Coordination of Prevention Services for People Who Inject Drugs: Lessons from the Wisconsin Rural Opioid Initiative

PRESENTER: Presented by Dr. Ryan Westergaard, our webinar is titled Coordination of Prevention Services for People Who Inject Drugs: Lessons from the Wisconsin Rural Opioid Initiative. And your webinar today is brought to you by the Great Lakes Addiction Technology Transfer Center. We're one of ten US-based and six international HIV ATTC centers. The ATTC network is celebrating 25 years of support from our funder SAMHSA this year.

And as I mentioned earlier, we cover the six states in the upper Great Lakes region. That's Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. A little bit of housekeeping before we get started. This webinar, like all of our Great Lakes ATTC webinars, will be recorded. The recording and the slides will be available on our website within the next week to 10 days. And there you see on the slide our website address, attcnetwork.org/greatlakes. And we do not offer CEUs for this webinar.

As I mentioned earlier, again, the webinar is being recorded through your computer, so make sure your speakers are turned on and up. There's no phone number that you need to use for this webinar. If you have questions throughout the presentation, please use the chat feature to ask your questions, and we'll save some time after Dr. Westergaard's presentation for a Q&A. And our presenter today is Dr. Ryan Westergaard.

I'll tell you a little bit about his background. Dr. Westergaard attended medical school at Johns Hopkins. He completed primary care internal medicine residency at the University of Colorado Denver, and he received a fellowship training in infectious diseases at Johns Hopkins Hospital and the Johns Hopkins AIDS Service, along with clinical research training at the Bloomberg School of Public Health.

Since 2011, he's been a care provider for HIV/AIDS Comprehensive Care Program at the UW Hospital and Clinics. He provides HIV-oriented primary care to patients in Madison and other areas of Wisconsin, including people incarcerated in the Wisconsin Department of Corrections. Today, Dr. Westergaard will be telling us more about a recent initiative that was focusing on rural areas of Wisconsin. And now, Dr. Westergaard. Would you like to take it away?

RYAN WESTERGAARD: Thank you very much, Maureen, and thank you to everyone for joining the webinar. On the attendee list in the lower right-hand corner, I see a number of familiar names. So greetings to everyone that we've-- I've met before and including a number of people that I work with closely on the project that I'm going to be discussing. So thank you for joining us. The title of the talk is Coordination of Prevention Services for People Who Inject Drugs: Lessons from the Wisconsin Rural Opioid Initiative.

The alternative title, or perhaps a subtitle, is what can the global response to HIV/AIDS teach us about the opioid and hepatitis C crisis? When my teammates and I have presented this work to more clinical audiences, we really draw on this connection. And so I'm going to be presenting a number of background slides and talk about themes that have evolved in the three decades old response to HIV, and thinking about the ways that it can help us address the current crisis of opioid overdose and hepatitis C.

Learning objectives are here. Specifically, we're going to talk about how comprehensive patient-centered care has transformed the HIV epidemic in the US and then describe a multi-site NIH funded initiative, which is known as a rural opioid initiative, which is a proposal to build client-centered prevention homes really inspired by their response to HIV within syringe service programs and for Wisconsin counties.

So this slide shows the juxtaposition of the two epidemics of our lifetime. On the left is the number of AIDS deaths in the United States between 1981 and 2007. And I put this next to the current more contemporary death epidemic of overdose deaths involving opioids to highlight how 20 or 30 years ago, the leading cause of death among people aged 25 to 44 was AIDS. And there was a sharp inflection point in 1995 that of course coincided with the development of antiretroviral therapy.

On the right, you'll see that the opioid overdose epidemic has easily surpassed the AIDS epidemic as the leading cause of death among young people. But we've not yet reached any inflection point. And the question is, what can we learn from how we've addressed HIV to find a strategy for turning the corner? This shows the magnitude of the two epidemics. The year in which AIDS deaths reached a peak was in 1995 at about 50,000.

In 2017, the number of people who died from drug overdoses was nearly 50% higher and to date does not show any signs of slowing down. There's also a direct connection between these two epidemics. In Wisconsin-- and it's similar to many states around the country-- public health had a very robust response and was able to control the number of HIV cases attributable to injection drug use at very low levels. But the current

epidemic of opioid and increasingly methamphetamine abuse is really threatening to undo this.

The figure on the left here shows that since 2015 to 2017, there was a tripling of HIV cases in Wisconsin caused by injection drug use. You'll see at the axis, it's still a relatively small number. It went from 5 to 15, but nevertheless a tripling. Hepatitis C, on the other hand, has exploded as a result of the current epidemic of injection drug use, and it is orders of magnitude higher. In Wisconsin, we're seeing up to 1000 new cases a year.

And although it looks like there's a little dip between 2015 and 2016, this is actually an artifact related to reporting. There actually-- the number from 2015 to 2016 and 2017 does not show any signs of slowing down among transmission of hepatitis C among young people. So the risk to communities across the country is really exemplified in what was the most dramatic and the most explosive HIV outbreak really in the continent in the past 20 years, which happened in small, rural communities in southern Indiana and Scott County.

In 2015, there was a cluster of 11 new HIV infections in a county that had had only five infections in the previous decade. And when all was said and done, there were 231 cases. So I bring this up again. In the previous webinar that we presented on hepatitis C and HIV a few months ago, we talked about the same as a case study. But I want to focus on the response. And the two figures on this slide-- the bottom-- were taken from the New England Journal article that really showed the outbreak investigation and the response.

And it's helpful to look here at the tail ends of this. I thought I had a pointer here

Here we go. So within six months, really, the majority of the number of cases were tested because of a program of implementing rapid testing and linkage to care. And by the time the two year the study had gone by, they had really saturated the number of cases, and most everyone had been tested and linked to care.

On the left, it shows the same data, the cumulative cases, and all the things that happened in order to control this response, including establishing an incident command center, getting federal support in terms of surveillance and resources and funding, declaring a public health emergency, starting syringe exchange programs. And we can really see the leveling off of this really showed that what we've learned from HIV can be used and scaled up in a relatively rapid sense to control these outbreaks of communicable diseases resulting from infections, diseases.

