

**Medicaid Innovation Accelerator Program (IAP)**  
**Emergency Department Treatment and Follow-up Strategies for Opioid Use Disorder**  
**December 13, 2017**

Hannah Dorr (HD): [intro logistics]

Tyler Sadwith (TS): I'm the project lead for the substance use disorder track of the Medicaid IAP. We're glad you could join us. Today's webinar is a follow-up from a presentation that was held at the state opioid workshop, which was an in-person event organized by CMS, SAMHSA and the CDC that took place in August and was attended by state Medicaid agency and substance use agency officials. At that workshop states connected with each other about strategies and effective interventions being used to address the opioid crisis. One heavily attended breakout session focused on successful programs that are implemented within the hospital emergency department (ED) setting to address opioid use disorder. Today's webinar is a forum to share that information more broadly and to provide the opportunity for additional states and Medicaid health plans to connect directly with the clinicians leading those programs.

As our speakers will share, the principle behind the approach is really about meeting people where they are and engaging with opioid addiction where it interfaces with the healthcare system, including in the ED. There is an opportunity for thinking about system design to leverage that as a pressure point. Our speakers will share their approaches for initiating medication-assisted treatment (MAT), distributing naloxone, embedding peer workers in facilitating referrals into addiction treatment and social services, all within the ED hospital setting.

As states and payers explore methods for optimizing SUD service purchasing, there is always an increased focus on performance and quality measurement. The models you hear today can play a role in enhancing performance as conveyed through quality measures, including through NCQA's follow-up after ED visit for alcohol or other drug-dependence measures, which is included in the 2017 Medicaid adult core set.

The one goal for this webinar is to spur discussion about ways to scale and spread these innovative approaches, which have a strong track record in increasing treatment initiation rates and can impact quality measurements.

The agenda:

- We will begin with Dr. Katherine Hawk regarding the Project ASSERT program at the Yale New Haven Hospital. We will have the opportunity for discussion afterwards.
- Dr. Ed Bernstein will present efforts underway at the Boston Medical Center, including Project ASSERT and the Faster Paths to Treatment programs.

There are several opportunities for discussion throughout the webinar. We encourage participation.

Dr. Katherine Hawk completed the NIDA K-12 Drug Abuse, Addiction and HIV Fellowship with a focus on reducing opioid overdose in high-risk populations. She is an assistant professor at Yale School of Medicine. Her primary research interests are ED-based interventions to increase access to treatment for substance use disorders, opioid overdose prevention, and naloxone access, and understanding how prescription drug monitoring programs can be used to reduce opioid-associated morbidity and mortality.

Dr. Edward Bernstein was board-certified by the American Board of Emergency Medicine in 1983 and is a professor of Emergency Medicine at Boston University School of Medicine and professor of Community Health Sciences at BU's School of Public Health. Dr. Bernstein is the director of the Faster Paths to Treatment at the Boston Medical School, which is funded by the Massachusetts Department of Public Health Bureau of Substance use Services to provide urgent access to a continuum of addiction treatment options including medication therapy. He is also founder and medical director of Project ASSERT, which is an ED program that employs peer health promotion advocates, licensed alcohol and drug counselors, to motivate patients and facilitate access to a continuum of SUD and other support services. For the past 25 years Dr. Bernstein has pioneered methods to integrate public health into emergency medicine practice.

John O'Brien is senior consultant at the Technical Assistance Collaborative (TAC) and will serve as our moderator for today's webinar. John brings more than 30 years of experience in behavioral health systems design, financing, and implementation. He has worked with Medicaid, mental health, and substance use authorities in many states to develop Medicaid waivers, state plan amendments, and federal grant applications. John directs the TAC's work on substance use disorders with an emphasis on how to increase access to services, integrate with primary care, and reduce unnecessary costs to support effective systems.

Dr. Hawk will get us started.

Katherine Hawk (KH): Thank you for having me. I'm glad there's so much interest in this topic. As mentioned, I'm assistant professor at Yale's ED. A lot of what I'll be talking about today is the care that we offer in our ED, which is largely driven by programs and research that have been put together by my mentor and the chair of our department, Gail D'Onofrio. I have no commercial disclosures or conflicts of interest to report.

Many of you on the call are aware of the problems we're facing due to the opioid epidemic. This chart is from HCAP data. On the X axis you have the years from 2005-2014. You can see significant increases in rates of either inpatient hospitalization or ED visits for a 100,000 population over the course of the past decade or so related to opioids. You can see significant rises both in inpatient hospitalization and in ED visits. Part of why that is important to us is we know that a significant portion of Americans who meet criteria for opioid use disorder and who would benefit from treatment, only about one in five are actually able to get treatment.

That brings us to why would we focus on the ED? The answer is because that's where patients are. We see folks on a regular basis, certainly every day, every shift, even every hour of every shift. We see patients that have moderate or severe opioid use disorder (OUD). Patients come in after opioid overdose. We have a decent amount who actually come in just seeking treatment. They're unable to access treatment systems or aren't sure where to go for help. Or we have people identified through screening who are in the ED either for opioid or non-opioid-related medical needs.

The way that I like to think about reducing opioid-associated morbidity and mortality, both in the ED and on a healthcare systems level and policy level, is really a three-legged stool. There's a role for preventions; for increasing access to treatment; and for harm reduction across the many spheres of the things we can do around reducing the impact of OUD.

I'd like to start by talking about a study published by Gail D'Onofrio and colleagues. It was worked and set in our ED and was published in JAMA in 2015. Many of you may have heard of this study. There's 329 patients enrolled from April 2009 to 2013. They were adults. They all met DSM-4 criteria for opioid dependence; had a urine toxicology that was positive for opioids; and about 9% were enrolled after an overall overdose. About 34% came to the ED seeking treatment, and the rest were identified by a screening.

