

Medicaid Innovation Accelerator Program

Medication-Assisted Treatment: Identifying the Need for Youth and Young Adult-Specific Strategies and Current Initiatives National Webinar March 4, 2019

Introduction

We'll be focusing on highlighting the gap in and needs for MAT for youth and young adults with opioid use disorder (OUD). The presentation will focus on strategies to increase the provision of MAT for young adults and adolescents. Some strategies include workforce and technical support for prescribers. The agenda:

- Background on national need for development of appropriate strategies for SUD (substance use disorder) in youth and young adults.
- Study on Access to Treatment in Medicaid among enrolled youth with opioid use disorder
- Two presenters from Massachusetts on their program.

Suzanne Fields (SF): I have been working with the Medicaid IAP SUD disorder efforts for 4-1/2 years. I also serve as faculty at the University of Maryland School of Social Work and as senior advisor healthcare policy and financing there. In that role we recognize the need to be addressing adolescent and young adult substance use treatment needs. We're very excited to have three national experts in this field joining us today:

- Scott Hadland: A pediatrician and addiction specialist at Boston Medical Center and Boston University School of Medicine. His clinical and research interests focus on youth substance use and improving care for young people who use heroin and prescription opioids. His work has been published in a number of leading journals including *Lancet*, *Pediatrics*, *JAMA* and others. He was the 2016 recipient of the new investigator award from the Society for Adolescent Health and Medicine.
- Rebecca Butler: She served as assistant director for the Office of Youth and Young Adult Services within the Massachusetts Substance Use Authority, Bureau of Substance Addiction Services at the Massachusetts Department of Public Health. Prior to this current role she provided consultation to the bureau regarding a SAMHSA grant to sustain state-wide expansion and increase access to and delivery of MAT for adolescents and young adults. Prior to that role she worked directly in both substance use and mental health treatment system settings including a number of community, state and federal roles, school districts, court systems, and medical institutions. She is a licensed clinical social worker with postgraduate work in clinical work with adolescents.
- Dr. Sharon Levy: She is a developmental behavioral pediatrician, addiction medicine specialist and associate professor at Harvard Medical School. She directs the Adolescent, Substance Use and Addictions Program at Boston Children's Hospital, served as the past chair of the American Academy of Pediatrics Committee on Substance Prevention, as president of the Association for Medical

Evaluation and Research in Substance Use, and on the board of directors of the Addiction Medicine Fellowship Directors Association.

We're very pleased to have these three national experts joining the discussion today. Dr. Scott Hadland will provide an overview on medication needs for youth.

Discussion

SH: It's an honor to address this esteemed group. I'm hoping to share recent findings we had using Medicaid data that really highlights the national gap we see in connecting adolescents and young adults to evidence-based treatment. I have no disclosures of concern. Let me give you a flavor. I work clinically and conduct research. Let me give you a sense of the sorts of patients I see in my own clinical practice that can serve as a nice basis for the data I'm about to present.

A typical patient for us would include the following: A 17-year-old female who presents to our substance use treatment clinic with her mother. She's currently in a residential treatment program where she's been for three weeks for management of severe OUD. She comes in to today's visit because she's experiencing strong daily cravings for opioids. She has a 2-year history of opioid use including use of prescription pills and intranasal and injection of heroin. She last used three weeks. This is the seventh admission she's had to residential treatment and her typical treatment at this program includes group therapy and one-on-one counseling. Because of her cravings, she and her mother are worried she will use opioids again shortly after discharge from the program. Despite these multiple admissions and many treatment programs she's never been offered pharmacotherapy before.

I'll take a moment to editorialize and say this is a very common thing we experience in our clinical care is that we have a number of adolescents and young adults in and out of treatment a lot who have not actually been offered standard of care treatment that includes pharmacotherapy.

Just by way of background, some data on youth and the opioid crisis. We know that treating opioid use disorder among youth and young adults is critical to addressing the opioid crisis. If we think about long-term strategies to address the opioid crisis, one central strategy needs to be the prevention of development of OUD among young people to prevent them from becoming the overdoses of tomorrow. Recent data just published last month showed that between 1999 and 2016 overdose deaths rose among 15- to 19-year-olds in the following way:

- There was a 95% rise for prescription opioid-related overdoses.
- There was a 405% increase for heroin-related overdoses.
- There was a 2,925% increase for synthetic opioids, the category including fentanyl which we're hearing so much about.

Again, highlighting the criticality of addressing OUD early in the life course. If you survey, as we have, all individuals in opioid treatment across the United States, two out of every three adults in treatment report that the first time they used opioids was before age 25 and one in three reports the first time they used opioids was before age 18. Again highlighting that this is a pediatric onset condition.

Sharon Levy, who we're lucky to have on the webinar today, was instrumental in releasing a policy statement with the American Academy of Pediatrics in late summer/early fall 2016. This policy statement called for expanded access to pharmacotherapy for young people with OUD. To be clear what medications

we're talking about, they include: buprenorphine, naltrexone, and methadone. The first two could be provided in primary care potentially or in subspecialty treatment centers, with methadone only being available at qualified methadone treatment programs.

Experience suggests that many youth never receive any pharmacotherapy and yet clinical trials highlight that they may enhance retention in care. In fact, if you look nationally at treatment programs, many drug treatment programs for youth actually actively deny entry if youth are on these medications, or allow youth to enter the program then make the decision to discontinue those medications at the time of admission.

The aims of our study were twofold. First, to identify the percentage of youth who receive timely addiction treatment with or without one of the medications I mentioned-- buprenorphine, naltrexone, or methadone—within three months of initiating care for SUD. Then to determine whether retention in addiction care is greater among youth who receive a medication than those who don't.

