## WEBVTT

NOTE duration: "00:43:19.2560000"

NOTE language:en-us

NOTE Confidence: 0.922945499420166

 $00:00:00.870 \longrightarrow 00:00:03.370$  It's it's a New Year 2020.

NOTE Confidence: 0.847416996955872

 $00:00:03.950 \longrightarrow 00:00:06.260$  An interesting times.

NOTE Confidence: 0.912597119808197

 $00:00:06.800 \longrightarrow 00:00:09.160$  If you've been following the news.

NOTE Confidence: 0.896218776702881

00:00:09.730 --> 00:00:14.740 Scary times, but not here in the Department of

psychiatry.

NOTE Confidence: 0.860971927642822

 $00:00:15.370 \longrightarrow 00:00:18.670$  We try to keep the scary scariness down.

NOTE Confidence: 0.0392627455294132

 $00:00:19.200 \longrightarrow 00:00:20.170 \text{ Um}.$ 

NOTE Confidence: 0.883166790008545

00:00:20.700 --> 00:00:36.200 In terms of upcoming lectures next week is Eric Nestler, who is the inaugural Henegar lecture will be talking about transcriptional and epigenetic mechanisms of addiction.

NOTE Confidence: 0.849333345890045

00:00:36.950 --> 00:00:51.220 That should be a special day there was a money raised for to establish an endowed lectureship in honor of George Henegar, an George Agaj Anian, the agagianian lecture will be later in the spring.

NOTE Confidence: 0.930890917778015

00:00:52.780 --> 00:00:59.810 And then the following week, the speaker will be Simon I cough from the University of Dusseldorf.

NOTE Confidence: 0.906954705715179

00:01:00.390 --> 00:01:24.380 And who will be talking about bridging brain mapping machine learning an clinical translation, which is how do you go from there really extraordinarily complex data that brain imaging studies generate to learning things that are interesting and relevant that are related to clinical stuff, so that both of those lectures should be really good.

00:01:24.930 --> 00:01:52.480 I'm I'm thrilled to introduce our Grand Round Speaker. Today, Doctor Nancy buy it from a University of Massachusetts. She's the director of the divisions of women mental health in the Department of psychiatry and executive director of a number of programs medical director executive program. A director of a number of programs, including Massachusetts Child Psychiatry Access program and lifeline for Mom's.

NOTE Confidence: 0.898957848548889

00:01:53.250 --> 00:02:25.370 Nancy's been trying to develop a figure out how to transform healthcare systems to address the real world complexities of the needs of new moms, including psychiatric and addiction comorbidities. She's been funded by NIH. She's been actively publishing in these areas, mentoring young people and dealing with the issues that I think are really critical.

NOTE Confidence: 0.905704617500305

00:02:25.370 --> 00:02:40.510 For helping people and families deal with the enormous challenges associated with Peri Natal period so Nancy. Thank you so much for coming down and look forward to your presentation.

NOTE Confidence: 0.716295540332794

 $00:02:49.210 \longrightarrow 00:02:53.010$  Yes, thank you.

NOTE Confidence: 0.885562419891357

00:02:54.610 --> 00:03:29.620 OK, you can hear me is it on, yeah, it's on yeah, OK great, so thank you. It's a pleasure to be here this morning, So what I'm going to these are just my disclosures. So what I'm going to talk about today is really the work. We've done in as John had said she really focused on changing healthcare systems to improve outcomes, maternal child health, health care outcomes, and I'm going to describe today to population based programs and there are varying components and how those help obstetrix setting specifically address depression. I'm also going to talk about in general. How these kind of programs. Some other programs and how they can be implemented evaluated and also sustained in the world.

NOTE Confidence: 0.858647882938385

00:03:29.620 --> 00:03:37.740 And then talk about some outlines outlines some gaps that are still exist interventions, and policies and potential strategies for stealing those gaps.

NOTE Confidence: 0.912103652954102

00:03:39.120 --> 00:03:54.490 So for those of you who aren't you know intimately familiar with parental mental health. It occurs paradiddle mental health conditions occur in one in 5. Women depression occurs in one and 7. It's a very, very common illness and pregnancy. Depression is twice as common as diabetes in pregnancy.

NOTE Confidence: 0.898063182830811

00:03:55.430 --> 00:04:27.120 And it's well established that has a really negative impact on mom, baby and family. So in pregnancy. Associated left engagement in health care increased risk of use of substances or birth outcomes pre term delivery low birth weight and the postpartum period can impact mom and baby bonding and then kids of moms with maternal depression or other mental health conditions or at increased risk of having their own anxiety interrupted disorders. Developmental delays and so forth so it's very well established an not only do we have all those effects but it's also.

NOTE Confidence: 0.91371089220047

00:04:27.120 --> 00:04:43.160 Leading cause of mortality for our mom's in America. So recent data from the maternal mortality review committee shows that mental health conditions are the 6th leading cause of death for women in the postpartum period and they are a mental health conditions includes.

NOTE Confidence: 0.855099141597748

00:04:43.700 --> 00:04:50.760 You know depression anxiety and then also overdoses due to what we think or due to substance use disorders, most likely.

NOTE Confidence: 0.935152649879456

00:04:51.260 --> 00:04:57.800 And for preventable death. They are on par with infection as the leading cause of death in the postpartum period.

NOTE Confidence: 0.908481061458588

00:05:00.310 --> 00:05:06.670 And, of those deaths 100% of them have been determined to be preventable through the CDC maternal mortality review committees.

NOTE Confidence: 0.897202730178833

00:05:07.390 --> 00:05:32.860 So we have this illness that is common. It hasn't negative impact in women are dying and this is being recognized as a major public health issue. So a lot of professional organizations. the American College of OBGYN, which I'll refer to as a kog American Academy Pediatrics. Lots of other policymakers professionalization have been recommending screening for depression. During this time period also a lot of times for anxiety as well and.

