hospital designation, and total hospital number of staffed beds. Throughout this report, total hospital number of staffed beds may be referred to simply as “staffed beds” or “hospital size.” Questions also were stratified by a primary data variable: estimated volume of patients with OUD in the ED. While the survey response rate was 78%, 53 respondents is a numerically small sample size. This is particularly true when cross-tabulating by stratifying variables. Cross-tabulated data should be interpreted with care.

As described above, to ensure one unique response per hospital, researchers removed 10 responses from eight hospitals from the analysis. Responses were first reviewed for breadth and

scope of services available to ED patients with OUD. If one response demonstrated a greater breadth and scope of available services, researchers selected that response for analysis. If no selection could be made on these grounds, the response completed by the employee with the most relevant title was selected. The eight hospitals with responses removed from analysis were Heywood Hospital, Sturdy Memorial Hospital, Newton-Wellesley Hospital, Southcoast Health - Charlton Memorial Hospital, Massachusetts General Hospital, Boston Medical Center - Menino Pavilion, Mount Auburn Hospital, and Beverly Hospital - Addison Gilbert Campus.

SEMI-STRUCTURED INTERVIEWS

To deepen understanding of the context in which OUD services are provided in the ED, JSI conducted a series of one-hour interviews via video conference with Massachusetts ED and hospital administrators and clinical staff. JSI utilized a semi-structured interview guide that was developed in collaboration with BSAS and MHA. While the survey focused directly on OUD, interviews addressed OUD and substance use disorder (SUD) more broadly. The guide contained open-ended questions and probes related to the following topics:

- General population served by the hospital
- Hospital staffing structure
- Screening for mental health and SUD
- Patient workflow
- Referral and discharge
- Partnerships
- Barriers and facilitators to serving patients with SUD
- Staff SUD knowledge
- Funding



Interview Recruitment

Interviewees were recruited between July 2022 and January 2023. MHA sent an introductory email to representatives at each of the 53 member hospitals who had completed the MA ED Survey. This was followed by a recruitment email sent by JSI staff to invite the representatives to participate in interviews. JSI and MHA staff followed up with individualized outreach and reminders of upcoming interviews through January 2023.

A total of 24 interviews were scheduled, and 22 interviews were completed. Twenty-one interviews were conducted with representatives of hospitals which completed the MA ED survey, resulting in a 40% response rate (21 of 53). One interview was conducted with an organization that provides behavioral health services to several hospitals in the sample. Interviews were conducted between August 2022 and February 2023.

At least two JSI team members participated in each interview, with one person serving as the interviewer and the other as the notetaker. The notetaker used a template with topic headers to organize the notes. Interviews also were recorded and sent to a vendor for transcription.

Interview Analysis

Prior to data analysis, the interview notes were cleaned and prepared for analysis. Notetakers used the interview transcripts to supplement their notes. The notetaker also completed an interview

summary that included key takeaways and emerging themes. Interview notes were uploaded into the qualitative analysis software, Dedoose.

Descriptors, including hospital designation and size (number of beds), were added to each ED's interview data to allow for thematic analysis by descriptor. Next, codes were developed and assigned to excerpts in the interview notes. The analyst then reviewed interview excerpts with the same code in order to draft themes and subthemes. Interviewers and notetakers reviewed the draft themes to limit bias and ensure alignment between the themes and the key takeaways captured in the interview summaries.

Once consensus was reached on the overall thematic analysis, each theme and subtheme were analyzed by two descriptors: hospital designation and hospital size. The descriptor analysis was designed to answer the question: Do the themes identified in the overall analysis differ by hospital designation or size? If these differences were found, they were noted in the findings.

Themes included the following language to indicate the number of mentions by interviewees from different EDs: "the majority", "most" (12 or more); "many" (8 or more); "some" (5 or more); "several" (4 or more); "few" (3); "couple" (2), and "individual" (1). Perspectives expressed by one individual were included when they provided additional context for the theme or quantitative findings. Representative quotes were chosen to reflect key themes.

SURVEY FINDINGS

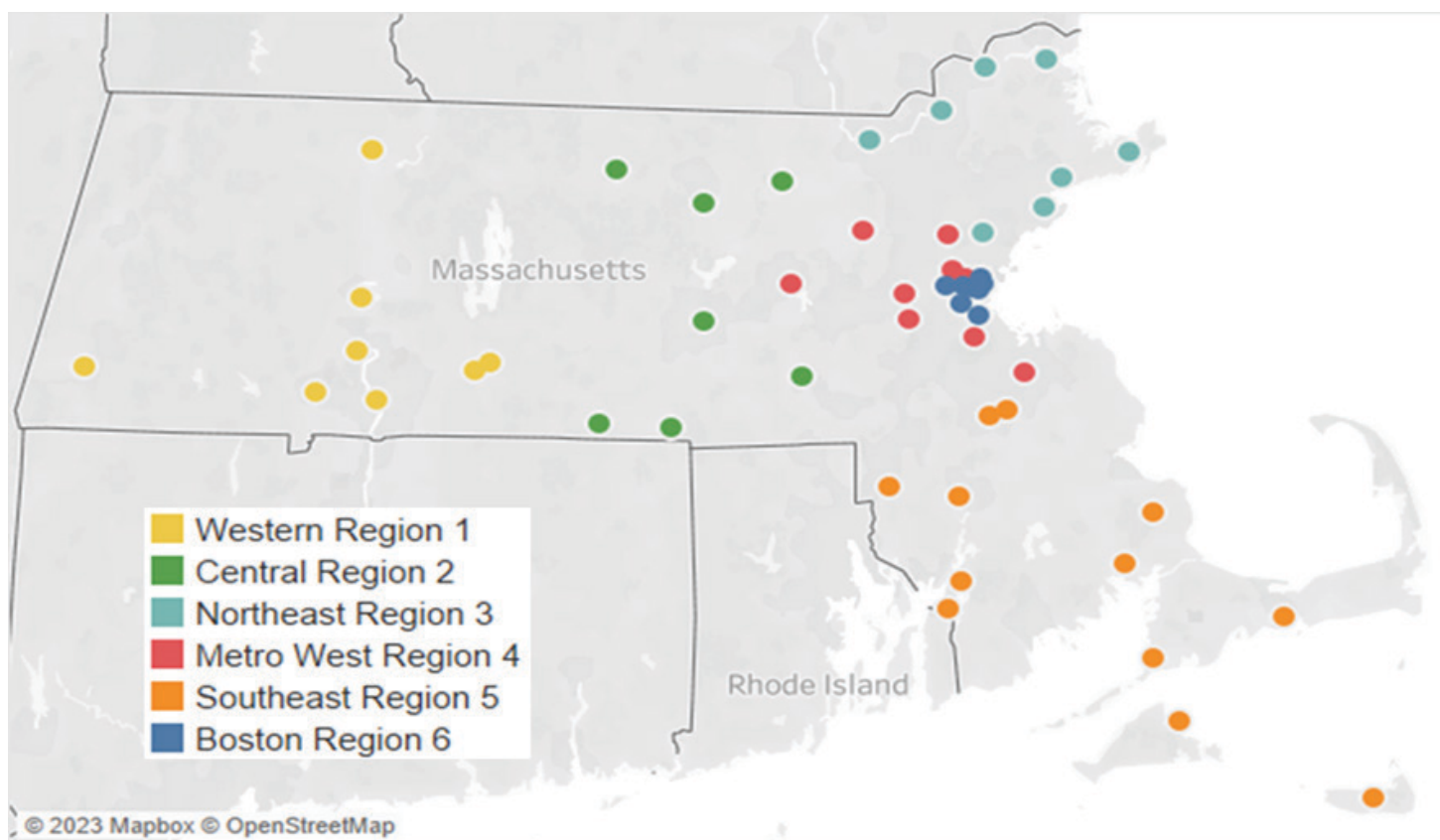
HOSPITAL CHARACTERISTICS

State Region

Hospitals responded from across the state, with 23% (n=12) of hospitals located in the Southeast Region, 17% (n=9) located in the Boston and Metro West Regions, 15% (n=8) located in the Western and Northwest Regions,

and 13% (n=7) located in the Central Region. The map in Figure 1 shows the 53 hospitals that participated in the MA ED Survey, with each color representing a different region in the state.

Figure 1. Hospitals that Participated in the MA ED Survey, by Region (n=53)





Hospital Designation

A defining characteristic of a hospital and its emergency department is its hospital designation. The Massachusetts Center for Health Information and Analysis characterizes hospitals in five types: teaching hospitals, academic medical centers, community hospitals, community high public payer hospitals, and specialty hospitals. This report collapses hospitals into three types: teaching hospital (includes teaching hospitals and academic medical centers), community hospital (includes community hospitals and community high public payer hospitals), or specialty hospital.

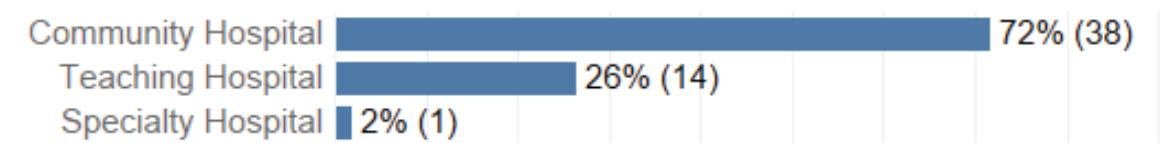
As displayed in Figure 2, 72% (n=38) of the 53 participating EDs are located in hospitals that are designated as community hospitals, 26% (n=14) as teaching hospitals, and 2% (n=1) as a specialty hospital.

Note: Teaching hospitals report at least 25 full-time equivalent medical school residents per 100 inpatient beds, in accordance with the Medicare Payment Advisory Commission (MedPAC), and include academic medical centers.

Community hospitals do not meet the MedPAC definition to be classified as teaching hospitals and include high public payer hospitals.

Specialty hospitals are not considered a cohort for comparison and analysis due to the unique patient populations they serve and/or the unique sets of services they provide. Specialty hospitals may be included in statewide analyses.

Figure 2. Percentage of Responding Emergency Departments by Hospital Designation (n=53)



Participating teaching hospitals are clustered in the Boston and Metro West Regions, with one teaching hospital located in the Central Region and one in the Western Region.