The data source is one probably many people will be familiar with—the IBM Market Scan Multistate Medication Database. This included in our study data from 11 deidentified states from January 1, 2014 to December 31, 2015, so we were able to utilize fairly recent data. Across these 11 deidentified states the sample included 2.5 million publicly insured 13- to 22-year-olds and included from across inpatient, outpatient, emergency department (ED) settings as well as pharmacy claims. To be clear, this also included behavioral health claims at all levels of care ranging from outpatient to inpatient treatment as well as procedure codes for medications often not prescribed but actually administered in clinical settings, like injectable naltrexone and methadone.

In the sample we identified adolescents and young adults initiating a new episode of care for OUD. We used an approach utilized before, and that was to identify youths receiving a diagnosis of both OUD in at least two outpatient settings or at least one inpatient or ED setting. This is the standard approach conducted in studies like this. We made sure there was a 60-day period in which that person did not receive an earlier OUD diagnosis or had received any medication, just to make sure this was a truly new episode of care for OUD.

Using this approach we were able to identify a sample of nearly 5,000 youths diagnosed with OUD initiating care. These are the samples of the Medicaid-enrolled youth we studied. Again this is a sample of nearly 5,000 youths. The median age was 20 years. The majority of the sample was female and non-Hispanic whites. There was a sizable percentage of the sample that was pregnant at the time of the OUD diagnosis, highlighting that pregnancy can be a motivating factor that brings young women to care. And comorbid mental health conditions were highly prevalent. There was a high prevalence of depression, anxiety, ADHD, and other substance use disorders including alcohol use disorder. We also examined acute and chronic pain conditions recognizing that sometimes these have an interaction with addiction.

This is what we found in the study. This is the percentage of youth that received treatment for OUD. Just to orient you to the future. Each bar represents a different age group of youth: 13- to 15-year-olds on the left, 16- and 17-year-olds just to the right of that, 18- to 20-year-olds to the right of that, and 21-22-year-old young adults on the far right. The height of each bar represents the percentage of young people who received any addiction treatment after being identified as having OUD.

What we found is that very fortunately the majority, about three out of every four young people diagnosed with an OUD in the sample, received some kind of treatment. But it appears that the majority of treatment received was behavioral health services only, represented by the blue portion of each bar. The red portion of each bar represents the portion of youth who after being diagnosed with OUD received any of those three medications I mentioned. You'll see there is a clear cutoff for adolescents under age 18 compared to young adults over age 18. Under age 18 we found that only 5%, or about one in 20 young people received a medication for OUD despite this being the recommendation of the American Academy of Pediatrics. And above age 18, the numbers were better but perhaps not much better: 25%, or about one in four young adults received an OUD medication. Again the vast majority received behavioral health services only.

Yet what we found is that when youth received medication for addiction treatment, they were more likely to be retained in addiction care. They were less likely to drop out of care. So just to orient you to this figure that can be a little foreign to some people, the X or horizontal axis here is the amount of time in treatment and then the Y or vertical axis represents the percentage of youth still in care at that particular point in time. What you see is this red line represented by youth who received only behavioral health services without medication had the steeper drop-off, meaning that youth drop out of care more quickly when they're not offered a medication. This blue line shows that when you receive a medication, at all points in time they're more likely to stay in care and less likely to drop out of care.

Here are some numbers you can sink your teeth into. What we found is that when youth receive behavioral health only they typically stayed in care for about 6-7 days. When youth receive buprenorphine they typically stayed in care for about 123 days or phrased a different way, they were about 42% less likely to drop out of treatment compared to youth who only got behavioral health. Youth who got naltrexone typically stayed in treatment for about 150 days and were 46% less likely to drop out of care. Youth who received methadone typically stayed in care for 324 days, far outlasting other youth on other forms of treatment, and they were 68% less likely to drop out of care at any given point in time.

I want to highlight a different study we did looking specifically at commercial claims. Because a question that often arises when we look at Medicaid data is what's going on with commercially enrolled youth? Suffice it to say that over time we've actually found that the percentage of youth who received medication for OUD in commercial health insurance samples is also very poor. So these results we just found for Medicaid have been replicated among commercially enrolled youth.

What this data also shows among commercially enrolled youth is that there are substantial disparities we need to work to address. In this commercially enrolled youth sample we found that black youth were 42% less likely to receive medication than non-Hispanic white youth, and Hispanic youth were 17% less likely to receive medication. I spent some time thinking about what barriers I know exist based on my own clinical practice and my review of the literature. Here are some important barriers I think are worth considering:

- There is a national shortage of youth-focused addiction providers. Dr. Levy and I have been in close communication with organizations responsible for training people that prescribe these medications and of addiction medicine specialists in the United States, only one in 100, or 1% of them are pediatricians.

- There is a limited availability of subspecialty addiction treatment programs that will prescribe medication. On a recent look we found that only 37% of treatment programs nationwide prescribe medications to young people, meaning that most young people go to treatment programs that do not offer medication.
- There are actually anti-medication policies. In the remaining programs, the balance of the numbers I just mentioned, 43% of the remaining programs deny admission to youth receiving medication that might be prescribed elsewhere.
- There are clear restrictions on access to methadone for adolescents under age 18. It's nearly impossible to find a methadone treatment program willing to take on an adolescent.
- There are historical disparities we need to overcome. There are clear disparities based on race and ethnicity, but also language, insurance status, socioeconomic status, and geography, comparing rural and urban regions.

To wrap up and conclude my findings, again only one-quarter of Medicaid-enrolled youth with OUD receives pharmacotherapy. In fact, the true percentage is likely even lower. I'll talk about it in a second, because this study was reliant on youth even being identified in the first place and we know we're not doing a good job identifying youth with OUD. And whereas one in four young adults over age 18 received a medication only one in 20 adolescents, so far fewer, received a medication. Yet when youth receive medication we found that they're more likely to be retained in care in real world settings. They're less likely the drop out.

