

Medicaid Innovation Accelerator Program (IAP) Substance Use Disorder Program Area
National Dissemination Webinar #3: Linking and Merging Data Sources
Audio-Only Recording Transcript

Good afternoon, everyone. I am Hannah Dorr from NASHP and welcome to today's webinar on Linking and Merging Data Sources.

Before we get started, I would like to go over a few logistics. In today's webinar we ask that you please mute your line and not put the line on hold during this call. If you would like to ask a question or leave a comment use the chat box on the lower left-hand side of your screen. The chat box will not be seen if you are in full screen mode so make sure you exit out of full screen mode if you would like to ask a question or leave a comment. You'd also need to exit out of full screen mode to participate in polling questions throughout the webinar. Moderator training will be held periodically throughout the webinar to ask questions and provide feedback; however questions submitted via the chat box will be prioritized. If you would like to ask a verbal question, please press *1 and you will be added to the queue. After the meeting is over, please complete the evaluation that will pop up after you exit the webinar. This will allow us to continue to improve your experience. And with that, I will hand it over to Tyler Sadwith from CMS.

Tyler Sadwith (TS): Thanks, Hannah, and welcome to everyone who's joining us today. My name is Tyler Sadwith and I'm a health insurance specialist at CMS and the project lead for the Substance Use Disorder Track of the Medicaid Innovation Accelerator program. We're glad you could join us for this national webinar on Linking and Merging Data to Address Substance Use Disorder. I would like to provide a high level background and introduce our speakers for today's session.

The Medicaid Innovation Accelerator Program, or the IAP for short, was launched in 2014 with the goal of improving health and healthcare for Medicaid beneficiaries by supporting state efforts to accelerate payment and service delivery system reforms. Based on the feedback we heard from states and stakeholders, we identified Substance Use Disorder (SUD) as the first area of focus under the IAP. We have since launched additional program areas including mental health and physical health integration, and that's for people with complex needs, and community integration and long-term services and supports. The primary goal of the SUD track is to support states to introduce policy, program, and payment reforms that better identify individuals with SUD, expand coverage for effective treatment, enhance care delivered to beneficiaries, and develop payment mechanisms that will provide better outcomes. Our strategy is to meet states where they are and channel our resources in ways that support their needs and their goals.

So we developed two tiers of technical support for SUD that we implemented over the past year. The first tier was a high intensity learning collaborative, which was a cohort of six states that really rolled up their sleeves and worked to design and implement a delivery system of forums. These states defined measurable goals and had a wide range of resources to assist them, including virtual monthly meetings, in-person workshops, and one-on-one technical support. We also offered targeted learning opportunities, or TLOs for short, to a broader set of states. The TLOs were essentially a monthly web-based learning series and 30-minute sessions where states can engage with top leaders and obtain insights from other state Medicaid agencies through peer-based discussions and state-to-state learning.

As part of our second year of the IAP SUD program area, we're highlighting what our intensive learning collaboratives and our TLO states are most valuable, and we are rolling out two of the resources we've developed under the IAP for a broader national audience. Through these national dissemination efforts,

we're hosting national webinars on a quarterly basis, targeting other states and our key partners in the states.

Under the IAP, our data analytics team has been developing a series of toolkits related to the four IAP program areas. The goal of these toolkits is to provide transparent, straightforward, and adaptable data analytics solutions that states can easily implement in their local environments.

The first tool that will be completed focuses on supporting states on a variety of SUD related issues. The SUD tool we are developing has three primary components.

1. Identifying Medicaid beneficiaries with SUD;
2. Examining the quality of their SUD-related care;
3. Providing guidance to states on best practices for linking their TIENSA data to specialty SUD treatment episode data.

The IAP data analytics tools will be mapped to TIENSA so that both states and CMS can compare results across a common data resource. In terms of timing for this tool, we are working to develop the tool as quickly as possible and we plan to develop the phases based on complexity. Our first priority is developing the identification tool, which we expect to complete within the next nine months.

The final product that we share with states and users will include a methodology document, a youth case, and example SAS code. We will share additional information on these tools on our Medicaid Background IAP web page.

Turning to today's webinar, we've invited several state partners to discuss the benefits and the strategies for linking Medicaid data with other data sources including SUD data sources and other state databases. Our partners will discuss how using different data sources can provide insight on service need, utilization, and outcomes. Our speakers will share how they're using merged and linked data strategies to monitor SUD system performance and to drive improvement.

Turning to the agenda; first we'll hear Connecticut discuss how they're using distributed data networks to answer questions about their SUD population demographics, care outcomes, and costs. After Connecticut, the state of Washington will discuss how they designed meaningful measurement concepts that enable policy analysis, program evaluations, predictive modeling, and performance management. After Washington, we'll hear how Oregon has developed a system to combine SUD block grant data with Medicaid claims data to analyze treatment outcomes and to share information with providers.

Let me quickly introduce our speakers, and then we can get started.

Minakshi Tikoo is a professor in the School of Nursing at the University of Connecticut. Within the department of Social Services, Dr. Tikoo serves as the Director of Business Intelligence and Shared Analytics, as well as the Health and Human Services Health Information Technology (HIT) Coordinator. She is responsible for leading the development of a statewide HIT strategic and operational plan, which includes coordinating HIT activities and initiatives across multiple state agencies.