Hospital Size

An additional defining characteristic of a hospital and its ED is the hospital’s total number of staffed beds. As shown in Figure 3, 25% (n=13) of the 53 responding EDs are located in the smallest (less than 100 staffed beds) hospitals,

34% (n=18) are located in smaller (100-199 staffed beds) hospitals, 25% (n=13) are located in larger (200-399 staffed beds) hospitals, and 17% (n=9) are located in the largest (400+ staffed beds) hospitals. When presenting data by number of staffed beds, this report will sometimes group small hospitals (defined as hospitals with less than 200 beds) and large hospitals (defined as 200 or more staffed beds).

Figure 3. Percentage of Responding Emergency Departments by Number of Staffed Beds (n=53)



For hospitals with a known number of staffed beds, the median number of staffed beds was highest for the Boston Region (428) and the Northeast Region (337). This was followed by the Metro West Region at 194, the Southeast Region at 169, the Western Region at 140, and the Central Region at 134.

VOLUME OF PATIENTS WITH OUD

Nearly two-thirds (62%, n=33) of respondents estimated that, on average, their ED saw one patient or more per day for concerns related to OUD, as shown in Figure 4.

Figure 4. Percentage of Responding Emergency Departments by Estimated Monthly Volume of Patients with OUD

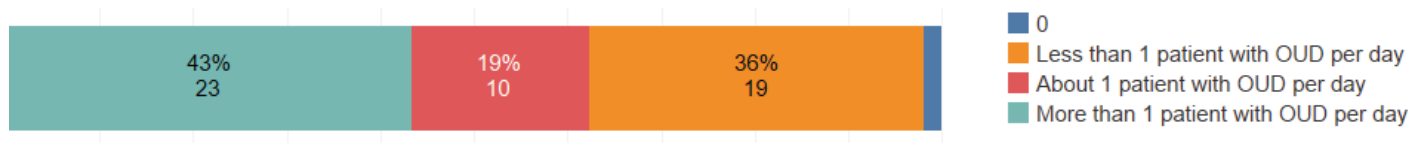
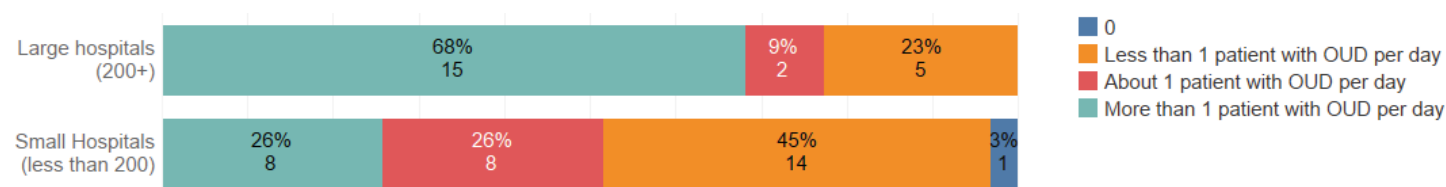




Figure 5 demonstrates that larger hospitals estimated a greater volume of patients with OUD than smaller hospitals. Sixty-eight percent (n=15) of respondents from hospitals with 200

or more staffed beds estimated that their ED sees more than one patient with OUD per day, compared with 26% (n=8) of respondents from hospitals with less than 200 staffed beds.

Figure 5. Percentage of Responding Emergency Departments by Estimated Monthly Volume of Patients with OUD and Hospital's Number of Staffed Beds



By geography, hospitals in the Southeast Region reported greater estimated encounters with patients with OUD in the ED, with 67% (n=8) of respondents in that region estimating that their ED sees more than one patient with OUD per day. This is followed by the Northeast Region at 63% (n=5), the Western Region at 50% (n=4), the Boston Region at 44% (n=4), the Central Region at 14% (n=1), and the Metro West Region at 11% (n=1).

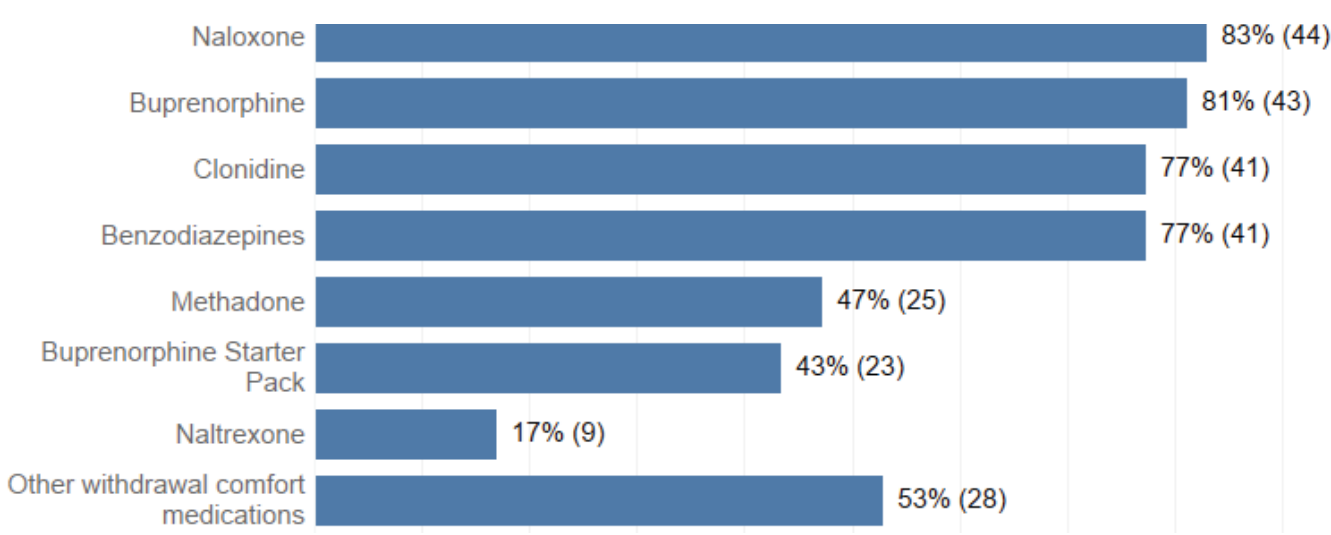
By hospital designation, teaching hospitals estimated slightly more encounters with patients with OUD in the ED, with 45% (n=5) of respondents estimating that their ED sees more than one patient with OUD per day. This is compared with community hospitals at 42% (n=15).

MEDICATION FOR OUD

More than three-quarters of responding EDs report the use of naloxone (83%, n=44), buprenorphine (81%, n=43), clonidine (77%, n=41), and benzodiazepines (77%, n=41) for the treatment of OUD or OUD withdrawal.

Less than half of EDs report using methadone (47%, n=25), buprenorphine starter packs (43%, n=23), or Naltrexone (17%, n=9; see Figure 6). Additionally, EDs report that the most common form of buprenorphine offered was buprenorphine plus naloxone combined.

Figure 6. Percentage of Responding Emergency Departments by Medications Used for the Treatment of OUD (n=53)



EDs that estimated their volume of patients with OUD as more than one patient encounter per day appear to offer a wider array of medications. Notably, 57% (n=13) of EDs estimating more than one encounter with a patient with OUD per day report that they offer buprenorphine starter packs, compared to 30% (n=3) of EDs estimating about one encounter with a patient with OUD per day, and 37% (n=7) of EDs estimating less

than one encounter with a patient with OUD per day. Similarly, 57% (n=13) of EDs estimating more than one encounter with a patient with OUD per day report that they offer methadone, compared to 30% (n=3) of EDs estimating about one encounter with a patient with OUD per day, and 42% (n=8) of EDs estimating less than one encounter with a patient with OUD per day.

Collectively, EDs in the Central Region report offering the fewest number of medications, but the percentage of hospitals that offer these medications are highest. All responding hospitals (n=7) in the Central Region report that their EDs provide naloxone, buprenorphine, and benzodiazepines. Nearly all (86%, n=6) report that their EDs provide clonidine, almost three quarters (71%, n=5) report that their EDs provide methadone, and more than half (57%, n=4) report that their EDs provide other comfort medications.

While the Southeast Region reports the greatest estimated volume of encounters of patients with OUD in the ED, a lower percentage of hospitals in this region offer buprenorphine (58%, n=7) when compared to all other regions combined (81%, n=43).

Larger hospitals reported use of a greater variety of medications for OUD (MOUD). Notably, buprenorphine starter packs are utilized at 60%

(n=12) of EDs located in hospitals with 200 or more beds, compared to 29% (n=7) for those with less than 200 beds.

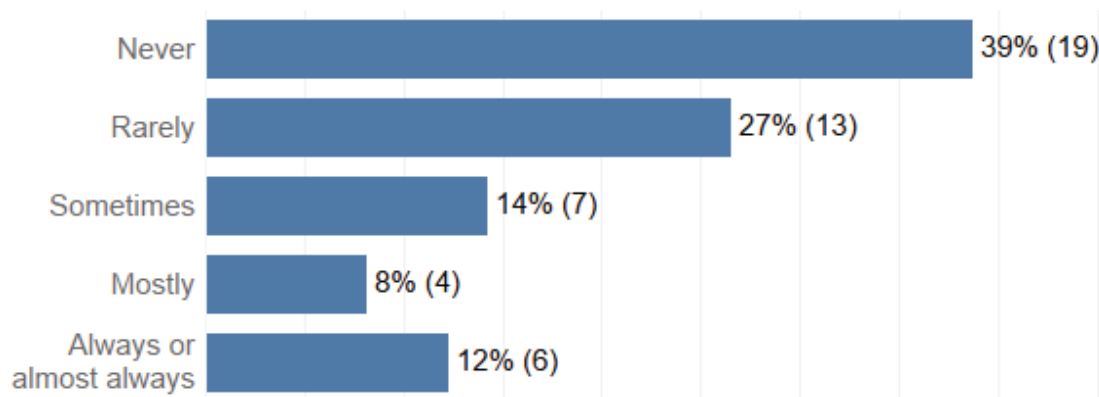
A greater percentage of EDs located in hospitals with 200 or more staffed beds also reported use of methadone at 55% (n=11), compared to 42% use of methadone in hospitals with less than 200 staffed beds (n=10).