What this means in light of recent recommendations including those from the American Academy of Pediatrics that I mentioned, along with recommendations from other organizations, there is substantial room for improvement in MAT among youth. Our findings really suggest that withholding OUD medications from young people may actually compromise their retention in care. Thank you.

SF: Thank you for that detailed overview of youth, adolescent and young adult need related to MAT treatment and opioid prevalence. Questions can be submitted through the chat box and there will be detailed Q&A at the end. Scott, I had questions for you. Some questioners want to understand slide 21, what the difference in percentages is about as it relates to the medications you found in your data. So people can understand that receiving behavioral health only versus medication may lead to some differences in those percentages. What are your thoughts from the data about how certain medications may also have different percentages in reduction and attrition?

SH: Marilee Larson asked this question, a really sharp and important question to be asking. Because we did observe a clear advantage in our study of methadone compared to buprenorphine and naltrexone. First it's worth pointing out there is some overlap of the confidence intervals we observed here, which tells us that these differences may not be statistically significantly different from one another, whereas there's a clear advantage of any medication versus no medication. We may not have the precision to say which medication is better in this particular study.

Having said that, this finding that methadone seems to have an advantage in this population is replicated in studies of adults. There is a recent meta analysis looking at a multitude of studies from adults with OUD and it clearly saw some advantages for methadone over buprenorphine as a medication. I try not to get too much into the game of saying which medication is best simply because I think it's often a very personal

decision that's made between patients and doctors. But I do think it's important to recognize that methadone, which is a medication that sometimes is very highly stigmatized, does have a very strong body of evidence supporting it.

The other thing I have to raise here is that because this wasn't a randomized clinical trial it's possible that some of the differences we observe here are not necessarily due to medications themselves but maybe due to the programs in which they're administered. We know that methadone is given in highly structured programs that have a great deal of expectations for patients and clients, and it may be that for some patients it's those actual program characteristics that retain them in care and not necessarily only the pharmacology of the medication itself.

SF: A followup question was were there any observable differences in retention between oral and injectable naltrexone? And any difference with buprenorphine as well?

SH: Just to handle the second part of that question about buprenorphine, unfortunately the study period we examined was one in which long-acting formulations of buprenorphine weren't available or in widespread use, so we weren't able to study the long-acting versions of buprenorphine. We were able to study injectable naltrexone and in the study period that we examined, the vast majority of treatments that we saw were actually injectable naltrexone. We didn't have enough people on only oral naltrexone to be able to tease apart those differences unfortunately. It was actually a very small portion of people that got naltrexone. It was one of the least utilized medications in the study, buprenorphine being much more common.

SF: Now Rebecca Butler about the efforts she led in Massachusetts.

RB: I'm delighted to highlight some of the work Massachusetts has engaged in at the state and system level to really serve youth and young adults with OUD. I want to acknowledge that really it was funding from SAMHSA and specifically their State Use Treatment Implementation (SUTI) Project that enabled our office within the Department of Public Health to really focus in an assertive way and look at this population and the programming and infrastructure to Massachusetts to support these youths.

I'd like to start with this data slide from our Youth Health Survey. In the larger context around OUD, the conversation with the epidemic, everything from harm reduction to treatment, for our youth and young adults having a developmentally appropriate lens, it really means looking upstream for them. It's compelling data captured here that indicated the age of first use for alcohol and the age of first use for marijuana, and the observable impact for prescription drug use. It for me highlights two things. One, for youth and young adults having conversations that are appropriate early on around their alcohol and marijuana use is in fact opioid use prevention, and just wanting to really speak to that, especially here in Massachusetts where the landscape of our work has changed with the legalization.

Specific to our BSAS (Bureau of Substance Addiction Services under the Department of Public Health) treatment data and looking at our Gifford data, I think any state looking to create a system or infrastructure being driven by the population is obviously where you start. So on our SUTI project, this is really for the high-level data captured early on, that we were working with a population that had significant prior mental health treatment. Our population definitely had significant lifetime experiences with trauma. That whatever our model looks like needed to account for harm reduction. And that

although we were working with a younger population, some of our folks were in fact pregnant and parenting. Also, in terms of looking at developmentally appropriate recovery capital as far as working through the continuous treatment, that we really needed programming to be looking at unemployment and education and vocational achievements for our population.

To be totally honest, when we started this work we really started increasing access which meant we needed more prescribers willing to treat. Because we were focusing on 16- to 25-year-olds that meant that we wanted to increase the number of pediatricians that were becoming waivered and willing to work with this population. What we quickly found was that similar to what happens with adult prescribers, those that want to become waivered and then end up prescribing, there was a significant drop-off. But then when you look at who was willing to prescribe to 16- and 17-year-olds there was an even more significant drop-off. So we began to figure out we have some prescriber challenges here.

We also became very aware of challenges around non-prescribing professionals. When you're looking at this younger population they're interfacing with other state systems, such as child protection agencies, the criminal justice system, school counselors in educational settings. So they were interfacing with a whole host of behavioral providers that they themselves may not have been educated on the efficacy of the model and the evidence-based underpinning of this level of treatment. That could cause significant access issues for our population. The nonbehavioral population is also the cross agency involvement and recognizing that our sister agencies, their workforce needed some education around MAT so there wasn't any misunderstanding that perhaps youth involved in certain state systems weren't eligible to access this level of care. So we are turning to our sister agencies and offering technical assistance and workforce support to their workforces.

Finally, unique to youth and young adults, we called it the "not under my roof" initiative, where some parents may not be educated on MAT and some of the feedback we were hearing from prescribers is parental concern that it was substituting one drug for another, people aren't really sober, those kind of concerns. Family has a very unique role with youth and young adults and it requires a very purposeful response on the state level to make sure we're addressing those systems as well.

