A Qualitative Evaluation of Advances in Emergency Department Opioid Use Disorder Care in Michigan

Community Foundation

MICHIGAN OPIOID PARTNERSHIP

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EXECUTIVE SUMMARY

The United States opioid epidemic claims the lives of tens of thousands of Americans each year due to opioid overdose. Hospital emergency departments (EDs) have been essential in combatting the crisis by stabilizing patients who are experiencing an overdose and other symptoms of their opioid use disorders (OUD). Over time, EDs have also become more involved in providing other addiction treatment services, such as prescribing and administering medications for opioid use disorder (MOUD) and referring their patients to outpatient behavioral health care providers for follow-up treatment. Policymakers have been essential in driving EDs to expand the scope of their addiction medicine services and referrals by creating specialized programs that provide incentivizes to participating hospitals.

The following report summarizes advances in opioid use disorder care within EDs in 19 hospitals across 8 health systems in Michigan. These hospitals participated in an initiative created by the Community Foundation for Southeast Michigan (CFSEM) in collaboration with the Michigan Opioid Partnership (MOP), a public-private collaborative with a mission to reduce opioid overdoses in Michigan by improving the access and quality of prevention, treatment, harm reduction, and recovery services. The initiative was supported by State Opioid Response grants from the Michigan Department of Health and Human Services. Vital Strategies, a global public health organization that helps governments strengthen public health, provided support, technical assistance, and resources to improve hospital coordination and designed the evaluation. Specifically, hospitals were provided funding by CFSEM to improve OUD care training, coordination, delivery, and quality in their EDs. Hospitals and health systems funded by CFSEM included the University of Michigan Health System (Michigan Medicine hospital), Trinity Health (Mercy Health Muskegon, Mercy Health St. Mary, St. Joseph Mercy - Ann Arbor, St. Joseph Mercy Chelsea, St. Joseph Mercy Livingston, St. Joseph Mercy Oakland), Henry Ford Health Systems (Henry Ford - Main, Henry Ford - Wynadotte/ Brownstown), Beaumont Health Systems (Beaumont - Royal Oak, Beaumont - Troy, Beaumont - Wayne), Ascension (Ascension St. John Hospital, Ascension Genesys Hospital), Munson Healthcare (Munson Medical Center - Traverse City, Sparrow Health System (Sparrow Hospital - Lansing), Spectrum Health (Spectrum Health Butterworth), War Memorial, and Hurley Medical Center. After receiving funding, hospitals created work plans related to improving opioid use disorder care in their EDs, including by increasing their number of employed X-waivered providers, integrating clinical tracking and support tools into electronic medical records, and connecting patients with behavioral health care providers in the community to establish treatment continuity (i.e., "warm handoffs"). Researchers with the Bloomberg Overdose Prevention Initiative at the Johns Hopkins Bloomberg School of Public Health evaluated hospital improvement in these areas using surveys and qualitative interviews with participants.

At the outset of the program, all grant recipients were requested to take a baseline assessment describing their existing practices and capacity for OUD treatment. From there, each recipient responded to monthly surveys regarding progress they had made with respect to improving their

OUD treatment care, as well as any barriers and facilitators to those changes. An individual from each hospital in Wayne and Genesee counties, the primary counties of focus in the program, were interviewed several months after receiving funding to detail changes their hospitals had made. This report synthesizes the survey and interview responses to describe their progress as well as common facilitators and barriers to improving OUD care in their EDs.

The most notable reported changes during the grant cycle included 1) increases in the number of buprenorphine x-waivered providers on staff, 2) greater provision of buprenorphine inductions and prescriptions, 3) improvements in OUD screening processes in the ED during patient intake, 4) expansion of networks with external behavioral health care providers to facilitate warm-handoffs, and 5) broadened ability to monitor patients after leaving the ED to ensure care continuity. Some facilitators for these changes included updating EMRs and related health technologies to integrate OUD services and patient care tracking, working with hospital pharmacies to streamline buprenorphine prescribing, increasing reliance on social workers and peer support staff to motivate patients to initiate OUD care and to identify high-quality community providers for follow-up care, and having providers attend the MOP-led buprenorphine training boot camps. Additional details regarding changes in care practices and processes are provided below

The report includes four sections. The **first section** describes changes in care processes throughout the grant cycle. This section was primarily informed using data obtained from baseline surveys and monthly provider reports that were circulated to hospitals before and after the grant began. The section also identifies barriers and facilitators to treatment identified in key-informant interviews from hospitals in Wayne and Genesee counties and includes exemplary quotes at the end of each subsection. In response to the identified barriers, the **second section** recommends potential policy and practice reforms that could help improve care and patient outcomes moving forward. The **third section** describes opportunities for future research. The **fourth section** summarizes findings and provides a call to action to improve OUD care in EDs throughout the entire state of Michigan.

SECTION 1. CHANGES IN PRACTICE & PROCESS AND FACILITATORS AND BARRIERS TO IMPROVING CARE

This section describes changes in provider practice and hospital policy throughout the grant cycle in addition to barriers and facilitators to improving care processes. These findings are based on responses to monthly surveys and key informant interviews that asked grant recipients about their progress in expanding OUD care as well as any challenges they faced in improving care. Areas of focus in this section include treatment initiation, provider education and training, buprenorphine

treatment, warm-handoffs, patient screening and tracking technologies, hiring, peer support coaches, stigma, harm reduction, and racial equity.