NOTE Confidence: 0.886824071407318

00:05:33.680 --> 00:06:03.810 However, the issue and the part of the reason they're recommending this and that a lot of more recommending screening of both wealth well child visits and also doing obsessed with care and the reason they're recommending this is because it's really being recognized that the parallel time period is an ideal time for the detection assessment attributive depression. Women see health care providers during pregnancy. More than anytime. They often do during their childbearing years unless they have a chronic medical

problem and every time they see an OB provider is an opportunity to engage them in treatment and to be having a conversation and help them get the care that they need.

NOTE Confidence: 0.891629934310913

00:06:03.810 --> 00:06:28.210 And in general, we think about mental health as you all know being a psychology Department here. Most mental health conditions are actually treated primary care not necessarily by our psychiatric office or psychiatric colleagues and so the goal is that there's been a lot of collaborative done in primary care, setting is really the goal is that an upset, maternal child care, health care setting. We should also be integrating mental health care into those settings just like we do in lots of other medical settings.

NOTE Confidence: 0.891973614692688

00:06:29.250 --> 00:07:02.680 The problem with this is that all sounds great right. We should integrate this into material healthcare settings. The problem is that of stature providers have not been adequately prepared or resource to address maternal mental health conditions. So it has not always been a part of their professional identity. There hasn't been guidance. There hasn't been training and there hasn't been even if they do feel comfortable screening. They don't necessarily have to say, and then they don't even know who to refer to when we very early on started doing focus groups with women, one woman told us that the OB said to her. She screamed positive for depression and they'll be said Well, you have a happy healthy baby what else do you want?

NOTE Confidence: 0.893130660057068

00:07:02.680 --> 00:07:29.520 Like horrific right like that is clearly unacceptable and the OB said. Well, I'm just hope they say no to all of the questions 'cause if they do I don't know what to say. And so this is what we were hearing and even if they do know what to say they don't have anyone to prefer to so they want to say you know you scream positive. I don't know what to tell you good luck. So we really clearly need a systems in place to be able to help the frontline providers address this 'cause it's really a change in their treatment purview.

NOTE Confidence: 0.90132611989975

00:07:30.790 --> 00:07:52.800 So what this is resulted in because we don't because we have these gaps is that the vast majority of women who have parental depression or underdiagnosed and undertreated. Even if women screen positive for depression. We did a systematic review and we found that less than 1/4 of those women are going to get to an initial mental health appointment. Even if they sprayed positive so clearly. We got this illness. It's common women are dying they're not getting treatment.

NOTE Confidence: 0.908146679401398

 $00:07:54.080 \longrightarrow 00:08:08.980$  So the thinking is that if we can build the capacity of Frontline medical providers to provide mental health care that can provide

a solution and leverage us is limited resources, especially if everyone is being a screen. There's no way will ever be enough psychiatrists and mental health providers in general to see the patients that need one.

NOTE Confidence: 0.905840635299683

00:08:10.140 --> 00:08:41.380 So how do we do this? I mean this is complicated right? I sort of just outlined some of the gaps in care that we have and really what we need is multi level interventions when we actually did that systematic review? What we found was when you add training on that helps if you add training and resources that helps even more an you can get you can increase treatment utilization. When you add these multilevel components and what I'm going to talk about today is some of the work that we've done with these different pieces, so training. We know that's helpful. It's necessary, but not sufficient. We know that training alone is not going to.

NOTE Confidence: 0.908993482589722

00:08:41.380 --> 00:08:48.860 Change provider behavior, but it's necessary consultation resources and then integrating into the practice. Workflow so I'll talk about each of these things.

NOTE Confidence: 0.910348057746887

00:08:49.790 --> 00:08:56.310 You might be wondering well. How do you do this and what resources are available? I'm going to talk through some of those things so first talk about training.

NOTE Confidence: 0.888869225978851

00:08:57.490 --> 00:09:27.500 So necessary, but not sufficient right So what we've done and I'm going to talk. A bit more about our program, except for moms. If we've developed trainings toolkits and website resources and this is really to give providers they told us when we did focus groups very early on. We were developing. These he said. We just wanted what to do. They really want to address this? They just have really have no idea what to do so. I said, We want like a card we wanted. How do you start a medication so that's what we gave them an arm for moms we've developed algorithms and toolkits and we've also done trainings and these have actually been.

NOTE Confidence: 0.904849410057068

00:09:27.500 --> 00:09:37.560 Lots of states have translated these toolkits and actually several other countries have been translating. It was clearly a need for it because people have been adapting it for their own country or state.

NOTE Confidence: 0.902696251869202

00:09:38.860 --> 00:10:10.770 That tool kit was only focused on depression and so as the OB community has become more interested in doing this we've also it's become very clear that depressions are part of this we also have to be addressing anxiety and other mood disorders as well so in partnership with the CDC who

fund some of our studies. We developed a more comprehensive paradina monthly health tool kit that is actually available and if you can download it. It's publicly available on this website and what we did here was we added We added screen for my poor disorder and anxiety.

NOTE Confidence: 0.848533570766449

00:10:10.800 --> 00:10:16.360 And other things, and it presents an algorithm for how you what do you do after someone screens positive essentially?

NOTE Confidence: 0.897295653820038

00:10:17.920 --> 00:10:33.070 We also developed a substance use disorder toolkit. My colleague Lena Mattel led the development of this. This is also publicly available any of you could use it if you'd like to this is something else that we developed to again acknowledging it is important to us depression, but there's a lot of other things that need to be addressed as well.

NOTE Confidence: 0.887631356716156

00:10:34.030 --> 00:10:47.790 And then this is also where a lot of this stuff is available, so next time. We talk about consultation and resources. So when we were doing this work. You know 10 years ago and we were doing focus groups and we went out to women without providers and we've said.