So once we were really clear on our three areas that we needed to address, that it wasn't just about increasing the number of prescribers willing to work with our population, we convened our experts, two of which are on the call, Scott and Sharon. We also were very fortunate to work closely with Dr. Sarah Bagley, the medical director of the Catalyst Clinic at BMC. We also pulled from partners at Mass General Hospital. So we convened all our prescribing content experts and shared all the lessons we have learned specific to prescribers and began to draft what I'm excited to say I have a final draft on my desk today is our prescriber toolkit. What that toolkit did is went through—and this is just some of the content areas—that the audience were prescribers, doctors and nurse practitioners, that wanted to prescribe to the 16- to 25-year-old population but they have additional questions unique to this population. So the toolkit literally goes through and answers these questions. So kind of post waiver takeaway, something they have to support themselves when they're sitting with a young person.

Consent is a huge issue. I'll speak later on one of our policy slides, but we did get into issues around consent, confidentiality, really recognizing reproductive health, hep C and HIV, and knowing that engagement in treatment across all levels is really hard for this population, so the more we can streamline

their access to everything the better. So how you incorporate that SUTI prevention piece also. Getting really into the nuts and bolts around dosage, maintenance, and tapering with this population. Scott mentioned this and it's definitely seen throughout the toolkit as not upholding this rock bottom. If we know that this is evidence-based and it's the best course of treatment then offering it as soon as it's clinically indicated and not waiting for youth to suffer multiple consequences across all life domains before offering this treatment.

Again really speaking to family engagement. Although our best practice is to have family engaged in treatment, when it's not clinically indicated or it's not the patient's choice what does family engagement look like? Then again thinking from the very beginning around recovery supports and what does recovery supports for this population look like.

The addendum documentation for our prescriber toolkit is the practice guidance document, which was intended to address the nonprescribing behavioral health workforce, really upholding especially for this population the role of the behavioral health provider, that while the research may not be conclusive for the adult population does the behavioral health piece help in long-term recovery outcomes? Is prescription sufficient alone? The position in our office is that best practice for MAT for youth and young adults needs to definitely uphold a behavioral health component. With that said we recognize that this is an extremely challenging population to engage and to retain in treatment. So the practice guidance speaks to things such as contingency management and really trying to get innovative and outside the box in any way that providers can to increase engagement with behavioral health. Our policy in Massachusetts is that behavioral health has to be offered. When we look at this population, though, we really want developmentally appropriate care, so in Massachusetts one of the models that our outpatient providers offer is the Adolescent Community reinforcement approach, so really guiding prescribers to recognize what are the evidence-based behavioral health models specific for this population. So those were two specific initiatives tackling the workforce areas that we identified.

Some of the infrastructure, it's still workforce but it's speaking more to sustaining the statewide infrastructure. We began hosting MAT 101 trainings again using our partnership with BMC, targeting state agency workforces specifically but also mental health and behavioral health providers to really do the nuts and bolts of what it is, how to know when it's working. We purposely keep these trainings very small because we want the opportunity—we know that stigma exists and we want to be able to have conversations with people and address concerns. So really getting into intimate conversations with people around what are your concerns? What do you know? What do you not know? Here's the facts, the research, the evidence. So those have been really dynamic trainings we've been offering statewide.

We're very lucky in Massachusetts to have a statewide substance use helpline. However, prior to this project if you were looking for MATs for this population those providers weren't on that list. We get calls in our office far too frequently of people looking for services. So we had a project to embed providers that we are working with and are aware of on the helpline so that those looking to make referrals have it at their fingertips and can really access exactly who the specialists are who have been trained that are willing to work with this population.

The last three, we haven't moved in any of these three areas but it's common practice for our office to host learning collaboratives where we convene experts, and it's an opportunity for providers to give

feedback to the state around everything from workforce retention issues, population trending, what are you starting to notice, any types of innovation, reimbursement and billing barriers. So convening adolescent MAT providers on a quarterly basis to keep a dialogue going so that as the state system needs to be tweaked we are time-ready for that and being very responsive to our providers.

Then working with our family and caregiver support groups around how are they educating their staff, what's the messaging they're sharing at meetings, do they know how to access the provider network, and really trying to uphold that family caregiver role as well.

This is some of the very specific policy implications that once we started doing this work, things get peeled back and then we realize go back to the regs, go back to our licensing, what does it say? So a lot of the work we're doing now actually is in this realm. The current BSAS regulations under an OBOT (office-based opioid treatment) don't have specifications on the credentialing of medical directors. If we're looking at adolescent- or young adult-specific programs, do we want to look and say you know, we really want someone with a pediatric specialty. We're not saying that but just for example. So one very specific policy piece we're looking at is just the overall authority to operate an OBOT and what those regulations look like.

The counseling I focused on a little bit earlier. Our regs uphold that there needs to be counseling made available, really tightening up that language for this population and then really upholding that we want it to be developmentally appropriate and evidence-based, that they're working with behavioral health providers that have specialty training.

Consent was actually a really big one here. In BSAS, our regulations require parental consent for substance use treatment for anyone under age 18. Massachusetts general law, however, upholds that anyone age 12 and older can consent to their own treatment if they have two physicians documenting an SUD and a need for treatment. So part of our work now is aligning those the regs with the law so there's not a discrepancy and we're not putting our providers in really uncomfortable situations where maybe given the clinical context of the specific case they really want to lean on Massachusetts general law, but that would put them in violation of BSAS regs, so tightening that up.

Then just some of our special populations. The only thing I'll point out here is our recovery coaching is expanding and everyone is really looking to supporting the treatment and recovery of young people through lived experience. One of our regs under special population says that staff has to have five college credit hours. That might not be relevant to folks with lived experience or it might unnecessarily exclude folks that we actually want participating in our treatment system. So just looking at some of those other considerations under special populations and the unique interpretations or clarifications that need to be made for this youth and young adult population.