Nearly all (95%, n=19) of EDs located in larger hospitals reported utilizing naloxone, compared to 75% (n=18) of those located in smaller hospitals.

Take-home Buprenorphine Starter Packs

Less than a quarter (20%, n=10) of EDs that responded to the question report they mostly or always offer take-home starter packs (see Figure 7). A greater percentage of teaching hospitals (27%, n=3) reported mostly or always offering take-home starter packs compared with community hospitals (16%, n=5).

Figure 7. How often is a take-home buprenorphine starter pack offered to ED patients with OUD? (n=49)





Nearly half (45%, n=10) of EDs that estimated their volume of patients with OUD as more than one patient encounter per day reported that buprenorphine starter packs are never offered. This figure is higher than in EDs with an estimated volume of patients with OUD of about one per day (38%, n=3), and EDs with an estimated OUD patient volume of less than one per day (28%, n=5). EDs that mostly or always offer take-home buprenorphine starter packs are concentrated in the Boston, Metro West, and Northeast Regions, with two EDs offering take-home buprenorphine in the Western Region.

Respondents report that ED patients often do not accept starter packs when they are offered, with 80% (n=39) indicating these patients never or rarely accept them. When patients do accept them, most EDs report providing written instructions (82%, n=27), verbal instructions (79%, n=26), and educational material (67%, n=22). Few EDs (9%, n=3) provide a signed agreement of use. Most EDs (59%, n=29) report having a protocol for providing patients with a take-home buprenorphine starter pack.

X-waiver

While the federal X-waiver requirement to provide buprenorphine prescriptions was removed following the survey administration period,

responses regarding X-waivers can be helpful to understand the ED climate. (This is explored in greater depth in the Interview Findings section of this report.) Overall, 61% (n=30) of respondents indicated that more than three-quarters of their ED physicians were X-waivered. Of respondents representing community hospitals, 66% (n=21) reported that more than three-quarters of their ED physicians were X-waivered. This percentage is greater than teaching hospitals, of which 55% (n=6) reported that more than three-quarters of their ED physicians were X-waivered. Nearly two-thirds (65%, n=32) of all respondents reported that a quarter or less of their ED advance practice practitioners (APPs) were X-waivered.

Buprenorphine Prescriptions

Most (57%, n=28) EDs reported that they never or rarely offer a prescription for take-home buprenorphine to ED patients with OUD. Of the EDs that reported they mostly or always offer a take-home buprenorphine prescription to ED patients with OUD, 75% (n=6) are located in the Greater Boston Area (defined as the Boston Region or the Metro West Region). The remaining 25% (n=2) are located in the Central Region.

Respondents report that ED patients often do not accept buprenorphine prescriptions when they are offered, with 63% (n=31) indicating

these patients never or rarely accept them. When patients do accept them, most (85%, n=34) EDs report providing written and verbal instructions. Most (65%, n=26) EDs also provide education materials. Few EDs (5%, n=2) report providing a signed agreement of use. Most EDs (66%, n=31) report having a protocol.

Naloxone Kits

Nearly half of responding EDs (45%, n=20) mostly or always offer naloxone kits to ED patients with OUD. A greater percentage of responding EDs in the Boston Region reported mostly or always offering naloxone kits (71%, n=5). This was followed by the Central Region (57%, n=4) and the Metro West Region (44%, n=4). About a third of EDs in other regions (33%) reported that they mostly or always offer naloxone kits.

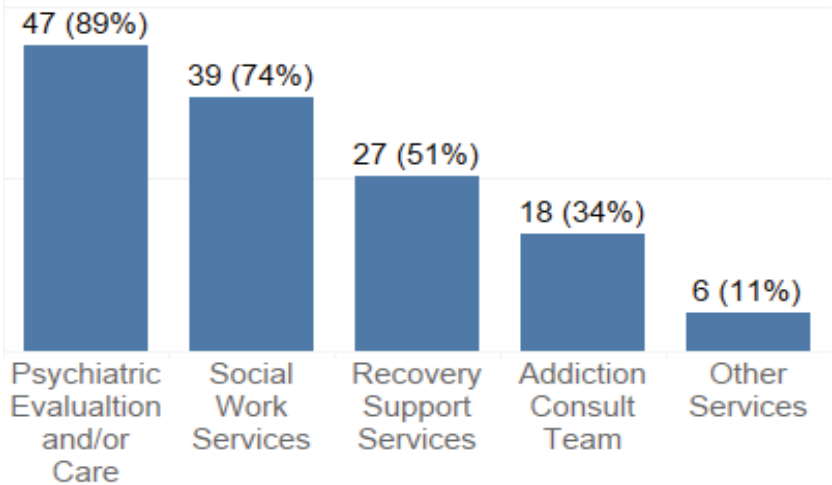
More than half (53%, n=10) of EDs that are located in large (200+ bed) hospitals reported mostly or always offering naloxone kits, compared with 44% (n=8) of EDs that reside in small (less than 200 bed) hospitals.

For responding EDs that report they provide naloxone kits and the respondent knew how these kits were funded, half (n=13) reported that they were purchased by the hospital and 31% (n=8) reported that they were reimbursed by insurance. Half (n=13) wrote in responses, which included that the kits were supplied by the Massachusetts Department of Public Health, BSAS, the state of Massachusetts, or a local substance use coalition.

ALLIED HEALTH PROFESSIONALS

In addition to medical care, responding EDs report that a patient with OUD may be offered a variety of services, including psychiatric evaluation or care (89%, n=47), social work services (74%, n=39), recovery support services (RSS, 51%, n=27), and addiction consult teams (34%, n=18; see Figure 8). Six respondents reported patients with OUD receiving other services including: consultation if they desire detoxification, patient education from the medical team, crisis intervention, referral to a bridge clinic, harm reduction supplies and sexually transmitted infection testing, and access to a licensed alcohol and drug counselor.

Figure 8. In addition to medical care, what other services can patients with OUD typically receive in your ED? (n=53)



The availability of RSS varied widely by region, with the Metro West Regions reporting the greatest percentage of EDs providing access, at 67% (n=6). This is compared with the Northeast Region (63%, n=5), the Southeast Region (58%, n=7), the Boston Region (44%, n=4), the Central Region (43%, n=3), and the Western Region (25%, n=2).

The availability of social work services also varied widely by region, with all (n=12) EDs in the Southeast Region reporting access. This is higher than the Metro West Region (89%, n=8), the Boston Region (78%, n=7), the Central Region (57%, n=4), the Northeast Region (50%, n=4), and the Western Region (50%, n=4).

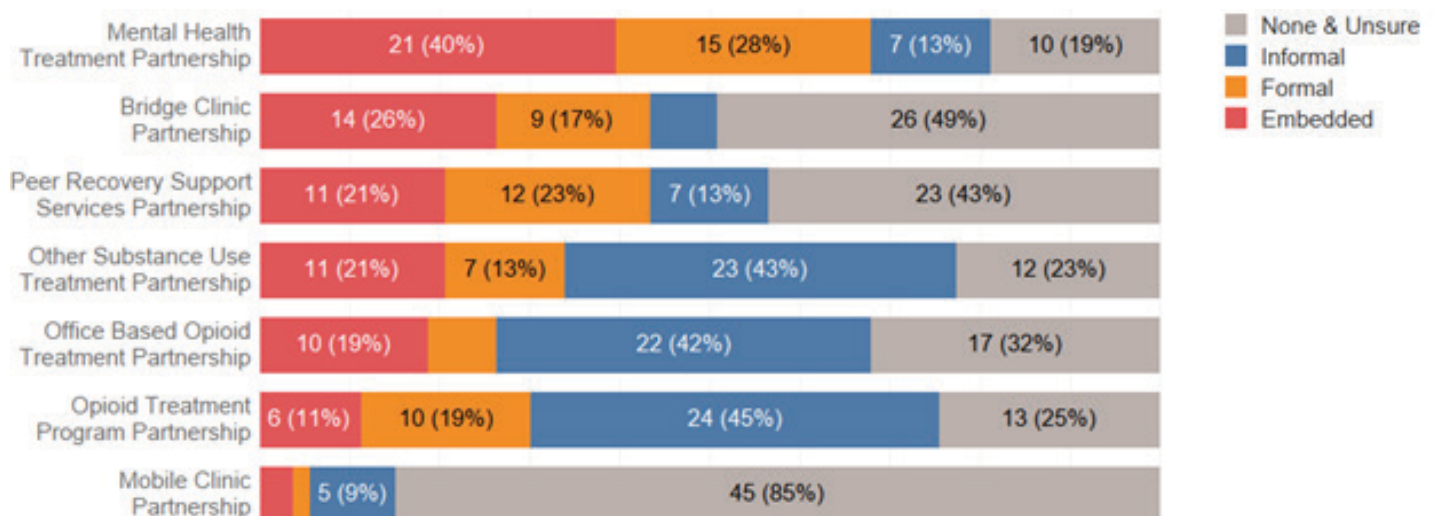
All EDs that reside in the largest hospitals (400+ staffed beds) reported access to social work services (n=8), compared with 92% (n=11) of EDs residing in larger hospitals (200-399 staffed beds), 80% (n=12) of EDs residing in smaller hospital (100-199 staffed beds), and 33% (n=3) of EDs residing in the smallest hospitals (less than 100 staffed beds).

When asked how allied health services are funded, most (85%, n=45) EDs reported that they are bundled into an overall rate. About a third (34%, n=18) reported allied health services are supported by grant funding to the hospital or ED, 13% (n=7) reported the services are funded by an external partner or agency, 9% (n=5) reported they are funded by philanthropy, and 4% (n=2) reported they are funded by supplemental billing in the ED.

PARTNERSHIPS

When asked about partnerships to support patients with OUD, the most often reported type of partnership was for mental health treatment as a service embedded in the hospital system or a formal partnership. This was followed by bridge clinics and peer recovery support services (see Figure 9). If informal partnerships are included, the most often reported partnerships were mental health treatment, substance use treatment, opioid treatment clinics, and office-based opioid treatment (OBOT).