NOTE Confidence: 0.877798914909363

00:10:48.680 --> 00:11:10.010 How do we want to address this in obstetrics settings and we heard from the women we want our providers to talk to us. They don't know what to say, and the provider, said. We don't want to do as I said, and we realized well. You know if they can they told us if we could call someone and we had a life line that would really help us we would love to be able to call psychiatrist and ask them what to do and in Massachusetts. We have people familiar with Mick path make Pat model for kids.

NOTE Confidence: 0.879725933074951

00:11:10.750 --> 00:11:37.060 Yeah, so it's a program for those of you who aren't familiar to program where a child psychiatrist is available to ride training Phone consultation and resources referral for frontline pediatric providers to help address child surprise. You I believe Connecticut has a program right. Yeah, you have a child psychiatry for access program so we thought, well can, we translate this for OB provider. So it's the same issue. There's not enough people throughout the frontline. They don't know what they're doing so, we created Mcpe app for mom's.

NOTE Confidence: 0.860588788986206

00:11:37.780 --> 00:11:43.060 And what make Pat for mom, says is education consultation and resource and referrals.

00:11:43.710 --> 00:12:14.280 And the kind of those, 3 pieces without the productive implementation. So the education. I talked about. These are the tool kits for the consultation what we do. There is this is really the sort of primary currency of the engine of the access program So what we do, I'll give you an example would be a provider given example. I wanna call it yesterday. The R photo rings. We have an 855 number that is rings anywhere in this state. One of our resource and referral specialist answers, the Phone. They then page us, I get a message saying, You know.

NOTE Confidence: 0.895176649093628

00:12:14.280 --> 00:12:22.940 This is the information the provider, has this question. I called the provider back and the call. I took yesterday was a very simple. One this particular patient had been on.

NOTE Confidence: 0.889445781707764

00:12:23.460 --> 00:12:48.620 Had been on an anti depressant, she'd stopped it when she became pregnant and she was asking for a different one. The other entity. Preston had work so we talked about you want to use what's work. You definitely don't want to switch medications in pregnancy and the provider, said great that's so helpful. I didn't know that and that was it. And so we just it ends with the telephone consultation and the goal here is that they can call us whenever they need to were available 9:00 to 5:00 Monday through Friday to take these Phone calls.

NOTE Confidence: 0.872804343700409

00:12:49.680 --> 00:13:24.690 So then I'm going to go through kind of some of the scenarios that happen. When people call so I just mentioned. We just in that case example. I just gave we discussed potential management strategies. They OB get off the Phone felt comfortable the other thing that can happen is what we seen throughout time of having this now 5, 1/2 years into this program in the beginning. There were calling us about how do you start this patients depressed I don't know what to do screen positive and they would literally say I don't know what to do, and then we talk about strategies and often it would be how do you start searcher lean or what have you now they're calling about really complicated patients they don't have to start searching they know how to refer for therapy they're still calling us for that, but for example.

NOTE Confidence: 0.873346745967865

00:13:24.690 --> 00:13:59.700 Yesterday I got a call from somebody who actually this was a couple weeks ago. The OB provider called and said I had this patient who screen positive. She has a history of bipolar disorder. She's been on Abilify and also other medications. I'm happy to treat her. She doesn't have access to a psychiatrist has mass health in our state. It takes months to find a psychiatrist or to get one. If you have our public health insurance, she said. I'm happy to treat her. I don't know what to do so in that case. I'm not feel comfortable over the Phone, saying Oh you should start like an animal like discussing Anna

Psychotics, but have you been diagnosis wasn't clear and it was complicated clearly his patient needs a psychiatrist so in that case we commiserate be great if you.

NOTE Confidence: 0.864252746105194

00:13:59.700 --> 00:14:27.370 Psychiatrist but it's going to take a long time, and then we usually say, well, we can see them for one time console if you're OK, prescribing in this case, they were. I happen to see that patient for face to face console turned out. She really did have bipolar disorder. Type one and you know, we restarted her on the medications should be helpful to pass they will be prescribing and we're doing that until she can get into a longer term, psychiatrist so we end up seeing actually a lot of quite ill patients in the OB is it's pretty amazing 5 years into this they're managing some pretty significant illness.

NOTE Confidence: 0.868788182735443

00:14:27.920 --> 00:14:40.700 Would it be in the beginning, we struggle with this 'cause? Would it be great. If all these patients had a had a psychiatric provider absolutely but we don't perfect the enemy. The good and it's better that they are treating them until they can get in rather than waiting until they can actually have you know there.

NOTE Confidence: 0.865468978881836

 $00:14:41.350 \longrightarrow 00:14:43.880$  Have a psychiatrist that they have an outpatient relationship with.

NOTE Confidence: 0.893339097499847

00:14:44.400 --> 00:15:19.410 And then the other thing that we do is we offer for the community for therapy so another example is that was uncalled yesterday and one provider called that I have this woman and she's you know, she hadn't screened her, but the patient had a history of depression had seen a psychiatrist in the past and it was disclosing some symptoms and the person that I really want to get into therapy. She's having trouble So what we do. There is we can. We refer them to the community. We have a database that includes resources throughout the state and our resource and referral specialist will contact the patient and help link them with resources in the community. So we're helping both the patient and provider.

NOTE Confidence: 0.859284162521362

00:15:19.410 --> 00:15:22.980 To navigate windows as you all know very complicated mental health system.

NOTE Confidence: 0.876037001609802

00:15:23.650 --> 00:15:55.020 So that's a lot of what we do to an in that particular case each time we talk then we have also have an opportunity to say, well. Did you screen them next time screen them. This patient has a history? She

someone who made him medications in pregnancy so make sure you're following them closely and screen them and then every time we talk to them as an opportunity. Hopefully raise the standard of care and further engage them. There was walking that line between raising the standard and not alienate them by trying to make him into a psychiatrist, but they don't like that, so it's always a balance that were walking and I just want to comment that it's different often people think about map for moms telepsychiatry.