This just really highlights that I don't have a broad sense of what it looks like in other states so this might seem exactly like what's happening in your state or it might be very unique, but our office, the DPH Bureau of Addiction Services, is very lucky to work so closely with MassHealth and really there's just a very clear delineation where BSAS is recognized as the constant experts and the link to the providers with the specialty treatments, but MassHealth is just a Goliath and they can really help push and support the work that BSAS is doing on a statewide front. So there's common conversation where they're really taking care of the reimbursement but we're able to really inform what the reimbursement looks like based on our

clinical content experts and what our systems look like. They will be helping with the dissemination of our toolkit and our practice guidance. They have a broader reach than just our BSAS providers and just some of the special initiatives around recovery coaching and such.

In summary, thinking about at a state level if you're creating this system:

- Being aware of the workforce development and training needs, not just for prescribers but also for the broad audience that youth and young adults interface with;
- Being very aware of the role of stigma, and again that can become very, very specific to individual families that can interrupt successful treatment, so being aware of and having strategies to address that stigma.
- Recognizing the disparities in access, especially for our youth of color, females, and sexual minorities.
- So purposely targeting providers that specialize in treating or are in geographic areas or communities as you look at broad dissemination statewide.
- Giving special attention to the on-demand and reengagement access or reengagement strategies, especially around behavioral health models.
- Recognizing that because of this developmental phase that it can't just all be about treatment and about the medications, and trying to incorporate holistic, fun, developmentally appropriate prosocial is actually really good.
- We have a pretty strong opinion in our office around recovery coaching and for this group oftentimes their long-term recovery capital is replacing their old peer group that they have been using with and so the more we create group-oriented peer recovery options the better.

I will stop there.

SF: Thank you for your overview of your efforts in Massachusetts. I have a question specific to content on a previous slide. Given our audience of Medicaid authorities, leaders within Medicaid and policy directors within Medicaid, I want to highlight on how you as the substance abuse authority in your state has really worked closely with MassHealth, the Medicaid authority in that state, around this particular effort. You've mentioned that the toolkit you've been developing, the practice guidance, that MassHealth is working with you and will be pushing that out within the MassHealth program. Can you speak more about what that effort might be looking like, things you know you'll be doing with your sister agency, MassHealth, or things under consideration in your discussions in terms of incorporation of that toolkit and guidance?

RB: Specific to the dissemination, we have a smaller pool of providers that are unique to BSAS. They still would bill Medicaid as the reimbursor but MassHealth has a far greater reach and network of providers. It's sort of silly but sometimes it's how work happens. We'll get a call where there's a young person trying to access care in a certain part of the state and I literally walk down to the hall and our adult providers and we troubleshoot it, and that's often how we find new providers. Then we connect them with prescribers so it literally starts with one young person. Then we just wrap a whole bunch of supports around them and check in on them, and they're sort of our go-to to send the second kit and third kit. MassHealth has a far more sophisticated approach than we do. So we've had initial conversations where they're completely ready. They'll offer a review of the toolkit now that it's finalized. They'll have an opportunity to review and get feedback and make sure everything aligns. Then it's really just mass distribution to all their providers.

SF: We had some discussions about that in preparation for today, that part of what you've been able to do and plan around this specific toolkit is using those Medicaid pathways with their fee for service system with their managed care partners to ensure that this information is available to practitioners within that Medicaid system.

Now Dr. Sharon Levy will discuss her efforts in Massachusetts.

SL: Thank you for inviting me to talk about the program development we've been doing here at Boston Children's Hospital (BCH), specifically aiming at capacitating our primary care providers in the community to take better care of kids with SUD including kids with OUD. Scott mentioned earlier that the American Academy of Pediatrics put out a policy statement back in 2016 that advocated for the use of medication treatment for kids with OUD and it actually challenged pediatricians to either get their waiver or to find somebody they could refer to in their community so as to increase access for these kids. We know from Scott's presentation earlier how many of these kids were missing and how many of them were not getting treatment, in part because they have difficulty accessing an appropriate provider.

Just a little background. I work at the Adolescent Substance Use and Addiction Program at BCH. We run a clinical program that treats kids with problems and SUD. I first got my buprenorphine waiver in 2004 and that same year I prescribed my first buprenorphine prescription for a young woman 16 years old at the time. We have a pretty regular stream of adolescents coming to our door who need help with this problem.

Also, Boston as a city is blessed and also rather unique in that we have three subspecialty adolescent SUD programs located within large academic medical centers where I think you can get really excellent treatment. But even in Massachusetts there are lots and lots of kids who can't make it into Boston. They live more than an hour away. The idea that we would be treating kids in the community so we can keep them in school and in their family and doing things in their community, and yet be asking them to make an hour or more commute several times a month doesn't really seem logical.

So about three years ago I partnered with the leaders of the Primary Care Network associated with BCH. It's called the PPOC, the Pediatric Physicians Organization at Children's Hospital. We applied for a grant through the Blue Cross/Blue Shield Foundation. The idea was to get these services out into community primary care. So the big idea was that we would be linking the specialty hub team that's for all these years been prescribing buprenorphine and taking care of kids with SUD with a practice out in the community just as a small pilot.

To be honest it wasn't that easy to find a site that wanted to pilot. It took us a lot of time convincing and some arm twisting and ultimately a practice out in Wareham, which is about an hour and 20 minutes from Boston, agreed, and we opened a small pilot program out there right near Cape Cod. What we offered was first we put a screened, licensed social worker into the practice to deliver direct services. This is a person who has been trained by our program who understands the treatment model we use and is now fully integrated into the primary care practice.

To support that we also offered other bells and whistles. We offered a package of didactic training. In our pilot this was mostly what the providers and other staff had asked for. They wanted help managing

confidentiality between adolescents and their parents, they wanted to understand the model of care better, and they wanted a better understanding of the neurobiology and how kids were different. Even though these were pediatricians they didn't always understand all the neurodevelopmental issues that makes adolescents so vulnerable to substance use and SUD. So we delivered this content. Much of the content was delivered by the embedded social worker with support from the hub staff. Some of it was delivered by our faculty.

