

**No Wrong Door for Opioid Safety  
How to Use Local Data for Measurable Results**

November 5, 2019

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>> Laura: Welcome to no wrong door for opioid safety. How do use local data for measurable results. My name is Laura Burr and I'm running this Dialogue 4 Health web forum with my colleague Tonya Hammond.

>> We thank our partners for today's event the California Opioid Safety Network. The Center for Health Leadership and Practice and the Public Health Institute.

Does your organization have work that professionals connected to public health should know about? To disseminate it to 25,000 Dialogue 4 Health subscribers contact me at Dialogue 4 Health.org.

Now it is my great pleasure to bring back Dr. Matt Willis. The moderator for this event. He is the clinical lead for the California Opioid Safety Network and public health officer for Marin County. Matt calls on experience as primary care physician and epidemiologist at the CDC to guide response to the opioid crisis. Welcome back to Dialogue 4 Health, Matt.

>> Matt: Thank you, Laura, thanks for that introduction good afternoon, everyone, it's awesome to be here with you today amazing panelists to talk about local data.

One of my favorite topics in guiding local opioid response. You will hear from speakers who work on the front lines today to keep our conversation grounded and the realities they face every day. Our hope is that you will come away with some practical tools that you can consider applying in your own setting.

Please do use the question feature along the way. I will be moderating questions and pose them to our panelists at the end. This webinar is the second in a dialogue 4 health webinar series that has four parts. After this conversation about data. In December we will discuss communications bring again experts from the front lines to help answer the question what are the most effective messages and means of communication to mobilize local opioid crisis response? And finally in January, we will talk about sustainability to ensure that our most effective strategies are secure and in place for as long as they are needed.

The California Opioid Safety Network is a collection of coalitions and organizations working at the forefront of the epidemic. This series is convened by COSN, which is led by Dr. Carmen Avaras I help support as a clinical lead. We invite leaders doing the work itself within California and the nation to share their lessons.

The Opioid Safety Network connects coalitions, organizations and individuals across California to accelerate our collective response. The network includes opiate safety coalitions in 38 of 58 California counties that are shown here on this map, which cover about 85% of the state or 33 million lives.

Our hope is that because California is one of the most diverse states and it has one of the most economically racially and politically diverse populations, large rural and urban areas, we hope that lessons we are gleaming here can be spread nationally while we learn from each other.

Let's talk about what we're talking about when we talk about data. There is a lot of different ideas of what data represents to different sectors. And I just want to be clear today we're talking about using local opioid overdose data to guide timely local response to limit overdose deaths. This is the Cambridge dictionary definition of data which is information, especially facts or numbers, collected to be examined and considered and used to help decision-making. So there is some important verbs here for us, which is not just the selection of data itself but actually the implication that it's used effectively for action. So one of the primary goals today is determining what the sources of data are for us but then also how to translate that into real life action in our communities.

Last month we talked about this info graphic and we had our session on partnerships. Note that at the top this starts with, quote: A rise in overdose is detected. This today's talk is taking us to that step to the data that allows to us detect that special action is needed and in some way to the interventions

that follow.

So this is, you know, some prompts to think about. You will hear from a small county program using 911 data in California. A hospital-based program using E.D. data for overdose follow-up and national program that uses first responder data describe overdose clusters. Hopefully as you listen you can think about would using our data in this way be helpful to us?

What are the comparable data sources in our setting?

What elements of these systems could we start to build now?

And what resources can help us begin?

I'm going to start with, you know, before we hear from two amazing programs that originated in the middle Atlantic states, we're going to start at much smaller scale and briefly describe a program I have been a part of, a county-based initiative that uses local 911 data. Marin is a county of about 250,000 people near San Francisco. The 911 ambulance response system is based out of fire departments and uses a single electronic medical record. Last year we built a system to use this data to identify people who had overdose events to offer outreach to survivors. Because one of the most important predictors of a fatal overdose is a nonfatal overdose. You will hear more about that from Sadie Smith later.

So our process is relatively simple. We use algorithm created by our wonderful epidemiologists which we will gladly share on the website among the resources that we will share later that automatically queries all the 911 responses and polls suspected overdoses using some structured field responses like Narcan use with a possible revival response and some key word combinations from the medical record pretext.