Of these 329 people, they were randomized to one of three treatment arms:

- A referral for treatment to one of our local treatment centers.
- A brief intervention, which is a motivational interview-based intervention where the patient is engaged in reasons they may want to seek treatment, and that was along with a facilitated referral.
- Brief intervention and either Narcan induction in the ED or enough buprenorphine to take home for up to three days until they were able to get to an outpatient provider in their primary care-based office and would continue their treatment for their OUD

Our findings from the study were that our primary outcome was 30 days follow-up, 30-day engagement and treatment. As you can see here, the graph on the right, the group in the buprenorphine group were almost twice as likely to be engaged in treatment for an SUD at 30 days compared to the referral group or brief intervention group.

One of our secondary outcomes was self-reported past seven-day use of operations, and again the purple line is buprenorphine and you can see that they had a sharper reduction in days of self-reported opioid use. Meaning across all three groups, on the baseline on the left here, they all started out five and a half out of the past seven days with opioid use, and the buprenorphine group dropped to less than one day out of the past seven days.

One thing I want to highlight is that we're looking at engagement and treatment. This is not complete abstinence from opioid use, but this is significant improvement in quantities of opioid use and engagement in treatment, which from my perspective are really important outcomes.

I'd like you to think about a case in the ED. You have a 28-year-old male brought into the ED after a heroin overdose. This is something we see in our ED and EDs across the country. I'll take you through what we know usually happens and what could happen, what are the possibilities to really help this man to change the trajectory of his opioid use.

Let's take a step back to think how we treat other acute life-threatening emergencies in the ED, both from the perspective of the ED and from health systems. Stroke and ST elevation/MI are two life-threatening emergencies we see in the ED that have very intense services and rigorous protocols that are really designed to increase morbidity and mortality and to increase the outcomes associated with these emergencies. Part of what we are trying to think more carefully about, at least in our ED, is how we can try to take some of that intensity that we treat these other emergencies with to the emergency that is an opioid overdose.

These three things here are a menu of services we offer in our ED. People can get one, two or three of them and it's a function of what the patient is interested in and what staffing is around. It's certainly not one service serves all. The first is brief intervention and referral to treatment. I'm going to talk a little bit

about Project ASSERT although we'll defer most of it to Dr. Bernstein, who developed the first Project ASSERT program, and upon which our program that's been running for almost 20 years is based on.

We also offer overdose prevention, education and take home the naloxone.

The third thing we do is ED-initiated buprenorphine with a referral to follow up at one of our local treatment providers.

Project ASSERT is based on the Boston Medical Center model and it's been functioning at Yale since 1999. We have health prevention advocates that provide the screening brief intervention, overdose prevention, and referral to treatment. This is not just for opioids but for all substance use disorders. They have really well-established relationships with local treatment providers and around the state, and some around the country if it's in the patient's best interests and what they would like to do. They collaborate with and educate our providers. They play a pretty significant role in helping advocate for our patients. They directly refer patients to treatment and have connected with 50,000 people since 1999, which we're proud of.

As far as overdose prevention and the naloxone distribution, I think at-home naloxone is really a gateway to treatment, because what that means is that if there's more naloxone in the community a life may be saved and may get to us in the ED, where we have a chance to engage them in treatment. So increasing naloxone in the community is a very powerful tool we have to fight morbidity and mortality associated with opioids. We happen to be lucky enough that our State Department of Public Health has given us kits to distribute to patients at risk for opioid overdose and we give to patients, their friends or family, whoever is in the ED that would like one. We initially did the atomizer kits, at the top center of the slide, and now we have the prefilled atomizer as part of our program. We initially started that only at our academic teaching center, Yale-New Haven Hospital, but have in the last couple months rolled it out to a community affiliate that's also part of Yale-New Haven Hospital and to our single freestanding community clinic. We've been able to take naloxone out there in part through a grant through our state hospital association.

I want to walk through how we think about responding to an opioid overdose in the ED. Start on the left, someone comes in; they're not breathing; they're suffering from an opioid overdose. Certainly you do the things you do in the ED. You give naloxone, you support breathing, you monitor vital signs and all the acute care you initially would.

It used to be that you would observe and discharge home with treatment. Now what we're doing is really moving towards initiating treatment, which is the yellow box here. Part of what that means is that we are providing people with a referral to treatment and sending them home with either a naloxone prescription or naloxone kit. The goal is to really help the patient change the trajectory of the course of their disease as opposed to just providing that one initial intervention for an overdose that most people think of the ED as providing.

I want to highlight the 72-hour rule. This is a federal law that allows providers to administer but not to prescribe opioids for the purpose of relieving acute withdrawal while arranging referral to treatment. It applies to both buprenorphine and methadone. This allows providers who are not X-waivered to give a dose of buprenorphine or methadone up to three consecutive days in the ED while referring them to treatment. It can't be extended, it's only for up to three days. But it is an option if there are not X-waivered physicians available in that facility.

This is our clinical opioid withdrawal scale. Essentially it's a validated scale we use to quantify the amount of withdrawal a patient is experiencing in the ED. In our previous study I discussed and clinically now, our goal is to do induction for people who are least in moderate or moderately severe opioid withdrawal. This is available online.

This is our referral form we use in our ED. Essentially we have been fortunate enough to practice in an area where we have multiple treatment centers who will take our patients. So the bottom of the form shows the five different sites and depending on a patient's preference, insurance, and other medical comorbidities, it helps us determine which venue we think might be the best match for the patient.