Figure 9. What type of partnership do you have with the following categories of agencies/organizations? (n=53)



Bridge Clinic Partnerships

Nearly half (45%, n=5) of teaching hospitals reported embedded bridge clinic partnerships, compared with 19% (n=7) of community hospitals (see Figure 10).

Nearly three-quarters (70%, n=14) of EDs located in large (200 or more staffed beds) hospitals reported a bridge clinic partnership of any kind, compared with 46% (n=11) of EDs located in small (less than 200 staffed beds) hospitals.

A greater percentage (67%, n=6) of EDs located in the Boston Region reported a bridge clinic partnership of any kind, compared with the Northeast Region (63%, n=5), the Metro West Region (56%, n=5), the Western Region (50%, n=4), the Central Region (43%, n=3), and the Southeast Region (33%, n=4).

A greater percentage of EDs that estimated their monthly volume of patients with OUD at more than one per day reported a bridge clinic partnership of any kind, at 74% (n=17), compared with 51% (n=27) of all hospitals.

Peer Recovery Support Services Partnerships

Peer recovery support services (PRSS) partnerships varied by region (see Figure 11). At 75% (n=6), a greater percentage of EDs located in the Western Region reported a PRSS partnership of any kind. This is a higher percentage than found at EDs in the Metro West Region at 67% (n=6), the Northeast Region at 63% (n=5), the Southeast Region at 50% (n=6), the Boston Region at 44% (n=4), and the Central Region at 43% (n=3).

Figure 10. Bridge Clinic Partnerships by Hospital Designation and Partnership Type (n=53)

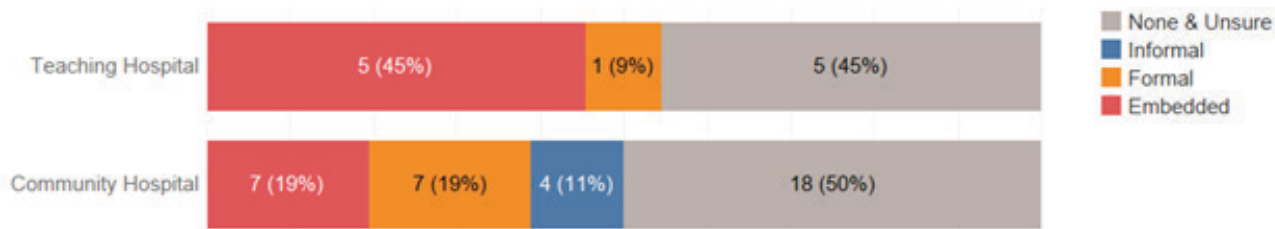
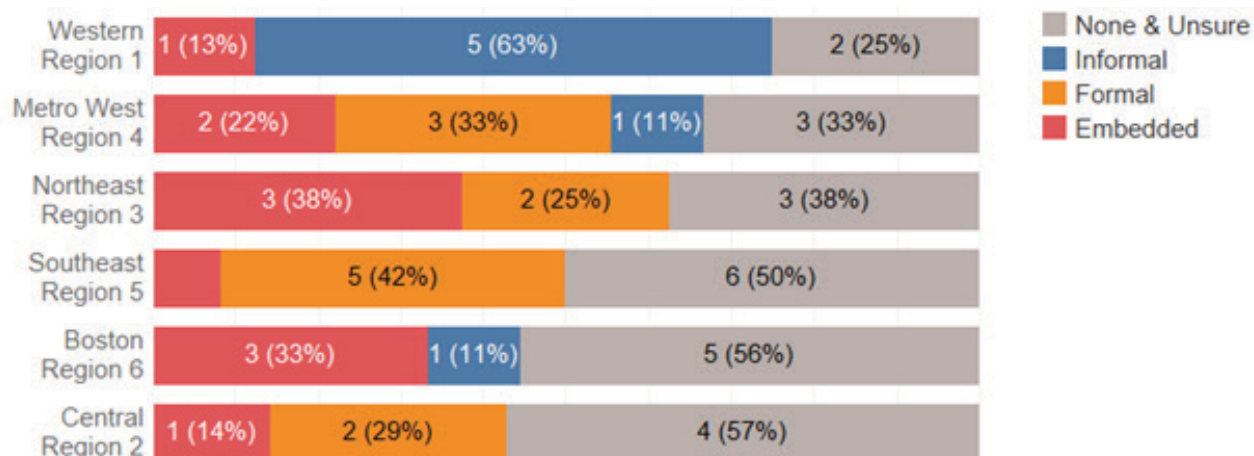


Figure 11. PRSS Partnerships by Region and Partnership Type (n=53)

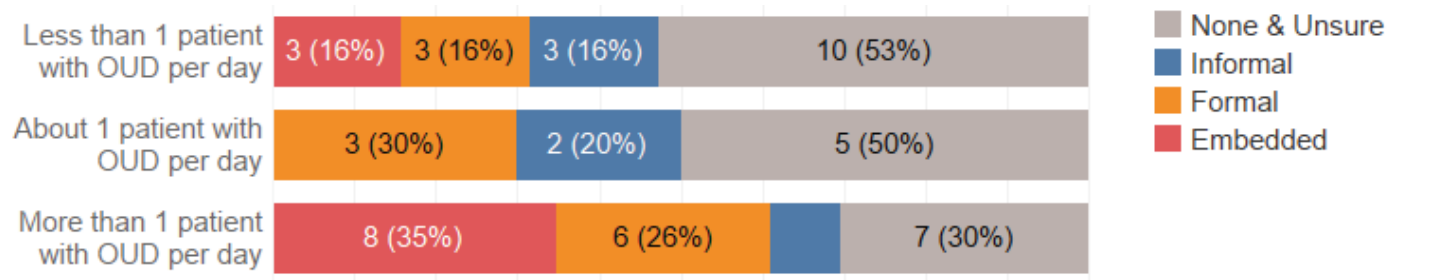




At 70% (n=16), a greater percentage of EDs that estimated their monthly volume of patients with OUD as more than one per day reported a PRSS partnership of any kind. This is compared with

50% (n=5) of EDs that estimated their monthly volume as about one per day and 47% (n=9) of EDs that estimated their monthly volume as less than one per day (see Figure 12).

Figure 12. PRSS Partnerships by ED Estimated Monthly Volume of Patients with OUD and Partnership Type (n=52)



At 45% (n=5), a smaller percentage of teaching hospitals than community hospitals (61%, n=22) reported having a PRSS partnership of any kind.

Nearly three-quarters (70%, n=14) of large (200+ bed) hospitals reported having a PRSS partnership of any kind, which is greater than the percentage of small (less than 200 bed) hospitals (54%, n=13).

Other Substance Use Treatment Partnerships

A high percentage of EDs (87%, n=20) that estimated their monthly volume of patients with OUD as more than one per day reported another substance use treatment partnership of any kind. This percentage is greater than EDs that estimated their monthly volume as about one per day (70%, n=7) and EDs that estimated their monthly volume as less than one per day (68%, n=13).

A greater percentage of teaching hospitals (36%, n=4) reported having another substance use treatment partnership of any kind, compared to the percentage of community hospitals (19%, n=7).

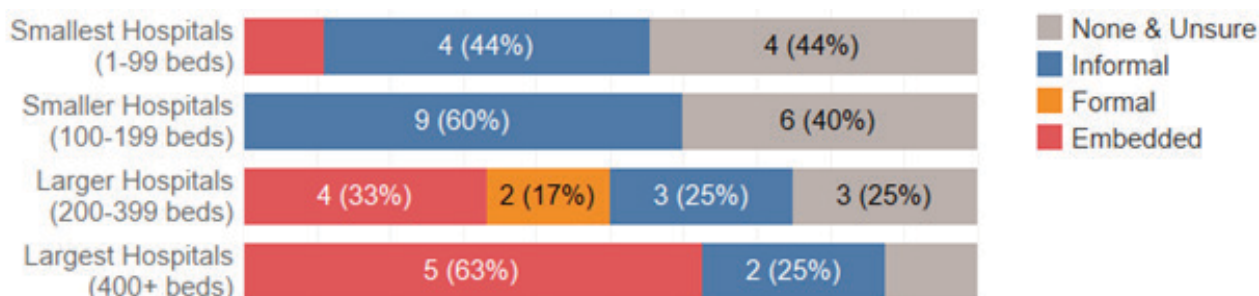
At 29% (n=7), a slightly greater percentage of small (less than 200 bed) hospitals reported having another substance use treatment partnership of any kind, compared to large (200+ bed) hospitals (20%, n=4).

About a third (33%, n=3) of EDs located in the Boston Region reported another substance use treatment partnership of any kind. This is slightly greater than the percentage of EDs located in the Central Region (29%, n=2), Northeast Region (25%, n=2), and Metro West Region (22%, n=2). EDs located in the Southeast Region and the Western Region reported the lowest access to other substance use treatment services, at 17% (n=2) and 13% (n=1), respectively.

Office-Based Opioid Treatment Partnerships

Figure 13 demonstrates that a greater percentage of EDs located in the largest (400+ bed) hospitals reported an OBOT partnership, with 88% (n=7) reporting an OBOT partnership of any kind, compared to 75% (n=9) of EDs located in larger (200-399 bed) hospitals, 60% (n=9) of EDs located in smaller (100-199 bed) hospitals, and 56% (n=5) of EDs located in the smallest (less than 100 bed) hospitals.

Figure 13. OBOT Partnerships by Hospital Size and Partnership Type (n=44)



Overall, most EDs reported an OBOT partnership of any kind, including 73% (n=8) of teaching hospitals and a slightly smaller percentage (69%, n=25) of community hospitals.

A high percentage of EDs that estimated their monthly volume of patients with OUD as more than one per day reported an OBOT partnership of any kind (83%, n=19). This is a greater percentage than reported by EDs that estimated their monthly volume as about one per day (60%, n=6), and by EDs that estimated their monthly volume as less than one per day (53%, n=10).