Typically we see about five overdoses, suspected overdoses per week. Behavioral health who perform outreach by phone to those patients who have had suspected overdoses within one week. The counseling is guided by what the patient wants, including counseling, medical referral treatment. Making sure they have access Naloxone. The goal is to extend a hand to support and some will take that hand.

These are the results of the proportion of suspected overdose survivors in the Medicaid population in Marin who had a treatment encounter within seven days of their overdose event before and after the event started. Number increased from about 1 in 10 that 9%. Or 8.7% to 1 in 5. The 21%. We're still working on selecting data on longer term outcomes but it's promising to see up creases in people taking that first step and engaging a treatment provider.

At the same time, a system like this also allows us to look at

population based data and track trends. This is a screen shot of the weekly summary of all the events since the intervention began to show areas with the most activity.

And this is just an example of the report that is offered to public health and behavioral health weekly that shows the number of overdose events that occurred that particular week. So this is last week's report, which we had an uncharacteristically low number of overdose events in Marin. Perhaps because we had no power for most of the county for most of the week. It was a quiet week for us with all the power outages and fires that we were experiencing further north in terms of overdoses.

Interesting observation. Normally we see about five. This is the lowest we have seen in the past -- since we began this intervention. And the location is noted by the number. That number one is where that one overdose event occurred. And then finally, we also use this data to see longer term trends shown here with all the weeks since June. We recently added methamphetamine, since we are seeing more meth use. And we are still working on how best to capture meth-related events using E.M.S. data, which is important for our future discussion. So that's a brief description of a small-scale county level approach in California. Some key take homes are that, one, that 911 data can be resourced for both individual follow-up and population level surveillance. Two, that Narcan administration by E.M.S. is a poor proxy for opioid overdose. We found that it's frequently used in other states of unconsciousness or altered consciousness. And sometimes not used in opioid overdoses especially if it's been administered by a bystander. And, three, telephone outreach is feasible and seems to increase rate of follow-up into care.

The protocol for this project will be available on the COSN website here, [www.californiaopioidsafetynetwork.org](http://www.californiaopioidsafetynetwork.org) along with other resources from the other Morrow best and promising programs that you will hear about now. So I would like to introduce Aliese alter. Aliese is the ODMAP program manager for the Washington Baltimore HITDTA. She manages OD map outreach, program development and implementation. She interfaces with partners representing government, law enforcement, and public health nationally to support data driven efforts to reduce overdoses. Aliese previously served as a detective in Richmond. How awesome is that? And is pursuing her masters of public administration at George Mason university. Welcome Aliese.

>> Aliese: Great thank you so much for that introduction, Matt. I will give more details shortly. Before we talk about where we are and where we are going, I think it's really important to

talk about how we got to where we are today. And so ODMAP was a proof of concept in the fall of 2016. At that time there was a convening in Baltimore of stakeholders in our backyard ranging from health and law enforcement, E.M.S., and there was realization of some of the barriers that we are facing. During this time, especially on the east coast, there was an increase in lethal drugs, particularly fentanyl. There was also the realization that nationally and even regionally and at the state level we're pretty good at tracking and reporting our fatal overdoses. There can definitely be a lag in time with that reporting and there was the realization of there may not be even any collection occurring for nonfatal overdoses, which met reiterated those are extremely important in our primary and logical source of intervention efforts.

It was also realized at this time that first responders may look back at calls for service and they would realize, you know what, last week on Tuesday, we had abnormal number of overdose calls and unfortunately many times that's where that conversation started and ended. We thought about how great would it be to be able to have this information in near realtime and respond in realtime as it is unfolding? And then, most importantly, insufficient information sharing was occurring depending on where you are, you may experience this at the county level. Maybe it's a regional thing or maybe it's within the state or outside of the state. So often jurisdictional boundaries are kind of where our data sharing stops and ends and it's really important to share drug trends and data outside of those jurisdictional lines. We all know that drugs don't discriminate and so it's really important to make sure that we are sharing information. And this can be not just sharing across jurisdictional boundaries but across disciplines as well. And I reflect back to my time as a police officer and detective where I was in Richmond, Virginia for about six years up until summer of 2018. And I recall one person, specifically, that I had transported to jail for possession of heroin. And during that time in transport we got to know each other through conversation. And eventually she ended up getting accepted into drug court where I was invited to her graduation. And then, unfortunately, a couple months later I was dispatched back to her house for a DOA. And I knew that it wasn't her. I knew due to the age of the person on the call, but she ended up being there, and it was one of her close family members. And I remember thinking, you know what? This is a really important time for her. She is a recent graduate of drug court. Now she is experiencing some trauma and it would be really great to give

her some extra resources to get through this time. And, unfortunately, she did end up fatally overdosing. And so I'm going to talk about some methods and I know Sadie will talk about them as well on how can we offer nonfatal overdoses, how can we intervene and offer them treatment and prevention to prevent that same story from occurring? And so that's what I'm going to talk about. And so ODMAP which stands for the overdose detection mapping application program we developed in the fall of 2016. It went live as a pilot in January of 2017 in areas of Maryland and West Virginia. And then went live nationally in April 2017.