If they're interested in pursuing buprenorphine we collect some basic data: the history of prior substance use, medical history, DSM mini-SKID because we certainly don't want to start someone who doesn't meet criteria for moderate or severe OUD. We also collect liver function tests. We want them to be less than five times the upper limit of normal. We also track the buprenorphine dose we give in the ED, the scripts, and then fax this form over to our treatment center. That's how we communicate with them because this often happens at off hours so people aren't available to have a conversation about the patient.

This is information about Data 2000 training in order to be able to prescribe buprenorphine and this is something many providers know is available but may need a push or some extra information or encouragement to pursue. I'm not sure if that is within the purview of many of you on this call, but that would certainly be a first place to start if you're in an area where you're thinking about developing these programs. There are four different organizations that offer the online training. It's either online training or you can do half in person and half online.

This is a graph that shows the viability and pharma-kinetics of buprenorphine. I want to highlight how it's different from methadone and naloxone. It's really important when thinking about prescribing buprenorphine or starting it in the ED, it's a partial agonist as opposed to a full agonist like methadone. What that means is that it binds to the new receptor, which is the opioid receptor, and it actually displaces a lot of opioid that might otherwise be bound to the receptor. But it doesn't fully activate it in a way that methadone, heroin or other opioids do. So the risk of respiratory depression and things along those lines is actually much less with buprenorphine. Of the opioids that physicians prescribe it's actually amongst the safest. That's always something people don't necessarily remember. I want to highlight that.

Thank you for doing this work in your community. It's important work.

John O'Brien (JO): Thank you for the terrific information. You mentioned a few components to your project on this call: the initiation of buprenorphine within the ED and some information about Project ASSERT and other strategies. There are several questions, some more operational and some more clinical.

The operational question is around how the Yale ED or projects within the ED are financed? My guess is it's changed over time. Was there a contract for either of the activities you mentioned, the initiation of buprenorphine in the ED or Project ASSERT? If so, who was it with and what are parameters you are aware of in the contract?

KH: Back to Project ASSERT, which was certainly initiated long before I was here, it actually started as a grant that Gail had gotten in order to develop this program here. It was a one- or two-year grant. When that ended, the hospital was so pleased with the outcomes and the ability to get people into treatment that this is actually now a line item budget for our hospital, even though they primarily work in the ED. So

Project ASSERT is their hospital employees. I think they actually can bill for it. It counts as a consult. As far as coding of a chart, if it was going to be a Level 4 versus a Level 3 visit, it does count as a consult. It has the potential to change but based on the reimbursement structure in our state, it doesn't actually change. I'm not the best person for that.

As far as ED-initiated buprenorphine, this is all just done under clinical care. So the medication is covered by all insurers in our state, including our state Medicaid plan. There's really no other specific funding.

JO: Payment to the ED for the bundled sort of activities?

KH: Exactly.

JO: Other questions: You mentioned Data 2000 and the importance of getting your physician and other practitioners waived through the DEA process. I assume the ED physicians working with you on the induction process are waived providers or if not is there some workaround?

KH: In order to write a prescription that a patient takes to a pharmacy, you have to have an X-waiver to be able to write that. That being said, I don't necessarily have to be the attending of record. I've certainly been working in one area of the ED and had someone who was not waived say "It sounds like they may be a good candidate. Will you meet them and see what you think?" That's certainly one of the ways we do it is by an in-house consultation service so to speak.

Other ways, as I mentioned the 72-hour rule. So anybody can give a dose of it in the ED if they meet criteria, and a lot of this is being available to have these conversations. People know I carry my phone with me and I'm always happy to answer questions, so I certainly get called where people say "I think it might work. Where should I send him? Can I give him a dose?" I do a lot of walking them through to make sure they did everything and they can do the dose there in the ED. Those are the two things.

We actually have about at least 15 providers waived in our department. We have pretty decent coverage from that perspective.

JO: Other questions: About induction, generally how long does the physician or practitioner need to observe a patient in the ED after induction or after they've taken Suboxone?

KH: I don't know that there's any clear evidence of recommendation. We usually watch people for at least a half hour. People start to have improvement of withdrawal symptoms within 15 or 20 minutes. Usually we try to keep people there for a half hour to an hour, but it's part of why I made sure to highlight the absence of respiratory depression is people do very well with this medication. In the study and since we've been doing this clinically we have had no problems with people running into trouble or coming back or anything along those lines.

The bigger thing is that you give a smaller dose, 4 mg, something along those lines, and they're not having adequate relief of their symptoms, and they're certainly going to stay in the ED and not go anywhere if they're still in withdrawal. Then you can consider giving another dose. But if they feel their symptoms are relieved they're generally okay to go.

JO: There are questions about what happens after someone's released from the ED or discharged. What might you be seeing in terms of access to care in terms of being unable to have an outpatient provider or quick access to an outpatient provider for follow-up? Maybe somebody experiences trying to get

treatment, especially medication, and that person's plan may require someone's authorization to be able to get that medication. What kinds of challenges are you seeing post-discharge?

KH: As I mentioned, I am well aware of the fact that I practice in an unusual place where we have open slots. We have people willing to take our patients. There's a scarcity, but we're able to at least meet the need of our ED patients who we're able to start on treatment. That being said, I know that is not the case in the majority of the country.

There are two ways to get around that. Some EDs—there's one, Cooper Hospital, to my knowledge, where there's nowhere to send folks, so the ED providers have set up their own clinic. Dr. Bernstein's going to talk about an option they have at the medical center. The ED can decide that if we're not able to hand people off either we become addiction providers, because that's the only thing we're able to get these folks right now until we can get a better option available, or other places have more criteria. You could conceivably set up something where you have someone on call for a treatment center and maybe they want to talk about a patient before you start it in the ED. You can set up all different types of programs but the bottom line is we know that people are dying. I think anything we can do to try to increase access to this life-saving medication is the right thing to do.