So that's the good news. We know how to do this. And the HIV response was encapsulated here on this community level by investigators and leaders in Indiana

showing how it really took a multifaceted, multi-stakeholder partnership, including federal funders, and local partners, and state partners, and academic partners all around the goal of getting people identified, getting people linked to treatment, and getting the virus suppressed.

And that has really been the key of stopping HIV transmission in communities, is getting people on treatment and getting the virus suppressed to undetectable levels. The bad news, of course, is that we didn't know how to stop this from happening in the first place. And it raises the question of, are there communities where this is vulnerable? And what lessons have we learned that can help us mobilize the resources to prevent outbreaks from HIV, rather than having to respond with all of the technological tools that we have?

So that's really been a focus by CDC and other federal partners for the past several years that's trying to understand what communities are at risk and what can we do? This is a study that used national data from a number of sources to try to identify likely hotspots based on the number of cases of acute hepatitis C, which is a marker for infections being transmitted by injection drug use. And it showed the areas of the country where this seems to be likely.

To try to get a better understanding of the tools that are at our disposal to prevent this, the National Institute of Health, specifically the National Institute on Drug Abuse, partnered with the CDC and SAMHSA, who is the funder of the ATTC which is funding this webinar, to fund a number of large community-engaged research projects. And that's what we'll be talking about the rest of our talk today.

The goal of the rural opiate initiative convened by these federal partners was to identify best practices that can be disseminated to address the particular need of communities in confronting the opioid epidemic, to conduct community assessments, and then using these assessments to design plans for implementing evidence-based practices to address the crisis of opioid overdose, the risk of HIV/AIDS transmission, hepatitis C, and other related comorbidities, and then finally to evaluate the implementation of these plans to develop a toolkit of best practices that communities can use.

So the map on the left shows the areas that the federal partners selected to implement this work. And Wisconsin and Southern Illinois, southern Ohio as well, are representatives in this collaborative in the Great Lakes region. Specifically, we're going to be talking about the project in Wisconsin, which is in close partnership with a community-based organization called the AIDS Resource Center of Wisconsin.

The Wisconsin map on the right highlights the cities-- or the counties where the study is being taking place. They include Douglas County, Eau Claire County, Marathon County, La Crosse County, Outagamie, and Brown County. So why is ARCW such an important partner in this work? Well, if this figure looks somewhat familiar with the various stakeholders, the various components connected by lines and various circles, it was on purpose.

What I wanted to draw the connection between was the response to HIV in the Indiana outbreak, and what is the model that's been developed at ARCW, which is called the HIV Medical Home. And it's built on the model that people who are living with HIV, as well as people who are at risk for HIV, have a broad and heterogeneous set of needs, both medical needs and social services needs, that are best met with a coordinated approach.

So ARCW, which, in addition to providing HIV care in Milwaukee and Madison-- and has expanded to Denver and St. Lewis in the past few years-- is really implementing this model showing that if we pay attention to social determinants of health and the social service and needs of our clients, we can make sure that the high number of people have optimal outcomes related to HIV care. And this is really based on the patient-centered medical home model, which is something that is also celebrated and promoted by federal funders, the AHRQ, and has been really adopted as the best model.

More along the lines of complex health systems serving people with complicated health needs, the idea is that patient is the center of the Health Network. And we build systems around to make sure that the patient receives care that's coordinated across these, and not that the patient is left alone to try to navigate these complex and disparate sets of care. The key concepts of patient-centered care in this model is that it is comprehensive, it's patient-centered, coordinated, accessible, and it has attention paid to high quality and safety.

So we in the HIV field have been doing this for a long time, even though ARCW is a relative trailblazer in calling it a patient-centered HIV medical home. The Ryan White CARE Program, which has funded HIV care around the country, traditionally for people who are uninsured or are underinsured, has really adopted the model that the social service needs and complex needs must be met, and has dedicated a great deal of funding to make sure that no one gets left behind who is living with HIV, because we know that optimal medical treatment is the best way to keep people alive and healthy, as well as reducing the transmission of HIV.

So this is a large-- one of the largest federal funding programs that there is. The total funding of HIV spending in 2018 was over \$26 billion, which is still quite a bit further

ahead of the number any proposal for the amount of funds has been set aside for opioid response. And outcomes back this up, that this is a very useful model. So Ryan White clinics that receive Ryan White funding have-- even those that tailor, and especially those that tailor to high-need populations who are traditionally underserved-- have just as good, if not better, clinical outcomes-- or, here we're talking about neurologic outcomes and then the level of viral suppression-- than patients with commercial insurance in general practice.

And the reason is because they receive these services here that are shown on the left. Medical case management, co-located substance abuse treatment, mental health services, social services, dental services, adherence counseling-- all these things are standard of care in the Ryan White CARE Act package of services. And that's what's really translated to this, to ensure that the HIV epidemic has been so well controlled.

So now we move to prevention services. And the biggest reason, to answer my earlier question of ARCW, and this particular organization, is such an important partner in this work, is that alongside the development of the HIV Medical Home is that they've invested resources in developing prevention services. And this is exemplified by the LifePoint Needle Exchange. This is built on the harm reduction model.

The definition of harm reduction is a set of practical strategies and ideas aimed at reducing negative consequences associated with drug use. And this is a model that's implemented nationally. It's limited, because it's not considered part of mainstream health care. And up until 2016, most federal funding was prohibited for supporting this, based on fears that providing needle exchange can encourage drug use.

So also because of the response to the Indiana outbreak, I think there has been a cultural shift that for most communities find this more acceptable, although still not all. But we still have a ways to go to incorporate this as a main strategy. And the amount of funding available for preventative service still lags quite far behind. It is still a far cry from what we're calling patient-centered medical home.

To review the key concepts of patient-centered medical home, it's definitely patient-centered. But because of funding limitations, the types of services provided in harm reduction centers, like needle exchange programs, is far from comprehensive. There aren't resources really to coordinate care, especially care that involves interaction with the formal health care system. And the services that other people need in addition to traditional harm reduction services, like addiction treatment, like immunizations and even primary care, are not always accessible to the clients who tend to use needle exchange programs.