NOTE Confidence: 0.884153604507446

00:15:55.020 --> 00:16:27.480 There is some similarities, but may differences that we never provide direct care. Our mission is to build their capacity leverage. This limited resource. So we never prescribe. We do one time consoles. It's really to help them provide the care tell psychiatrist different because we do, do some telepsychiatry. We have some practices that they can't come to our hubs for face to face evaluation. So we do, do that. But they're always console, so a lot of times until psychiatry is providing direct care, which is great for those structural barriers and things like that, and transportation barriers. It's a little bit different because we never actually provide direct care.

NOTE Confidence: 0.864379346370697

00:16:29.200 --> 00:16:56.520 So as mentioned a lot about abstraction providers. We've served all providers who work with pregnant and postpartum women so upset your providers family. Medison substance use disorder providers psychiatrists. A lot of psychiatrists are not comfortable prescribing for this population is about. We are often helping helping them provide evidence based care and then they get Rogers called well child visits and this is the amount of patients call most of our calls from a statue of providers. We get a fair amount from family Medison.

NOTE Confidence: 0.871371030807495

00:16:57.050 --> 00:17:16.910 We recently had an Sud expansion and so we're getting more and more calls from SUV providers who may not who may there, either calling to help with the psychiatric comorbidity or they're calling to understand how to better manage someone's medication during pregnancy. For example, and about 15% of calls come from psychiatrists and then 5% from pediatric providers.

NOTE Confidence: 0.883163630962372

00:17:18.630 --> 00:17:52.370 So I mentioned we also do the resource and referral and this is often the Golden Nugget as to why people call in the 1st place in the beginning. People weren't like really wanting to provide care nurses, there, so they can't be like can you refer for therapy and then that would be an opportunity for us to say, and if you screw them and have you done all these other things and it was sort of like it? It's nice in the Phone with a no brainer. We could say well for therapy. They would like and what are you going to do next per so it's kind of this really, really does help the resource and referral and

what we did was we really link women with therapy support groups and other community resources and as I mentioned we have this statewide database. We contracted with organization called William James College to do that.

NOTE Confidence: 0.881534039974213

00:17:52.450 --> 00:18:08.980 And we really the goal there is you know supporting the Wellness and mental health of perianal women and you know, we're referring for individual therapy groups and then other community resources well and we have a lot of this information. Also on our website. So women can actually go into our website put in their zip code search for support group.

NOTE Confidence: 0.89532482624054

00:18:11.030 --> 00:18:42.520 And then throughout this whole process so a lot of times when other there's other programs. Now like this popping up throughout the country and people kind of think you will build it. They will come and what we have learned is that it's actually. Not that way, and you build it and you really have to like relentlessly engage them so they come and so a key part of this is engagement, engaging it providers to do this and it's really focused on the providers because the patients actually cannot call or if they call we redirect them back to the providers are real goal to build the medical community capacity and so when we first started this for example.

NOTE Confidence: 0.874396085739136

00:18:42.520 --> 00:18:54.270 We did grand rounds at all the birthing hospitals in the state we went to practices. We collaborated with Massachusetts. A kog to really do engagement and it's really, really important piece of this.

NOTE Confidence: 0.876900136470795

00:18:55.720 --> 00:19:25.860 And you may be wondering how does this work so we have 3 helps one at Brigham one at UMass Medical School, where I am and then wanted face state and we staff this with one .0 FT of a psychiatrist so it's split between 5 psychiatrist throughout the state and then we have 2.5 FT of resource and referral specialist so it's pretty it's a pretty lean team and anyone in all the providers in the state can access our program a little bit better data. We've been rolled 75% of the practices in the state, which is covers more than 80% of the deliveries. We've sort of.

NOTE Confidence: 0.817215859889984

00:19:25.860 --> 00:19:28.870 This number is close to 8000 now and the.

NOTE Confidence: 0.898990869522095

00:19:29.550 --> 00:19:35.610 As you can see most the majority of these we do

have those provider to provider consultations over the Phone.

00:19:36.160 --> 00:19:50.600 Face to face evaluations is less than 10% and we do resource and referral time. We're doing a lot of referring for therapy and the reason this number is higher is 'cause. We do a lot of follow up there too. Every time we see it every time we do resource and referral. We call the patient. We call a month later and see how they're doing, and see if they need further help at that point.

NOTE Confidence: 0.835715472698212

00:19:51.260 --> 00:20:16.720 And for face to face evaluations. This is pretty key. We help the vast majority either by regional summer floor. Telephone consultation and we really reserve this for the the ones that are the more ill patients that need this, or the indication really isn't rather old indication if it's going to help the provider, Flyers uncomfortable that's our indication do a face to face not whether we think it's complicated so the.

NOTE Confidence: 0.884470820426941

00:20:17.320 --> 00:20:50.720 And the this number being lower is really critical 'cause. There's no way we all kind of like served 7 a half thousand patients right in the past 5 years and so because this number is only 10% were able to get people in for face to face user within a week or 2 and that's really critical because providers, especially obese. There, like I understand how can it be 3 months of unemployment so I psychiatry? Works Unfortunately so they love it. They can get him in quickly and the patients like that, too, when they're pregnant and postpartum. It's a really critical time period in that time when this is really important, and now we serve an average about 2 to 300 patients per month.

NOTE Confidence: 0.870496034622192

00:20:50.720 --> 00:20:55.290 And these are unique patients that were calling Edith Phone consultation all these different methods.

NOTE Confidence: 0.865737974643707

00:20:56.310 --> 00:21:06.730 This is just presenting our data in a different way as you can see the beginning. We're going about 50 calls a month. Now we're getting 2 to 300 and as we've as we've enrolled practices the.