Treatment Initiation

All hospitals reported that they worked to increase the rate of OUD screening and treatment initiation for patients. The typical treatment initiation process is described as follows: Following an OUD diagnosis and patient stability, providers noted that they generally asked patients about their willingness to accept treatment, including initiation of MOUD and referral to outpatient care after leaving the ED. If they were willing to receive care, a designated opioid use disorder treatment team, typically consisting of a mix of physicians, social workers, and or peer support teams, would be called in to begin the treatment process. All hospitals specifically mentioned offering patients medications for opioid use disorder (MOUD). The most common MOUD provided was sublingual buprenorphine-naloxone strips (i.e., Suboxone film).

Hospital responses to monthly surveys and key informant interviews indicated that patient willingness to receive treatment was a significant barrier to patient treatment initiation. Many patients, especially those treated for an overdose, were often unwilling to accept any form of treatment. Social workers appeared to be a strong facilitator in getting treatment hesitant patients to accept OUD care. Still, patients that were initially willing to receive treatment frequently became impatient in hospitals, especially while waiting for providers to obtain MOUD from the hospital pharmacy. Broader coordination and expedited processing with hospital pharmacies was mentioned as a facilitator to reducing the likelihood that patients left before receiving MOUD.

"For inpatients or someone who comes in with OUD, it can be recognized by either the nurses or the primary service. What happens then is [a message is sent] to all physicians and a number of nurses in the hospital - that this patient needs to be assessed for opioid use disorder. That team assembles. It's a physician, medical student, and a pharmacist and the patient, and they make sure that the patient is ready and is accepting of treatment. And they also see how close they are to withdrawals. A full council assessment goes into it. If they are willing, we decide to call in our peer recovery coach. And then we also start the suboxone and doing COWS assessments based on the algorithm set forth usually two or four hours. And eventually, we're treating them, of course, for another disease process. Once that disease process is taken care of, we try to coordinate a discharge plan to one of our outpatient settings or rehab centers to continue suboxone management."

"So they'll come in and be triaged after they check in at the front desk. During that triage, they complete an expert screening with the patient, and then they'll get an audit score on their drug use will be reported at that time, too. So after triage, the patient will go to a room. The answers that they've given on that expert screening are going to flag [peer support] in our computer system. One of us will walk in the room and just say, "Hey, we're

not a nurse or a doctor, but we're in recovery and we help people that may need some assistance in that area." And then we just kind of discuss with them their substance use, their history, their social history, perform brief intervention. And then we'll start right from then setting them up with either outpatient, or getting them set up with inpatient or an addiction specialist at that time so that we actually have a plan for them when they leave the hospital. And then we'll make that appointment for them. I will actually physically take them to their appointment, be there with them for their first appointments, and make sure that they get set up on an MAT program, and that they're being successful on it. And we'll continue with phone calls and things like that after people leave also to keep them motivated. If the person who happens to be admitted to the hospital, we follow up with them on the floors every day that they're here. And then once again, once they live in the community for 90 days, I'll be working with them on any MAT or anything else they need as far as recovery support goes".

Provider Education & Training

Providers across all grant recipient health systems and independent hospitals participated in MOP official buprenorphine "bootcamps." The bootcamps were MOP-led sessions that provided buprenorphine prescribing training to providers within the MOP participant EDs. Following the training, providers could then go on to apply for a buprenorphine X-waiver. A total of five bootcamps occurred between 12/2020 and 11/2021. CFSEM and Vital Strategies provided financial incentives (i.e., \$600) and offered continuing medical education (CME) credits to providers to attend these bootcamps. Provider training participation increased over the five sessions, with 78 providers being trained in the fifth and final session out of a total of 223 providers. Each of the eight health systems and the two independent hospitals (i.e., war memorial hospital and hurley medical center) reported that at least one provider from their EDs received the training, and more than 50% of grant recipients reported 10 or more providers had received the training. In total, providers across 13 different counties in MI attended the bootcamp. By specialty, ED physician residents, pharmacy staff, and nurses were the most common bootcamp attendees (52% relative to 48% of physicians). Following each bootcamp, roughly 45% of attending providers went on to obtain their X-waiver on average. Not all providers were able to obtain an x-waiver who participated in the bootcamp as their specialty precluded them from being eligible to obtain an X-waiver (e.g., pharmacists). Other attending providers had also previously obtained their x-waiver and chose to attend the bootcamp for additional education

Hospitals noted that the financial incentive was a strong motivator in driving provider participation in the bootcamps. Continuing medical education credits also helped to motivate providers in addition to framing the training as career development for more junior providers. The most critical barrier to participation was a lack of time and availability among physicians; the training took a full day and typically had a limited number of time slots (i.e., once per month), making scheduling

difficult. Hospitals also noted that some of their physicians were hesitant to participate in the bootcamps due to concerns about having to care for highly complex OUD patients, a lack of opportunities for follow-up care to ensure treatment continuity, and fears that increasing capacity for treatment would overwhelm the hospital. Many hospitals also cited physician stigma against treatment with buprenorphine as a barrier to X-waivering providers and noted that they had to work against perceptions that buprenorphine treatment offered minimal clinical benefit. In some cases, physicians were described as feeling that prescribing buprenorphine was outside of their scope of practice and assumed that if others were receiving waivers that there would be a sufficient supply of providers in the hospital to meet existing patient demand.