ODMAP is available free of charge and we are able to do that with the great support of our federal partners. The HIDTA program is administered out of the office of national drug control policy they are a constant supporter for us.

And then I will talk later about some of our other big supporters the bureau of justice assistance which is out of DOJ and our partners at CDC continue to fund ODMAP. As ODMAP rolled out in April of 2017 and here we are about two and a half years later. We're still able to offer ODMAP free of charge. It's available to any government entity serving the interest of public health and public safety as part of its official mandate as well as EDs and hospitals and any private E.M.S. companies out there. And so the way that ODMAP works it's in near realtime. So these are we say suspected overdoses. This is being completed typically by a first responder. So, perhaps a police officer, an EMT or paramedic entering this information and as soon as they clear up from an overdose. You can probably see here on your screen there is several fields here. I will note that the items there in case information, those are optional. So I will focus here on the required fields that are necessary to successfully submit an overdose.

The first is the location. Most of our users are using an address. And I want to focus on this for a minute. If they do use an address, it is going to be translated in Geo coded to an approximated latitude and longitude and zoom level is going to be restricted, which we will take a look at. The address is then discarded from the system in the server and so they just have the latitude and longitude. And that is available only for that submitting agency to see because, again, we will take a look here shortly that we are facilitating data sharing. And then the only other fields that are required are the fatality status and how much Naloxone was administered. So you would just click one of those buttons down there and it would take to you a screen and then you enter in the date and time.

And then that's all that is necessary to submit. This is a mobile friendly interface so it can be completed anywhere that you have internet service, whether it's on a mobile phone, a tablet, an patrol car, a desktop back at the station, anywhere that has internet, basically. And then you will see some of that information in there that is optional. We do find quite a bit of our agencies using that information.

So some of the optional information that you can enter in is case number, age, gender, primary suspected drug, additional suspected drug, which is a long dropdown list as well to include a pretext box, whether or not there was transport to the hospital, if they were part of a multiple overdose victim incident. If they were involved in a motor vehicle. So was this a traffic stop or an accident? And then we just had a new release come out yesterday which also has who administered Naloxone with a dropdown box as well to include bystander, fire, E.M.S., hospital, et cetera.

And, so, again suspected. It's being completed in near realtime. This is based primarily on how the patient is presenting themselves combined with any evidence that's on scene. So we don't have our toxicology back. We don't have our crime lab back. It's just based purely off of those components. However, you do have the ability to go back later on once you do receive that and edit your service.

So we look at the next component here of ODMAP. This is the national map. There are two users in ODMAP. First one is level one user. That's the platform we just looked at. It's the administrative hub of the system. This right here is level 2. Many refer to it as the national map. And we find that it's about 10% of our users that have access to this. It's typically going to be decision-makers or maybe analysts that are a need to know. There is some really cool features on the right-hand side that I couldn't fit into the screen shot but I will focus right now on the left-hand side where you see the legend. You see diamonds and circles. And diamonds represent fatal overdoses and circles represent nonfatal overdoses. And the colors correspond with Naloxone. On the right-hand side there is filters. For example we could click our state, Maryland, and we could click Baltimore. And it will continue to correspond to the filters that we select. So we can look at state and county time, suspected drug, agencies, all that good stuff.

And we will talk about here shortly about how agencies at the local level, especially, are putting this into action.