NOTE Confidence: 0.757653176784515

 $00:21:07.270 \longrightarrow 00:21:08.950$  Our utilization keeps going out.

NOTE Confidence: 0.88503223657608

00:21:09.890 --> 00:21:39.960 And if we think about you know, I've mentioned a little bit about sort of the progression of addressing Colonel to health conditions. In general and when we first started this in 2013 to 14. It was really about depression and we were very purposeful because we knew if we went and said, We want to address all these things they would have liked it out of our exam. Yeah, I don't know that that would have been palatable because then it was

people really weren't sure people said to us like we are going to do this. This is going to work and so we really were very physically said. Just we're here to help you adjust depression to kind of make it a bite size chunk.

NOTE Confidence: 0.882735013961792

00:21:39.960 --> 00:22:10.890 Then we have expanded to do depression and anxiety and around that time a kog and the council on patient safety and the US protesters come out the recommendations which held the culture was shifting now in the past couple years. They call a lot about bipolar disorder because their screening alot of women or bipolar disorder as they should be an they're calling us a lot about that which is great. We had an expansion to address substance use disorders are in 2018. So we have some more funding there and so we developed the tool kit.

NOTE Confidence: 0.886626303195953

00:22:10.890 --> 00:22:41.060 Outlook were actively engaging substance use disorder providers well and our next step. This is actually 2019 to 20 is we really want to be our next step in our next mission is to be really working on inequities disparities aces social determinants and helping of such practices integrate trauma informed care, we are in the process of doing this and for example, some of it. When we're talking to our providers, making sure we're asking about this. It's in our face to face consultation. It's really embedded in the culture of how we're providing that consultation.

NOTE Confidence: 0.873302280902863

00:22:41.060 --> 00:22:46.890 So that's something that that's our mission for the next and our next phase now that we've been out for 5 years.

NOTE Confidence: 0.864308714866638

00:22:47.780 --> 00:23:05.070 So just to get a sense of the costs as someone who may be wondering. How does this funding so this program is funded it? Let me just contextualize perinatal muneeza disorders? Are estimated to cost \$30,000 per woman, her mother child dyad per year. If you take the state of Massachusetts that 345 million dollars a year.

NOTE Confidence: 0.88202702999115

00:23:05.680 --> 00:23:36.770 And costs are program is \$14.00 per month for mom per year or \$100 a little over dollar per month per woman and our budgets. About a million dollar. It's \$1,000,000 a year so clearly. A lot less expensive than the cost of untreated depression and one thing we've been able to do is our funding is it were a line item in the state budget and so and we've worked very closely with our postpartum, Depression Commission being involved. One of these programs it's very, very.

00:23:36.770 --> 00:24:09.160 There's a lot of different parts that need to be addressed. And it's very, very lot of political aspects to it, and one of the things we've been able to do is actually the mic app team was able to do this, I should say was in 2015. They passed legislation such that all of the health plans pay a surcharge for this program because before that all of the health plans were assets in this program free of charge. The members were benefiting and they weren't paying for it. And so with a lot of advocacy. Now all of the health plans pay a surcharge, which proportional to their medications that are served by both the path for kids and the mic pap for Mom's.

NOTE Confidence: 0.894948065280914

00:24:09.160 --> 00:24:22.080 And so that ends up being about 50% of the budget each year. 'cause 50% of our patients tend to be publicly insured and they use the same formula. They used to determine the cost for vaccinations in Massachusetts, so that's a huge win because it actually makes the program much more sustainable.

NOTE Confidence: 0.893736958503723

00:24:23.840 --> 00:24:46.790 So, In summary about make path you know all the women have access through their providers. And we're really excited that this has been serving as a model for other states in the country. Congresswoman Katherine Clark actually put forth federal legislation for other states that have programs like this that got folded into the 21st century cures act and Hersa is now his funded 7 states to have their own parallel psychiatry access programs. These are the hearts of funded states.

NOTE Confidence: 0.910806000232697

00:24:47.880 --> 00:25:01.300 And also there's a lot of other programs that are popping up through various sources of funding. There's now 14 programs throughout the country and these are all the all the various programs. It's fascinating to see how these need to be tailored and.

NOTE Confidence: 0.896532416343689

00:25:02.510 --> 00:25:33.970 Well, we and all of these as I mentioned need to be tailored and it's very, very different for each state in healthcare system. As far as how these programs need to be tailored and each of them do have these do have these sort of 3 core components. However, not all of them are they have to do them in really different ways, so for example, I'm just going to give examples of 3 states here. Massachusetts we have creating consultation resource and referral Washington and part of this 'cause of funding levels. This level, we probably have more funding. A lot of the other states. They have training tool kits in consultation.

NOTE Confidence: 0.891730785369873

00:25:33.970 --> 00:26:08.090 They don't have as much resource over for all that they're doing, and it was constant same. They do training of toolkits not

as much resource and referral animals. All these states are doing this is also the context. Is there legislation is there a Commission? What is the funding source and also complements your program so for example, at UW in Washington. They have a lot of collaborative care happening there and they have all these compliments you programs that can feed that could feed into their access program and those 2. Sometimes people think those are mutually exclusive. They're definitely not you can have a proactive practice level intervention and then also have this state why they actually are very synergistic and complement each other.

NOTE Confidence: 0.889865100383759

00:26:08.090 --> 00:26:11.270 I'll talk more about those I talk about are more practice level interventions.

NOTE Confidence: 0.90638256072998

00:26:12.240 --> 00:26:23.510 And when in thinking about these sort of statewide you know population based large access programs. These are really all the pieces. It's very different than like other interventions in that.

NOTE Confidence: 0.876990675926209

00:26:24.010 --> 00:26:45.440 I think for this to be successful. You don't you're not just sitting in ivory tower like creating this you really have to like partner with community partners advocates and us through the Department of Public Health Department to help the legislators and for us. We have the child access program and stakeholders. So it's really an iterative process and for productive use Excel so it's really critical to kind of be engaging in this.