In addition to the buprenorphine bootcamps, hospitals noted providing other training and education services regarding best practices in addiction treatment, and more specific training on topics like addiction stigma and patient trauma. According to respondents in key informant interviews, sharing the latest data on national opioid use disorder rates and treatment was helpful to inform providers of the epidemic's current scale and contextualize the importance of scaling up treatment efforts. Several hospitals also placed binders of educational material throughout their EDs to serve as a reference for providers. Similarly, some hospitals circulated newsletters and promotions regarding processes being implemented to expand treatment to ensure broad provider engagement and awareness. With respect to patient education, hospitals created informational pamphlets that included contacts for community resources and mental health and substance use treatment providers. Finally, seven health systems reported directly connecting providers with peer-support coaches to educate providers regarding the lived experiences of people with addiction.

"The grant certainly helped, that people were getting paid for their time to do it. The amount of time hurt. And it was enormous. Even if it was via web education, that's a big chunk of time people were not willing to give up. And I believe there are some people who might not entirely buy into the overall benefit of Suboxone, but that's just kind of a– that's an informal feeling I have with conversations with some people."

"We're in the very beginning of it. So we anticipate we'll have a subject matter expert training and then training for staff. What is opioid use disorder? What are the stigmas? What are we looking for? What is our policy and procedure going to look like? How we're going to be doing the MAT therapy or initiating that? So that's just some of the pieces that the education is going to be. Trauma-informed care also is another big piece; we use that in some of our other policies. And then just knowing that opioid use disorder is intermingled with a lot of other vulnerabilities that patients have such as trafficking, sexual assault, domestic violence, child abuse, child sexual assault, knowing that all can be tied in together and knowing that people have suffered multiple levels of trauma and how we can help them during this trauma"

"So just early on in our process, what was helpful was having the free classes for the physicians to get X Waivered. And then also our chief of the department, he made it mandatory for all the ED physicians. The challenge was that those were only offered, I think, maybe every other month. It made it difficult for the physicians to all be able to attend or some were delayed a little bit to wait for the next class. And then now I know that they've removed it where you can prescribe Suboxone and so forth, and you don't need to be X Waiver. And I talked to some physicians about that, and they still feel that they should be X Waiver to have that additional education and resource to feel comfortable with prescribing it."

"So what's been helpful in getting them X waivered is incentive pay because we went through a number of groups that would pay the docs to get on board with taking the X waiver. The challenge is the timeframe that it takes. I think it's a full day, basically. That's a little bit challenging when people are busy and they have families and their work and whatnot...I would say 50% of my physicians in the ER are X waivered. The other downside is that APPs were not incentivized, and so many of them weren't as interested in taking the course."

Buprenorphine Prescribing

A sample of nine hospitals reported inducting over 450 individuals in MOUD and provided over 250 MOUD prescriptions. A table showing the breakdown of prescriptions and inductions by these hospitals is provided below:

HOSPITAL	INDUCTED IN MAT IN ED	PRESCRIPTIONS PROVIDED
Munson Medical Center	30	20
Royal Oak Beaumont	100	35
St. Joseph Mercy Ann Arbor	49	31
Sparrow Hospital	6	8
War Memorial	13	13
Henry Ford Hospital	134	43
Henry Ford Wyandotte	48	51
Beaumont Wayne	10	5
Beaumont Troy	22	16

An additional analysis of the number of Medicaid beneficiaries receiving buprenorphine in the ED by quarter between January 2019 and January 2021 showed changes MOP participating hospital prescribing rates over time. At least six of the nine hospitals had initiated Medicaid beneficiaries on buprenorphine in the ED with a minimum of two beneficiaries and a maximum of 92 beneficiaries per hospital. Prior to 2020, quarterly induction was roughly 15 patients per quarter, but in 2020 induction increased to just over 20 patients on average. These hospitals accounted for between 40%–50% of all buprenorphine inductions of Medicaid beneficiaries across the entire state.

In an analysis of three grant recipient hospitals treating more than 10 patients in the ED with buprenorphine, between 39–90% of patients had previously received a dose of buprenorphine prior to their visit while 10–61% were newly treated. This suggests variation in the rate of new inductions by hospitals; some hospitals may be comfortable with treating existing buprenorphine treatments with buprenorphine but less inclined to induct new patients. Further, follow-up with buprenorphine 1–3 days after the ED stay ranged between 7%–38% among the three hospitals. This suggests variation in the ability of hospitals to engage their patients in follow-up buprenorphine treatment.

Creating buprenorphine order sets/integrating buprenorphine prescribing into electronic medical records (EMRs), improving coordination with hospital pharmacies, and increasing the supply of waivered providers were mentioned as key changes in hospitals that facilitated greater buprenorphine initiation. Hospitals that worked closely with their pharmacies to educate pharmacy staff on buprenorphine prescribing, ensure a consistent supply of buprenorphine within the pharmacy, and add buprenorphine to PYXIS (an automated medication dispensing system used in the ED) reported substantial increases in buprenorphine prescribing.