So what's clearly needed-- and this slide is the motivating concept behind the study that I'll be talking about-- is that we need a new model of care, a new model of service

coordination. Needle exchange programs and similar harm reduction services are in many ways miles ahead of the health care service because they engage with a population that does not utilize care. They provide it in a nonstigmatizing way. And they develop the trust of communities of people who inject drugs over many years. But there's a lot more that can be done.

And what we're proposing is that we can build out services in prevention services using the needle exchange program model as a backbone, but then using the model of the patient-centered medical home, built something that we can really call the client-centered prevention home. We're not trying to replace or supplant primary health care, but we acknowledge that there's many needs that are going unmet by this population, and can we build out this harm reduction, or prevention services model, in a way that helps facilitate delivery of these important services?

So the study was designed to do this. And in the next 10 minutes or so, I'll talk about how this study was designed and what our early findings are, and where we're going from here. The grant mechanism for the Wisconsin branch of the rural opioid initiative was a five-year study divided into two parts. The first phase was called the UG3 phase by the grant-giving agency. It was from September 2017 to-- this should be August 2019. And we're finishing the phase 1 later this summer.

The goals of this were to estimate the zero prevalence of HIV and hepatitis C, to conduct a community needs assessment through stakeholder interviews, and to assess health behaviors and health care access using the client survey. We sought to enroll people who are existing clients of the needle exchange program in the six communities that I mentioned, as well as people in their social network. To be eligible, people have to be 15 years or older and inject the drugs to get high in the past 30 days.

It was not strictly limited to opioids, so any drug used for the purpose of getting high was acceptable. And we specifically targeted so-called nonurban or rural. The communities in our study are not typically rural as in they're sparsely populated, but they're definitely outside of the main population center in Wisconsin, which is really in the south east. And we know that the clients used in these what are really medium-sized cities across Wisconsin are often traveling from long distances to utilize services because they're not available in the smaller communities.

So on an individual level, clients who consented to participate would get rapid tests for HIV, hepatitis, and syphilis. They would do a computer-based questionnaire lasting 25 to 30 minutes. And if their HIV, hepatitis C, or syphilis test was positive, they would need to get a blood draw for confirmation, which would be sent to a laboratory. We used a strategy called respondent-driven sampling, which is that when we had participants who were eligible, they would get coupons to enroll people in their social network, or

other people that they knew who are also eligible for the study. And they received a small incentive to engage people in their social networks.

There's also a qualitative study where we did more in-depth interviews to really try to get a more in-depth understanding of the barriers that people encounter when trying to use prevention services or addiction treatment. The second phase of the study, which starts later this fall, is implementation of what we're calling the client-centered prevention home model. Whereas all the data that I just described collecting, we're in the process of synthesizing and thinking about, what does that teach us when we develop a model to build-- or an intervention using prevention case managers rather than the medical case managers to try to improve prevention services.

This is an example of what the-- some of the data collecting that would like. The map of Wisconsin, again, shows the six counties, the darkly colored ones. I think I can use my pointer again. The darker colored counties are where the prevention services offices are in these cities. And then the lighter shaded counties are where clients have come to these offices to use services. So this really is a very large study area that we're doing, even though data collection is centered in these offices.

The two largest offices are in La Crosse-- the city of La Crosse-- and the city of Green Bay, which is in Brown County. And this shows an example of one of the referral networks that gets generated on driven sampling. So the very first participant that was enrolled actually was over here in La Crosse. And we all remember the day we enrolled our first person. These individuals were people that that individual enrolled, and so on and so forth. And we've-- able to track these social networks, or these injecting drug use networks.

And the data visualization here shows that in the same network of people who are all connected by a certain several degrees of separation, there's a fair amount of heterogeneity about which drugs that they use most commonly. Here, the blue boxes are people who said that they use heroin predominately, where green is methamphetamine. And we can also distinguish people in the network, how many have had a reactive or positive hepatitis C test versus non-reactive.

So we're understanding a community on a somewhat granular level in understanding who in these networks are at risk, and who might be at high risk for transmission of hepatitis C, for example. Other general findings-- we've now enrolled over 800 people in this study. About 50% of them-- we found this interesting-- were not clients who used the needle exchange on a regular basis, meaning there were people rather in the social networks of needle exchange clients.

This was a deliberate goal of the study, to try to get people who might not be normal clients, who might not have relationships with the prevention staff at these places, to try

to see if these individuals are at a higher risk or have unmet needs. We've had a very thankfully low number of reactive HIV tests. There were three total. Two of them were already known and plugged into care. So only one new HIV diagnosis out of over 800 people enrolled so far, which is higher than the baseline prevalence from Wisconsin, but not by much.

There is a very large prevalence, a high prevalence, of hepatitis C. So 34% overall of people who have hepatitis C infection, about half of these, or approximately more than half, were unaware that they were infected prior to enrolling in this study. So this is one of our the most important finding so far, is that despite Wisconsin having a relatively robust network of needle exchange programs, there is a large amount of hepatitis C transmission going on. And we're seeing this in these networks.

Another thing that was unexpected-- because this was, after all, referred to and titled The Rural Opioid Initiative, because there's such an epidemic of opioid overdose. And that's really the-- with the injection of oxymorphone in Indiana that got everyone's attention and a well-known heroin epidemic, what we're finding is that of people who are injecting drugs and are at high risk for complications, slightly more than half now, as our most recent findings say, that actually methamphetamine is their so-called drug of choice, or the drug that they inject most frequently. We've also found that most people are injecting multiple drugs and go through periods where they inject stimulants and opioids one more than the other.

An important goal of the study is to try to understand how people perceive the accessibility of treatment and prevention services in the community. Our study is built around the idea that we might not be able to provide comprehensive health care for everyone. But there is a finite list of services that the World Health Organization and other human rights organizations have said that ought to be available for every person who injects drugs as a means to prevent overdose in HIV. And some of these are on this list.

For example, medication assisted treatment with buprenorphine or methadone or naltrexone-- when we asked people whether this was easy for them to get or difficult to get, most people said that it was more difficult than easy. The way that we listed the things here, the bottom are the things that-- with the large dark red are the things that people had the least difficulty obtaining. So clean syringes or needles or condoms, people had relatively-- were easy to access. But medication assisted treatment, immunizations for hepatitis B, were more difficult to get than the other ones in terms of treatment for sexually transmitted diseases. And access to naloxone for overdose prevention were in the middle.