NOTE Confidence: 0.916155338287354

00:26:46.010 --> 00:26:49.110 In this multi level way with lots of different stakeholders.

NOTE Confidence: 0.925299286842346

00:26:51.950 -> 00:26:55.670 And so one of the things we've done is because we've had this.

NOTE Confidence: 0.874880135059357

00:26:56.200 --> 00:27:27.100 These you know this has become a national model and now we have all these states throughout the program. We really wanted to leverage that because the her so states got funded last summer and is the Hearst States got funded. We saw an opportunity one to create opportunity of all the states to learn from each other and 2. They're all developing databases and they're all developing their measures 'cause. They all have or accountable to herself for a lot of these measures so we really wanted to have the programs learn from each other also harmonize the data collection to facilitate program evaluation. So we created a network, which is funded by the parody funded.

NOTE Confidence: 0.867509782314301

00:27:27.100 --> 00:27:59.170 Access programs and all the states actually that you saw on that are now in this network. So we have this national network of access programs. It's fascinating to see how all these states are struggling with different things. And this is ultimately what we do the goals are they mentioned facilitate per learning and partner valuation for peer learning. We have in person. Some it's twice a year monthly webinars and we share training tool kits and products were not reinventing the wheel and then for program evaluation. We have actually created database a template. So so the programs can all have consistent data fields as they are all developing which a lot of.

NOTE Confidence: 0.887148261070251

00:27:59.170 --> 00:28:16.460 Which most of them are using which we're excited about and we've also been able to provide them with a lot of them need to be assessing changes in provider self efficacy and practices around paranormal to health conditions. So we provided them with assessments that there are many, many of the states are using so those assessments are consistent and also helps them do their evaluation.

NOTE Confidence: 0.911578595638275

00:28:18.490 --> 00:28:20.840 So now I'm going to move on to the.

NOTE Confidence: 0.882433235645294

00:28:21.860 --> 00:28:52.430 Practice workflow because we talked about these like you know large statewide large programs, which are helpful and I think part of the reason they're successful is because they fit into the medical system well because they're kind of reactive has a problem. They call us and we help to figure out what to do, we're kind of helping to put out fires in a way? What we're not doing is proactive working with practices to really make sure that depression is truly part of Obstetric. Just like diabetes. So it's detected it's followed up and it's treated until remission.

NOTE Confidence: 0.887498378753662

00:28:52.590 --> 00:29:22.700 So what we've done is built on the access program in Massachusetts to provide more proactive practice level engagement because if we think about the depression care pathway. It starts with detection assessment treatment will make sure they're getting adequate treatment that treatment sustained. They improved their symptoms are approved and then hopefully that leads to improve outcomes, Midcap for moms is really great about helping providers do this indefinitely Phone. We're encouraging to do this. We were not proactively kind of doing that I think they're doing, it more, but you know.

NOTE Confidence: 0.879043757915497

00:29:22.700 --> 00:29:53.010 We know this happens in primary care settings as well. They started Med. It's of sub therapeutic dose and they don't actually get

treated so remission So what we're doing is we created a program called prism, which stands for program in support of Mom's and the goal of prism is to add on that proactive practice level piece and it really builds on the path for months and the goal with prism is that where you know, helping make sure they're screening treatment and also that their monitoring patients goal being engaged patients and improved outcomes and we do this through an implementation protocol.

NOTE Confidence: 0.858346819877625

00:29:54.060 --> 00:30:10.600 And what what some of the things that we're doing is we're helping them screen at 3. Timepoints initial OB visit 2628 weeks 6 weeks postpartum and the reason is that Kathy Winters work showed that of women who present with postpartum depression 1/3 of women over enterprises, we resisting illness.

NOTE Confidence: 0.853218853473663

00:30:11.480 --> 00:30:17.520 1/3 will develop during pregnancy. Another 40% will develop depression postpartum, so screening with those two time points.

NOTE Confidence: 0.877504527568817

00:30:18.050 --> 00:30:49.940 The goal is to cover those time points when it occurs and then screening with her bipolar disorder at the initial OB visit because there's work also shown that of women who screen positive for postpartum depression, one in 5 women in her study met criteria bipolar. Sora diagnostic interview. So we don't want to do is have a knee jerk response if describing without screening for bipolar disorder and to make sure that that's happening, too because clearly that would not be a young would not be what would be indicated so we're working with practices to help them implement this and also to develop more prompts and so forth.

NOTE Confidence: 0.883936703205109

 $00:30:49.940 \longrightarrow 00:30:54.120$  So what we did this was actually my K Award was we had.

NOTE Confidence: 0.843827307224274

00:30:54.780 --> 00:31:24.970 Did we did a pilot group marked looking at 2 practices habit pepper moms to practice that has prism? Which I described the screening protocol implementation assistance office prompts and then make path for moms and we did this with two practices that had path moms to practice ahead prism and what we're thinking clearly. We weren't this is a pilot study. So our outcomes were feasibility measures that were not. We weren't powered to assess the effectiveness. What we were thinking, though, for the effectiveness trial was that if you have looked at for moms. It helps women are going to get better if you have.

00:31:24.970 --> 00:31:30.890 If you add on these additional proactive practice level interventions. It's going to help even more and women's outcomes will improve even more.

NOTE Confidence: 0.862139046192169

00:31:31.430 --> 00:32:05.680 And So what we saw in our pilot study was if this. The This is a mic platforms group. They start off with an EPS of 15 went down to 10, so little less than a 5 point difference in the PDF score and the prism study started, of- at 13 and a half went down to 6, so about 7 point difference in DPS scores. What we did. See was this differential improvement. This is not statistically significant. The Pre Post is it's not across the groups more power to do that. We weren't expecting that what we're doing now is in a CDC funded again. A cluster arced so randomizing make practice instead of by patient because this is.