I want to talk a little bit about our spike alert system that we have built in to ODMAP. And so agencies can set spike alerts

based off of a state and county. This goes back to the question of you who great would it be to be able to respond to something as it is occurring? So you can set a spike alert. What that means for us is when you exceed a specified threshold of a floating 24-hour period. So say in your area that you find that the average number of overdoses that you have in a 24-hour period is five. So you want to be notified on the sixth overdose. That there have been six overdoses in the past 24 hours. You can set that up in ODMAP and that level one administrative hub and we also have built in an algorithm as well. If you are kind of unsure what that should be, go take a look at the data in your county and it's two standard deviations above the mean. And what will happen is that you will receive an email and you can set up the email distribution list. Ideally multidisciplinary response so you would have someone from E.M.S. and fire and medical examiners, coroners, et cetera. You would all receive that email. As soon as you hit 6 in 24 hours, and it would say, you know, for example Baltimore city is in a spike, you set your threshold at six and you are at six. It will continue to alert you as you, unfortunately, may climb within that threshold in the 24 hours and then ultimately once you end.

This picture that I'm showing you here on the screen were actual spike alerts that happened this weekend. And this weekend that I'm looking at here in May and June. This is antidotal at this point. We had taken a look at this and we had actual verified data to review. We do find there is often a correlation, specifically the idea for the spike alert system would be be aware when jurisdictions that are bordering you are in a spike but also, perhaps, where you are obtaining your drug, your source city is so, for example, when we look at Richmond, Virginia and Baltimore, Maryland, Baltimore is a known source city for Richmond, Virginia. And so, in this case, we could have perhaps received 24 hoursish advanced notice that a spike could be coming into Richmond, Virginia, and we could start doing our prespike preparing and then ultimately embarking on during our spike and post spike. And if you are ever interested in a general spike response framework, we have developed one that's on our website. It's generally made so it can be tailored. And so, of course, there is always barriers that are necessary -- that will inevitably come up. Some that we have encountered where data sharing amongst the diverse stockholder groups that really goes into next bullet with HIPPA and law enforcement sensitive data. So often we are accustomed to operating in those data sets that are familiar for us. And that

are comfortable for us. And it can be a little bit uncomfortable to share data with disciplines and so a lot of that has been an opportunity to learn and to open up those conversations and for everybody to get -- come to the table together. That's what I always say for ODMAP. It's an opportunity for everybody to come to the table to view a data set that's comfortable for everybody and then establish partnerships and collaborations to build on that data to put it even further into action. That's what I will touch on here before I hand it over to Sadie. We have one really great best practice out of Erie county, New York, that has been tailored in different counties across the nation. And Oneida county in New York was one of those that tailored it to their county. But the way that it works is in Erie county, New York, the police department is entering the overdoses into ODMAP because they are primarily responding to them. They have a great partnership with their public health department. What the public health department does is they go to that national map on typically a daily basis. They filter down to New York and Erie county and they may select the past 24 hours as a time period. They see that a new overdose has occurred. There is no information there about the person, but they want to be able to conduct outreach. So they have established a memorandum -- standing memorandum of understanding with the police department. All they do now is email over to the records department. They give them a copy of the police report, and then the public health department receives that. And they have a pure recovery specialist that is conducting outreach by phone and/or text message which they have found most successful. We do have some of their most recent data here. And so at the 90-day follow-up mark they found that 56 were connected to care. 96% were working with a peer to identify a program that meets their needs. 11% were speaking with a peer at that time but have turned down treatment and 11% refused. And they continue to contact them about every 30 days. And then lastly any resources the bureau of assistance and CDC have been constant supporters of ODMAP and continue to prioritize funding for ODMAP and/or have specific funding out there. Always go take a look at their Web sites and of course we will continue to link any opportunities over to our website as well.

And now I will turn it over to you, Sadie.

>> Matt: Thank you, thank you so much. That was excellent summary of OD map and there is a lot of questions coming in that we will have time to get to regarding access to ODMAP and other aspects. I'm now going to hand it over to Sadie Smith. Sadie

is the chief program officer for behavioral health in the Mosaic Group. Sadie holds her masters in social work with specializations in community organizing and program development. Since 2005, Sadie has worked across public and private sectors to advance communities and systems to improve health and well-being. Welcome, Sadie, and the ball is yours.

>> Sadie: Thank you, Matt and good afternoon, everyone. So, as mentioned earlier in the presentation, I reign from Maryland but the discussion that I'm about to have we have actually integrated in hospitals across the Mid-Atlantic within Maryland and the district of Columbia. We also work in South Carolina and are now in a number of states nationally through support from the CDC.