The availability of OBOT partnerships varied widely by region. Nearly all (88%, n=7) EDs in the Western Region reported an OBOT partnership of any kind. This is greater than the percentage of EDs in the Boston and Metro West Regions (78%, n=7), the Southeast Region (75%, n=9), the Northeast Region (50%, n=4), and the Central Region (29%, n=2).

Opioid Treatment Program Partnerships

A greater percentage (78%, n=28) of community hospitals than teaching hospitals (55%, n=6) reported an opioid treatment program (OTP) partnership of any kind.

Notably, all (n=7) EDs located in the Central Region reported an OTP partnership of any kind. This is slightly greater than the percentage of EDs located in the Northeast Region (88%, n=7). A smaller percentage of EDs located in the Southeast (75%, n=9), Metro West (67%, n=6), Boston (67%, n=6), and Western (63%, n=5) Regions reported an OTP partnership of any kind.

No notable variations in OTP partnerships were observed on the basis of number of staffed beds or estimated monthly volume of patients with OUD in EDs.

BARRIERS TO CARE

Respondents were asked to rank barriers to treating OUD in the ED and barriers to arranging post-ED care. An average rank was calculated for each barrier by summing all the ranking positions and dividing by the number of responses to the question.

The barriers to treating OUD in the ED, from most (1) to least (5) challenging, as reported by respondents, included:

- Patient volume and acuity (average rank of 1.8)
- Lack of time or resources (average rank of 2.1)
- Lack of provider education on MOUD (average rank of 3.2)
- Lack of provider education on OUD (average rank of 3.8)
- Lack of X-waivered providers (average rank of 4.1)

The barriers to arranging post-ED care, from most (1) to least challenging (6), as reported by respondents, included:

- Patient readiness for OUD treatment (average rank of 2.4)
- Lack of referral resources or treatment providers (average rank of 2.9)
- Patient transport (average rank of 3.3)
- Medical staff available time (average rank of 3.6)
- Stigma (average rank of 3.9)
- Lack of medical provider knowledge on OUD (average rank of 4.9)

INTERVIEW FINDINGS

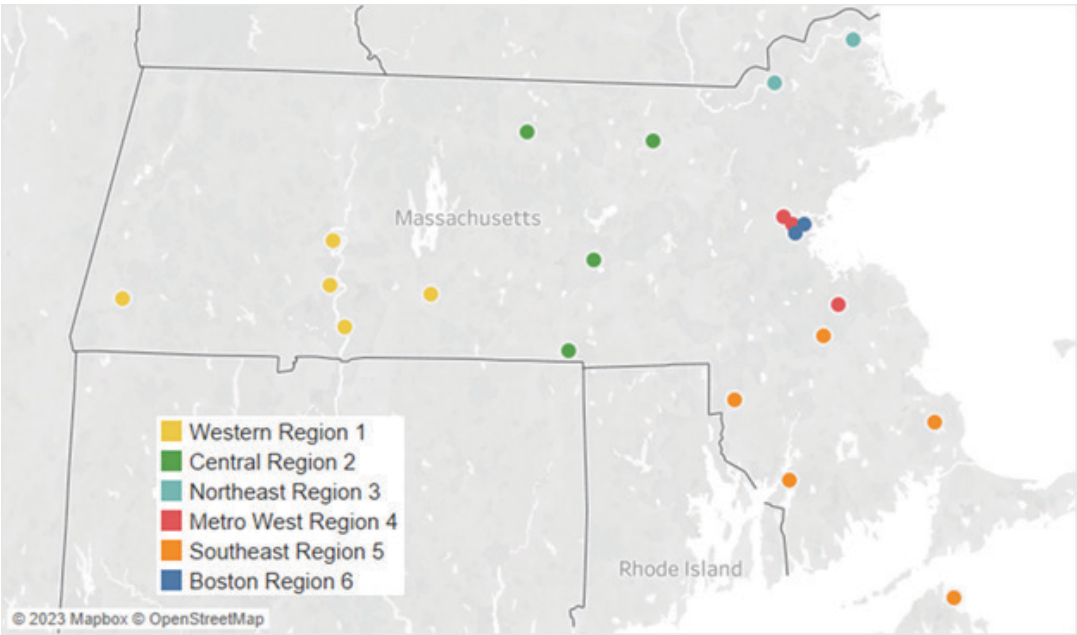
PARTICIPANT CHARACTERISTICS

State Region

ED representatives participated from hospitals across the state, with 24% (n=5) located in the Western Region, 24% (n=5) in the Southeast Region, 19% (n=4) in the Central Region, 14% (n=3) located in the Metro West Region, 10% (n=2) in the Northeast Region, and 10% (n=2)

in the Boston Region. Participating emergency departments are displayed by region in Figure 14. An additional interview was conducted with a behavioral health agency that provides services to several hospitals in the sample.

Figure 14. Participating Emergency Departments by Region (n=21)

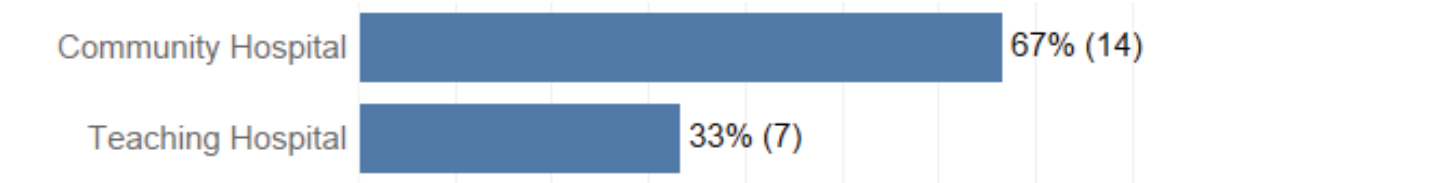


Hospital Designation

As displayed in Figure 15, 67% (n=14) of the 21 EDs interviewed were located in community hospitals and 33% (n=7) were located in teaching

hospitals. One additional interview was conducted with a behavioral health agency that provides services to several hospitals in the sample.

Figure 15. Percentage of Participating Emergency Departments by Hospital Designation (n=21)



Hospital Size

As shown in Figure 16, 24% (n=5) of the 21 EDs interviewed were located in the smallest (less than 100 staffed bed) hospitals, 33% (n=7) were located in smaller (100-199 staffed bed) hospitals, 19% (n=4) were located in larger (200-399 staffed bed) hospitals, and 24% (n=5)

were located in the largest (400+ staffed bed) hospitals. One additional interview was conducted with a behavioral health agency that provides services to several hospitals in the sample.

Figure 16. Percentage of Participating Emergency Departments by Number of Staffed Beds



SCREENING AND PERCEIVED PREVALENCE OF PATIENTS WITH OUD IN THE ED

Interview respondents were asked about behavioral health screening methods implemented in the emergency departments, as well as the most common substance use problems encountered among patients in the emergency department.

Screening

Suicide risk assessment is the most common form of universal screening in the ED, while universal screening for OUD is practiced in some EDs. Approximately 75% of the EDs that participated in the interviews and 100% of EDs from the largest (400+ bed) facilities reported that they universally screen for suicide risk.



Results indicated that only 14% of EDs universally screen for other mental health disorders like depression or anxiety. About 60% of interviewees reported that they universally screen for OUD. Some use validated screening tools or procedures, including Screening, Brief Intervention and Referral to Treatment (SBIRT); the Alcohol Use Disorders Identification Test (AUDIT-C); CAGE; and the National Institute on Drug Abuse (NIDA) Quick Screen. Others do not have a specific tool, but rather embed one or two OUD questions into their triage process.

When universal screening is not in place, assessment of the need for behavioral health services is done based upon the observations and discretion of ED clinicians. Several interviewees, most of whom represented teaching hospitals, noted that providers only have the capacity to conduct a limited number of screens in the ED.

Common Substance Use Problems in the ED

In many EDs, alcohol use disorder was reported as more prevalent than OUD or other types of SUD. However, there were a few EDs that listed opioids (including heroin, fentanyl, and oxycodone) as their primary SUD concern. Other drugs that interviewees mentioned (in order of frequency) were crystal methamphetamine, cocaine, marijuana, benzodiazepines, and crack.

THEMES

Table 1 summarizes the thematic categories and corresponding themes that arose from data analysis of semi-structured interviews. The themes were extracted from interview responses for the following topics: referral practices, patient workflow, partnerships, barriers and facilitators to treatment access, staff knowledge and training, and funding considerations. Interviewees responded to these topics as they related to all SUDs, including OUD.

TABLE 1. SUMMARY OF THEMES

Thematic Category	Theme
ED Treatment Environment	Improved provider training and access to consultation has facilitated more acceptance of SUD as a chronic condition that can be addressed in the ED.
	Consistent training across a larger range of topics for all prescribers is needed to increase provider comfort in treating patients with SUD.
	Commitment to harm reduction is expanding, but barriers remain.
	Stigma surrounding SUD leads to inequities in policies, procedures, and care for ED patients with SUD when compared with treatment for patients with other chronic or acute conditions.
	The ED is not an environment that is well-suited to initiate complex SUD care.
Collaboration, Partnerships, and Referrals to Ongoing Treatment	Established external collaborations and partnerships allow the ED to improve efficiency and effectiveness.
	There are limitations in the type, capacity, and distribution of referral partnerships.
	Many ED patients lack critical resources to get and stay connected to treatment or recovery referrals.
	Discharge planning and follow-up communication with patients post-ED is challenging.
ED Staffing	Staff members with SUD expertise who are available during all shifts improve patient care.
Funding and Leadership	Leadership buy-in is essential to establish and sustain SUD capacity in the ED.
	Sustaining SUD resources in the ED is challenging because reimbursement is poor, hospital budgets are tight, and there are many competing financial priorities.



The following sections are organized by thematic category and theme. Within each theme, we share subthemes, additional context from the interviews, and selected quotes that are representative of the themes. Differences in theme based upon hospital designation (community as compared with teaching hospitals) or size (number of beds) are noted.