NOTE Confidence: 0.84443473815918

00:32:05.680 --> 00:32:30.720 These are practiced level interventions, we are doing a larger study where we have 5 practices that have mic pack for moms alone and 5 that have prism and we're here, we're following patients to their one year postpartum before we only follow them until 3 months postpartum and so we recruit them in pregnancy. We recruit them, actually any of those three time points. I mentioned first half of pregnancy second half for postpartum. We follow them till year postpartum our primary outcome of interest is improvement in depression.

NOTE Confidence: 0.881621658802032

00:32:32.290 --> 00:33:03.670 And then talk a little bit when we did this we also revised prism because when we did it for the first it was OK. If it was a lot of funding to be able to do a lot of really rigorous intervention. You know, So what we did here and also we learned a lot when we did. The pilot study. We learned a ton about how we can better help these practices, So what we did when we when we in the new prism, which were testing in this larger Arctic is we're really focusing much more on the monitoring and also we made our implementation protocol much more robust.

NOTE Confidence: 0.861407995223999

00:33:03.670 --> 00:33:13.170 And the goal there is that we're helping with the monitoring and we're engaging both more gauging the providers more so than we did. The prism so I'll talk a bit more about what we've added on.

NOTE Confidence: 0.853003442287445

00:33:13.970 --> 00:33:45.950 So I said, with both of the versions of prism. The goal is to step up care with increasing illness, severity and as you can see this kind of build on the mic platforms model so if their mild. You know given support options therapy possible medication treatment if it's moderate and MVQ so for example, bipolar disorders. Negative that they're more strongly

considered treatment and then they can refer to us, they can call my cpap for moms. If they need to, and then for here. If someone has severe depression and their MD cues. Positive then they need a console so these patients. Most what we recommend there is we do a consultation with them.

NOTE Confidence: 0.874108076095581

00:33:45.990 --> 00:34:19.630 And what we do in the prism study is we take our algorithm. It's actually that map for mom's algorithm. I mentioned the beginning and we basically Taylor that to each practice. We take the algorithm. We work with the practice and we tailor it for each practice to figure out OK, then because positive? What do you do when you get a call and so we really work with them to create that flow the other thing that we do in this revised version enhanced version of prism is we have a navigator. It's a little bit like collaborative care what we didn't want to do is collaborative care is wonderful. It's a great model. The tricky thing and it will sure you're familiar with the voltage drop where.

NOTE Confidence: 0.856627225875854

00:34:19.630 --> 00:34:54.020 Probably in this never considered to be realistic for there to be a every OB practice in the country to have a care manager because it's just expensive right so we wanted to do it in a way that's more scalable so we buy out time from an RN or M in the practice to have a registry of patients with depression to follow them. They really functional liaison between the OB provider in the Navigator and these navigators have a call once a month with armik pepper. Mom psychiatrists and they provide some consultation or how do you engage them? How do you navigate the mic tap system at the health system and when you need to call the OB around medication treatment so forth like if the EPS isn't improving.

NOTE Confidence: 0.879257798194885

00:34:54.020 --> 00:35:00.610 You know, kind of helping them be proactive and really the goal is to follow. These patients in the registry make sure that oppression goes into full remission.

NOTE Confidence: 0.88489818572998

00:35:02.460 --> 00:35:32.800 So how do we do this so one of the things that we also did in the 2nd. One was we developed this thing called the prep D assessment and what we do here is we go to the practice. We look at doing environmental scan. We look at their posters in the waiting room is there messaging on your does the practice appear to be a holistic practice. That's addressing mental health and integrating that in based on sort of how their environment looks, including their website, then we do a chart extraction looking at are they detecting assessing treating depression. We look at what their policies are and we do questionnaires with their providers.

00:35:33.540 --> 00:36:05.070 And then what we do is we then give that data back to the practice and we actually give them a score. And it's interesting with the scores because they like to know we're all little competitive and they like to know that their scores and what's interesting is that when we do that, it kind of usually automatically they start developing goals because they're like well, we say this is what the bundle recommends or this is what the recommendations are this is where you guys are at then they often kind of naturally come up with goals and so we then provide those goals. We refine them, with the practice. We make sure they're smart goals measurable attainable and so forth.

NOTE Confidence: 0.885729253292084

00:36:05.070 --> 00:36:36.790 And then we established that Workflow as I mentioned we were fine. All that and then we have system. They implement it all, and then we have sustainment meetings. Now we're meeting with them or in your 5 of this study. We meet with them now. But once every three months, the beginning. We were doing once a month. The statement meetings are really critical because otherwise they would probably just you know go back to I think they would do some of it, but the same thing is really helpful to keep them accountable and what's interesting about this is we're not bringing any external resources or funding. Other than the Navigator what we're doing is providing the structure for the practice to do this themselves.

NOTE Confidence: 0.894418299198151

00:36:36.790 --> 00:37:06.490 But it stops them from kind of being reactive and it forces them to sit down and actually like figure out what they're going to do and they appreciate it and it's amazing what they're willing to do with very little resources, except our implementation on our end is a lot. We don't bring the resource practice. But it is still a pretty detailed intensive implementation protocol where we're doing this we know we're doing in person meetings and we have about 10 meetings and system being so while we named it be scalable. It's still pretty intensive.

NOTE Confidence: 0.873919725418091

00:37:07.130 --> 00:37:39.390 This is just a little data about the pre and post implementation, so before the study. Most were not screening for some more screening for depression alot, more not screening most for screening and post-partum not many were screening in the second half. Some in the first half. None were spring, if I pulled this order number using a registry and so this is just after this is not based on chart abstraction. We're in the middle of doing that data now but this is based on their policies and what we're hearing their meanings that they're all from a sort of practice level perspective, doing all of these things does that mean that hard percent of the patients are getting it probably certainly not.