But I'm going to focus mostly on Maryland this afternoon and just to talk a little bit about the problem as we have experienced across the nation. Maryland over the course of the last several years has seen a significant spike in the incidence of overdose deaths. So in Maryland about 89% of those 2400 deaths you see in 2018 were opioid-related. And especially the greater Baltimore region as even Aliese alluded to has experienced an opioid crisis for a number of years prior to even the national crisis.

So we know that we had an opioid problem. In addition we also understand that our opioid use patients are coming to our hospitals more frequently than the average patient and also getting admitted at higher rates. So they are coming into our emergency departments and getting admitted. So there is a significant cost to hospitals but we also know, especially for our overdose patients that they are typically not accessing other services and might be using the emergency department as their primary care center. And so we have an opportunity which we wanted to take advantage of in regards to providing an intervention to patients.

And so similarly in Maryland, we fell second to Massachusetts in regards to our rate of opioid-related emergency room department visits. That shows you how much above the national average we are and you can see some of those other highly rated states. So Matt touched on this a little bit earlier we know the reality is that about half of the individuals who experienced a fatal overdose had reported at least one nonfatal overdose prior to the fatality. Increasing number of nonfatal overdoses are related to greater risk of overdose death as well. We also understand that in about one in 10 survivors suffers a fatal overdose within 12 months. And they visited the E.D. typically about on average four times prior to the fatal overdose with

some sort of opioid-related issue. And so we recognize, again, that we have an opportunity within our hospitals and our emergency departments to really understand and provide an intervention for this population of individuals. But what we found was that the hospitals were really lacking the mechanism to systemically identify overdose patients. It might be entered as a chief complaint or even as the mentioned earlier it might be mentioned that they received Narcan in the community but was not necessarily an accurate trigger or identifier for opioid overdose patients. The other piece was hospitals were looking for a better way for us to respond to those overdose patients and those overdose survivors and really hadn't been involved in the community level but were looking at ways that they could get involved.

So I thought about what we needed to do.

We were clear that Naloxone only strategy was not enough. While we have sort of seen the percentage increase of overdoses start to bell out at the top of that curve, it continues to increase. So Mosaic Group developed what's called our overdose survivors outreach program and this is just one component of our comprehensive hospital opioid response program that is in several hospitals as I mentioned across states where we are utilizing hospital emergency departments to engage this high risk patient population and using risk reduction strategies and conducting brief interventions using peer recovery coaches to work with those patients while they are in the emergency department and then once they are back in the community. So, involve intensive community engagement. In our model with the OSOP program if you will, we involve very intention initialing engagement of home visiting and telephonic follow-up for the first 30 days our goal is really to just engage and build rapport with the patient. It's really not until we hit days 30 through 60 where we are starting to develop a recovery plan with them. And I will talk a little bit about some of that success but our goal is to help those individuals reduce the threat of likelihood of a subsequent overdose.

And so that's really linking them to recovery support services and really building their recovery asset.

And so one way that we were able to do this within the emergency department is universally screening patients. And so we couldn't clearly identify who we needed to work with prior to this. And so we really integrated and modified medical records so that we could universally screen all patients who come into the emergency department and be able to accurately identify those patients as an opioid overdose and so there is some

clinical criteria that nurses are considering when patients come in to identify that patient as an opioid overdose. But then also the peer recovery coach as I mentioned are also confirming through medical record as well as conversation with the patient around what occurred and what's the history around that substance use to understand the incidence around their overdose. And so it's not only being able to identify patients appropriately but then also how do we help have that data work for us? And so it involves extraction of that information and innovation to the peer recovery coach team. So, within our model, the peer recovery coaches are housed within the emergency department and we really utilize the medical record and as I mentioned have made modifications to that medical record that allows us to identify the patient, trigger the peer recovery coach, and then have the medical team really incorporate the recovery coaching as part of that intervention while the patient is in the emergency department. And so, they are conducting a brief intervention with patients in developing a plan which might involve treatment or other recovery support services. Well, we also did some other pieces within the medical record. An automatic best practice alert for Naloxone distribution so, again, making sure that any patient who has come into the emergency department either as an opioid overdose or with any reported opioid use because going back to that universal screening we are also identifying individuals who maybe didn't come in as an overdose but are reporting other opioid use. That they get dispensed or administered Naloxone within the emergency department so they can leave with their Naloxone. And we have also been type use CRISP which is the health information exchange for.