Although most hospitals noted that the rate of MOUD delivery in the ED increased over time, opportunities for improvement remained. Initially, after attending the bootcamp and obtaining an X-waiver, some hospitals reported that only a small fraction of their physicians began actively prescribing buprenorphine in the ED due to reported concerns of inexperience in prescribing. However, over time, physicians' willingness to prescribe buprenorphine increased due to greater comfort and familiarity with prescribing. Still, a lack of available community behavioral health providers needed to ensure treatment continuity remained a consistent barrier to physician willingness to initiate patients on MOUD.

It is important to note that the requirement that ED providers an X-waiver before prescribing buprenorphine was removed during the evaluation period. Despite this, hospital administrators signaled they wanted to continue X-waivering their providers, as the X-waiver training increased comfort around prescribing buprenorphine and reduced associated stigma. Providers with the X-waiver were also much more likely to prescribe following the rule change.

"The issue is that since we don't have it in the emergency department other than the 0.4 milligram for IV...if you're ordering an appropriate dose of Suboxone for someone, even if you check the boxes...it might take 90 minutes to get that because it's only one place in the hospital and someone's got to go get it. And that's a huge barrier to it."

"There's a little bit of learning curve happening with getting the prescriptions sent electronically and that sort of thing. But the providers have been so open and willing to speak with [peer support] if there is a patient that's in need of assessment for buprenorphine in the ED. And we really started to develop a good relationship with them in talking about this because we're learning things from them, and they're learning things

from us. So it's been a really good team-building experience. I know if I've got a patient that calls me and says, "I'm in withdrawal. Hey, buddy, I'm coming to pick you up," then we're going to go to the hospital. And I know that there's somebody here that can take care of that. And that's life-changing".

Warm-Handoffs

All grant recipients noted that they had taken efforts to increase the rate at which they referred their patients with OUD to outpatient behavioral health care in the community. This practice is colloquially known as a "warm handoff" to the community. A subset of ten hospitals reported providing over 500 warm handoffs to patients. The number of warm handoffs facilitated by in a set of ten hospitals is provided in the table below:

EMERGENCY DEPARTMENT	REFERRALS TO OUTPATIENT TREATMENT
Munson Medical Center	36
Royal Oak Beaumont	51
St. Joseph Mercy Ann Arbor	37
Sparrow Hospital	8
War Memorial	81
Henry Ford Hospital	67
Henry Ford Wyandotte	107
Beaumont Wayne	1
Beaumont Troy	125
Spectrum Butterworth Hospital	39

The most common initial step to increase the rate of warm handoffs was to educate their providers regarding their clinical benefits. This education occurred both internally by hospital leadership staff and through seven learning collaboratives hosted by MOP. Second, hospitals mentioned that they had created standardized processes for facilitating warm handoffs in the ED (e.g., helping patients with setting up appointments). Hospitals also reported that they had integrated referral processes directly into their EMRs. One hospital developed a set of QR codes for patients and providers to scan to identify local community behavioral health providers and allow appointment scheduling. Several hospitals also established follow-up guidelines for nurses and social workers to ensure that warm handoffs were successful. With respect to identifying relevant local outpatient providers, some hospitals reported forming both formal and informal arrangements with local community organizations. Other hospitals relied more heavily on PIHP coordinators to refer their patients for follow-up care.

A key barrier to increasing the number of warm handoffs was identifying and contracting with outpatient providers. As an example, many hospitals held internal policies that required them to establish formal memorandums of understanding (i.e., partnership agreements) with outpatient providers, which slowed network formation. Grant recipients also noted that they struggled to identify high-quality providers who would continue prescribing MOUD or offer induction services to patients instead of taking an abstinence-only approach to OUD treatment. In general, hospital respondents perceived substantial variation in quality across local community behavioral health care providers and were concerned over a general lack of transparency regarding what these providers offered to patients. They also mentioned that they lacked enough support staff to ensure patients were scheduling follow-up appointments with outpatient providers in their network.

Hospitals also noted that they faced many challenges when working with pre-paid inpatient health plans (PIHPs) to facilitate warm handoffs. Most hospitals that utilized PIHPs in their referral processes expressed significant dissatisfaction with the rate at which patients could obtain follow-up services. They explained that PIHP administrators were challenging to reach, and appointments that were made were typically long after treatment induction, thereby increasing the likelihood of patient relapse before obtaining follow-up care.

A key facilitator to improving warm handoffs was reliance on peer support and social worker staff. Peer-support coaches and social workers were uniquely capable with respect to identifying high-quality providers in the community. They were also extremely helpful in getting treatment hesitant patients to consider obtaining additional treatment after leaving the ED. Finally, hospitals with strong connections with specific community providers generally reported greater success regarding patient warm handoffs.

"What's been helpful is having one or two pre-identified partners...they make it pretty easy for us because they send up staff. They sent up a recovery coach who then can take the patient with them, if that's what the patient wants kind of thing. So it's been helpful having a community partner also be a stakeholder in this whole program and be invested in the ER, in kind of understanding the ER side of things".

"There are a lot of places that claim to be a substance abuse treatment program or claim to be a medically supervised detox or something, and it's not, or it's very loose with the definition of medically supervised, or MAT or whatever, MOUD. And so trying to figure out, when I send patients to a resource or send them to a community agency, is it one that is going to be helpful? Is it one that has everything that they need? Can trust them, if I send them out? So that's tough, but having them preselected already and knowing that ahead of time, it just makes it so much easier."