From Washington, David Mancuso is the Director of the Research and Data Analysis Division of the Washington State Department of Social and Health Services. His current work focuses on supporting on health and social service interventions and policy making through data integration, predictive modeling, and rapid cycle data analytics. Dr. Mancuso co-developed the Predictive Risk Intelligence System (PRISM),

a predictive modeling tool supporting medical and behavioral healthcare management strategies for Medicaid and dual Medicare-Medicaid beneficiaries. He also leads a team of analytical and IT staff maintaining Washington State's integrated client database, a policy analysis and program evaluation resource that links Medicaid medical, behavioral health and long-term care data with Social Service, Criminal Justice, Housing, Child Welfare, Education, Employment, and Vital Statistics data.

Jon Collins is the Director of Health Analytics for the Oregon Health Authority. Dr. Collins has been part of the Oregon Health Authority for 16 years and has served in various roles of leadership associated with the government healthcare field. In his current position, he has broad responsibility for policy and measurement across all areas of healthcare overseen by the Oregon Health Authority. Prior to joining Oregon Health Authority, Jon served as the Quality Improvement Manager for a rural managed care company contracted for Medicaid behavioral health services in Oregon. Dr. Collins is an accomplished researcher and maintains an adjunct appointment with Oregon Health Sciences University Psychiatry Department. He is published in various areas, such as psychotropic medication utilization and organizational development.

Suzanne Fields will serve as our moderator for this webinar. She is a faculty member and peer advisor for healthcare policy and financing at the University Of Maryland School Of Social Work. Suzanne is also a clinical social worker with 20 years of experience. Her work has spanned multiple settings, including Medicaid, mental health and substance use, children's services, child welfare, and managed care. She is a familiar voice on the IAP series having moderated a number of our previous webinars. With that, I will turn it over to Suzanne to kick us off.

Suzanne Fields (SF): Tyler, thank you very much and hello everyone. To begin our conversation today we would like to first acknowledge the reality of barriers to merging our data sources together. Those barriers can be resources; they can deal with confidentiality as well as the clinical complexity that exists when we move to link data systems together. These barriers can often halt state processes or challenge systems to move forward to link databases or to expand and deepen their existing processes around linking data. Unfortunately, these challenges often cast a long shadow over the benefits that states can receive by linking data. In many instances, the benefits may not be fully articulated by bringing forward data linkage and we'll be hearing and focusing throughout this webinar today, on the fact that articulating the benefits, the utility of linking data systems together, can actually further the impetus to overcoming or addressing many of these barriers that we do have.

We'll be hearing from our speakers today, both in terms of how they navigated specific challenges to merging data systems, but also hearing about the benefits that they reaped by taking on these efforts and linking data systems together.

The next two graphics provide some additional context for the importance of linking data together, whether that be SUD-specific data as well as with a Medicaid data system. When we examine Substance Use Disorder spending, particularly when we think about it in the context of overall healthcare spending, we know that a significant amount of expenditures is occurring outside of the Medicaid system; that dollars from other states, other local, be it block grant dollars, all are contributing to SUD treatment. This particular data from SAMSHA highlights for us that upwards of nearly 29% in 2014 of expenditures related to SUD treatment are coming from outside of the Medicaid system; are coming from those other sources of data. So understanding what is occurring, what is being purchased through those dollars can become very important to addressing key policy questions for states.

In addition to understanding the expenditures, or the spend, that's happening on SUD treatment, it's also important to know the type of client level information that many other data systems have. The previous slide highlighted the expenditure information that can exist from other sources outside of Medicaid and as we see here, again highlighting information from the SAMSHA study cited, we can see that there is a significant amount of services happening within specialty providers; providers that may be outside of the Medicaid system and these providers often have significant amount of outcome data, clinical treatment data, that can be very helpful to states trying to further address Substance Use policy issues.

There are a range of policy questions that can be addressed through linking data. We have some examples from understanding basic service utilization patterns that are happening all the way through states tackling understanding outcomes as well as return on investment in providing SUD treatment under Medicaid. Certainly, the latter two questions are becoming increasingly important, or an increasing focus, within policy makers in states to understand the dollars and the expenditures that are occurring and the value that's happening through those priorities.

I want to briefly mention two data sets you will be hearing about from our speakers that contain very significant SUD-related data for consideration in data-linking efforts. The first is the Treatments Episode Data Set, or TEDS, and the second, that I will talk about in a moment, is the National Outcome Measures, or NOM.

TEDS is data at the client level and it captures data at the endpoint of treatment; endpoint here meaning admission and discharge data or admission and transfer data between services. Again, capturing the entire episode of care that someone is receiving care across different services that are occurring. TEDS data sets can be linked using HIPAA compliant unique client identifiers and treatment programs that are receiving public funds are required to provide TEDS data. So it is a very robust data set and very comprehensive; data on nearly two million clients is available on TEDS. The types of data fields that exist in this are client identifiers, socio-economic status, characteristics, SUD services, admission and discharge dates, as well as information about the providers.

Within TEDS are the National Outcome Measures or NOMS. This provides outcome measures in 10 domains for all state and federal block grant and formula grant programs. This particular slide provides you complete detail of four of those 10 outcome domains. The blue tabs represent an example of some of these NOM domains: reduced morbidity, retention, employment, crime and criminal justice. Within each of the domains is an associated outcome and the measure. We see here some examples of that. So for Reduced Morbidity, the outcome is abstinence from alcohol or drug use, and the measure is the absolute percent change of clients not using between admission and discharge. And, again, for each of the 10 domains, outcomes and measures are clearly defined. In addition to these four, other areas covered include stability in housing, social connectedness, access, perceptions of care, cost effectiveness, and use of evidence-based practices.