I would say one of the most striking findings from our qualitative interviews are both a relative indictment of our mainstream health care communities, but also a real

endorsement of the harm reduction model, and specifically the staff that are engaged in the work. So I'm going to read these two quotes from some of the interviews. And I put them on the same slide just to juxtapose them.

We asked them, what's it like to receive health care in the area where you live? And what the respondent says was, when you go to doctors, they look down on you. It's the most ridiculous thing. It's embarrassing. It makes you feel worthless-- less than that. When you go to a doctor, and the doctor asking, why are your veins so knotty, when you have to tell them that you're an IV drug user, it just destroys the relationship you have with certain doctors. If you tell them you're sick or you need this or that, the first thing they jump back to is, oh, well, you're just an IV drug user. And you're just going to come here looking for pills.

This was a sentiment that was not unique in the interviews that we found, that people feel relatively stigmatized by receiving routine health care. By some contrast, when we asked, what's it like to receive services here at the syringe service program, they say it's wonderful, that they don't make me feel like I'm a piece of expletive drug user. It's kind of weird, to be honest with you. The ladies here and this guy, they're awesome. They make you feel like, what can I do for you? What do you need? Do you need anything else? Can I help you with anything? Do you want to get educated? That's awesome.

So this reinforced our suspicion, or our hypothesis, that service organizations or community group organizations that are engaged in harm reduction is a very important place to start, because it's a place where we can start that might start to undo some of these years of toxic stigmatization and criminalization that has really pushed people who inject drugs away from routine health care situations. The stigma and marginalization come up over and over again when we talk to people about what it is like to them, what keeps them from using services.

Here are two additional quotes. First was, I was supposed to bring five people to participate in the study, but nobody would come. They're scared to come here, because they feel like they're going to get arrested because of being a user. And we shouldn't have to feel scared. I know it's illegal to do drugs, but wouldn't they rather us be doing them in a safe way than frigging dying and getting diseases and infections?

And a really impressive quote-- I think this was a different person on the bottom said, I've been in the situation-- talking about why people don't call 911 after they used naloxone. And only once did they call 911. But I always tell them, if I overdose and I don't come back, just drop my body in the alley, but don't say anything. If anything, call my mom or sister. I don't want the stigma attached to me that they got a junkie overdosing in their house.

So this was more than expected stigma and marginalization. It was a challenge that's encountered. And speaking as a physician and someone who provides health care, I think we need to own this and look at ourselves and say, how can we do better to make people who have these extraordinary needs feel more welcome in health care situations? And another piece of our study-- we got supplemental funding to look specifically at the provider angle of this issue.

I'm going to present some of those findings next. We do what we call the Wisconsin Primary Care Provider Survey. And it was a substudy of this rural opioid study. And the goals were to-- a couple goals. But we wanted to try to identify how many people were currently-- had as their job description, primary care providers. Not addiction medicine specialist, but primary care providers, specifically family medicine providers, who had adopted medications as a treatment as part of their practice. And what's special about them? How is it going?

And what can we learn, if anything, about how to motivate other people in the primary care workforce to help take this on? We wanted to look at rural and urban differences in providers to see whether the rural primary care workforce might have a bigger role to play because of the relative absence of specific addiction treatment in rural communities. And we had a hypothesis. We just wanted to explore, building on some of these testimonials that we heard from our patients, do providers—do they feel like they have stigmatizing or negative attitudes? And is that a barrier to primary care in rural communities?

So before I get into that, there's one more-- this is sort of the last literature review slide I wanted to-- but I think it's very important. So the reason that I think it's important to engage primary care workforce in addiction-- or particularly opioid treatment, is that this problem has gotten far too big for specialists, addiction medicine specialists or methadone clinics, to take on. And we have really effective tools. So this study was from an all payers claims database in Massachusetts.

And it looked at people who had a non-fatal overdose who came into the hospital, or some clinical setting, like an emergency department, and had a non-fatal overdose. What were the risk factors for having a subsequent fatal overdose? And they looked at who was prescribed medication. And they looked at whether people received methadone, buprenorphine, naltrexone, or no medication for opioid use disorder. And they found a pretty robust treatment response.

So of all the people who had a non-fatal overdose, within one year, 5% had a fatal overdose and had died. And that was people who were linked to methadone. After having an overdose, it was 2%. And lowest was down to 1% of people used naltrexone. So this is strong data that linking people to treatment-- and I intentionally use the word linkage to care, because that's something that we've talked about in HIV for decades

now, is that when someone has an HIV test, that is the moment where we need to link them to care. And the sooner the better.

And so if you link people after non-fatal overdose to MAT, Medication Assisted Treatment, there's a mortality benefit. So that's the good news. But the bad news is in the second slide from the same paper showing just how few people were linked to care in the year after they had a non-fatal overdose, despite there being a really potent mortality benefit from these drugs. Only 10% to 15% received any MAT during the 12 months following a non-fatal overdose.

So there are numerous reasons for why these are. But again, learning from HIV where-we use as a quality measure in public health settings and in our health systems, how many days does it take from the time to someone having a positive HIV test to getting on treatment? And if it's less than 90%, we feel like we're failing. So having that high of a standard to get people on evidence-based treatment is a strategy that I think we need to pursue. And this is just an example of how far away we are from having that same kind of success.

All right. So back to the provider survey. We used a male based survey. People got a \$5 incentive whether they returned it or not. We sent it out to 1500 providers, and we sampled family medicine providers across Wisconsin. And we slightly over sampled people in rural counties and slightly under sampled in urban counties. And we also tried to send a questionnaire to every single person that we knew from the SAMHSA database had been waived, had received a waiver to prescribe office-based opioid treatment with buprenorphine. And we did this last summer.

So we got a good response, over 600 people from all over the state. And after three mailings, we got a 45% response rate, which is not bad for physicians. Speaking as a physician who gets a lot of surveys, I personally have a less than 45% response rate. So I felt OK about this. So what we found. So of the 600, only 78 had received the waiver to prescribe office-based treatment with opioid use disorder.