"In order for a patient with state insurance, regardless of that insurance, they have one number to call where they have to talk to a screener, and the screener then determines where this person should be placed. Now, that's fine in theory, but it may take two or three days to actually speak with the screener. Nobody may call you back. They may just hang up on you. I'm not even kidding with you right now. So that is the number one barrier that we have run into. And I'm just going to tell you right now that I sidestep that at every opportunity that I can by getting them in with an addiction specialist instead".

"And I understand that they're probably overworked and understaffed. I really do get that. But if somebody reaches out and says, "I need help with an opiate addiction," you'll have a very small window of opportunity. And they're not calling back in 15 minutes. They're not calling back in an hour. They're not doing that. They're going to go get high. You know what I mean? And as recovery coaches, as Emma was just saying, we can't answer the questions for them. That patient actually has to speak with that screener, and they're going through withdrawal. So do you really want to go through an hour-long screening process with somebody while you're dope sick? So that's really the biggest challenge in my job as a whole, I would say".

Screening & Patient Treatment Tracking Technology

EMR implementation of screening and treatment tracking tools was also a key directive for hospitals throughout the early and late stages of the grant. Roughly half of all the participating hospitals did not have comprehensive OUD screening tools implemented in their EHRs in the baseline assessment but mentioned they had made progress on improving them in the monthly reports. Some hospitals created proprietary algorithms to track patients throughout their care, including after they left the ED. Six hospitals noted creating buprenorphine order sets to simplify medication ordering and provide decision support (an order set is a clinical decision-making tool built into an EMR that helps to expedite prescribing). At least one hospital created tracking tools for encounters that did not result in treatment to assess opportunities for treatment initiation improvement. Three hospitals implemented technology that allowed them to conduct follow-up surveys for patients within 30-days of leaving the ED to determine patient satisfaction and treatment continuity.

Hospitals with integrated screening and tracking tools reported that they were extremely helpful throughout the care process by reducing care delivery delays and increasing the proportion of patients that received services. Facilitators to improving the use and accessibility of EMR tools included strong IT departments with 24-hour support services, having physician champions to lead implementation efforts, integrating buprenorphine into PIXYS, and obtaining staff input during screening implementation. Specific barriers mentioned to universal screening tool implementation included poor user interfaces that complicated data entry, apprehensiveness in using tools among staff due to perceived burden, lack of conciseness of screening that led to lost patient interest and encumbering providers, high costs of implementation, technical difficulties integrating specific

components like the Clinical Opiate Withdrawal Scale (COWS) into their EMR, and concerns over patient privacy and safety. Hospitals struggled to overcome these challenges in some cases due to issues coordinating with IT staff. The ability to follow up with patients also seemed to be a hurdle that lingered throughout the grant duration despite technical innovations in tracking. For example, grant recipients often noted difficulty contacting patients over the phone after they had left the ED to confirm treatment continuity. Finally, COVID–19 was a persistent barrier to change that delayed the implementation of new technologies.

"So the barriers that I've encountered include more work. The nurses are already asked to do a bunch of different things...and so part of the compromise, if you will, is working closely with our nursing leadership and kind of getting at, what would be a reasonable request, or I have this, and I show them kind of what I'm looking for. And we kind of just go back and forth until we kind of reach a place where we're both comfortable and in that we get what we need out of it. [Also] patients may not feel comfortable disclosing that, they may be there for something seemingly unrelated and then when the patient discloses that they have an opioid use disorder, maybe it then becomes more clear as to how directly related they are. I think that those are the ones that I can think of right now."

"Staff buy-in piece of it, that's another component that we're working on stigma reduction, so just getting the staff open to the idea of the screening. Second piece would be ensuring that the screening tool is short enough and concise enough that we're able to not only keep the staff's interest, but keep the interest of the patient as well so that we're not getting too deep into the weeds. So that's one component that we're looking at with some of the screening tools that already exist out there is how quickly we can get through them and how concise they are. And then another aspect would be the ease of implementation within our electronic medical record".

Hiring

All hospitals reported hiring new staff for multi-disciplinary care coordination and teams to work on achieving MOP objectives. Hospitals also commonly added new team members to their social work programs. Provider coordinators and care champions were hired in multi-site health systems to ensure objective alignment across sites. However, hiring often took several months to review relevant candidates, train new hires, and address administrative burdens (i.e., setting up salaries). Hiring needs for IT staff also persisted throughout the grant. In addition, there were commonly reported unmet staffing needs for bilingual interpreters for non-English speaking patients, nurses, and peer-support coaches. COVID-19 created unique challenges for staffing as well as the ability to hire new staff in required roles. Timing of the grant funds, and concerns that new hires would not be able to be supported after the grant had lapsed, were also cited barriers.

"Yeah, for us internally, we want to hire a social worker and a manager specifically for the OUD program. But the grant funds were only till September, and we weren't sure what was going to happen after that. And we didn't want to make the decision to hire somebody with the current grant funds that could be cut off in September and then have to identify from our financial perspective of how we either have to support that roller or look at other options".

"And I think, too, if you want to see Utopia maintaining the staffing for this program as well has been quite a challenge for us. Just the nature of the beast itself, I think, with the peer recovery coaches, sometimes there were lapses. And I think it's difficult to sometimes maintain the position. It's a hard position to do. We've definitely struggled with that".