In 2015, all but eight states had submitted information to populate the NOMS. So, again, it's a very robust data system with a lot of data available to support states in looking at a variety of issues.

In addition to what we will be hearing about from the three presenters, in the resource materials that have been provided to accompany this webinar, is one case study in particular that we wanted to briefly mention. Here was an effort to link data within three states - Delaware, Oklahoma, and Washington - looking across Medicaid, substance use as well as mental health. The intent of this particular case study was to analyze the rate of detox readmission and factors associated with any readmissions that had

occurred. What was learned through this data-linking effort was that 73% of the sample did not receive any follow-up care. For clients that receive follow-up, treatment experienced with longer time between those readmissions. Again, this study highlighted the importance of linking data and formed a variety of different policy issues and opportunities that those particular states have to improve the care for those beneficiaries of those services.

We'd like now to take a moment to hear from you and ask you to participate in a polling question so we can understand where your particular state is currently in linking and merging data. We ask you now to take a moment to respond to this question and then we will move forward and I'll share the results with everyone. Has your state begun linking and merging different data sources together? Please take a moment to respond to this particular poll.

We're going to move forward now with the results and we can see here that we have states in a variety of different places; we have about half of the states currently building a system and looking at this (about 41%). We also have about 41-42% of states not currently with a system, but discussing that. We can also see that some of you have fully operational systems and we have a few states that aren't currently looking at this in particular. We can see here that many of you are in the initial phases of tackling this issue, so we hope the information today will be very relevant to those discussions that are occurring.

Now I would like to invite Dr. Minakshi Tikoo to begin talking about what you've lead in Connecticut.

Minakshi Tikoo (MT): Thank you, Suzanne. Good afternoon everybody, thank you for being on the call. I'm going to provide a brief overview of what our journey over the last two years has been about; data-linking and how we are approaching this question because everybody wants to do this, but doing it in a cost effective and efficient manner is where we are headed. I am going to give a brief background and probably leave more time in my session for questions.

Everybody has looked at this triangle and it is the magic mantra and right now it is the ___21:17?? is what everybody is focused on. What really it's about is improving patients' experiences; to me what the end goal of all health care is to improve not just the patient's experience, but also the outcome experience by people as they interact with our treatment systems, whether it be the Substance Use system, the health system, or just the social services system. The goal obviously it to improve population health and, hopefully, as we do that, reduce some costs. Sometimes right up front you don't see reductions in cost because if you start providing services, as we have seen, actually the expansion of the Medicaid population and other healthcare delivery, we've seen that some costs have gone up and health plans, in some cases, exited the playing field because the risks within those systems were higher than they thought. I always say it takes a little bit of time to reduce costs; you can't just start having a good system and expect a reduction in costs right away. You have to be cognizant of that.

What are the challenges to getting this data that we want to use to help know better how to serve our population; know whether or not our interventions are working? What do we need? We need all the data that we have from all possible sources, both structured and unstructured, and then we have the challenge of linking all these disparate data sources together to make a meaningful, comprehensive, cogent story for a portion so that we can interact and do something differently. The challenge that we face today is building data warehouses is really expensive. At the time you build your warehouses, your funding sometimes dries up and then the analysis is always the first. Data is constantly changing; really in the changing world now with social media all kinds of data that we have we need to be able to have our systems incorporate and inject these very different types of data to have good comprehensive view of the

people. There really is a lot of data within the state systems and also outside the state systems. Because we haven't really connected all this data and it has not been accounted for in a systematic manner; just having an inventory of all the different data, little and small data systems that your agency may have, can be quite an exercise. We started that exercise this January and, if we have time, we can talk about that. There is very limited documentation both on the IT system side, data dictionaries, and explanation of harmonization of the data. That is a little bit of the logistical problem, if you will. It's not the dearth of data, we have lots of data, but we just haven't put it all together in most cases.

I spend a great amount of time looking at the quality of the data; that is one of the things that I think we don't pay enough attention to. If you don't have good quality data, then the conclusions, whether predictive, prescriptive, or descriptive analysis, whatever you're trying to do, is limited because you don't have the richness that you need to have. I always say it's okay to start and understand the limitations of your data first. I find that the more you work with the data and also give the feedback to your providers, the better you have the quality of the data. Glossing over the fact that you may only have 50% of the data that is good and try to do population health analytics is not a good way to be. Where you are is always a good place to start; it's never a perfect place, but it's a pretty good place to start. It's good to understand the quality and then do the analytics.

Work with small data before getting too much into the big data. We have buzz words and "big data" is going to solve all of our problems, but if the big data has a quality problem it certainly is not going to solve our problem. There are lots of challenges with "big data" and we could talk about that, but the biggest challenges you have with linking data, and Suzanne hinted on that, is what are the agreements in place. With Substance Abuse 42 CFR Part 2, their requirements of disclosure; in Substance Abuse you have a little bit more challenges to link that data to other sources of data.

This is our conceptual model. We think, given all the investments in health IT, there is lots and lots of data, so it's just generic information data: primary care, pharmacy, hospital, specialty care, and lab. We have also been working with Allied Healthcare regarding long-term services and support, such as home health, nursing homes, there's just no end to it. Some states that have successful Health Information Exchanges (HIE), that may be a good place for Substance Abuse agencies to go; if your state has a state level HIE, that would be a good conversation to have to see what they do for people that have bigger health, what kind of consent processes they have, and then how you might be able to use that data. We have a couple of projects; one is a grant in which we are demonstrating personal health record data, too. So this is the data that is within the control of the person. There is lots and lots of data and I have not talked about social media data yet. What you want to do on the linking is integrate all of this data and then you want to end up using this data and we want to make it accessible so many people can use it. The outcome you are looking for is a seamlessly connected healthcare system and for it to be effective, efficient, timely, applicable, safe, and person-centered these are the characteristics that the Institute of Medicine Report identified in its 2001 report, so it's nothing new.