JO: A couple other questions: One participant is running into issues about sharing information with community providers upon discharge from the ED because of 42 CFR part 2. Have you experienced that? Have a process to address it?

KH: As emergency providers, because we provide emergency care, we are not a primary addiction provider. From that perspective we're not limited by 42 CFR. We're also not sending information to treatment centers without the patient's permission. But my understanding is that we're not bound by 42 CFR because we are not a primary addiction provider and because we provide emergency care.

One question that comes up a lot is how we handle doing inductions after an overdose, because it is a little tricky and different. Some folks read the study I talk about and think this was all in patients after an opioid overdose and it wasn't; that was only a small percentage of the patients in that study. That being said, a lot of people I do start have come into the ED after an opioid overdose. I don't do buprenorphine inductions—I don't think the COWS is kind of valid right after somebody gets naloxone for an overdose. Our general protocol would be to wait at least a couple hours. Honestly those are folks that I send home with a prescription. Anybody that has taken methadone within the last 24 hours, I generally consider their risk of precipitated withdrawal is pretty high. So that's another group I wouldn't start in the ED. And anybody who's in treatment with methadone is also not really a candidate for switching over to buprenorphine in the ED. We refer them back to their providers.

JO: The last question is any information or read on in-home induction post-discharge from the ED? Do you know of it? Seen it work? Examples that folks can look at to understand its efficacy?

KH: From a protocol standpoint, Joshua Lee in New York has published a home induction protocol for buprenorphine. Also the JAMA study I talked about in our ED, at least a third of those patients were home induction as opposed to getting their dose in the ED. Those are folks who are followed very, very closely, and there were no complications with that or side effects with that. The folks we started in our ED, we certainly keep an eye out for them and have QI processes through our ED and have had no one come back with problems with home induction. We've also had nobody come back saying "Ooh, could I get that

again?" ED providers are always afraid that it's going to open this Pandora's box of people coming into the ED thinking they can get all the buprenorphine they want, and we have not seen that in any case at all here, for what that's worth.

JO: Now Mr. Bernstein will talk about his product.

Edward Bernstein (EB): Kudos to my colleagues at Yale for their pioneering work. Thank you for the opportunity to share the lessons of implementing a regional opiate urgent care center at the Boston Medical Center. Our strategy has been to address transitions of care by linking ED services with primary care, behavioral health, HIV, HPV and substance use treatment. Our model recognizes that the ED is a critical link in the chain of the system of healthcare delivery for people with substance use disorders. I really appreciated that Dr. Hawk presented the models that we have in place for stroke and for \_\_\_[00:39:52] or heart attacks. We need similar models for addiction care. What we're talking about today has some components of the model. Where people have chest pain and cardiac arrest, we have the AEDs in the field. Now we have the opportunity to flood the market with naloxone distribution, putting something in the hands of people that can reverse an overdose and bring people back to life. We're making good steps to trying to develop a system of care.

We're quite fortunate in having been awarded a four-year grant by our state Bureau of Substance use Services. It was awarded in March of '16 and we opened our doors in August of '16. We're one of three regional care centers throughout Massachusetts and part of our state's strategies to address the opioid overdose and substance use disorder health emergency.

In the past 15 months of operation, we've assessed, motivated to seek help, and placed over 1,800 patients with substance use disorders and a continuum of treatment services. The grants help us to fill existing gaps in services which include expanding overdose education and naloxone kit distribution, and providing medication for addiction treatment, buprenorphine and naltrexone, in a low barrier, Faster Path clinic.

In this next MAT bridge clinic, we provide the DSM-5 evaluation of all our patients to assess level of severity, medical exams, prescriptions for the medication, and a standardized panel of appropriate labs including hepatitis C, HIV and sexually transmitted diseases, and rapid drug testing. Under the leadership of our urgent care specialists, we're able to bridge 40% of our patients to further ongoing maintenance care in the community or within our own institution. There are patients that have to make this transfer on their own because we lost them to follow-up.

From 8 a.m. to 12 a.m. daily, seven days a week, our licensed alcohol and drug counselors in Project ASSERT conduct the ASAM triage and a psychosocial assessment to determine appropriate levels of care to treatment placement. Our MAT unit is open weekdays from 8 to 4:30, and during these hours this permits us to safely divert patients who use the ED solely for the purpose of seeking help in finding treatment to our open urgent care center. This might be particularly interesting to the audience since 87% of our Faster Path patients are Medicaid/MassHealth.

In order to create and integrate this collaborative model, we were able to bring together our ED flagship program, Project ASSERT, with the general internal medicine group and their programs, the office-based addiction treatment program started in the early 2000s and the addiction consult service. We've also been



able to partner with our other programs that have waived physicians that distribute buprenorphine for pregnant women in Project Respect and for adolescents in the Catalyst program.

As mentioned earlier, we founded Project ASSERT in 1993 after a grant from SAMHSA that lasted about four years, and in 1998 the hospital took it on as a line item budget. For 23 years, we've had experience providing bedside service and consultation to both staff and patients, utilizing a brief negotiated interview, a form of brief motivational interviewing, and placing people in treatment in follow-up. So I think we've reached over 80,000 patients. Our program was an early prototype for SBRIT--screening, intervention, and referral to treatment.