Peer Support Coaches

Perhaps one of the greatest cited facilitators to improving OUD care processes was the involvement of peer-recovery coaches throughout the entire course of patient care. Seven health systems with hospitals utilizing peer-support coaches reported strong satisfaction and highlighted the ability of coaches to provide education to patients to initiate treatment. Grant recipients also mentioned that they met greater success in getting patients to initiate OUD treatment by having them speak with peer support coaches. Further, coaches were highly successful in improving care continuity and followed up frequently with patients after they had left the ED. Still, there were some challenges with maximizing the potential benefit of peer-support coaches. Peer-recovery coaches were typically only available during daytime hours (i.e., 9 AM–5 PM), and were therefore unable to assist with patient care later in the evenings when overdoses were common. Coaches also frequently faced scrutiny by hospital security. It was also reported during the learning collaboratives that grant recipients needed more education on how to identify high-quality peer service organizations and reimburse peer support staff.

"We're having our recovery partner come out and give us some education on stigma, motivational interviewing, and addiction, generally speaking, 101. And part of that is having some of the more senior recovery coaches, be a part of that discussion and talk about what their recovery was like. And provide different perspective to the ER staff. We see a skewed population of people within the addiction spectrum, and we don't really get that many positive cases. We don't hear about-people who actually were in the recovery and are successful. We only see and hear about people who have relapsed or have made poor choices. And we see the results of those types of choices and behaviors. So there's some burnout there as well. So kind of showing them a different perspective and kind of trying to get buy-in from them is part of the additional success with this." "And so the peer recovery coaches are accessible to all parts of the hospital. So specifically

in the emergency room, they're accessible 24 hours a day, seven days a week. And what we do, is once a patient is identified, we dispatch for a peer recovery coach and they typically respond within one hour to where they come into the hospital. So this program has changed over the last year. It's kind of ebbed and flowed because of the pandemic. So there was a large portion of time where they were only responding through phone calls. But now we're back to responding in person, now that the numbers have kind of subsided around here. But they are a wonderful resource in assisting with helping to motivate patients, helping to link them with the warm handoffs to if they're going to do treatment at a different facility, following with them in the community. They have a year to follow with them. So they provide a great resource and partnership to our programs here". "COVID was a major barrier for us because it was very difficult to get our product off the ground because no one could come into the hospital. So now that that's getting a little bit better, peer recovery coaches are able to come in. But they're still scrutinized by security very well. [Someone]-came as a personal friend because he has experience, and we tried to help his son. And he's just completely passionate and committed. And so finding a passionate, committed peer recovery coach is key, and they've been really good partners. So just getting them into the hospital was our biggest issue." "I mean, just as you think the Utopia would be that you would have a recovery coach 24/7, so. That's the only thing that I can think of. That's just not realistic....And I think, too, if you want to see Utopia maintaining the staffing for this program as well has been quite a challenge for us and for Maine. Just the nature of the beast itself, I think, with the peer recovery coaches, sometimes there were lapses. And I think it's difficult to sometimes maintain the position. It's a hard position to do. We've definitely struggled with that."

Stigma

Stigma was a critical issue in all hospitals. Many hospital survey respondents mentioned that small but significant "pockets" of providers tended to discriminate against patients experiencing overdoses and other symptoms from opioid misuse. This often translated into apprehensiveness among these providers regarding patient MOUD induction; providers often preferred an abstinence-based treatment due to concerns over diversion and abuse. The key facilitators to reducing the stigma that hospitals mentioned included the provision of free stigma training programs that offered CME credits and face-to-face meetings with peer-support coaches to learn more about the addiction. Barriers to reducing stigma included a general sentiment that treatment wasn't making a difference for patients, provider inability to see outcomes post-treatment, the time associated with receiving stigma training, the lack of stigma training programs that provided CME credits, inaccessibility of stigma training programs (especially following the pandemic), and contracting with low-quality stigma training programs. Still, hospitals were in general agreement with the importance of improving their targeted stigma reduction approaches to improve care quality. Further, many of

the grant recipients that did not contract with training programs at the time of their interview stated that they planned to do so in the future.

"It's kind of almost built into the culture almost of the ED, that these people have done this to themselves. That a lot of it is choice-driven, and it kind of goes from there. I would say one of the things that's been kind of helpful in an almost unfortunate way, is that so many people are kind of touched by this. So being able to draw kind of or relate on a personal level can kind of sometimes to help change that, so maybe sharing of stories, those types of things. Also just the education that's out there as far as physiology behind it, making people aware of the fact that it's not just choice. That there's so much more that goes into it and that these people truly want help and they're a vulnerable population. So definitely, trying to break through the culture of the emergency department. But I think that people are starting to become more open, especially as you see more and more of it in the news, just in the area and people are relating to it personally".

"Yeah, I think there's a huge stigma out there, too, especially in the ER, they don't want to attract more people into the ER with OUD, and I don't believe that that's really valid, but I think that some people, especially if you're a little less educated on the topic, are afraid to reach out and welcome those people in. Not that they don't want to help them, but I had somebody tell me once that we don't want to turn our ER into an opioid recovery center. And it's completely inappropriate, but people have said that".