And again, this isn't the percentage. We tried to sample everybody. So this is-- the best we could tell, far less than 1% of family medicine providers have-- I'm sorry, not less than 1%-- about 5% had a waiver in our sample. But concerningly of those, the largest-the plurality of primary care providers that had a waiver said they weren't using it at all. And another 26% had prescribed between 1 and 10 patients. There was only a few-there was less than 20%-- that had over 50 patients who they were prescribing office based opioid treatment for.

And when we asked them, why not? Or what gets in the way? These are providers who are clearly motivated to treat opioid use disorder among their patients, because they had to go through the training and get the waiver. And we asked them, well, why are

you doing it more? The three big ones were time constraints-- in primary care settings, we don't have a lot of time. It's not necessarily easy.

The other thing was-- the biggest one was that-- I think, in my opinion, a correct assessment that this works better if there's also addiction counseling and other mental health services available. And most of the providers in our provider survey said that they would be doing it more if they had better mental health services to use And when we asked them about to self-report some of the attitudes that they have, for what it's worth, people shared that they do have some negative beliefs. Like when we asked them-- and here on the bottom, despite my professional beliefs, I have negative reactions toward people who have opioid use.

And a third of people said, yes, I do. These other stigmatizing beliefs, or that people with opiate use disorders overuse health system resources-- more than half people said that. So there's a wide range of how people responded to this. But I think we found that they're prevalent. It's not rare for people to have somewhat negative opinions about providing treatment to people with substance use disorder in the primary care settings.

This is one of the most disappointing finding from the standpoint that we need to have more of an all hands on deck approach, is that both rural and urban providers both said that they've-- the most common was that people are not at all likely to want to do this in the future. So it's definitely a minority of primary care providers who are considering or doing this. At least that's as of last year among family medicine providers in Wisconsin. This does not seem to be a high priority in terms of adopting new practice.

So what's next? So we've learned a lot about risky behaviors. We've learned that there is a growing and high-level hepatitis C epidemic. And we learned that there is a nuanced and somewhat complicated set of barriers to engagement in care. So how are we going to tailor this intervention next? So what we're planning to do in the next phase of this study is develop an intervention that we're calling prevention navigation.

Health system navigation sometimes used by peers, known as peer navigation-- it really developed initially in cancer settings for people who get a diagnosis and are facing a complicated health system and can tend to feel overwhelmed, may have low health literacy, may be underinsured, and not have all the resources. And so we're taking that approach that with some tailored, patient-centered, ancillary support that exists not outside of health care systems, but helps people navigate systems that will be able to help reduce some of these barriers. The goal of the CCPH-- and we're calling it the Client-Centered Prevention Home-- is to increase knowledge of people who inject drugs on navigating prevention treatment services. We're focusing on HIV and hepatitis C as well as overdose.



The idea, the title, or the evolving job description of the prevention navigator will be to provide intensive care coordination support services for HIV negative individuals who request assistance in accessing services to prevent infectious disease consequences. Our thought is that they will work alongside the prevention specialists. So within the ARCW, department of and services, the professionals that essentially run the needle exchange are in the community-based offices and provide education, and do rapid testing, and do a lot of service coordination, and give advice, and are really seen as a resource.

But the volume of needle exchange and other things doesn't allow them to do higher level things, like helping people get enrolled in insurance, for example. So our idea that we would have a prevention navigator that works alongside prevention specialists to really focus on a subset of people who could really benefit from or who have a need in getting plugged in, to help reduce the barriers on a really case by case basis. So the risk reduction counseling will be similar to what happens now in needle exchange programs.

The care coordination, or the prevention service coordination, based more on a protocol, be slightly more client-centered, in that people will have a chart. In health care systems, everyone has a chart, or if not, an electronic medical record, at least some record of, when was the last time you had this test or this vaccine? Needle exchange programs don't operate that way, and I think for good reason, because we want it to be low threshold.

We want people to feel welcome. We don't want to-- if people feel more comfortable using these services anonymously, that's important. But to take the next step into more formal care coordination, we're going to try to coordinate in a way that's more person centered and has a little more investment of time, then, with clients and providers. So there's different models that we could-- We're exploring both.

ARCW is a health care organization and could potentially provide some of these services such as immunization, at least in the Green Bay office, which is where one of the intervention sites-- they have nurses and providers and could potentially colocate treatment. But I think more often than not, it will be identifying resources in the community and helping people navigate the systems after building skills and making sure that they have insurance.

Another important part of our work that has been a goal from the beginning and will become increasingly important as we start to implement the study, is partnerships with other agencies in the communities that are already engaged in the response to opioid and methamphetamine use disorder. So local public health agencies have been important partners from the beginning. They already do hepatitis C testing. They do testing in jails and other settings. And they come across individuals in the communities

through their outreach and through testing who could benefit from care coordination, some of whom might not be existing clients of the ARCW.

The counties that we've chosen to work, perhaps uniquely so-- and I say this based on sharing notes with collaborators in other areas of the country-- these counties tend to have robust task forces. I think La Crosse in particular has an alliance that involves all sectors of public service, including law enforcement, and health care, and public health, and faith-based organizations, and recovery advocacy communities. They've done all this well before the study was launched and have these task forces and multistakeholder groups.

And I think that's been a really a facilitator of thinking about the best way to do this is to realize, what are the resources that are already in place in communities? And how can the existence of a new trained workforce that is based on the harm reduction model complement and perhaps help people get connected to the existing resources that are there? And dealing with health systems, so we have a dire need for getting people linked to treatment for hepatitis C, which is after all curable. And the same goes for HIV, where if people have no detectable virus in their blood, they're not contagious.

And if we could scale that up and get the majority of people with hepatitis C treated so they're not have the virus-- then we're going to cut down transmission. But that requires a health systems approach. And we need to make sure that people who have addiction treatment coordinated with their infectious disease treatment and their primary care providers to make sure that all folks are on the same page, and that patients feel like their needs are being met. So these are big challenges.

And I think we've collected enough information, engaged the right people that we can develop strategies, even though we might not have the answer. But I think we have rich opportunities to work together on an ongoing basis to figure out, what are the best ways to get people connected to services? On an individual level, how we see the program working is that people who are clients of the needle exchange program-- we'll probably prioritize people who have a positive hepatitis C test or express motivation in getting linked to either treatment for hepatitis C or medication-assisted treatment.