Getting to have a system that is connected and has all these characteristics is not easy because you talk about one of the outcomes we would need to collect to indicate if we were affected. All those methods come into play in data measurement and putting it all together.

And then we want to make sure that we are also able to provide data electronically for decision-making to individuals that are taking care of people. They're not going to be using big data, they want it in a bite-size chunk for the decision they are making about the healthcare of that particular person. That's kind of what we think all our data needs to get integrated, but, again, as it informs the population health metrics

side, but actually it needs to act for an individual at a very granular level to impact outcomes for people and impact people's lives. That's basically what we want to do.

How have we gone about doing that in Connecticut? Very early on we decided we wanted to try something that wasn't all about centralizing data and we also wanted to address, at least in my experience of having done this for over 25 years, there's a lot of territoriality around data and we don't really want to give out our data, but we want data from everybody else. Having hoarded for so many years, one of the things is can we leave the data where it is? But you're really not centralizing it so that might address some of the concerns people have because data is a very big asset; it is the one asset that should be the most valued asset. How could we analyze this data that is now sitting in various data centers, across these data centers, without actually pulling it together, but being able to aggregate the results in a meaningful manner? That was our purpose.

We were fortunate enough to learn about ZETA Health Interoperability platform. What this platform does is it has a capability to go across different databases and uses an indexing __30:31?? server technology to index the data for the use that everyone wants to use it for. Basically, it secured federated analysis of data across multiple silos. It's also, in IT lingo, called the Cooperative Computing at the Edge because the server sits at the edge, which are indexing the data from each of the organizations, if you will, and then it posts the data across to create one normalized report. It's parallel processing across the networks to aggregate the data on whatever, depending on what you question is; what your query is. It queries across all of those data centers, normalizes the data, and then presents you with the answer in a very simplified manner, obviously.

If you do the pros and cons, what are the comparisons? The traditional approach is all about centralizing whereas the cross-organizational data interoperability approach is about decentralizing; leaving it where it is, leaving it in the form it is, but indexing it. Indexing is similar to leaving tags in the data set, so you find the data more easily, just like in a book; you have an index in the back that tells you where to go to look for a concept. In this case the concept could be an ICD9 code or ICD10 code or we have natural language processing, so it could be just a concept that we are looking for. It's easier to do that. In the traditional approach, each organization is standardized for one organization; the application. Here, every organization is using their own kind of technology to put the data into the databases and we are going against whatever that organization uses. Data warehouses we talked about and now we are talking about how information sharing environment is creating a global view of what a client, a person looks like and what their needs might be. Again privacy and protection and security get done at the centralized approach, whereas each agency and organization are now in this decentralized approach and have whatever security policy that they have in place, so we are not asking them to change anything, we are not asking them to change any privacy policies.

The other thing is that the indexes we create, or the tags that we create, are definitely reusable. You can have the same data element be used for multiple analyses and once it's tagged, we can reuse it.

We find that this model is definitely a better internal investment for us and it also supports decentralized analysis in the sense that each server, depending on the role and agreed upon responsibilities, can actually use all or part of the data depending on the agreements that exist between different organizations. And the applications can be easily distributed.

What are we trying to do? Since I presented this class, we have continued to use the approach of federated network-based parallel computing and one of the things that we want to answer is: across our state

agencies, how many people do we serve? That has often been a difficult question to answer. This helps us answer that depending on all the data sets. So far we have been able to do eligibility management system, both the current system that we use for social services and Access Health CT, which was our health insurance exchange data set. We were able to join those. We recently have also been able to index our lab data that comes from a lab and now we have started having clinical data and now we are in the process of indexing the Medicaid claims data: institutional, pharmacy, dental, and physician claims.

We definitely want to get to the question of who is getting better and who is getting worse because it helps you when you have a global view. We have connected data from 1960 all the way to the present so we have been able to create longer term histories for people in our service system. We are looking at how we can incorporate some of the GIS data to that, both the social determinant data based on the context and the zip codes people live in and other patterns that we see emerging just based on geo-location of this data. Having claims data gives us a better idea.

We've just started doing it, so I can't answer a lot of questions on the cost, but we want to get to the question: what are we paying? Are we paying pretty decent prices? We don't seem to have a lot of variability and, also, what do we get for what costs and are we buying the right kinds of services. Given our pool of people that we are treating across agencies, and not just looking at your agency, looking across agencies, are you buying as a state the rights of the services and do you have good costing mechanisms in place. Our state has the State Innovative Model grant so we also want to see how value-based purchasing is going to play into this. We will see if we can use the data there for some of those questions.

Then, of course, the predictive; using this data, can we simulate taking a look at what our demographic or what our population might look like in the next 10 years and would we have all the needs covered or would you want to do something differently.

This is where we are. Like I said, we have claims data, we have patient-level data, we are looking at clinical quality measurement data that comes out of our EHR incentive program, we have the list of discussion of getting satisfaction data in there, and then, like I talked about the geo-spatial data we are working with a geo specialist who has a lot of training in these big data analyses.