 $00:37:39.390 \longrightarrow 00:37:43.350$  But but as far as their practices, no workflow, they're all doing all of these things.

NOTE Confidence: 0.894492208957672

00:37:44.390 --> 00:38:14.810 So I talked about how we ate for this to be scalable, but it's still pretty intensive because our team is going out there and doing all this in person. So we collaborate a lot with a kog and a cognizant maternal motel expert work group that on the AP. A representative on an they've really been interested in well? How do we help all these providers? Meet the standard of care and integrate this and there's a lot of pressure. Around this California. For example, just had some legislation that practices have to screen. Then there's a lot of now, momentum around well? How do we do this and so?

NOTE Confidence: 0.869373381137848

00:38:14.810 --> 00:38:47.060 They want to make this even more scalable because prism is never going to be in every place in the country like we can't we can't in person doing that throughout the whole country is just not going to be that's just not feasible. So if we think about it. We were kind of going into the prison practices with like a huge ladle in like feeding them right down there So what we're doing now is we're actually we are now we are now taking the prism protocol and making it so it can be done virtually and like 3 meetings and then we're having a practice do it themselves, hence the baby like feeding herself, which I don't think it's going to be messy.

NOTE Confidence: 0.879945456981659

00:38:47.060 --> 00:38:54.210 That's the plan is that they're not going to do this themselves and so we now through NIH have a?

NOTE Confidence: 0.869645476341248

00:38:54.800 --> 00:39:26.290 Another cluster RCT I've yet to do a RCT, randomized by patient. This is again practice level intervention, So what we're doing. There is we are testing. There's going to be there's 3 groups in the study were testing. This lean implementation assistance where we have 3 meetings and we're doing this virtually and the practice is doing work in between verses us doing it for them, which we did in the present study so there's going to be a group that has implementation assistance and the toolkit and there's me group that has the E modules in the toolkit. We are taking our platforms trading other trainings.

NOTE Confidence: 0.877941846847534

00:39:26.290 --> 00:39:56.770 And developing for E modules that it's going to be 2 hours for OB a cagas our commercialization partner on this so they will be disseminating. These modules and working with us on that, so the first one, will be implementation assistance and toolkit versus E modules and toolkit versus readings alone and the goal is that what were hypothesising in that as you

have these intensive more intensive interventions you see differential changing practices were not looking at patient outcomes in this study.

NOTE Confidence: 0.88016003370285

00:39:57.250 --> 00:40:23.410 Provider practices provider self efficacy or primary our primary outcome is actually changing in screening practices, so knowing that that's not enough. But it's a way to get out? Is this changing practice essentially what we suspect is that they do need this implementation assistance will be very interesting to see how we do that virtually with 25 practice is going to be 10 in each group and 5 in the in the control group and they're all over the country.

NOTE Confidence: 0.860170125961304

00:40:24.620 --> 00:40:36.030 So this is so in here, you see we have so this is just another way to describe it. We actually just added on a third group 'cause. We're getting a supplement to add on that third group, so that's why it's not on there.

NOTE Confidence: 0.908911347389221

00:40:36.550 --> 00:41:10.020 So when we think about this you know, we've talked about all these different kinds of interventions. We've come up with an that said, we still need sustainable approaches for dressing up, the health conditions. And there's still some areas where we still have gaps right because you know, we're really working hard to create scalable approaches. It's really, really challenging will be very interesting to see what this new Arctic? How much practice is going to do this? What's fascinating about it is that as we reach out to practice is? When we did. This first arc that was now 5 years ago. We started it, but it was a tough sell.

NOTE Confidence: 0.884649395942688

00:41:10.020 --> 00:41:41.870 We'd say, We want to do this we want to help you just depression. If you like really we don't know if we want to do this and they wanted to do it. It was just that the work. They always wanted to. Let me be clear about that. But it was a tougher sell and the culture hadn't shifted yet now practices are contacting else they really want to do this. They're like really want to be an intervention arm because their culture is just shift and there's so much pressure, which is great. We all need to respond to that and make sure that we're leveraging that momentum. The other really tricky thing about Obi settings is that it's a bundled payment So what that means for those who aren't familiar with it. They get a one time payment for.

NOTE Confidence: 0.906355142593384

00:41:41.870 --> 00:42:13.420 All the care they provide so when we're adding on this stuff. They're not necessarily getting any paid anymore. For that, so there isn't necessarily financial incentive in my experience in working with OB providers. They're doing this 'cause. It's the right thing to do and they want to provide good care. They're not getting paid more and that's a real problem

because for something to really work. I mean, they should be paid to do this. They should be compensated and then in regards to it would be great to be able establish what the ROI on this 'cause whatever in these circles and policy settings and so forth and especially political settings.

NOTE Confidence: 0.885215640068054

00:42:13.420 --> 00:42:44.350 They want to know what's the return investment is this actually improving outcomes is actually saving costs. For example, doesn't access program decrease your utilization so we're in the process of working on some grants to be able to try to establish that but that question really needs to be answered and then as I've mentioned we can address any of this without without addressing equities disparities aces. Social determinants and trauma informed care and this is where a lot of our we our goal is to be focusing more on this and integrating this stuff into all of our materials in our toolkits and so forth.

NOTE Confidence: 0.926282286643982

 $00:42:44.350 \longrightarrow 00:42:45.380$  As we move forward.

NOTE Confidence: 0.906443238258362

00:42:47.050 --> 00:43:08.220 So, In summary you know, increasing frontline provider capacity can promote maternal child health, and the good thing is as I've mentioned the expectations are changing. I'm going amazed at how the material child health care providers. Both Pediatrics and obstetrics and midwives have wrapped their minds. Around this and are really doing this work despite it being really, really hard and.

NOTE Confidence: 0.89054811000824

00:43:09.000 --> 00:43:13.130 But it's clearly more to do so. I think we have time for questions. Thank you for listening.