Harm Reduction

Most hospitals reported minimal involvement in the provision or referral of harm reduction services. Hospitals that were engaged in providing services typically conducted HIV and hepatitis screening, provided information regarding safe injection practices, offered to take opioids from patients for disposal, and asked patients about treatment with medical marijuana. Key barriers to delivering and referring patients to harm reduction services included a lack of provider education on the clinical value of harm reduction, provider fears that harm reduction might incentivize continued use of opioids, and the absence of a standardized process for delivery of harm reduction services and referrals within the hospital.

"Bias is one thing. I think people are—some people are biased saying, "Why would you do that? You're encouraging them to use drugs." Again so it starts by breaking down that bias and getting the buy-in of what it could lead to developing relationships with them so they don't die. Essentially, that's what we want. And worst-case scenario, that's what we want to prevent. So it's breaking that down and then getting, again, funding support for that and resource support. So if there's a list of places that we can educate for an OUD

patient to go to get safe needles and so forth, it's having that available to provide them those areas that they can go, and I don't think we have that even. And like I said, you can tell. When I heard this story, it's something I really wanted to drive and work on here for us, but with the pandemic, it's really pushed things back. And now, just even talking with you makes me want to get really focused back on it for us and tying it in now with the OUD program, so".

Racial Equity

None of the grant recipients interviewed mentioned any steps that they were taking to reduce health care disparities in OUD treatment. Some said that they had expanded their provision of services such as housing and transportation that may be helpful for improving equity in treatment access but otherwise did not specifically implement processes to reduce disparities in treatment outcomes and practice. This is despite the broad acknowledgment that hospitals served racially and ethnically diverse populations at many of their hospitals and had a general interest in reducing treatment and outcome disparities.

"So I'm going to preface with, I don't know. Our hospital takes care of a large percentage of minorities in general for anything. I imagine that we see an above average amount of people of a minority that use some sort of substance, either alcohol or drugs. It's just part of what we do on a daily basis because we have a different population than that of—well, I'm going to pick on U of M Ann Arbor [who] has a different patient population than Flint. That's just what we do. We just take care of whoever. It just so happens that a bulk of our patients identify being in some sort of minority. So I don't think we have anything specific. It's just part of what we do".

"I think that there's the fact that we are in a, you know, we're a very white town. We're, you know, historically a sundown town from, you know, decades ago. And the practice of emergency medicine remains one that sort of skews towards, you know, a less representation of people of color than some other fields of medicine might be. But that being said, I think that we have a very progressive and forward-thinking set of clinicians here who really provide, you know, leading by example and in treating and recognizing, you know, some of the barriers that might be there to people seeking access or obtaining access for the things that might have them requiring the access in the beginning, whether it is socioeconomic or otherwise. And I think that that model of our leadership and the way that we've been embracing things like this to reach out to populations that are in need of help has been supportive of providing a—I don't want to say cultural and mutual, but recognition of the barriers that are out there and attempting to provide treatment regardless of some of the different paths that have brought people to our dorm".

"I think anytime you can do that with bias training is so important. And just the challenge is the amount of training that's out there. It's not easily accessible. Something like that, you'd have to work with a company like we were. But there should be I think more opportunities that are provided to hospitals so we can get staff easily trained, and it's easy on us too to schedule stuff like that for them rather than a module of some sort, which I don't think is as impactful as actually hearing it first person. I mean, I don't know if you have anything to add".

SECTION 2. POLICY RECOMMENDATIONS

Section 2 provides specific policy recommendations in response to findings from Section 1 sections. These include both hospital-specific recommendations and opportunities for statewide reform.

Expansion of Peer-Support Programs

One of the most notable findings from the surveys was the value of peer-support recovery coaches. Coaches successfully motivated patients to engage in OUD recovery treatment, including accepting treatment with MOUD. Coaches were also fundamental in reducing provider stigma and apprehensiveness in prescribing MOUD, connecting patients to local MOUD providers, and connecting with patients after they left the ED. Hospitals should continue to engage with peer-support providers in these areas and expand their involvement in leading initiatives to improve OUD patients' outcomes. For example, peer-support coaches could work directly with physician champions to review hospital care reform in specialized roles. They could also help to assess the quality of local outpatient behavioral health care providers through site visits.

In general, increased hiring and availability of peer-support coaches could help to improve patient treatment initiation, continuity, and outcomes. Peer-support coaches that can be called upon for assistance throughout the evening hours and weekends could further fill gaps in existing peer-support services. Partnering with external organizations that employ peer support coaches could also increase hospital use of coaches by allowing them to be reimbursed by Medicaid. However, hospitals noted that they needed some guidance on the processes to set up these partnerships and obtain reimbursement from BH MCO.

Establishing strong relationships with community behavioral health care

Although forming relationships with community behavioral health care providers was a focus for

many participating hospitals, broader efforts are needed due to the low observed rates of treatment continuity. One approach will be to reduce legal frictions that make contracting with external organizations challenging. Hospital C-suites can introduce contracting guidelines and push for expanding their provider networks by working directly with legal departments to standardize and expedite processes for establishing MOUs. Direct connection with providers is vital due to challenges when working with PIHPs to set up follow-up care appointments for providers. Instead of relying solely on PIHPs, which have demonstrated limited success in scheduling appointments, hospitals should work directly with community providers. They should also recognize that informal networks may be preferable to formal partnerships before standardized partnering processes can be established.