So Mid-Atlantic states. To allows us to really understand what's happening with that patient in a more holistic way. Our OSOP coaches, our peer recovery coaches who are community-based working in the community with our overdose survivors are able to add their patient list to CRISP so that way if my patient shows up at a different hospital, that hospital will get an alert that says this is a patient of Sadie Smith at, you know, hospital A. But I will also get an alert that tells me that the patient has shown up at hospital B, which allows me, again, there is a lot of business associates agreements and different releases of information and consents to participate that need to be involved. But, at the very minimum, I can at least then call the hospital and try to speak with my patient who might have arrived there.

We also are hoping to start using CRISP to be able to collect

the data from the office of the chief medical examiner. So, when I mentioned that one in 10 overdose survivors experiences a fatal overdose within 12 months, what we're hoping to look at is 12 months out from our intervention in we use CRISP to look at the office of the chief medical officer data if that patient is deceased or the reason or cause of their death. So we will be able to tell have we been able to reduce that one in 10. Unfortunately, we don't have that data just yet. But we are working on getting that through CRISP.

We are also using CRISP more generally around pre and post data so did the patient come to my ED 10 times prior to having a coach intervention and receiving the outreach from the peer recovery coach and what did those visits look like after that? So, again, it helps really take the hospitals, who are businesses, who have really, I think on differing levels determined how they want to be involved in addressing the opioid crisis. But if we can show them some of that utilization data that we anticipate is a decrease after the peer intervention then hopefully they could understand the return on investment a little bit better.

We talked about doing this and this again goes back to a hospital specific model. Any new program, of course, does present its own challenges. And it's a big heavy lift for a large institution like a hospital to integrate an entirely new program within an emergency department. And one person described it as, you know, emergency departments provide Band-Aids. We are not there to cure people. We are there to treat their presenting illness or ailment. But, integration of our peer recovery coach programming in the OSOP program actually starts to change lives. And redirect the trajectory for many of their patients. So it changes the entire culture of the emergency department, but that involves a lot of buy-in as we ask people to do additional work to really try to make this program work: But one of the biggest pieces and this is true across any data sets is making sure that our data systems are working for us.

If we are doing in medical record or specific data base that we need to incorporate all of this within that as well. And then being able to extract that, what we learned in a hospital settings is they are not used to looking at such detailed patient level data but it's in critically important as we look at this patient population and what we have been able to do to understand what's working and what's not.

To date what we have found is across our hospitals there has been 23 hospitals that have integrated the overdose survivors

outreach program and over 6,000 overdose survivors have been identified since the pilot program began in March 2017. And one of the things that I didn't mention is how we have started to work with our local community resources through the local health departments or even local law enforcement because what happened is sometimes the patients come into the emergency department. Sometimes they refuse transport. And so our hospitals have really begun to partner with those local health departments and law enforcement agencies to understand who are we missing? But, also, who do we both have? If somebody in regards to the program that Matt described earlier, if somebody is conducting outreach with an overdose survivor and we are also trying to locate them, how can we utilize our resources most efficiently. And so we have been able to use our data as well to share around who were those overdoses and did we catch them or did somebody catch them and, if not, how can we make sure that they get integrated into somebody's program? But of those that we have identified through the hospital system, 72% of patients have engaged with our outreach services, which we're very proud of, interesting that this is a very difficult to engage population. And especially in our more urban areas, many of those patients are experiencing homelessness so don't have a residence to which we can locate them. Of those one in three of our survivors actually does engage in treatment. And so, we're very fortunate in the greater Baltimore region, again, to have a very robust network of treatment resources. We have 40 methadone programs, we have lots of Buprenorphine providers and lots of intensive outpatient providers. So we really have been fortunate to have such great access to care that allows our survivors to engage in treatment when they are ready. So we work with them for about 90 days after that overdose to help them move along the spectrum of change to be ready and prepared to take action into treatment.

I think what we have sort of taken away from this is really being able to incorporate a clear identifier in the emergency department, to identify patients so that they can begin to understand the issue. And it's not, again, just about overdose patients but also all opioid use patients and what does our patient population look like? We often walk into an emergency department and they say well all of my patients are going to screen positive. But what we find is, you know, on average a hospital has about 12 to 15% of their patient population screening positive. Our highest hospital, which is in downtown Baltimore city, has about 35% of patients screening positive. And then also leveraging those local resources to support

survivors. And so understanding what is around our jurisdiction in regards to how can these systems work together and communicate with each other so that we are providing the best level of support to these patients.