One of the conditions for partnering with us was that at least one provider had to agree to buprenorphine waiver training and we did that ourselves so our staff actually went out to the practices and delivered in person. We negotiated with them on how they wanted to be waived then we'd go out in person and could do it during lunchtime or on a Saturday or however they want to manage it, but we don't want any obstacles in their way of completing this training and applying for the waiver.

We opened a consultation line so that the practices can call us with any questions at all they have on SUD. When we first opened this it was actually quite slow. We've picked up over time and get probably an average of one call a week so it's not a tremendous amount but it's clearly and consistently been picking up over time. As people become aware of it, they use it, they get feedback, they like it and do it again. We've also seen an evolution in the types of questions folks ask. About a month ago for the first time I got asked by a pediatrician for help starting naltrexone to treat alcohol use disorder, really showing how there has been an expansion in how pediatricians are thinking about some of these problems.

In addition, we do quarterly quality assurance meetings with all our programs. So one of our faculty members will go out and ask how the program is running and if there are problems or questions and there always are, and really to troubleshoot what are the barriers? What are you running into? How can we surmount them? Are there other issues or more we could be providing you? And keeping them involved in this conversation of how can we make this even better.

So there a number of practice changes we discovered needed to be implemented to make this all work. The first thing is we decided that the social worker's notes would really fall under federal confidentiality laws and that they needed to be protected. So we actually had to retrain all the staff including the administrative staff, the schedulers and the people who work at the front desk on how they could share information.

We had to design new clinical workflows that really could accommodate kids being screened or otherwise identified and then being referred to a social worker, even an integrated social worker. It was still a little bit of a dance we had to do, particularly when parents weren't involved and particularly if the visits were confidential. So we spent some time thinking how we would route kids through and this took a little trial and error and a little bit of practice to get it right.

We wanted to be sure that all our practices were ready to handle mental health emergencies. There were already some protocols in place but we took them out, reviewed them, and made sure they were robust enough, and we made sure all the crash carts in the practices had Narcan on them.

Finally, we knew that we would be identifying kids who had needs that could not be handled within primary care either because they needed a higher level of care than outpatient treatment for an SUD or

because they had a mental health disorder that was going to require more services than we could provide. So one thing we did was with the social worker we built a reference guide of folks practicing in the community who could help with some of these other issues and built referral bases. This page is actually a page from the Massachusetts Adolescent Expert Toolkit, which really shows how to think about level of care needed. It's a busy slide but it's a pretty easy algorithm to use. We talked to our providers about thinking about referrals and the level of care kids need by using this.

Then we asked the question- will kids really come? So, here we are building this service. Will we be able to identify kids? Even if we do, are they going to be willing to go into substance abuse treatment? There's often a block there because even kids with SUD, even severe SUD, don't always appreciate the need for treatment. We're catching people really at a time in life where for many of them they feel like things are still working for them, so this was really an open question.

This is just a very little bit of data from our first four months at our very first site. During that time period we had about 683 primary care visits for patients aged 12-22. We used NSDUH data to estimate that we would expect about 50 kids with an SUD in that group. The practice identified 20, so just less than half, which sounds like a relatively small proportion although given how new this all was we thought that was pretty good for the first time out. Thirteen of those kids actually made it in for an appointment for treatment, so a little bit over half. For the first few months we were pretty happy with this result.

Our numbers for the first year, there were actually 60 referrals. Forty kids entered treatment for SUD. We identified five kids with OUD and did three inductions. This is what we thought it would be. A lot of the reason we got doors closed in our face when we were looking for a pilot site is people were really thinking that if we would open this they would get tens if not hundreds of kids with OUD and it would change the nature of their practice. And these primary care practices which really are treating infants all the way through young adults were not so interested in changing the nature of their practice, although many of them were happy to provide services to the kids who were already enrolled in their practice but just not having this problem treated. So when we could show them data and say it's about three kids in a year entering treatment for OUD, everybody took a deep breath and that has just changed how people understand the project, and moving forward it's really enabled the project.

The five kids we identified actually took some doing. The practice made a press release. They sent a letter home to patients and parents electronically and they even printed up posters in the waiting room announcing really that this service was available. There's still more work that could be done on how do you find these kids in the community. Just building it into the practice may not be enough. But actually collaborating with local treatment programs, the judicial system, schools might actually help us find these kids a little bit better and that's something we're working on and thinking about.

But there are lots of additional benefits to this program. One is that we saw very similar data before but we were able to identify kids with marijuana use disorders and cigarette smoking. These days it's more electronic cigarettes. But the point being these are all very highly correlated with using on to opioid misuse and eventual OUD, and these substances in and of themselves are harmful. So we're actually able to get in there, move this all upstream, pick up kids earlier, start talking about these problems and getting these kids into treatment earlier, which is really part of the secondary prevention we need to do with pediatrics. There's a real benefit to this kind of program and pushing it out to primary care.

The other thing we're introducing as the project moves on is prevention visits. We are starting to offer prevention visits to kids with no SUD but kids who are identified as high-risk in other ways, for example, kids known to have anxiety, depression, ADHD, any number of problems, as they're hitting that transition where they're going into high school we're starting to offer them prevention visits, which is actually more of a primary prevention strategy to reduce opioid misuse, and we think this is important because the data shows that for every year older you are, when nonmedical opioid use is initiated, there's a 5% less risk of developing an OUD.

I am pleased to announce that in November 2018 we were awarded a grant from SAMHSA to expand the project from our small pilot, which is just two sites, into 25 additional sites. Actually with some efficiencies we'll get into 30 or even 35 sites within the next five years and that will be nearly half of all the practices in our network.