Expand the ability of PIHP coordinators to assist with facilitating warm handoffs

Although hospitals should be able to contract with and identify local providers for their patients, in cases where that is not possible, the PIHP must intervene. However, the PIHP's ability to facilitate the scheduling of follow-up care for patients was cited by nearly every hospital surveyed as inadequate. Working with PIHPs to review their warm-handoff coordination services is essential to ensure sufficient staffing and administrative needs are being met. Patients that do not receive follow-up care following an overdose are at significant risk of experiencing a subsequent overdose, which makes the timeliness of follow-up care essential. An oversight board that can review PIHP provider referrals and progress in establishing continuity could be convened to make additional specific recommendations.

Increase the availability of racial equity and stigma training

Hospitals increased their utilization of stigma training throughout the grant and mentioned its importance in reducing provider apprehension when treating patients with OUD. That said, stigma training was often limited in availability, making it difficult for providers to attend. Training programs also rarely offered incentivizes to promote strong attendance, such as CME credits. Hospitals should work to build in-house training programs and coordinate with external training programs to make sessions available to providers. Further, social workers and peer-support coaches can work directly with training organizations to develop hospital-specific modules based on individual hospital needs. Increasing racial equity training is of critical importance, as none of the interviewed hospitals mentioned that they were contracting with training programs to reduce health inequity. OUD patient outcomes and treatment are wrought with disparities, and broader provider training can help shape provider perceptions and practice to reduce their scope and scale. CFSEM is currently working with New Detroit on a pilot curriculum that addresses stigma and racism in addiction treatment that could help fill existing gaps in training availability.

Increase integration of care tracking, prescribing, and screening into EMR systems

Greater use of EMR was directly associated with higher rates of treatment initiation and retention. Although providers had some pushback due to the burden of data entry and technical challenges, the benefits of integration appeared to outweigh concerns. Hospitals should continue to expand their EMR capabilities, which will require additional investment in infrastructure and labor needed for development. The state can help by creating funding opportunities to achieve this goal while emphasizing its importance in streamlining OUD ED care.

More involvement by the C-suite in ensuring performance metrics are being met

The evaluation brought to light the need for more extensive c-suite involvement in developing best practices for the day-to-day care of OUD patients, ensuring sufficient utilization of clinical tools, and encouraging providers with financial incentives (which were mentioned to be highly effective in motivating providers) to seek and complete relevant training, including buprenorphine prescribing training, stigma training, and racial equity training. While physician champions and cite coordinators helped to improve situations on the ground, there was almost no mention of executive involvement in ensuring program milestones were being met. If executives are going to rely heavily on physician champions to expand ED OUD care, then hospitals should be responsible for funding them. Achieving greater executive engagement will be challenging, but payment reform could be a valuable tool to incentivize hospital governing boards to become a central force in improving patient OUD care.

Hiring

A common concern cited among hospitals was that they lacked the necessary staff to facilitate best practices. Hospitals should expand their hospital staff to help patients schedule appointments and ensure follow-up care is being delivered. Similarly, hospitals should work to hire providers that are typically helpful in facilitating warm-handoffs, such as peer support and social workers. Nurse shortages and waivered/trained buprenorphine prescriber shortages were also noted and increasing their supply could facilitate greater OUD treatment engagement. Additional administrative staff to help ensure MOP goals and objectives are met could also improve the performance of grant recipients.

SECTION 3. FUTURE RESEARCH OPPORTUNITIES

In addition to qualitative review, a full-scale quantitative evaluation can help illustrate hospital improvement following participation in MOP. Fundamental questions that can be answered using additional medical claims-based analysis include 1) was there an impact on prescribing rates?

2) were OUD-related readmissions reduced and/or prevented? 3) did patients obtain adequate follow-up care after leaving the ED? and 4) were outcomes and treatments for patients equitable? Providing answers to these questions will help demonstrate areas of success and areas where additional reform may be needed. Lessons learned can be applied to future programs in Michigan and throughout the nation. Previous descriptive work using Medicaid claims showed potential promise, as MOP physicians were notably active in buprenorphine prescribing in the ED relative to other non-MOP providers. Additional Medicaid claims data analyses can reveal more granular changes in hospital practices, such as improvements in buprenorphine induction and prescribing over time. It can also evaluate hospital success in establishing patient care continuity in the community after they left the ED. Patient outcomes for those treated and untreated by hospitals will then help unravel the relationship between efforts to expand treatment by CFSEM and population health.

SECTION 4. CONCLUSION

In this qualitative review, hospitals funded by CFSEM to improve OUD care in their EDs reported significant changes in their care processes since the outset of the grant. Overall, hospitals appeared to improve their ability to care for OUD patients in their EDs, based on reported increases in MOUD initiation, follow-up care, and patient monitoring. Providers obtained waivers to prescribe buprenorphine at greater rates than before the grant cycle, became more comfortable and confident when treating OUD patients, and fostered new partnerships and arrangements with community mental health providers to ensure patient care continuity after leaving the ED. Hospitals also expanded their EMR capabilities and coordinated across sites to ensure best practices were implemented throughout the ED. However, opportunities for improving care remain. As the frontline workers in the fight against the opioid epidemic, ED physicians and hospitals can save patient lives by streamlining the integration and use of clinical tools in EMRs, expanding their use of peer-support and social services, providing more opportunities for providers to attend stigma and racial equity training, and broadening their community behavioral health care provider networks. Future evaluations can help to quantify participant success and new opportunities to improve care quality and coordination.