There'll be an intake where they do an assessment, and a needs assessment, and a service plan development by the prevention navigator. The service plan will be implemented over a period of three to six months with a checklist approach to say, are these the service goals, and have we met them, and the possibility of being extended or intensified. And then if and when goals are met, people can be discharged.

The service plan will be modular in that there'll be-- over the summer, we're going to be developing individual level training modules that are based on motivational interviewing and accessibility of specific needs, like how do you navigate the health care

marketplace in these specific cases? Who is eligible for Medicaid, and what forms do they need? So there'll be a training plan for the prevention navigators to be able to do this.

But when the protocol is developed, there'll be a manual, which, based on an individual's needs, we can do over a three-month intervention. Not everyone might express readiness for addiction treatment, but we will use a motivational interviewing approach or a readiness to change approach and see, can we move people along that stage? There are other things.

We have some partnerships here at the UW who are really interested in community-based approaches to smoking cessation, which initially wasn't on our radar screen as a high priority for this population. But we learned that something like 92% of the individuals who are using services at ARCW for needle exchange services are current smokers. And many of them want to quit.

So even though I think there's probably a bias toward having bigger fish to fry and wanting people to get treatment for their opioid or methamphetamine use, we've learned also from HIV that when we control people's HIV, they're more likely to die in the long run from cardiovascular disease like everyone else is. So since we are engaging, we would feel like we would be shirking some duty by not making evidence-based smoking cessation treatment for people if they're interested. So that'll be part of the intervention.

So right now, we are in year three of the study. We're proposing our transition from the planning phase to the intervention phase. Over the remainder of 2019, we'll be developing all the content for the patients-- or the prevention navigation intervention.

With input from our community partners, we'll be pilot testing these. In the Fall, we'll be hiring and training prevention navigators to work at ARCW. And then hopefully in early 2020, there will be a new staff member at these offices, and we'll start enrolling individuals and collecting data about both the processes and the outcomes.

We've got nowhere to go but up. When we looked at the linkage to care outcomes related to hepatitis C of our first study, we found only 1 out of about 200 people who we diagnosed with hepatitis C seem to have been linked to treatment. That's just unacceptable. And there's many barriers other than difficult to navigate health system for this. And so we're not going to fix the problem all at once, but we clearly have opportunities to move the needle in a very substantial way in getting people linked to services that they're currently not using.

So another thing-- and this is, I think, an important plug-- again, the ATTC network I think is largely based on people who are already engaged in addiction treatment and services in some capacity. So this might be better tailored toward our colleagues who

are in primary care who are not-- one of our collaborators, Dr. Randy Brown, who I think has provided previous webinars for this group, is leading a project ECHO here in Wisconsin, which is a national institute to provide telephone or webinar based support for providers who are trying to deal with difficult cases and get additional training.

And they've recently rebranded this as the ACCEPT, or the Addiction and Comorbid Conditions Enhancing Prevention and Therapeutics. So the target population for this is any provider who wants to take on-- wants support in addressing addiction and its comorbid conditions, which I hope in the coming years we'll increasingly focus on hepatitis C and other infectious diseases, because there's such a need. And the web link here is something that you or your colleagues might be interested in for the webinar in the future.

So in summary, we have a strong evidence-based toolkit to treat opioid use disorder and manage its consequences. But these are dramatically underutilized by many in our communities, and particularly in our rural communities. And there's an urgent need to implement these tools more effectively and equitably.

And my thesis, or what I tried to convince you of in the past 50 minutes or so, is that there's a lot we've learned from the HIV/AIDS epidemic on how to take patients who are marginalized and have a lot of unique vulnerabilities and help get them connected to services. And this works best when it's patient-centered, free of stigma, and coordinated. And our hope is that the model that we're developing with input from really a lot of committed people in the communities will help us make progress in this regard in the coming year.

So we're limited in the ability to having a discussion. So I guess it'd be more of a Q&A, because I'm the only one who actually gets to talk. But if anyone would like to share a reaction or host questions in the chat function, we can spend an additional 10 minutes or however long we want on getting clarifications or sharing the experience. So I'll stop there and open it up to the group.

PRESENTER: Thanks so much, Dr. Westergaard. We do have some questions that have come in while you were speaking. And I'll start with the first one. The presentation discusses the prevention navigator that will be used in the implementation phase. I'd like to learn more about this-- how this person is trained and opportunities to promote, to have more information.

RYAN WESTERGAARD: Yes. Well, I'll tell you. So it doesn't exist yet, but I'll tell you our approach, our strategy. So one of the--- I think, again, one of the strengths that we have here in our partnership in Wisconsin that involves the AIDS resource center of Wisconsin and the State Department of Health Services is that we received support

from HRSA five or six years ago to develop what I would call a pretty analogous type of intervention for people who are marginally engaged in HIV care.

It was called the systems linkages to care-- I'm going to mix up what exactly it was called. But it was a special projects of national significance funded under the HIV program to develop this one-on-one, intensive patient-centered support to make sure that either people are linked to HIV care promptly after diagnosis, or receive additional support to mitigate the risk that they will become disengaged if they're considered to be high risk. So we're using a protocol that was built for this HIV linkage to care, or intensive case management, or patient navigation. We prefer to do it by all of these somewhat interchangeable terms.

But we're using that experience as a starting point, and in turn, to think about things about what type of background do people need to work well? The questions, for example, does someone with training in-- someone with a master's in social work compared to someone who has lived experience. And we found that both models work. And I think the job description is going to be somewhat vague about the ideal qualifications, but more about experience and working with the population.

And the training will be done by our staff, which is comprised of a fair number of social workers, community health workers, and clinicians who will develop and train these individuals over the periods of four to six months before we go live. And the AIDS Resource Center of Wisconsin has this probably 20 medical case managers on staff, and we're hoping to engage them in some of the day-to-day skills that are needed to support people.

So we are explicitly, like I alluded to through the talk, really borrowing from what we've done for supporting vulnerable patients in HIV care. But the specific training materials and intervention content is going to be developed over the next six months as we synthesize all the different types of data that we've collected in the last year and a half or so.