This is my favorite slide because you can see where Wareham Pediatrics was our first practice. It was hard to get them to enroll but within a week or two of getting additional funding we were able to sign up seven additional practices and we have 17 pediatricians either waived or signed up to waiver so we have their training schedule. So this is all really very exciting. Again these seem like very small numbers but if each of these practices could take care of just a handful of kids with OUD together we'll make a big contribution.

One question we're asking now is what sorts of outcomes can we expect? We will be looking at service delivery, so one thing is how often substance use screening is documented in the electronic medical record. All our practices have tools built right into the electronic medical record. We took a look at the practices we'll be going into in the next year and only 15% of charts actually had screens documented, so that's a glass half-empty, half-full I guess because there's no place to go but up on that measure.

We'll also be creating a registry to track kids who did get referred to the integrated social worker to see what happens with them, whether they improve and where they go within the practice and within the community.

Finally we want to look at some patient outcomes to see if we can move the needle on some important things, specifically for kids picked up as having a substance use problem we'll be looking at youth rates as captured by the registry as well as treatment engagement, medication use for kids with OUD or other disorders. We think when we're at scale we might have the opportunity to use claims data to see if we can, for example, lower the rates of sexually transmitted infections in our integrated practices or lower the rates of accidents and ED visits. That will take a lot of observations but we think when we're at scale we'll actually have enough to get there.

In terms of policy prescriptions, we are optimistic this is a model that can be used in other places, and really what it takes is a combination of a specialty hub partnering with a network of primary care. Networks are important. It's the way community medicine is practiced in many places in the country, and by getting into a network you can actually put in services that are easily scalable within the network because of the policy environment that's shared across. So it's a very logical strategy.

A couple things we learned. We know that in order to replicate there needs to be adequate support for planning and evaluation. It takes some time and effort to think through how you're going to do this. I'm

sure every network will be slightly different and it's worth some upfront effort to make sure that it's done right. It's really important that the embedded counselors get trained. All of our counselors have a 6-week protocol where they spend time actually observing in our substance use program right here in Boston, then they observe in some of the integrated sites that are up and running before their site. Then they go into their site and actually do some observed and heavily precepted or supervised visits before they're actually on their own because we are hiring very qualified people who have expertise in counseling modalities but don't necessarily have a lot of expertise in working with this age group or really understanding the treatment level. So we want to make sure the folks we put out there are getting it right.

We need to simplify the ability to invent clinicians. In our program it takes 3-4 months from the time we hire somebody to get them credentialed so they can do billing. That's a really long time and we're holding them during that period of time. We're doing some of their training during that period of time but it's really long and it's a burden to the processes that want to move forward with us. So anything we can do to simplify their integration into practices would really facilitate this moving forward.

We also need to think about contracting between the specialty hub. It's so important to have these tight connections and even a small hub can actually get out to a lot of different practices, especially in pediatrics where it's a relatively small part of what these offices do because so many of these kids, the age group is even a relatively small part of what they do.

So we have the capacity to enable lots and lots of hubs but we do need to do some contracting so we can support the time for our faculty and staff so they're available to provide these services.

Finally we need to think more about extenders like telemedicine and peer recovery supports for young adults. We also need to be thinking about things like models of doing quarterly assurance. We're doing a lot of this stuff in person. We're putting a lot of miles on the car. I think that is very, very effective, but as we grow in even larger states with more spread apart hubs and networks start getting together we'll need to have more mechanisms to do this in an electronically facilitated way, whether necessarily being at every site and person. All that needs to be considered for moving forward. I'll stop there and am happy to take questions.

SF: I want to clarify one aspect within your outcome data sources, because this is very rich. As we think about participants on the call, they're looking for opportunities to really identify what those critical measures might be related to efforts such as this. You spoke a lot about screening rates, referrals and outcomes. Could you revisit what you would see as some of those key measures that you would be recommending to Medicaid authorities?

SL: Screening rates are pretty straightforward. We're looking for the proportion of kids who have a primary care health maintenance visit who have a validated screen document, a result documented in their EMR. We know we won't find them if we're not screening and using validated tools so that's really the first step.

For kids who are identified as somebody who needs attention from our integrated social worker, we're actually building a registry so we can track the referrals. We can see how many of them make it from the referral stage to a visit; where else they go in the system, where they were referred to. We're building our

systems so we can have some objective measures of how they're doing looking at things like the Teen Addiction Severity Index as an objective measure so that gets followed each time. We'll be looking at things like number of visits they complete and the kinds of plans put in place.

Right now, it's fairly early in the project but we're working on developing some picklists for the clinical documentation so that the registry will be very easy for us to pull data from, so we can look across these practices and will be using the same notes, same pick lists. We will look at the amount of service delivered, the type of service delivered, and some measure of outcomes that are standardized.

SF: A question to all three of you which goes back to the impetus for this webinar. As efforts through the CMS IAP examined what states were doing for youth and young adults, we noticed through that review that there was not necessarily a lot of youth or young adult-specific efforts occurring. There seemed to be a gap between what we knew would be expected prevalence with what may be happening or being reported.

One key issue that often comes up for Medicaid authorities as well as other purchasers is that the numbers of youth needing MAT are so small. So how do you think through why you have youth-specific strategies and how you balance incorporating youth-specific strategies within an overall MAT strategy. Any thoughts any of you have about why specific strategies are really needed within Medicaid policy opportunities?

SL: I think Scott presented the reason. The reality is that we know what to do for youth but we're not doing it. We know that OUD is a lethal condition associated with a lot of morbidity and mortality and we know medication works, yet we're not getting it out to kids. Therein lies your answer. The numbers just tell the story. So few kids are actually getting this treatment even though we know it works. Even kids who do get treated, they actually tend to do worse than older young adults. Part of that is because the treatment is often not designed to meet their needs, which are really often quite different. Kids living in families under their parents' roofs have a whole different set of considerations and issues as opposed to adults in a different phase of life. So if we're not addressing them we will never be able to really get kids into treatment and maintain them there. It's a missed opportunity.