In the next tier or two we also want to bring in the machine learning aspect to our data because when you put this kind of data together, there's a lot you don't know. You might not even know what are the questions you should ask so we do want to use some machine learning techniques and tools to see if there is some other way we should be looking at our data; that will help us get to our end a little faster than if we just keep doing the hypotheses-driven questions.

Definitely, we believe in our business intelligence and analytics group that it is a continuous quality improvement cycle with interpretive loops that we are looking at; we want to make sure that with putting all this data together that we are really able to get it to everybody that wants to use data in a form that they want. I wouldn't speak too much to our visualization because that is something we are looking at right now. There are lots and lots of platforms, but the question is how you chunk information for the role of the person in the format that is useful for that person; so not just publish a dashboard that has to work for everybody because everybody doesn't have the same needs. We talk about precision medicine; similarly we talk about precision in delivery of data and information which is in keeping with the role that each person plays in healthcare. Why do I need to know some things that may not be pertinent and I might just like my information delivered a little bit differently, so we really need to get there.

Some of the challenges that agencies have is that they don't want to share data, there is always a fear of looking bad, the sooner we get over that one the better off we'll all be. We've all made mistakes and it's okay to make a mistake, acknowledge and then move forward; if we knew everything already, we wouldn't be doing this work.

Having an interpretive learning process is very important. In data analysis you know that is how all learning is happening. What is very different and what is very important at the agency level is that you really have to have leaders that have a vision, but they also value data as the most strategic asset for the agency. We are very fortunate to have a commissioner that is very dedicated to data, understands the limitations and that it's not perfect and it's not magic, but he also believe that we have to make investments in health IT, but that the goal is actually better delivery of healthcare and also a better way to measure. We are very fortunate to have him. The talented workforce search used to be a challenge for state agencies, I think, but partnering with universities all having some way of innovation around getting talented people that are working on your data makes for a better team.

Without good leadership you cannot do this kind of work because it takes a while; it can't be done very quickly. Your vendors will always promise you they can deliver in six months. I've worked with a lot of vendors, too, and a lot are very good friends, but this is not easy work to do.

With that I am going to give it back to the moderator.

SF: Thank you, Minakshi. Thank you very much for sharing your experiences in Connecticut. I would now like to move us to an opportunity to pose a question or two to Minakshi. To remind you, there are two different ways you can let us know about questions you have. We are prioritizing questions submitted through the chat box on the lower left of your screen. For those of you who may not be able to submit through the chat box, you can also be in touch with Amber, our operator, by hitting *1 on your phone and that will place you in the queue for a phone question. As we move to folks submitting questions via the chat or through the queue, we do have a poll question for you if you could please respond to. For those states that have begun to link your data, what are the databases that you are currently integrating? This is a "select all that apply" question. Are you looking at integrating and linking data Medicaid, mental health agencies, substance use agencies, with the Department of Corrections, housing, other, or if you're not certain; all of those.

I'm going to move to the results and share with you that we see those of you currently linking data we have about half looking at housing and Medicaid claim data, and about 30% looking at both mental health agency data and corrections data as well, in addition to substance use data. Thank you very much for sharing; that helps us understand some of the priorities that you're thinking of.

Minakshi, we have had several questions come through that I would like to turn to. One of the main themes that is coming through has to do with the complexity of cross-agency agreements. Could you speak a bit to, in Connecticut, how you navigated those issues and, specifically, any recommendations you have from lessons learned that help reach agreements on sharing data?

MT: Those are critical: having a data sharing agreement. Our platform can actually do both deterministic and probabilistic and so we can de-identify data and then do the linking. Preference, obviously, on the healthcare side is to have linked data because you are trying to look at individuals and to help improve the service delivery system. That goes back to leadership and vision. One of the only recommendations I have is to make sure that these agreements are not just for the short time period; I started this work

around 2000 and keep an outcome performance policy. My initial work was all actually in behavioral health. We had put agreements in place with the DMV, the Department of Labor (DOL), so on and so forth, but those have to be in place and stay in place even as administrations change. That's why those structures that are created have to be well-documented and have to produce value for people to want to continue.

The initial getting the people to sign can take anywhere between six months all the way to two years and there are some we are still working; still talking to them saying I think this would be a good thing to do if you would want to. Currently, we are looking at an opportunity of doing the Department of Corrections, DMHS, housing, homelessness. This morning I was writing to all of them explaining how all that would work. You have to keep convincing your leadership and you have to have good champions that support and believe in the cause and say I can get those signatures. Sometimes it can just be the Governor's office saying this has to be done and then somebody taking that cause on and getting all the agencies on board. We've done a lot of work across agencies even in just governance and planning, which isn't really connected to this initiative, but as a state we've been working on it as a multi-pronged project.

SF: Thank you, that's very helpful. It sounds like it's very much an iterative process and something that has to be a focus throughout any of your data-linking networks. That's very helpful. I do want to do a time check and I know that there are several other sessions that have come in. I am going to hold those briefly as we move forward to our next presenter, recognizing that we'll be returning to many themes and we'll have an opportunity to open up discussion with all of our presenters. Minakshi, thank you very much for talking with us about Connecticut and we will be returning to some additional questions to you here in a moment.

Now I would like to move to Dr. David Mancuso to share with us his experience about Washington. David, welcome.

David Mancuso (DM): Thank you and thank you for the opportunity to share some of our experiences with linking and analyzing state agency data in Washington State. If we could move on to the next slide. This next slide gives you another review of what I'll be discussing in the next 15 or so minutes. In the interest of time, thought, let's go ahead and move past this slide and actually just jump right in.