ED Treatment Environment

Theme: Improved provider training and access to consultation has facilitated more acceptance of SUD as a chronic condition that can be addressed in the ED

Interview participants reported seeing a greater commitment by ED medical staff to provide quality care to patients with SUD than in the past. A few interviewees indicated that the new generation of providers received more SUD training during medical school than previous generations. This generation of providers is helping to shift the ED culture to create more acceptance of patients with SUD. Additionally, X-waiver training provided formal education on SUD and OUD more specifically that many ED providers had not previously received. When this training requirement was in place, a high percentage of ED physicians participated in formal SUD education in order to become X-waivered. This built more collective knowledge and comfort among providers to prescribe MOUD.

“There has been a major shift in the field...Ten years ago when I trained... [EDs] didn’t treat chronic disease. If you [were] having an emergency, [we’d] deal with that. That has radically changed.”

EDs used several strategies to increase the number of physicians who were X-waivered, including: making X-waiver a requirement for employment, expecting attending physicians to apply for the waiver as part of their onboarding process, and providing incentives for X-waiver training participants. Interviewees from a few EDs said that their facility made the training process as easy as possible by making it free, providing multiple opportunities to participate, scheduling training after faculty meetings, and delivering training via teleconference. A couple of interviewees highlighted the role of leadership to ensure that these training opportunities were available, accessible, and prioritized.

Respondents reported that as more ED providers became X-waivered, access to MOUD in the

Changes in X-waiver Regulations

The former X-waiver regulations were established as part of the Drug Addiction Treatment Act of 2000 (DATA). This required providers to obtain a waiver in order to administer, dispense, and prescribe buprenorphine for the treatment of OUD in settings outside of federally registered opioid treatment programs. These regulations required providers to complete specialized training prior to dispensing buprenorphine. The Consolidated Appropriations Act of 2023 removed the federal requirement for practitioners to submit a waiver application (X-waiver) to prescribe medications like buprenorphine for the treatment of OUD. Now any clinician with a current DEA registration that includes Schedule III authority can

prescribe buprenorphine for OUD, and there are no longer any limits or patient caps on the number of patients a prescriber may treat for OUD with buprenorphine. While there is no longer a training requirement specific to obtaining an X-waiver, the bill includes provisions that require practitioners to meet a one-time, eight-hour training requirement on the treatment and management of patients with an OUD or other SUD upon application or renewal for their DEA license. This training requirement can be satisfied with previous training hours (such as completed X-waiver education); it is also waived for addiction medicine specialists and physicians who graduated from medical school within the last five years.

ED increased. Some hospitals offer patients buprenorphine prescriptions at discharge. Others provide buprenorphine starter packs, which remove the barrier of having to pick up a prescription or wait for it to be filled. Methadone induction remains rare; only one ED stated that they provide this.

Access to consultation may help increase provider comfort in treating patients with SUD. Interviewees from two large (400+ bed) teaching hospitals said their staff had access to external consultation services. As an example, one person mentioned the Massachusetts Consultation Service for the Treatment of Addiction and Pain (MCSTAP). This is a daytime phone line for clinical OUD questions.

Another interviewee mentioned a 24/7 hotline that ED staff can call with questions about prescribing buprenorphine/naloxone or methadone. An interviewee from a smaller community hospital said that they used to have a staff person who served as their “hotline” for MOUD questions.

Theme: Consistent training across a larger range of topics for all prescribers is needed to increase provider comfort in treating patients with SUD

Beyond the X-waiver training that was offered in the past, most EDs do not provide regular opportunities for professional development related to SUD. Interviewees described occasional trainings or discussions in staff meetings.

Topics included available SUD treatments, services, and referral options, new research, and case studies. Several interviewees expressed a desire for ongoing training. Learning needs may be greater for those who have not had regular exposure to patients needing SUD treatment.

Other noted gaps included:

- **Training for APPs:** Several interviewees noted that APPs in their hospital were less likely to receive X-waiver training or be X-waivered when a waiver was required to prescribe MOUD.
- **Education and support related to adulterants and pain management:** Several providers commented that adulterants such as xylazine and fentanyl make it more difficult to reverse overdoses and initiate buprenorphine. A few said that there is very little guidance about how to provide appropriate pain management in general. Pain can be a consequence of OUD, yet few providers know how to treat pain in patients with OUD. The focus upon reducing opioid prescriptions has led to undertreatment for pain in the ED, especially for those with OUD.
- **Guidance about prescribing methadone:** One person highlighted that there is no education about the provision of methadone for any of their ED providers. As a result, methadone is not offered to patients.

Theme: Commitment to harm reduction is expanding, but barriers remain

The majority of EDs that participated in interviews reported that they provide naloxone at discharge. Some offer it to any patient who has a history of substance use, while a few community hospitals provide it following an overdose.

Some interviewees described other harm reduction supports. Three noted that they provide harm reduction kits, which include

naloxone and clean needles. Two of these were representatives from large (400+ bed) teaching hospitals, and the third was from an affiliated small community hospital. A few interviewees also described established partnerships with organizations that specialize in harm reduction.

There are still some barriers to expanding harm reduction services. Most representatives from naloxone dispensing EDs reported that it is not reimbursable to give patients naloxone from a supply kept in the ED. One person shared that they must wait for naloxone prescriptions written in the ED to be filled by the in-patient pharmacy, and this delay results in fewer patients leaving the ED with naloxone in hand (see Funding and Leadership section). In two EDs, interviewees reported that the practice of naloxone distribution is limited because the process is not streamlined or well publicized.

Theme: Stigma surrounding SUD leads to inequities in policies, procedures, and care for ED patients with SUD compared with patients with other chronic or acute conditions

Many interviewees cited stigma as a barrier to SUD care, with some perceiving a direct relationship between stigma and inequitable policies and practices. They shared several examples of how care of patients with SUD differs from care of patients with other conditions within the ED. For instance, a couple of interviewees described stark differences between those presenting in the ED with a heart attack versus those presenting with an overdose. There is a whole team to attend to those with a heart attack at any hour of the day and there are procedures in place to follow up with these patients when they leave the hospital. Conversely, one person said, “We have someone [with SUD] with the exact same mortality rate, and we don’t do any of that.”

Some interviewees shared that the former X-waiver policy presented a barrier to treatment access. A couple stated that this requirement was different from requirements to prescribe any other treatment in the ED. Furthermore, interviewees from some small- to medium-sized community hospitals observed a continued reluctance from a subset of ED providers to treat SUD at all.

Several interviewees commented that reimbursement is worse for SUD staff, programs, and medications than it is for other diseases (see Funding and Leadership section). Interviewees from a couple of affiliated hospitals independently commented that there are no performance measures related to SUD care, which results in the deprioritization of treatment when compared to treatment for other conditions (e.g., sepsis, infection rates, heart attacks) that are being closely tracked.

“It becomes really hard when the responsibility is placed on the primary staff...Emergency department’s care is...variable because it is based on acuity and timing.”

Several interviewees indicated a relationship between SUD stigma and provider compassion fatigue. They shared that when patients overdose, are revived, are given resources, and return again with another overdose, it leads providers to feel helpless and jaded. One person said that “recurrent complaints challenge your empathy.”

Another shared, “Recovery is up to the patient, which can be frustrating for providers.” One person noted that providers need to actively work against biases against those with SUD itself, especially when compounded by other biases related to race, socioeconomic status, and homelessness.

Theme: The ED is not an environment well-suited to initiate complex SUD care

Some interviewees stressed that the priority of the ED is to address acute, life-threatening health issues. They noted that many other competing directives are heaped upon ED staff, and they do not have the capacity or resources to address all of them.

ED patients often refuse SUD care. Interviewees from several hospitals reported low uptake of SUD evaluation, MOUD, and referral options. Those presenting in the ED may have just experienced something traumatic, may be feeling shame or guilt, and may not be in a good place to engage in care. One person noted that the triage system in the ED often means that patients with non-life-threatening complaints have to wait, and those who are struggling with addiction but not in acute distress are unlikely to do so.

Collaboration, Partnerships, and Referrals to Ongoing Treatment

Theme: Established external collaborations and partnerships allow the ED to improve efficiency and effectiveness

Interview participants noted that partnerships result in stronger referral networks, which, in turn, provide more potential for patients to be connected with ongoing treatment and resources to support recovery.

Established partnerships take many forms, including: direct, facilitated, or expedited



admission processes; staff from a partner organization embedded in an ED or on call for the ED; memoranda of understanding, business associates, or other documented agreements; a dedicated contact person for referrals; or provision of education from the partner organization to the ED. The types of partnerships or referral relationships mentioned most frequently were outpatient/office-based buprenorphine treatment programs and mental health services. When asked about partnerships, almost all community hospital interviewees mentioned having referral options for outpatient/office-based buprenorphine treatment. However, only one interviewee from a teaching hospital spoke of this type of referral. Relationships with peer support organizations and detoxification/Acute Treatment Service were each mentioned by multiple interviewees. Some interviewees said that they referred patients to comprehensive treatment facilities which offer behavioral health services along the continuum of care including inpatient, outpatient, and recovery options. Interviewees from some EDs, including representatives from all four hospitals in the largest category (400+bed), reported having a partnership with an opioid treatment program (OTP) or “methadone clinic.”

The several hospitals that had relationships with bridge clinics considered these clinics one of their most important referrals for those with

SUD. Bridge clinics can connect patients to a variety of resources, including addiction treatment facilities and support services. Notably, most of the interviewees who spoke about access to bridge clinics were from teaching hospitals and/or large hospitals with 200+ beds.

Theme: There are limitations in the type, capacity, and distribution of referral partnerships

The most frequently cited referral gaps were with OTP/methadone programs, followed by detoxification and inpatient facilities. Interviewees stated either there were not an adequate number of those types of facilities in their area, they lacked relationships with these entities, or there were other access barriers; such barriers may include patients “not being welcomed back” or not meeting clinical criteria. A few interviewees mentioned the most frequent barriers to methadone treatment options included restrictive regulations (e.g., the 72-hour rule¹ can provide inadequate time to arrange for referrals), and limited referral options.

Other challenges to establishing referral partnerships included:

- **Limited ED staff time:** Some interviewees stated that key challenges included their own time constraints and competing priorities in the ED.

¹ The “72-hour rule” allows non-OTP providers to administer methadone for opioid withdrawal symptoms for up to 72 hours while arranging referral for ongoing treatment.