PRESENTER: Thanks, Dr. Westergaard. There's another question related to that. Where are the sites that will be implementing prevention navigators?

RYAN WESTERGAARD: The limitations of the funding were that, of the six sites that we started, we had to pick three for the intervention. And we're cheating a little bit, meaning that the ARCW has offices in Appleton and Green Bay. And they're close enough, and the services in these areas are overlapping enough that we're hoping that we can have one prevention navigator that works with clients in and around that Green Bay Fox Valley area. So that will likely be one.

The other likely, too, will be in Marathon County, which is in the city of Wausau, and also La Crosse County. So the two other sites that we're engaging are Douglas County, which is Superior and Eau Claire County. We have certainly not given up on the ability to do this. We might need to find different funding to have this strategy going forward. And there may well be. Similarly, there's four other sites that ARCW has infrastructure to do this.

So we want to do this everywhere that we have prevention services. But we're having to roll it out in a way where it's limited, somewhat by funding availability. And really the goal-- and this is the goal of all of the projects funded under this national collaboration-- is that we don't want this to be a study where we're doing-- a research study that we try something, and then the funding goes, and then it stops.

We're really trying to build this toward sustainability. And I think the goal is if we do something and we do it well, and we evaluate it in a way that shows value-- that it's something that can get expanded everywhere. But those are our immediate next steps, and then our aspirations to expand after that.

PRESENTER: Thank you. Another question. Without risk stratified assessment that evaluates lifelong risk for developing SUD chronic illness versus only acute tools currently available, how do we extend prevention of SUD prior to injection-related disease transmission?

RYAN WESTERGAARD: So this is a question about how do we focus on prevention of substance abuse rather than mitigating its harms, like we're doing. So that's a big question, and something that task forces and the stakeholder groups in our communities are really working on with law enforcement and schools and all of the things that-- how do we identify people who are high risk and prevent substance use disorder? And I'm afraid our particular project, that might be a little bit out of scope.

We're happy to be part of the solution and take lessons learned about this. But I think the upstream social determinants of health and of substance use disorder are really things that need to get addressed in a wide societal level. I think our project is really focused on putting out fires and really preventing bad outcomes from people who are currently injecting drugs and the extent to which we can learn about what has made these individuals' lives so complicated.

And for example, the traumas that people have experienced and the stigma that people have faced I think may have lessons for primary prevention. But the tool of the strategies that we're talking about aren't really primary prevention. They're really prevention of consequences of people who are already quite high risk.

PRESENTER: Thanks. And our next question is, how do we get more waivered providers unless we give them assessment tools to build their comfort in who and how to differentially treat? There's not even any standard for how much or which MAT and for what minimum duration best fits with risk level?

RYAN WESTERGAARD: Yeah, that sounds like more of a comment than a question. And I think it's good. I think it's true. I think, in some ways, my analogy of linking people to care for HIV might fall short a little bit, because if someone has HIV, there is one answer. They need to be on antiretroviral therapy relatively soon and for the rest of their life, or we know what happens. And I think people with opioid use disorder, it's much more heterogeneous.

Some people don't want it. It's the risk, the clinical efficacy. And the way that people respond is certainly less than the degree that we think of with treatment for these infectious diseases. So I'll take that as a point well-made rather than a question to say that I don't personally fault providers who are not engaged in this. And I think we're coming at it from the standpoint of, those are the questions.

And what knowledge gaps need to be filled, and what logistical or systems level barriers need to be ameliorated in order to allow more primary care providers to take this on? But I think there certainly are good reasons and certainly justifiable reasons where it's not feasible for many, or if not most, primary care providers to be engaged in this. But at the end of the day, there are evidence-based treatments that we can certainly strive to have wider implementation of.

PRESENTER: Thanks. And here's a related question. This participant said, this is excellent information-- barriers to treatment in rural areas beyond general stigma, distance to services, lack of services. There's also the nonforgiveness for past behaviors. Can this be affected through patient center support?

RYAN WESTERGAARD: I think that's a fascinating question. But I guess when we've talked about-- so the lack of forgiveness for past behaviors, I think when you first said that, I put that in the category of stigmatization or just judgment. And we've had a lot of debate about this. If we've identified stigma and judgment and criminalization as the problem, how does a patient address this - it's not the patient's fault necessarily. How does a patient-centered intervention address those things?

But that might be right. We're not going to fix a lot of prevailing culturally or socially held conceptions and fix stigma with this type of intervention. But we might reduce some of the harms that that environment has on individuals. And as part of our multi-state collaborative, we had a guest speaker from the New England site who works on individual level stigma, reducing interventions. And what does that mean?

So it was a patient level-- or individual level intervention that didn't try to fix what other people-- other people not forgiving them. But it trained resilience, almost like-- it made me think of how people who do mindfulness-based cognitive therapy for things like chronic depression or chronic pain, saying, just the fact you live in an environment that can be toxic and you have to endure these things doesn't mean that you can't meet your goals and you can't have a fulfilled life. So that's not solving the problem.

But it's consistent with a harm reduction approach, I think, to the extent that there are strategies to help people function and feel better about themselves and have a sense of self-worth inside a society that is very stigmatizing. It seems something worth doing. And you may have noticed on, I think, on my bulleted list of potential modules that's something that we'd like to think about.

Can that or should that be a standard part of the services we provide people, to say, look. You're worth it. You deserve treatment. You might not always be made to feel that way when you access treatment, but it's still important. And let's come up with strategies to do that. So I think it's a promising approach. I don't think we've figured that out yet in our study or any study.

But I think there is a way, at least I'm hopeful that there is a way, to address the toxic effects of stigma and criminalization short of fixing the structural level barriers or the societal barriers. But of course, we still need to try and do those other things as well. We need to change discriminatory policies, and we need to have those discussions about acceptance and forgiveness and judgment. So we're trying to address that to the extent we can. But thanks for bringing that point up.

PRESENTER: And here's another question, also related. We have three providers newly waivered as MAT providers, and they're starting to get negative responses from our chemical dependency treatment partner organization. Do you have any tips on how to alleviate distress between the traditional abstinence treatment model and the harm reduction model?