The first topic to discuss is the motivation for doing this work. I think you all probably don't need that much motivation since our motivation really reflects the shared reality that we all face; that the driver for wanting to integrate data across delivery systems, across agencies, is that many of our high-cost clients, many of our folks who are experiencing adverse health outcomes, adverse outcomes more generally are folks that have complex needs and are served by or otherwise interact with or perhaps need services, but are unable to access care from a variety of different delivery systems.

In our state, a driver for integration of data and integrated analytical capability has been, historically, the Substance Use Disorder (SUD) Treatment Program in part because that program recognized that the lack of access to services that were funded through their agency had a profound effect on a range of outcomes that were potentially impactable and improvable; impacts on healthcare utilization, on criminal justice outcomes, housing stability, employment, and so on. In our state over the last 20+ years our SUD program had been a key early investor in this kind of capacity. As we look forward in terms of what kind of environment we're operating in now, there's increasing interest in many areas in the ability to analyze social outcomes that are affected by Medicaid delivery systems more generally. So there is a great deal of greater interest in cross-system outcome measurement, performance measurement, as well as ongoing pressure around cost containment that continue to point to the importance of being able to integrate and

analyze integrated data and helping the state understand where to make investments and what programs are working.

(on the next slide) Some of this discussion here really connects back to some of the information that Minakshi was sharing in the discussion session after her presentation. So, what are some of the key components for developing this kind of capacity? It's really hard to overstate the importance of having data owners buy-in to engaging in this effort. They need to agree to make their data available; they need to agree to make their subject matter experts available and accessible to this effort because that subject matter expertise is going to be essential to ensuring that good analytics are done with their data. Data owners are often going to probably need to be asked to contribute resources or help find resources, actually staff up or engage contractors in actually doing the work. Developing selling data owners on the value of keeping the work connected to activities that they value are essential foundational things that need to be put in place to move ahead, we found in our experience.

In terms of capacity, to do this work, we rely critically on folks who have quantitative social and health service advanced degrees; who have good analytical skills. We are a __51:20?? (sounds like SAS) sequel shop in terms of our core data management activity. The missing link often for these efforts is not traditional IT, but it is in the quantitative skills of folks who have an interest in social and health policy and who are folks who are going to develop the subject matter expertise to complement expertise with IT system knowledge and program knowledge and fiscal knowledge and clinical knowledge. We are really recruiting folks who are coming out of, essentially, Social Science PhD programs with really strong quantitative skills as a key part of our teams of folks who do this work.

Let's move on to slide 33, which is a stylized representation of where the essential value added is in our work in transforming raw data from IT systems into data that's prepared to produce information; to generate knowledge. And this connects to the kind of expertise that we are looking to bring into this work. Where we add value is in the transformation of raw data into analytically meaningful concepts. If you want to connect this to things you might be familiar with, this would include activities like embedding chronic condition risk groupers on top of raw claim and encounter data. If you do work in a quality setting and are familiar with HEDIS and NCQA you might be familiar with their value set concepts, which are basically the mapping of co-values into higher level concepts that have analytical meaning. NCQA does that in the context of quality measure that represent the logical algorithmic relationship between these underlying concepts. Basically, everything that we do in organizing data and preparing it for analysis has parallels to that kind of adding of value on top of raw data by embedding grouping concepts so that you get to analytically tractable concepts from raw encounter data, or assessment data, or other data sources.

Moving on to the next slide, which is a depiction of the data sources that we're integrating in our division, you'll see the broad sweep of social and health services that are delivered in a typical state agency environment, plus other areas that are really areas where we see critical interaction between services delivered in social programs and health service programs, behavioral health programs included, and other publicly-funded delivery systems: criminal justice, employment, housing, education. This slide is a little bit dated; it doesn't include some newer sources that have been integrated like jail booking data and Medicare data for those who are dually eligible. If we were to refer back to the previous slide, all these data sources require that same sufficient understanding to transform raw data from those multiple sources from criminal justice systems, etc. into analytical constructs that are valid and prepared to be analyzed. Again, that value add, that mastery of many dimensions of the human service experience that is critical for building out this analytical data infrastructure and keeping it aligned with how all these IT systems and delivery systems gradually, or not so gradually, evolve over time.

Let's move on to slide 35. Again, this is another reference to slide 34. In our environment, we have sequel databases, we have SAS data marks and we have specialized web applications designed to support particular use cases. So, you want to think about sort of what's in there; that's kind of the what's there that we're building on top of interfaces to raw data.

Moving on to slide 35 - what do we do with all this information? There are four broad headings that pretty much everything we do can fit under those headings. We do descriptive policy analysis, which would range from budget analyses to informed decision packages, ad hoc stuff we might do for litigation support, but also that descriptive analysis is stuff that we're often doing when we first integrate new sources into our environments. We integrate jail booking data for the first time; we want to see how that information relates to other information we already have. For example, we want to see the extent to which for some Medicaid who are booked to the jail have behavioral health issues and we do that kind of work from a descriptive perspective. You see things like, especially we're an expansion state; most folks who are booked into jail now have Medicaid coverage or are on other public systems and the vast majority of those folks have SUD issues or mental health needs. So those are the kinds of descriptive analyses that we are often doing as a foundational body of work as we're understanding and integrating new sources into our system as well as doing a lot of work that is fundamentally descriptive, driven by the rough and tumble of the most recent legislative requests or a policy question an agency had or a division director might have.