- **Capacity limitations:** Many interviewees shared that referral organizations often have an inadequate number of beds/staff and limited hours of operation. This can result in long wait times and missed opportunities to connect patients to treatment.
- **Inequitable distribution of treatment resources across the state:** Two interviewees from teaching hospitals suggested a need for more equitable distribution of treatment resources throughout different geographic regions of the state. One person cited the concentration of bridge clinics in the Boston area as an example.

“There is a benefit to having an alliance with a specialty agency rather than reinventing the wheel by yourself and creating a whole set of resources.”

A few interviewees, all of whom were from community hospitals, said that limited referral options act as a deterrent for treating patients with SUD in the ED. In the words of one person, “EDs need someone to hand off to. It is not enough to give someone a Suboxone prescription... Until you have resources to connect patients to, you are putting a finger in the dam.”

Theme: Many ED patients lack critical resources to get and stay connected to treatment or recovery referrals

Even when SUD treatment or recovery referral options are in place, many ED patients lack

critical resources to access and stay connected to them. These patients may lack the following:

- **Transportation:** Hospitals may use significant internal resources or rely on partnerships and grants to transport patients from the ED to another place of care, such as a detoxification facility.
- **Insurance:** Referrals are limited by a patient’s type of insurance. It is often difficult to find placements for people who lack commercial insurance. The specific referral services mentioned were recovery centers, detoxification, and clinical stabilization care.
- **Telephones:** A few interviewees, all of whom represented teaching hospitals, cited patients’ lack of a working telephone as a barrier to accessing care. They explained that those without telephones cannot call referral entities and cannot be reached for follow up. Telehealth options also are difficult to access for those without phones. In addition, those who may lack regular phone access are more likely to change phone numbers frequently, which can make follow-up calls difficult. One interviewee stressed the importance of gathering updated contact information each time the patient is seen.
- **Identification:** Without identification, some patients cannot fill their prescriptions or enroll in OTPs.

Theme: Discharge planning and follow-up communication with patients post-ED is challenging

Interviewees recognized that better discharge planning and follow-up would lead to better outcomes, but many did not have systems in place to make these happen. The majority of EDs provide a list of SUD treatment resources and

contact information to patients upon discharge. However, as one person acknowledged, “The onus is on the patient to follow through with most referrals.” Challenges to discharge planning and follow-up communication included:

- **Limited use of “warm handoff” referral method:** The capacity to provide patients with warm handoffs¹¹ from the ED to referral agencies varies depending upon ED staffing, patient load and acuity, and the strength of referral partnerships. Interviewees indicated that warm handoffs happen most frequently when: 1) allied health professionals are available to facilitate them (see ED Staffing section) and 2) there are established agreements or protocols in place to accept referrals from the ED. A few interviewees from teaching hospitals said that it was difficult to complete a warm handoff if patients came in during late-night and weekend hours, when ED or referral agency staffing was sparse. All of these interviewees noted that when a warm handoff is not possible, they may call the patient the next day to follow up. Another interviewee said that their ED provides patients with a phone to contact treatment sites or other SUD referral organizations while they are in the ED, but their staff do not have the capacity to make warm handoffs themselves.
- **Challenges with follow-up from referral agency:** The likelihood that the ED will receive follow-up information about whether or not a client engaged in care is also related to the strength of the partnership between the ED and the referral agency. Some representatives from EDs said they do not get any follow-up information. A couple of interviewees noted that

they only receive this information from a small subset of referral sites. There were a couple of models for follow-up care that interviewees felt were promising. A few interviewees spoke highly of a program where plainclothes police officers and recovery coaches/social workers follow up with those who have presented with SUD risks in the ED. Another interviewee said their ED partners with street outreach teams from Healthcare for the Homeless to “follow up on patients of concern.”

- **Health information technology’s role to support referral coordination:** Electronic Medical Records (EMRs) and other forms of technology can help with coordination of care and follow-up communication, but there are still many barriers to data sharing. A common EMR can allow staff from different departments/programs within the hospital or hospital system (for example ED and Behavioral Health, Psychiatric, Intensive Outpatient, Bridge Clinic) to share patient information. EMRs also help to automate referrals, workflows, and navigation of the discharge planning process. However, the hospital system and its partners may have several different EMRs which are not interoperable. Not all staff have access to other EMRs, and it can be difficult to obtain patient-level data. A couple of community hospitals either have or are planning agreements with external partners that allow them to access each other’s EMR. This arrangement is not the norm, however. Confidentiality and consent provisions related to disclosing patient SUD information (42 Code of Federal Regulations [CFR]) were noted by several EDs as barriers to internal and external data sharing.

¹¹ As defined by The Agency for Healthcare Research and Quality (AHRQ), a warm handoff is a “transfer of care between two members of the healthcare team, where the handoff occurs in front of the patient.”

ED Staffing

Theme: Staff members with SUD expertise who are available during all shifts improve patient care.

EDs with dedicated SUD staff have a mix of staffing types including recovery coaches, recovery support navigators, recovery liaisons, health promotion advocates, SUD counselors, and social workers. These staff are able to provide one-on-one attention to patients while they are in the ED, and also to follow up with patients once they leave. They screen patients, facilitate connection with MOUD within the hospital, stay with the patients, build rapport, provide comfort, and direct the patients to longer-term resources. Resources include bridge clinics, long-term treatment programs, and social services that improve access, such as transportation and securing identification.

“If we had a [referral source] that was staffed specifically with people with the specialty of recovery navigators, I think [patients] probably would be seen a lot quicker...we could provide a more engaging therapeutic environment.”

Many interviewees said that those with lived experience have credibility with patients because they share a personal journey with addiction. Two interviewees said that when ED staff work with peer recovery coaches, it also provides an opportunity for providers to have positive interactions with people who have been successful in their recovery; this can reinforce provider commitment to providing treatment in the ED.

Several interviewees reported that they have interdisciplinary addiction teams in the ED that are available to work with patients who are identified as having or being at risk for SUD. Another ED is planning to implement this model soon. All of these hospitals have community designations.

“Being based in the ED, I think that [recovery coaches] provide a huge role because they can talk to the person in their language, but they’re in our setting. And I’ve seen a lot of great work from the PRCS [Peer Recovery Coach Services] that I’ve worked with in the past. And I think that’s an underutilized resource that’s very cost effective.”

In several cases, resources that are available within the hospital or hospital system can be called upon by the ED to improve care for those with SUD. Examples include a well-staffed psychiatric/behavioral health unit, a hospital-based crisis team, and a dual-diagnosis facility.

Some hospitals, the majority of which are community hospitals with less than 200 beds, have no or very limited SUD/allied staff resources. While several interviewees said they had a clinical provider with specific training and expertise in SUD care, a couple of others noted this as a critical staffing gap. Even those with SUD staff and/or resources note that their capacity is often limited. In many cases, ED-based SUD staff only work certain days and/or certain shifts, meaning that patients who come in at other times have to

wait or go without services. Many hospitals that have allied or behavioral health professionals share these staff across multiple departments. As a result, their availability to help patients with SUD in the ED is constrained and unpredictable.

“Providers only have so much bandwidth and it takes a lot of time to know all these places...That’s why we need more resources [like] the social workers to really make this work efficiently and effectively.”

Current workforce shortages have made it difficult to recruit and retain SUD clinicians and behavioral health professionals. Staff vacancies limit the capacity to provide comprehensive SUD care. Interviewees identified several potential reasons for difficulty in filling positions, including licensure requirements, low compensation, and post-COVID reluctance to work in an in-person hospital environment.

Funding and Leadership

Theme: Leadership buy-in is essential to establish and sustain SUD capacity in the ED

Hospital leadership buy-in is necessary to ensure funding, since leadership must seek out and sustain funding (either from external sources or from within the hospital’s budget) to support staffing and resources for SUD care. Leadership must also prioritize ED staff training in SUD to ensure that these opportunities are made available.

SUD leaders, especially those with dedicated time allotments, help develop systems,

policies, training, technical assistance opportunities, and partnerships to enhance care. Some ED representatives spoke of their designated SUD leaders and the positive impacts they had made. All were from teaching hospitals, mostly those with 200+ beds.

“The administrative people need to get their head around the ROI [return on investment] of things and how it benefits people...The only way to have embedded people here is for the hospital to hire them. And the hospital has to recognize that that is a need that is important.”

Theme: Sustaining SUD resources in the ED is challenging because reimbursement is poor, hospital budgets are tight, and there are many competing financial priorities

SUD services are often not reimbursable. Despite the fact that many interviewees lauded the value of recovery coaches, they were described as “non-billable.” One interviewee noted that recovery support navigators, who are not required to have lived experience, are billable. Interviewees perceived that OUD medications dispensed at the point of care for take-home use (naloxone, buprenorphine) are not reimbursable. However, interviewees said that they are reimbursable if the prescription is provided and filled at a pharmacy. Some shared that even when SUD services are billed, the reimbursement is a fraction of the cost of the services.



To cover costs for SUD staff and services, hospitals must engage in fundraising, secure grants, or find the funds within their existing budgets. Grant funding can be time-limited. Most interviewees noted that when a grant ends, the position or service goes away unless the hospital can find additional funding sources or a way to pay for it in their budget. Grants also are difficult to secure. One hospital system has unsuccessfully applied for grants to fund recovery coaches. A few others noted inequities in grant systems; smaller community hospitals do not have the capacity to write grants to fund the services they would like to have. Dependence on hospital resources is also challenging because it requires consistent commitment from hospital leadership and financial stability within the organization. These are high standards to meet in the current healthcare environment.

While many interviewees stated the need for more funding in general, some offered specific suggestions. Several stated that they would like supplemental funding for positions like clinical addiction specialists and recovery coaches. A couple of others called for health care payment reform, noting the challenges of the current fee-for-service model, as well as a lack of parity between behavioral health and other kinds of medical care.

“We do try to bill for services, but it is not anywhere near covering the expense of the SUD program. If we did not have philanthropy, we would not have a program...I don’t know any organization that is able to do an appropriate addiction service that covers what we’re covering without grant or philanthropy funding.”

“[SUD services] should be reimbursable at a rate that allows it to be self-sustaining...if cardiology couldn’t bill for a consult, they wouldn’t be here, either.”