You can find some more information about it on our website or at the Maryland Department of Health website which I have listed here and will also be listed on the COSN website later. Thank you.

>> Matt: Great. Thank you, super inspiring. And I'm seeing lots of really good questions. We have got about 15 minutes. And why don't we just take them one at a time. I apologize if we don't get to yours. Hopefully we will be able to cover most of them.

Questions for Aliese, so, are there formal written plans or recommendations for developing a response to an overdose spike at the local level?

>> Aliese: Sure, that's a great question. So, on our website at ODMAP.org you can click spike alert, and we do have one that we have written that's pretty general. It is broken down by discipline. So, different for hospitals and E.M.S. and police, et cetera. It breaks it down that way so that you can plan specifically for your agency level. What you can do pre-spike during a spike and post-spike. And it's general so it can be tailored, obviously, so that it can be more for rural areas or urban areas. And we are also really excited that we are partnering with NHO to refine our overdose spike response framework and we hope to have an updated version out within the next six months or so.

>> Matt: Awesome. Thank you. Here's a fun question. Are there any no costs grant funded or little cost overdose detecting mapping programs available. Aliese?

>> Aliese: This is a fun question. I always love the opportunity to remind everyone that ODMAP is free. If you want to sign up for it navigate over to ODMAP.org and click on agencies and there is a button right there for request agency access.

>> Matt: Great, thank you. And I assume once we, you know, that initiates a conversation with the local jurisdiction that would sort of hold it at the local level: Aliese, is it generally law enforcement that you are partnering with?

>> Aliese: So most of our users represent law enforcement and fire and E.M.S. But we do have a growing number of users for data input that represent medical examiners and coroners nationally. And we have also seen a recent onboarding from poison control centers as well as EDs and hospitals. And then

obviously the public health and behavioral health partnership is integral. While they may not be entering in data, they are active in that collaborative partnership with those first responders.

>> Matt: Great, thank you. So, for Sadie, are you doing any initiation of AMT and the emergency departments?

>> Yeah. So we are comprehensive model that I mentioned involves three components. It's expert so we have nurses conducting universal screening with peer recovery coaches doing brief interventions and referrals to treatment. Into the community. Along with medication administration in the emergency department. So for those opioid use patients who are motivated for treatment they will be evaluated clinically for appropriate for 8-milligram dose of Buprenorphine within the emergency department and then fast-tracked to a community provider the same or next day for continued induction and maintenance therapy as well as the overdose survivors outreach program. Those are the three components of our more comprehensive model.

>> Matt: Great. You mentioned that you had the fortune of having lots of MAP providers in your community that you can tie people.

To say do you see value in this kind of outreach even in areas where you wouldn't be able to guarantee access to MAT that would be contacted after a nonfatal overdose event?

>> Sadie: I absolutely do.

I talked about our work in Baltimore city where the resources are robust. But we have also done a lot of work in South Carolina in Orie county where there might be one or two or three is you box zone waivers in private practice. I think what we have been able to do.

Because, when you think about doing medication administration in the emergency department, you have to have a patient that's motivated for treatment so that reduces the number. Then you have to have a patient that's clinically appropriate to start. And so the numbers are not so incredibly high that they would overwhelm even one provider in your community. And I also think that the value in starting something like this is that then the community begins to respond. So when we started with this whole program, our first hospital was in 2014. But we really started to ramp it up more so in 2017 with the medication assisted treatment component and OSOP component. And at that time we had 8 fast track providers. Now we have over 60. Because hospitals have high volume and hospitals are referring patients and they are open 24/7. So it's been really sort of magical, if you

will, watching the community and the resource system respond based on the need of the hospitals.

>> Great. There is a comment here that it would be great to understand education and training conducted to get buy-in of the health systems. Is that something that you have available in your resources? I think behind this question is many who are working to advocate within the hospitals or systems where they work with varying levels of success in terms of gaining buy-in for and enhancing services for opioid use disorder.

>> Aliese: Yeah, I can start there we unfortunately don't have a specific tool or resource. We share a lot of data. And, unfortunately, in every system we go in a lot of people do have firsthand experience by this point with somebody impacted by the opioid crisis and so, we share a lot of data and what I would say though is that we integrate the program and there's a ton of resistance. But, we take -- we give it the whole year to really see that culture shift occur. And I would say the key piece of that is the integration of the peer recovery coaches because they are model to recovery for the individuals working in the ED who have never seen recovery because substance using patients are either consistently coming in and continue to substance use or not coming back when they are well. So I really think what's been a key component for us in that buy-in culture shift has really been around people working with our peer recovery coaches.