We do a ton of work that is program evaluation in nature and if you look at our website you'll see dozens of program evaluation studies where we're using matching techniques or other approaches to do that work. We do a lot of increased amount of predictive modeling and we're going to go to slides that go into a little bit more detail about these things shortly. We are doing more and more performance measurement.

Let's now move on past slide 35 and I've kind of talked about slide 36 already, so let's move on past that and dive a little bit deeper into program evaluation examples. This slide is very complicated; I really just wanted to throw something up that conveyed, if you spend a little bit of time staring at it, the idea that we're using matching algorithms to basically do quasi experimental program evaluation. We're creating control groups or comparison groups that look like the intervention groups that we want to study where we're trying to understand a given program is having impact on outcomes that we're concerned about. This is a stylized representation of a particular case to kind of visualize that.

Let's move on to slide 38. This slide is an analysis that we actually published in *Health Affairs* last April. I wanted to mention that because it's an illustration of where the work that we're doing is of policy journal submission quality even though most of the volume of what we're doing we're publishing for internal purposes; much of it will go on our website. We're bringing an academic rigor and we do publish intermittently in peer review journals like *Health Affairs* as we did in the case of this study, which was a study of a precursor to our HealthHome program.

Let's pass the next slide, which probably goes into a little too much detail for what we need now to talk about some of the considerations in doing program evaluation work. Let's move on to predictive modeling and clinical decision support.

We do share a subset of the data that we're integrating in our analytical environment in individually identified form with a carefully curated group of authorized users, generally affiliated with managed-care organizations, behavioral health carve out organizations, Area Agencies on Aging, HealthHomes, and the

like. We are actually making this information available in a timely, but not real time because this is administrative data, form.

If we go to the next slide, to actually help them identify who is eligible for high-touch care management/care coordination services, to help them develop care plans, and informed care management for this high-risk populations to help them find and engage clients who they have a care management responsibility for and some other special features that are built into that application. So we are making some of this information turn over as rapidly as we can to actually inform on the ground service intervention strategies. One big caveat about that, 42 CFR 2 is still a significant barrier in our ability to share SUD treatment data through this kind of mechanism. So that treatment information is redacted. At the same time, there is a lot of SUD risk information that's not protected by 42 CFR 2 that we can share and we do share in this application.

Let's go ahead and move on to our last category of major use cases, which is a performance measurement. We are doing an increasing amount of work where we're building out dashboards of various types that are tracking either national standard metrics, like family HEDIS metrics, or state-developed measures where we feel that there are gaps in the national standards to track over time outcomes, utilization, quality, often with a focus on a lens of subpopulations where we're really interested in disparities or differences regionally, across different communities, across service-contracting entities; we are often concerned in that context about differences between those with different kinds of behavioral health risk factors and those similarly situated Medicaid enrollees who don't have those risk factors. This particular slide points to a phenomenon I think a lot of people on the call are already familiar with which is that behavioral health risk factors, especially SUD issues, are really a profound driver of ED utilization in adult Medicaid populations. For example, just an illustration of the kinds of metrics we're deploying more frequently and the kind of lens we are applying to those metrics to understand the interaction between behavioral health risk and key measures of interest.

Let's go ahead and move on past the next slide, since 44 is a deeper dive than folks are interested in. Some of our thought process on how we have thought about major selection and development.

I want to close with a high level summary of some of the challenges in doing this work and, again, go back to something which can't be overemphasized, which is: the key foundational aspect of building and maintaining trust among data owners; the fact that they need to buy in; they need to agree to make their data available; agencies don't have to do things that they are allowed to do under our statutory and regulatory environment; and they need to engage to bring their data into this kind of effort. Agencies have very valid concerns about that, which are related to resources, in-kind conscription of subject matter expertise, which is essential to use their data well, and the risk that some agencies may feel around the dissemination risk associated with even information which may point to challenges and opportunities in outcomes for clients they serve. There are also risks associated with information being used to the best of intentions without being formed by the necessary subject matter expertise to draw correct inferences. So they are very valid concerns that agencies have about the complexity of their information, the complexity of how they do their business and how it's reflected in their IT system, and external parties' ability to gain enough mastery to do that work well. Building and demonstrating that you will learn from them how to use their data well, you'll share information with them so they can vet it; these are all really important parts of the process so that agencies' valid concerns about how their data is being used will be addressed so that they will get value from engaging with others in this kind of work.

Another important consideration is that building this kind of infrastructure is hard; maintaining it over time is about as hard as building it to begin with because there's constant, unending evolution in this environment. Recent examples ICD10 transitions, Medicaid expansion, in our state moving from fee-for-service to managed care for more and more populations, and the integration of physical and behavioral healthcare, all having profound implications for how data exists in our IT systems, how we need to work with it, and how we can work with it; the kind of agreements we'll need in place to be able to allow us to continue to work with it. The maintenance of this capacity isn't as challenging as building it and for those doing the work maintenance is maybe more boring than building, and points to some degree of staff retention and engagement challenges that is met with, especially in the state agency environment.