The team of four full-time and two half-time licensed alcohol and drug counselors have been recruited from the communities we serve and include many in long-term recovery. They bring the knowledge of the community and the conditions of life in the neighborhoods to the emergency practice, to our physicians and nurses. They serve as culture brokers, and help the patients understand the medical language and constructs, while at the same time helping the medical professionals understand what's going on in the community and in the patient's lives, and the social determinants that bring them in for medical care. A brief negotiation interview involves compassionate curiosity, respect for listening, and a conversation that's nonjudgmental. It addresses the addiction issues in the context of people's lives, health and safety.

I would be remiss if I didn't share with you that other programs have been developed throughout the country that have different models than we have. At both Yale and Boston Medical Center we have on onsite model of peer support and peer counseling. In Rhode Island, they have a contract with Anchor Recovery, and an ED program called Anchor ED, and peer recovery coaches are deployed from outside agencies to help patients in the ED who have overdosed or have opioid use disorder. There are similar programs developed in Michigan and New Jersey. So I think this is beginning to spread. Our Project ASSERT model has been brought to Bethel, Alaska and Bayamon, Puerto Rico and El Paso and different parts of the country, and we're proud to be able to help train physicians, nurses and peer practitioners.

I want to share a study published in DAD, Drug and Alcohol Dependence, in which we tested the Project ASSERT peer model utilizing bridged interventions in a randomized, controlled trial that involved 1,175 moderate to severe cocaine and heroin users in the urgent care setting. We demonstrated an increase in abstinence and a reduction in quantity of drug use compared to controls at six months, based on hair sample analysis. As mentioned before, one out of five patients who need treatment have access to treatment for opiate addiction and use disorder. At our institution we've improved some of the outcomes by having this active team with a vast network of support from the community for treatment access.

At the same time, only 56% of our patients, at least last year, could be placed in treatment at the time of their ED visit. Those that were denied were because of no beds available, inadequate or lack of insurance, or they didn't have their medications at the time in order to be placed. We have a significant number of people that refuse any offers of treatment, and we have to have improved options for these patients, and all these patients are offered other services during this visit, such as an appointment with their PCP, clothes, food, opiate education and naloxone distribution kits. As well, patients with no home can be placed in shelters for the evening and asked to return the next day for further attempts to place in treatment.

Our peer model for opiate education is to be at the bedside, evaluate the patient and assess their needs, and then educate them on the risks of overdose, sign of overdose, response to overdose, how to use a

naloxone kit and they are given the kit before they leave. The president of our hospital issued a policy in 2013 that every patient at risk for an overdose coming to our ED should be offered a naloxone distribution kit free of charge. We have both the support of the Bureau of Substance use providing kits as well as the hospital pharmacy.

We offer patients referrals to a Faster Path clinic, where we offer medication for addiction treatment, or to a detox or outpatient or other services. We plan for a safe discharge, which involves in some cases asking them if they have any family members or friends we can call to help them get home or protect them from a further overdose.

A critical partnership in our development has been with the inpatient addiction consult service—their faculty, the X waived, the fellows that are in their fellowship program, and residents. They help to staff our addiction treatment unit as well as refer patients to us. They start the patients in inpatient service on methadone and buprenorphine, and in many cases they're able to contact acute treatment facilities that continue them on the medication and then send them back to our clinic for further care or to a methadone maintenance clinic.

One of our chief partners is the City of Boston and its public health commission, and a program called PATHS. We count on them to help patients who have been through acute treatment to transition to longer care, as well as to outpatient programs, and to provide support services such as referral to housing, education and job support as an added component of our grant.

This is a diagram to try to bring the things I've shared with you together into one picture. Our patients come mainly from the ED as walk-ins. We've changed the processes from being in the ED primarily to being an ambulatory bill so that they walk the patient from the ED into their office. Patients are referred from the inpatient service, from other agencies and residential programs, as well as word of mouth.

The first step is to have an LADC, licensed counselor, do the intake and provide an array of services. Based on their assessment and the algorithm behind the ASAM triage, recommendations are made for levels of care that they qualify for. But there may not be those services available or the patient may have other ideas, and it's a question of negotiating and treatment planning. They could come to a medication unit, our low-barrier unit, to start the medication, or they could go to other services—acute treatment services or detox, and get the community-based services as well.

This is a picture of the program. We're fortunate to be located next to our pharmacy, the lab, the ED, and within walking steps of Project ASSERT's office. So between the MAT clinic and Project ASSERT's office we have the basic Faster Path program. At the same time, we're fortunate that just across the street there's Healthcare for the Homeless and an acute treatment facility as well as other outpatient programs. We have a full array of services, despite the fact that we often never have enough.

During our first year we reached and served 1,275 patients and they attended 4,600 visits. This is a breakdown of what the different team members [cut off][00:52:04] during that time. But I'd like to share with you that we were able to start on medication 407 patients out of that 1,200, and 40% of those patients were transferred to further care, 664 patients were placed in acute treatment and other services were provided. That's a picture of our program in the first year. We're quite proud we were able to get off the ground and get this program rolling.