SUMMARY AND DISCUSSION

The purpose of the survey and interviews was to identify the OUD services provided in Massachusetts EDs, hear directly from ED staff about strengths and challenges in providing this care, and identify opportunities for the state to support EDs to enhance services to patients with OUD. While the survey results focused directly on OUD, interviews resulted in themes that addressed OUD and other SUDs more broadly. The following section provides a summary and discussion of the findings as they relate to providing OUD services in the ED.

IDENTIFYING AND TREATING OUD IN THE ED

Universal and regular screening for substance problems among ED patients only occurred in about 60% of the EDs. Without regular screening to identify substance use risk and formal protocols for engaging patients who screen positive, early and consistent identification and treatment is less likely for all those who need it.⁷

Although alcohol use disorder was perceived as the most common SUD encountered in the ED, many EDs in Massachusetts are a critical point of care for patients with OUD, with close to two-thirds of EDs experiencing at least one patient with OUD each day and over 40% reporting more than one encounter with patients with OUD per day. EDs are using many medications to treat patients with OUD or OUD withdrawal. The most common medications reported are naloxone, buprenorphine, clonidine, and benzodiazepines. Less than half of responding EDs use methadone to treat OUD. Of those EDs using methadone to treat OUD, they rarely offer it to patients with OUD.

ED STAFF EDUCATION AND TRAINING

EDs appear prepared to treat OUD, with close to two-thirds of EDs reporting that most (75% or more) of their ED physicians were X-waivered (when that requirement was in place). However, practices to increase access to MOUD, such as buprenorphine prescriptions and buprenorphine starter packs, are often not offered to ED patients with OUD. In addition, only about half of EDs consistently offer naloxone kits to patients with OUD in the ED.

Interviewees indicated that the training of ED medical staff has improved, with newer generations of providers receiving more SUD training during medical school. This has led to increased acceptance of OUD as a chronic condition. The former requirement for X-waiver training increased the collective knowledge and comfort among providers to prescribe buprenorphine. Strategies such as making X-waiver training a requirement for employment and providing incentives for undertaking such training increased the number of X-waivered physicians. Access to consultation services has also improved provider comfort in treating patients with SUD.

SUPPORT SERVICES OFFERED IN THE ED

The ED setting provides a window of opportunity to support patients with OUD by initiating treatment and providing linkages to ongoing treatment.⁸ In addition to offering MOUD, many EDs reported offering a variety of support services, including psychiatric evaluation and social work services. About half of the EDs offered recovery support services to patients with OUD. Many interviewees spoke about the positive impact

of having dedicated support staff (allied health professionals) in the ED, such as recovery coaches, recovery support navigators, and social workers. These staff have the time and expertise to better connect patients with long-term treatment facilities, as well as to resources that improve access to treatment like transportation and identification.

Despite the value that allied staff provide, consistently funding these positions was a challenge in most hospitals. EDs shared a common experience of losing support staff when grants ended without another source of funding to pay for these services. Others noted concerns about long-term sustainability for these positions since their hospitals often are grappling with budget shortfalls.

CHALLENGES WITH THE ED SETTING FOR INITIATING TREATMENT AND SUPPORTING RECOVERY

Interview results showed that many providers believe the ED environment is not best suited for initiating complex OUD care. ED patients often are emotionally and physically vulnerable, either due to an overdose or another health issue that brought them to the ED. This makes it particularly challenging to build rapport, gain trust, and provide OUD care.

Despite expanding commitment to providing and improving OUD care, interviewees said that stigma surrounding OUD contributes to inequitable and discriminatory policies, procedures, and care for ED patients with OUD. Compared to other diseases, OUD carries unique requirements for prescribing medication, limited reimbursement for services, and less opportunity for provider education.

While some ED staff are well trained to provide OUD care, many do not have the experience and training to support these patients. Interviewees described a need for consistent OUD training across a broader range of topics to combat

stigma associated with OUD and to increase provider confidence in treating OUD.

Results indicate that the aforementioned improvements in training and systems will create an ED environment that is better equipped to provide OUD care. However, given the ED's focus on volume and acuity, these improvements will not be sufficient to meet the needs of patients with OUD. It is also crucial that EDs have collaboration, partnerships, and referrals in place to provide ongoing, comprehensive services once patients leave the ED.

REFERRAL PARTNERSHIPS TO SUPPORT PATIENT CARE

Interview participants noted that established partnerships result in stronger referral networks, which, in turn, provides greater likelihood for patients to receive ongoing treatment and resources that support recovery. The presence of referral pathways increases provider comfort in initiating OUD care in the ED. Still, there are limitations in the type, capacity, and distribution of referral partnerships. Many ED patients lack critical resources to access and to stay connected to treatment or recovery referrals; the resources they may lack include transportation, insurance, telephones, and identification. Discharge planning and follow-up communication are challenging, with limited use of warm handoff referral methods and inconsistent follow-up from referral agencies. Health information technology may play a role in supporting referral coordination, but lack of interoperability presents a barrier to this possible solution.

Mental health treatment services are the most common and robust partnerships EDs have in place to support patients with OUD, according to the survey results. Nearly 70% of the EDs reported a mental health treatment partnership that was either embedded in the hospital system

or accessible through a formal partnership with an organization in the community. Partnerships with substance use treatment providers also were very common, but about two-thirds of those partnerships were reported to be informal. In addition, less than half of the EDs reported embedded or formal partnerships with bridge clinics and peer recovery support services. Any form of partnership with mobile clinics was very rare, with only about 15% of respondents from

EDs reporting they have such a relationship. Interviewees stressed the value of investing resources in developing partnerships, but also expressed concerns about the capacity to develop these partnerships. Identified partnership gaps included access to methadone referrals and bridge clinics. Respondents expressed concern that if EDs lack a formal partnership, they may lack the expertise and resources needed to fully support patients with OUD.

OPPORTUNITIES TO ENHANCE CARE IN THE ED FOR PATIENTS WITH OUD

Overall, the findings suggest that EDs are prepared to care for patients with OUD. However, continued improvement is necessary to strengthen ED infrastructure through staff training, the development of community partnerships, and other strategies. Financial and human resources must be sustainably allocated to: 1) support the provision of quality OUD services in the ED; and 2) facilitate connections between ED patients and resources for ongoing treatment. The following section provides some opportunities for improvement:

1. **Provide consistent and expanded training.**

All ED staff need comprehensive ongoing training to fully understand the complexity of OUDs, and to have access to the most current information on best practices and latest trends. The X-waiver training requirements offered one opportunity, but others are needed. For example, survey results showed that APPs in particular were less likely to receive training than physicians. Using some of the same strategies that were successful in increasing uptake of X-waiver training (e.g., making training a condition of employment, providing

training as part of the onboarding process and after faculty meetings, incentivizing training, offering online training) may improve the care patients with OUD receive in the ED. While more and more prescribers are well informed about buprenorphine initiation in the ED, they know much less about the role of methadone in the MOUD landscape. Providing this education could facilitate the desire to build more partnerships with methadone programs, and thus offer more referral options to ensure the best fit between patient needs and available treatment options.

- ### 2. **Facilitate medications dispensed at the point of care for take-home use (e.g., naloxone, buprenorphine).**
- Dispensing take-home medications at point of care eliminates barriers, such as visiting the pharmacy or waiting for medication to be filled. Despite efforts made by the state to facilitate accessibility of take-home medications dispensed at the point of care, many EDs face added costs to provide those medications or rely on filling prescriptions through the pharmacy. More clarity is needed



regarding potential reimbursement of point-of-care dispensing of take-home MOUD in the ED. If no reimbursement avenues exist, EDs could benefit from policy change to facilitate this. It may also be helpful to explore functional barriers to dispensing take-home medication at the point of care.

3. **Establish funding for transportation from EDs to inpatient or long-term treatment facilities.** Not all hospitals have the same ability to invest in facilitating transportation access for ED patients. Capacity of individual staff at a given time to coordinate this transportation is inconsistent, and relying on overtaxed staff to coordinate transportation is not sustainable. Allocating funding to support transportation services for patients transitioning from the ED to inpatient or long-term treatment may facilitate access to care.
4. **Formalize and implement an ED addiction leadership position.** An ED addiction leader could address the needs of ED patients with OUD by: 1) establishing and strengthening partnerships; 2) developing and implementing new standard operating procedures as well as staff training plans. Consideration

should be placed on making this a funded role with a formal title, job description, and performance expectations. This will support the sustainability of this position, and ensure it is built into the hospital care model.

5. **Establish bridge clinics or embedded addiction consult services.** Providing funding for the creation of bridge clinics or embedded addiction consult services increases access to addiction specialists. Furthermore, these services take the onus off of the ED staff for providing patients with linkages to longer term care. With respect to bridge clinics, it is important to examine the distribution of these clinics and to ensure access for regions or smaller community hospitals that may need such clinics but currently lack the resources for them.
6. **Simplify state and federal funding mechanisms.** Some hospitals lack the infrastructure necessary to apply for funding. Streamlining grant applications for hospitals that lack the infrastructure for grant writing could reduce the burden to apply for funding. Exploring opportunities for non-competitive funding of EDs,

especially funding that does not require an application or reporting, could provide greater equity for under-resourced hospitals.

7. **Fund planning grants.** Funding planning grants could support hospitals in developing and refining their OUD programs and initiatives. Many EDs are not ready to implement bridge clinics or other addiction support services if grant money becomes available for these services. A grant that provides funding to do the planning work could allow EDs to: 1) set themselves up for success by securing internal champions, 2) conduct a needs assessment, 3) assess current protocols, 4) develop new standard operating procedures, 5) provide staff training, and 6) secure formal partnerships and collaborations.

8. **Create metrics and quality improvement goals specifically related to OUD in ED settings.**

Developing these metrics could allow EDs to track and measure their performance in treating patients with OUD. These metrics could take various forms, such as the proportion of patients receiving an OUD screen, number and type of MOUD prescribed and/or provided, number of naloxone kits dispensed, number and type of referrals made, number or percent of patients who attended a referral visit, utilization of evidence-based interventions, and patient satisfaction with OUD care.

ENDNOTES

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