Our program is designed around the concept of who better than do this than the healthcare professionals already taking care of this age group and really have a sense of what the developmental issues are, who already know how to talk to and provide healthcare for this group.

RB: The only thing I would add and Sharon touched on this is imposing an adult treatment system on youth or young adults and then to sit back and evaluate their recovery or treatment outcomes, it's just apples and oranges. Our providers have to take into account the developmental stage and just brain development and the neuroscience alone means that how you're engaging in conversation from the very beginning needs to account for that and look really different. Even though the numbers might be small, I would argue that if you look at the data on access for those who do need it, that alone really should encourage states to really address it. The numbers needing MAT might be small but if instead of focusing on that you look at the huge number of youth that need it and aren't getting it, that should really challenge states to explore creating something that meets these young people where they are.

SH: I agreed. Our data showed that across the 11 states we studied in a 2-year period that there were 5,000 youths identified as having a problem and that's a sizable number. So although we have that sense that need for MAT is low among adolescents, I think that it's really a question of is it the chicken or the egg. It's possible we don't recognize or acknowledge that there's actually probably a large number of young people who do need MAT who are not presenting to clinical attention simply because they don't know where to turn. We don't offer them several where they can potentially seek out the care that they need.

To build on Rebecca's point I can think of a few tangible examples of how the care for young people is just very different from the care that we provide for adults and why youth do worse when they're in adult care than their adult peers do. I'm sure that Sharon and Rebecca can both attest to this in what they've observed with young people. Young people often the rules and regulations we impose on them during treatment are seen as very punitive. Young people are usually going to treatment programs and being told if you mess up you're out. Actually to successfully work with young people you really need to be able to engage them in the moments they're struggling and not simply turn them away from your treatment program.

Young people are often late for appointments, particularly if a family member is driving them who may have their own issues that make it difficult for them to get to treatment on time. Or if they're a young adult they may be getting treatment all on their own and navigating very complicated healthcare environments for the first time. I think often about our 18- and 19-year-olds who come to treatment by themselves without a parent, they're often learning about things like insurance cards and prescription copays for the first time. This is not easy stuff to navigate. These are all reasons why being prepared to work with young people is really critical to making this successful.

SF: Thank you for those details which really reinforce the necessity for customizing strategies for this population. As you were talking it made me think about priorities for looking at Medicaid data. Here we're talking about one, understanding the youth with an OUD, understanding are they getting any type of behavioral health treatment, and then are they getting any type of access to MAT. That's very clear from our conversation today those are starting points for Medicaid authorities to go back and look at their own data.

In addition to that, are there any other areas you would recommend Medicaid programs also consider looking at when revisiting their own claims and encounter information?

SH: What we've learned in Massachusetts is that the claims data just aren't enough. Although they're a really critical piece to help us understand the extent to which young people are being diagnosed with OUD and then receiving treatment for OUD, that denominator, the number of young people that have been diagnosed is probably a vast underestimation of the true problem. We learned this in Massachusetts when we linked our Medicaid and commercial claims data to a broad public health database that included not only information on health insurance claims but also things like ambulance rides and vital statistics data where we could see overdose data among young people who never even made it to clinical attention because they actually died of an overdose.

What we learned in Massachusetts is when we took this broad look at our population we learned that the number of youths in really the entire population being diagnosed with OUD was really just the tip of the iceberg, that there was this vast majority of people with OUD out there who were not interfacing with our healthcare system and therefore would not be picked up in claims data. So, it's important to really consider taking a broad look not just at Medicaid claims data but other sources of data to help understand who are the young people that may not be presenting to attention.

Another source to look at is the criminal justice system because we know in particular for youth of color very often when they are uncovered to be using substances, they don't end up in medical treatment, they end up in jail or prison. So taking a really broad look is critical to understanding the real impact of this problem.

SF: A question for Rebecca, as you think about your efforts in Massachusetts around the prescriber toolkit, practice guidelines, what advice do you have for states interested in similar efforts in their state?

RB: Wow. Probably what made the biggest difference for us was our strong collaboration with our medical providers. There's just a certain competence and language and approach prescriber to prescriber or medical professional to medical professional. So oftentimes as we are working to still expand providers in Massachusetts, we work really closely with Sarah Bagley at BMC specifically and being able to call on Sarah to answer questions and to put her in contact with other prescribers, that starts the conversation and the initiation of this in a way that's just a lot more efficient. So I would say aligning with medical professionals in a really close collaborative relationship. If you can get one and they come along they're much more successful at bringing on additional providers.

SF: How can people find access to your practice guidelines document? Is it on your website?

RB: No, it's not. They're changing our state's website so it's not useful at all now. The easiest is people can email me and I have a list that once everything gets through the final vetting process and we can do dissemination so folks can email me and I can keep track.

SF: That email information was in the slide. Sharon, you mentioned going to scale with 25 up to 35 sites. As states consider adoption or inclusion of your approach, what are the critical elements you would recommend to states as they consider such an effort? What will ensure its success?

SL: The place to start is connecting an addiction medicine hub with a primary care network. As addiction medicine has now been recognized by the American Board of Medical Specialties and there are addiction medicine fellowship training programs in academic medical centers all over the country—close to 60 of them now in just about every state—that would be the place I would start. It's nice that in Massachusetts we happen to have a real focus on youth across both BMC and Boston Children's, but even if the addiction medicine programs are focused on adults, if you put those folks together with pediatricians that's how people will figure it out.

Conclusion

SF: Thank you. We need to conclude. Thank you for participating and thank you to our presenters for providing insights from their own efforts. We could have continued the discussion as there were many other issues to look at and examine.