I want to end with some of the lessons learned:

- The importance of building a model that brings together peers with medical providers.
- A model that brings together EDs with the general hospital and general internal medicine. I don't think we could serve the patients in the way we're doing without this collaboration. Without the hospital's dedication to providing space for us and their information technology team, we would not have a unified electronic medical record that brings all the different components together into a medical note. Out of that note comes a report each month of the services we delivered, so we are able to extract from that report the frequencies of different types of visits and services.
- We're quite fortunate to have the support of the pharmacy because the MAT unit holds a very tight control over its patients. We make one-day, two-day, and three-day prescriptions. We'll check people's urine on a regular basis, and we work diligently to place them in maintenance programs. We need the pharmacy's support, especially when they need prior approval from some insurance agencies.
- We do provide alcohol treatment with injectable as well as oral naltrexone.
- We have been working on a business plan after the grant and while the grant is going on. We intend to bill for our services but have not at the present time.
- One of the commitments of our hospital and team over the last 23 years is workforce development and helping the community have physicians in the hospital that could provide a use for the community and a use for the patients. So I think our project and staff have done a tremendous job in that respect of being a bridge to the community. Now we'll begin to invest in housing and workforce development from our determination of need money.
- One of our barriers/challenges is not having sufficient capacity in medications in the addiction treatment area, so that 40% isn't sufficient for us.
- We are also challenged by patients who have overdosed and been given naloxone and the difficulty in getting them started on treatment after they leave to address their withdrawal effects.
- All of us face this huge gap in mental health services.
- We need to think about how to engage the community in the opioid overdose crisis. The outreach workers in our community are doing some really spectacular work and there has to be other types of development so that the community economic and social life is more compatible for bringing people back into the community and families. So basically we're not just medicating and treating it as an emergency but working on helping people recover their lives and dealing with the trauma of some of their lives.

JO: I appreciated the programs you highlighted. Let me ask about information around the purchasers and contractors for the programs you mentioned. Can you say how some of your programs/activities are underwritten by state, federal or other funds?

ED: The grant funds all the capacity building and it's a four-year grant, so it's quite a boost to us and has been helpful. The hospital has provided funds for building this space, over \$100,000, and is providing additional services the grant was not able to provide funding for. We have billed for the pharmacy and lab and are quite fortunate because 87% of our patients are on MassHealth so people get their medications in our pharmacy within a few steps of our clinic. That's been a big boon to us. The folks at this conference have to see the importance of their work in addressing the overdose crisis and creating access to care and medication and funding that.

In terms of our peers, we have licensed alcohol and drug counselors on different levels. One level, the LADC1's, are independent practitioners with master's (degrees). We just started a credentialing process in our hospital and intend to bill for their services as we will bill for the doctor's services as well and the facility fee.

In terms of Project ASSERT staff, the peer alcohol and drug counselors, we haven't begun to bill for their services. It's been funded by the hospital. We have over the years augmented the facility fee based on intensity and coordination of care, but I'm not sure, as Dr. Hawk pointed out, that since it's bundled services that we will see much reimbursement from that at all for the programs. I think the hospital has gone a long distance to invest in this and it's going to help them in the long run because they've basically probably waived ACO that will require patients to get a little bit more services in helping them stay on their feet.

JO: Can you talk about reporting requirements from your projects, especially the ones that are bed-based?

EB: Project ASSERT merged into the Faster Path program and its records are part of the Faster Path records. It comes out as one electronic record. We review those records and have to take the information from the records and reports and submit monthly reports to the state on the services we delivered, the number of folks that we saw. The state has an enterprising voice management system called ESN. We fill out the enrollment and disenrollment forms on each patient. The ASAM triage continuum gets entered into the state system called the \_\_\_[00:59:44], and we're hoping to see data back on those systems of what happens to our patients and then to be able to track within the state system the trajectory of the transitions from care from our bridge medication unit to maintenance, from our detoxes to longer-term care because we know without longer-term care people aren't successful.

We have the information system in place. It's challenging. Everybody knows we devote so much work and time in the grant to data reporting and data collecting, we may be losing time with patients and conversations that are very important to help them support with traumas in their life. So we have to strike a balance there. Those are the reports we submit.

JO: In terms of reports to the MassHealth managed care organization, those are what you're providing via claims or encounter information—there's no specific reporting the MCOs have set up for you?

EB: As far as I know, the only thing the insurance sees are the claims and they've gotten documentation of the work that we've done, which is extensive. We have a very high level of document digital requirements for our patients so that these records stick with them in their primary care visits and the hospitalizations so that the more detailed their records are, the better care people will get. Especially because we have this addiction consult service that basically tries to connect things for patients leaving the inpatient service.

I guess that's the theme of this conference is how do you avoid people slipping through the cracks and ensure good transitions? I think you need a system of healthcare delivery for addiction services that is integrated and do away with some of the siloes we've had in providing care.

They raised the question of CFR 42 and so far we have really excellent relations with providers and we get patient permission and help them on the phone to do the intake as well as pass on information of medical exams that are required, medical testing that's required for the placement, and we serve as a backup for

the Boston Public Health Commission's programs, too, and we do our medical evaluations for them as well as the medication for addiction treatment.

I want to go back to this point that we are trying to divert those patients that are only seeking care for getting help for getting placed in treatment from federal ED visits, which requires copayments and is very expensive, to an ambulatory setting. That's what we promised the state we would deliver and we have to a great extent.

JO: There are a couple of questions around the use of Sublocade and whether that is being used in the ED for either of you and if so what are you seeing vis-à-vis efficacy?

EB: The injectable?

KH: Yes. So Sublocade as it was approved a couple weeks ago, requires a one-week sublegal legal kind of run-in. As it's approved by the FDA, it's not really pragmatic to start it in the ED. That's the 30-day formulation. The FDA is currently reviewing two formulations from Bayer Pharmaceuticals, a seven-day and a 30-day formulation. We're yet to see exactly what the approval will look like, but at least their preclinical studies did not have a sublegal run-in period or a period of sublegal stabilization of sublegal buprenorphine. So there certainly is a great potential to consider those medications for at least initiation of buprenorphine and referral to treatment that is not yet FDA approved.