>> Matt: This is a question for Aliese. ODMA interoperability between ODMAP are you familiar with a system in Marin where we are querying our 911 system to identify opioid overdoses might interface in interoperability with ODMAP?

>> Aliese: Yes, absolutely.

>> Matt: Maybe we can play afterwards?

>> Aliese: Yes, we have developed an application programming interface or an API that has been able to successfully connect from statewide EMS data sets such as Maryland, for example, that comes in typically within about an hour of a patient care report being submitted. And then we are also connected to locals such as Los Angeles county fire or rescue or Memphis fire and rescue to police data sets. We have some coroners that have automated data.

Absolutely I would say that's the preferred method going forward because it reduces the burden of the individual data entry and just facilitates automatic entry and really allows agencies or localities to focus on putting data into action.

>> Matt: Characteristics for data for interoperability would be time and location and a certain level of confidence that it

actually represents an opioid overdose, primarily?

>> Aliese: That has been interesting thing to navigate looking at data. So we work really closely with the agencies or the states or whoever it may be that is coming to us specifically when we're looking at the E.M.S. data to brainstorm and share best practices of you who different agencies may have defined suspected overdose in those fields. And really interesting one is when Maryland, for example, it was a legislative effort that went into effect July 2018. Initially the algorithm was based off of Naloxone administration and for what you talked about earlier in your presentation that just wasn't the best method. And so we have actually worked really closely, recently with the Maryland E.M.S. services and we have adjusted the algorithm and basically we find that a lot of agencies look at things like primary, secondary impression combined with narratives and things like that.

>> Matt: Thank you. A lot of the participants on this call represent public health. And one of the, you know, overarching concerns I think in public health regarding partnership with law enforcement and opioid epidemic response is the view that an overdose event signifies potentially a crime and managed as criminal justice issue rather than as a treatment need. Which might be a barrier to adoption of ODMAP for public health partners. What do you have to say about the willingness of law enforcement partners and ODMAP system for tying people into treatment rather than identifying people who may need to be incarcerated?

>> Great, that's a question and concern that we get quite frequently. And I think that really goes back to one of those initial barriers that we were presented with is data sharing can be scary, data sharing, there is protection and privacy surrounding it for a reason. I think it's really important when you are looking at developing or onboarding OD map in your backyard that everybody comes to the table and sits down together that there is an understanding of you who the data is going to be used. I think that's the most important thing is how is data going to be used, using OD map is that mechanism to facilitate it and then putting the data into action. With ODMAP it does not collect any personal identifying information and that location is Geo located to an approximated location with a zoom level restriction, so it's very difficult to take specific action at times and that's really why it's really important when we talk about that second component that you talk about about introduction to resources -- to establish collaborative efforts out of ODMAP as well.

>> Matt: Thank you, the last question is how do we find out if there is 911 data available in our jurisdiction? And I think the answer to that is that, you know, it depends on the nature of your 911 system. Some are private ambulance companies, some are fire-based. I think all would have some sort of systematic data process. Most are using electronic medical records now in their ambulance crews and have a way of querying and measuring trends over time. And I think the first step for whoever asked that question would be finding out whether or not you have a single system across your jurisdiction or whether it's a collection of different providers and starting and asking them what -- whether or not they were able to share this data in the identified way.

So, I want to thank our presenters. Amazing conversation and inspiring work. I think this epidemic is too complex and too challenging for us to be tackling it on our own. And I want to be -- thank all of you and our amazing presenters for joining this collective national effort. We will see you next month. And I will hand it over to Laura for close-out regarding the scheduling of the future webinars. Thank you.

>> Laura: Thank you so much, Matt, and thank you Aliese and Sadie for your presentations. And many thanks to the California Opioid Safety Network, the center for health leadership in practice and the Public Health Institute for today's presentation. And many thanks to you, our audience. The recording of today's presentation and slides will be available to you next week at [Dialogue4Health.org](http://Dialogue4Health.org). You will receive email from us with a link to a brief survey. Please take that and at the end of the survey you will find questions for certificate of completion of this event. Thanks for being with us. That concludes today's web forum. Have a great day.