RYAN WESTERGAARD: I'm going to try to read that question again, because I want to make sure I understand the dynamic here. So there's addiction treatment providers who are more of an abstinence-based paradigm, who are providing negative feedback to providers using medication assisted treatment?

PRESENTER: Yeah, that's it.

RYAN WESTERGAARD: Yeah. Yeah. Yeah, I don't have specific advice on how to manage those interpersonal conversations. I tend to approach things as a scientist and say that opioid use disorder is a chronic health condition that has specific diagnostic

criteria. And when you use those criteria and you do a clinical trial with these tools; people stay in recovery longer and they overdose less. So why shouldn't we use them?

So that's been my approach, is to try to steer away from ideology and more toward evidence-based medical practice. And I think the evidence is pretty strong that these are tools-- they're not a magic bullet, and they're probably not as effective by themselves as they are in a comprehensive care model that includes one-on-one counseling and psychosocial support and everything. But I think there is some stigma, or there's some antipathy toward medications because they're medications.

That hasn't really gone away to the extent that if you look at it just through a lens of an evidence-based medical treatment, I would expect. This is a common thing we've heard in our partners-- the other collaborators in other parts of the country, in Appalachia and New England, have told us the same dynamic is going on. In fact, there's one county in Kentucky that actually outlawed buprenorphine.

They passed an ordinance that no one can prescribe buprenorphine in the community, because they thought-- I actually don't know the precise justification, but there's some widespread antipathy toward medical treatment for various reasons, in the treatment and the nontreatment community. And I don't have the solution for that other than to think about it in terms of an evidence-based treatment model and hearken back to, what effect do we know that it has outcomes if we study it rigorously?

PRESENTER: Thanks, Dr. Westergaard. Our next question is about the service plan. You mentioned the service plan lasting three to six months. Is this flexible? After obtaining insurance, it very likely could take a couple of months in rural areas just to get an initial appointment with a provider.

RYAN WESTERGAARD: Yeah. I agree completely. And the way that we've thought about it would be that there would be a three-month service plan where we say, these are the things we want to try to accomplish within three months. And then there'd be an assessment at six months, say, are we making progress? Have we met all our goals and can the client graduate?

Then it would stop there. And if not, we could extend it. And I think what we've learned from our HIV linkage to care program is that it often gets extended, and appropriately so. The challenge would be that some people benefit from this type of support are never going to stop needing it or stop benefiting from it. And that's going to be a challenge, because this isn't necessarily a general case management to help-- so with all of someone's needs, we want it to be somewhat focused on prevention needs related to injection drug use.

And so that's a dynamic we have to work on. But our expectation is that it probably would be up to a year. But you nailed a very specific issue that we've encountered on the HIV care side, that if we try to have intensive time-limited case management, that helps a lot of folks. But if you stop doing that, some people are not going to do well.

And we don't know exactly how that's going to play out, because it's in the prevention services side and not the care side where people are necessarily going to have an ongoing doctor-patient relationship, for example. I don't think it's going to be longer than that. It's really going to be focused around the goals. And I think 6 to 12 months would probably be the longest.

PRESENTER: Thanks, Dr. Westergaard. We have another participant who just has a comment. Our major challenge is transportation and ACP counselors managing clients' well-being.

RYAN WESTERGAARD: Yeah. So transportation in more remote areas I think is going to be a limitation to this as well. One aspect of this study that I haven't talked about is the degree to which we might use some mobile health technology. I think because there's no shortage of need in the medium-sized cities where the study is, I think that's likely where most of the clients are going to come from.

But we know that people are driving for a long distance to use needle exchange, for example. And we wanted to make it available to provide some support possibly remotely. So some of our other work uses a mobile health application called HS that provides addiction treatment support. And we're exploring ways to use things like the chat function to talk with a prevention navigator, or even a group chat, and this is just to get support and information.

So we have a tool that's being used in other studies that we may pilot test incorporating here that we can try to provide care coordination services for people who are over long distances. And I think even in the cities where we're working, I think that would be useful, because transportation within a city can be difficult. And the degree to how much this prevention navigation intervention happens by phone or by text is something that we're going to learn how we go.

I think it's probably important to have at least one or two in person, face-to-face meetings where you get to know someone and make a good personal connection. But my guess is a lot of the follow-up interactions are going to be remote through text or by phone, or potentially through the mobile health application, to the extent that we get that implemented.

PRESENTER: Thanks for mentioning the HS application. And there's been a lot of conversation in the chatbox about project ECHO. So we've added that web link to the resource in one of the pods next to the slides.

RYAN WESTERGAARD: Great.

PRESENTER: And also, there's a link to the addiction hotline-- or, I believe it's called the WarmLine that's available in Wisconsin. Do you want-- mention a little bit about that, Dr. Westergaard?

RYAN WESTERGAARD: I'm not directly involved with that, although I see that Bree, who's chatting, is. I think if she shared her-- I don't want to put you on the spot sharing your email, but there is an accept ECHO email address. I think those would be either web resources and reaching out to Bree directly would be useful.

So in our family medicine department, we have an addiction medicine training program. Dr. Brown, who I mentioned as the PI of the project ECHO, also helps coordinate this addiction medicine WarmLine. So we have a growing number of providers who can provide technical support around the state. And I think there's funding support for it, and that's clearly a need. So I don't hesitate to ask for additional resources, if you're interested.

PRESENTER: Thanks so much. Let's see if we have any other questions that have come in. I don't see any new questions, but we could give it a couple more minutes, if you'd like.

RYAN WESTERGAARD: Alternatively, we can come back in a year and give you update on how it's going. And I would be happy to do that at some point down the road. We're learning lessons every day about the best way to work in this area, and we're happy to share it to the extent that the ATTC network of providers is useful.

So please let us-- send any feedback if this was helpful or unhelpful. You can reach-follow-up questions by email. I'm happy to respond. If my email wasn't on the registration of links, I'm happy to share that for this group. So I'm happy to wrap up there.

PRESENTER: Thanks so much, Dr. Westergaard. And we'll definitely take you up on that and look at the calendar for setting up a follow-up webinar for 2020.

RYAN WESTERGAARD: OK. You're on.

PRESENTER: Or sooner. OK. RYAN WESTERGAARD: Thank you, everyone.