EB: We're definitely looking forward to the opportunity to have a 30-day injection. We do a lot of home inductions in the MAT unit, the bridge unit. I also wanted to add that we tried to put together a safety plan and package so when people are transferred to the next level we've put some things in place, so our recovery specialists and staff work to get people into outpatient treatment, to make sure they have psych support. If they're on medications we've reconciled their medications. We write prescriptions for them until they're safe into another program. A lot of patients have been in transitional programs and we keep them on our prescriptions until they find another prescriber. We really are trying to make it easy, a smooth transition and warm handoff for our patients.

In terms of acute detox treatment services, we provide the medical examination, reconciliation of medications, trying to get prescriptions when possible, and basically transport them. We provide transportation to all our facilities. One change to the grant is we were able to have more funds for out of Boston transport for people in other parts of the state, Worcester and north. That's helped us access more treatment facilities because we have transportation support. I think transportation's a big need that has to be supported. Safe housing, some sort of sober housing needs to be supported. We have a lot of needs in order to have a successful program that's going to help people stay safe.

JO: Other questions for both of you. What is the role of pharmacists as part of your approach other than dispensing medication?

EB: In the ED we have a 24-hour pharmacy staff seven days a week. They go to the bedside, after the private nurse leaves at 12 midnight. The doctor places the order in the electronic medical system and they dispense with opioid education and naloxone distribution kits to the patient. That's one method. We've talked to them about the buprenorphine distribution in the ED and we're working with them on this and we want to learn from the Yale-New Haven experience.

As an emergency physician, I would not be comfortable unless I was guaranteed a good handoff from the ED to the next step. By working on the MAT program we have in Faster Path, I've set up a safety net for emergency providers to have a place they can always send people. The problem is we weren't funded sufficient to cover evenings and weekends and we're trying to raise funds. Once we bill for our services we'll probably be able to provide longer coverage. That's the future plan.

KH: We also have pharmacists in our ED although not 24 hours a day. We love having them there. They're a tremendous asset to our ability to provide education for patients. They're very involved in our naloxone distribution program. They don't always do the education but are certainly part of the team available to do that. We worked with them very closely on setting up a naloxone distribution program.

The other thing is, at least in Connecticut, our state laws allow pharmacists to actually prescribe naloxone outside of the hospital. So there's been a lot of work amongst pharmacies in our community and certainly Rhode Island as well around the role of pharmacists in educating patients.

EB: We have standing orders for the pharmacist to distribute to the patient.

KH: Exactly.

EB: Our pharmacy is so co-located with us, we have a designated person in our pharmacy who's responsible for prior approval, especially for injectable naltrexone. That's been very helpful in setting that up for patients. I really do think throughout this crisis that we don't forget other forms of addiction and just think that patients come with just straight opiates. When I look at urine screens I see Fentanyl, cocaine, a little meth, a lot of alcohol and benzos. We take all these folks that other places won't accept and work with them to get them prepared to go into the maintenance programs that require much more focus during urine testing that doesn't have these other chemicals in it.

JO: There's a question about protocols for different populations, whether or not your programs have a different protocol for pregnant women?

EB: We use Subutex, which is without the naloxone. We prescribe Subutex without naloxone primarily. We have a program called Respect in our Ob-gyn department so patients are referred to them for further care.

KH: To my knowledge I haven't come across a patient in our ED that happened to be pregnant that I was going to start buprenorphine on. Our hospital policy is that we offer admission to the hospital for induction on either buprenorphine or methadone just because they're such high-risk folks, although I understand people may not always want to do that. But it's offered.

JO: Ed, who is the contractor providing the funds for the four-year grant?

EB: The Public Health Bureau Substance use Services. The opiate urgent care center was one of the proposals made by a taskforce that the governor called together. It was one of their innovative strategies, which I implemented in three sites.

JO: You both talked in August about the impact you're having on return ED visits. Any data regarding return visits for overdoses or from other means when entering the ED?

EB: I can't share data at the present time. The opioid crisis is out of hand. We saw more visits this year than the year before to our ED for an overdose. We have entered it on spreadsheets and see that we've

almost doubled the number of visits over the five-year period of people brought in with what they call narcotic-related incidents. But to single out one patient in the ED to see if one of our patients didn't return, we would want them to return if they have an overdose, but we don't have the data yet on that.

KH: I also don't have data about return visits or ED visits. What I do have, at least for the initial study by the team here, we did work with a health economist at our School of Public Health and did a cost effectiveness analysis based on both the primary and secondary outcomes. This was published in *Addiction* a couple months ago. We did actually find that it was cost effective, buprenorphine on hand versus the other two treatment arms—referral or brief intervention and referral to treatment. But that was largely driven by differences in treatment costs and increased treatment engagement in the buprenorphine group rather than specifically ED visits or repeat ED visits.

JO: When you first started the induction program in your ED, were you getting much pushback from the community providers or hospital administration around beginning that as an ongoing process or did everyone have an epiphany at the same time that it made sense to do induction and treatment?

KH: We have a very robust network of addiction treatment providers. There's a lot of close collaboration. The follow-up from the initial study was done in our primary care center here at Yale and we also have several treatment facilities we have really close working relationships with. From the research perspective it was done here within Yale. Just the magnitude of the epidemic the past couple years has really helped open those doors, and the overdoses we see in New Haven, everyone is trying to figure out how to get people in treatment. If they have to start in the ED, our treatment providers are happy to take them however they can get them is my impression.

EB: But it is important to meet with the community. I presented at the Public Health Commission and my presentation was put on the web. The South End community was a little upset to hear that we're starting a program or grant without them participating in it. So we basically backtracked and went ahead and met with them in community meetings and discussed it. They seemed to be fine with the fact that these are our patients and we're taking care of them here anyway, so we're not bringing in more people into their neighborhood because they're coming into our hospital, not the neighborhood. We basically tried to understand where they're coming from and to work with us, because until we have community support and treatment, this is going to continue at a very high level.

JO: Are you aware of within your program or elsewhere that EDs have a protocol for how soon after you administer Narcan that oral buprenorphine can be initiated?

KH: I don't have a clear black-and-white answer, a number. I think it certainly depends on the patient in front of you, on whether they have previously taken heroin versus a long-acting opioid, methadone or something along those lines. But in general I would say a good rule of thumb would be not within two hours of receiving someone sent from an overdose, and at that point it should really be driven by the COWS, the withdrawal scale, and the whole complete clinical picture.

EB: I really think we need a study on it since Dr. D'Onofrio's first study on it had 9% of those patients just overdosed, so it would be good to have some research to support it. It would help push the envelope so we could initiate it in the ED. That's one of the pushbacks we're getting. I'm hoping to initiate it in this program with our faculty and residents. One of their concerns is what if they're taking other drugs? The anecdotal information we're hearing is that because the fentanyl epidemic is so out of control and people

are using fentanyl instead of heroin that some people are starting off with Suboxone in protecting themselves from respiratory arrest by taking Suboxone before the fentanyl. If this is the case, and I should be talking about this publicly, then it must say that it would be safe to give buprenorphine to anyone who's overdosed, because even if they go out and use fentanyl afterwards they're protected to some extent.

KH: I haven't heard that, but I do want to note that in September there was an FEA safety advisory that came out. It was a follow-up to a previous safety advisory around the risks of using buprenorphine in patients on benzodiazepines. As you know, they're a respiratory depressant and increase your risk of overdose. This safety advisory that just came out in September acknowledges the risk of overdose with buprenorphine but it highlights the fact that the risks of not treating opioid use disorder can be much higher. That's one of the things, that's how we've always done it for the initial study here we didn't exclude anybody who used benzodiazepines, either prescribed or illicit, and that's our practical protocol here. But that is something a lot of sites are concerned about, and some treatment facilities won't take people on buprenorphine if they can currently use benzos. So if you're thinking about setting up a program that is an important thing to consider, but the FEA safety advisory is a thing to make sure that people are aware of as well.

JO: There's a higher-level question in terms of stigma. Given where you both are in the medical community and ED in particular, are you seeing the impact of your work on the medical community or other community partners that are not substance use disorder partners, and on people's attitudes towards substance use disorders in seeing this as more of a disease than a social/moral issue?

EB: That's a wonderful question. I think we've seen some of the culture in the ED from what we called treatment street to being concerned and greeting people and making sure they get to where they need to go afterwards. I think there's been a change in the culture. We have a campaign now at the hospital where people have to sign a pledge that words matter and not using the word abuser or the other words used about people that have substance use disorder. That's something we have leadership for. We have a culture that's changing. I'm pretty pleased with the direction we're going.

It's certainly not perfect and we have work to do in this area but the stigma definitely prevents people from seeking the treatment they need. It also reinforces their own sense of worthlessness and certainly is not helpful. It also pushes the system into criminalizing their behavior instead of treating them. It's very important to keep working at that. The Project ASSERT staff who have been in recovery have been invited to all the parties the ED puts on and are part of the staff and given awards. The fact that people in recovery are working side by side is helping inspire them that there is a way forward, and it has helped the patients as well. There's been a great run of MAT for 29 years and at Boston Medical Center and I'm really proud of what we've accomplished and all the colleagues that are working together now under this new bridging center to help each other do better. It's just a question of continually to do better.

KH: I agree. We've come a long way, although there is still so much stigma, both on patients and the communities and within healthcare providers. I do think it's better. We're certainly being more patient-centered in the words and language we use, and acknowledging that this is a disease as opposed to a moral problem, but there's still a lot of work to do in all areas of both the healthcare system and society.

EB: I think it's really detrimental to people to look into a provider's eyes and see that in their eyes they don't have time to listen to them or they don't think they're worth anything. So this idea of worthless in



the healthcare system is really repugnant to me and we have to really work on the healthcare system that people throughout the whole country in different sectors and strata feel respected and listened to and served by the healthcare system.

JO: We will end on that note. Obviously we've highlighted two of several approaches and successful strategies that involve EDs. Summary and key takeaways:

- While we hope to have most treatment occur in nonhospital settings, it's just an unfortunate fact that people will seek help and be brought to EDs due to overdoses or other circumstances. As Drs. Hawk and Bernstein say, you just have to meet the people where they are.
- While a good chunk of time is being focused on what to do when someone overdoses, some of the information that Dr. Hawk gave on how people actually are identified for treatment when they come to the ED and may not be necessarily having a fatal overdose are in fact a good chunk of the people that ultimately the ED can begin treatment with.
- Given that we will probably continue to see people present themselves at the ED, we have to give EDs and hospitals tools they need to start treatment and the tools to help people get from EDs to the next level of care. These two examples really were illustrative of how to be able to do that.
- It is important to recognize that there is a chasm between expectations. A good example is the measure that Tyler mentioned at the beginning of the webinar around follow-up after ED for substance use disorder. That's a measure I know is of great interest to states, plans and providers, and in some cases they all may be held accountable for that measure and there may be a chasm between that accountability and what interventions currently exist, and how available these interventions may be in any jurisdiction.
- There have been lots of efforts the past year in a number of states to begin these types of projects that both Yale and Boston Medical Center started years ago, and to spread those projects throughout the state in order to be able to really address the needs of individuals presenting at the ED, and more importantly, when those individuals leave that ED and are seeking follow-up care.

Again, thanks to Ed and Katherine. Here's their contact info. Don't barrage them with calls or emails. Thank you for participating in this webinar.

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