One last thing before I turn it back to Suzanne, I do think it's critical for folks to understand what makes doing this work hard in our environment. It's not that we have a lot of data, our data is actually not big, if you would compare it to Google or Amazon, they would laugh at the bigness of our data because it's not really big, what makes our data big, or, really, what makes it complicated to work with is its complexity and that is connected to the dimensionality of the domains of expertise that matter in being able to analyze it well; clinical, statistical, econometric, actuarial, all that kind of stuff, policy and program design, fiscal IT system variation, and the fact that generally we have a lack of standardization as you look across states, even in areas where we have standards, like in the MIS environment. The challenges are really about complexity and there are challenges in building an integrated environment that connect to buy-in and access to data and building a data-sharing foundation and a shared agency stewardship environment where that's the approach you need to take. But the underlying analytical complexity is not about the size of the data; it's about all these domains where work to be done well needs to be connected to many facets of subject matter expertise to do more good than harm with the data. So I'm going to pause there and turn it back to Suzanne to carry on.

SF: David, thank you very much for the detailed information you provided about what you've been doing in Washington. I am doing a time check and I want to make sure that we have time to hear about Oregon's experience from Dr. Jon Collins, so what I would like to do, David, is just briefly defer questions that we see coming in specific to your experiences in Washington until after Jon's presentation; again, recognizing that there are things across all three presenters and your experiences. Thank you very much, David, for continuing to stay with us for those questions that we'll address following Jon's presentation.

With that, I would like to introduce Dr. Jon Collins. Jon, welcome and please, we look forward to hearing about Oregon.

Jon Collins (JC): Thanks everyone. I really appreciate you guys tuning in for this presentation. Before I get into the slides, I'm going to start off by saying that as I go through the information you guys might also interpreting it as a cautionary tale or maybe a shining aspirational goal, or maybe just totally unrelatable. As we were just talking, this is really a complicated situation in terms of data integration. It's not just complicated because of some of the data issues and some of the technical solutions that could be offered, but it's complicated because of the varied ways in which the states are organized: how your service system is designed; what the funding requirements are associated with the services; how the contracts are arranged with your various providers, be they managed care, fee-for-service, county-based, or whatever; all sorts of issues impacting data integration and how you go about that work.

One of the ways in which, before I get into the actual detail of our MOTS system here in Oregon, that Oregon handled this was to look at how we were organized and we made some pretty big changes in terms of how we were organized, so that we could move forward with analysis of integrated data. The

Oregon Health Authority (OHA), the slide that I have up here, as very simplified presentation of the OHA is divided into a couple of different main divisions: one of them is the Health Systems division and under that umbrella they actually handle Medicaid and non-Medicaid services for behavioral health services, physical health, dental, etc.; all that is under one umbrella. Then we formed, separately, a Health Policy Analytics division, which is what I am part of, and that is a covered entity that works cooperatively with the Health Systems division to promote policy and move that piece along, but also to take all the data that's coming in under the Health Systems division and work with that to help understand and plan for policy and services and work with the legislature and all of the other various stakeholders. The data we end up having available to us is generated both within the Health Policy and Analytics Division as well as the Health Systems division and they include: Medicaid claims data, behavioral health data that we end up submitting, survey data, all payor claims data, which includes things like Medicare information as well as commercial information. We actually organized in such a way to basically promote and allow us to move forward with data integration.

Getting more specifically down to substance use data, I'm going to concentrate on a solution that we put forward that focused in on behavioral health and substance use data as well as Medicaid and integrating those two things. It's called the Measures and Outcomes Tracking System or MOTS. As the slide here points out, the idea for MOTS came several years ago, probably five or six years ago; we needed to put a new system together in Oregon around Behavioral Health Services (BHS) that basically met our current set of business needs. The old system that we had that was referred to as the Client Process Monitoring System was a 30-year-old system that didn't really meet the business needs any longer; it did do an okay job of reporting data and TEDS, but it wasn't very flexible because, quite honestly, when it was originally designed, the people who were designing it had no idea where our system would end up 30 years later; it just wasn't thought of that they needed to be more flexible and all the changes that would occur over that time.

The visions for MOTS was to create something that reflected our actual delivery system and in Oregon was are a very Medicaid heavy state. About ¼ of our population is on Medicaid after we implemented the expansion and in mental health, a huge majority of the services are covered by Medicaid, and, since the expansion, an even higher percentage of substance use services are covered by Medicaid. So, we really thought we needed to implement something that would allow us to more easily integrate Medicaid service data and the non-Medicaid service BHS information, and combine that information to better inform our planning and policy development, and to have better accountability to the legislature and to our stakeholders. The idea was that we would create something that would allow us to combine information from the Medicaid service area and to generate service data for non-Medicaid services for substance use and to use those things to basically still generate the TEDS episode data set, meet our obligations back to SAMSHA for meeting that requirement.

In doing that, and the resulting MOTS, we needed to focus on how that information was designed and what we needed to do was to focus on creating a couple different data sets to integrate. One of them was set of profile information and this slide outlines some of that. It's really just our basic demographics, race, gender, marital status, employment status and things such as that. We also wanted to collect an integrated set of behavioral health data so it could be applied to both our mental health and substance use system, which is integrated in our communities. This slide outlines a lot of the information that we were collecting from that behavioral health data. Then there were specific pieces that we needed to collect for substance use and be able to meet the requirements for submitting TEDS data; these are related to some of the items that are listed here.

One of the most difficult pieces in implementing this new data system for us was, and it was also very important for the concept of integrating with Medicaid, we wanted to start collecting non-Medicaid service data. Previously, in the old system that we had, we had concentrated on collecting information that was more episodic in nature, that focused on what was going on in the beginning and end of a service episode; this allowed us to meet our basic TEDS requirement, but it didn't work too well combining with information that we had on our Medicaid side, which was much more discreet and claims-based. So we had to implement under MOTS the process for collecting a similar set of data for non-Medicaid services and so we basically mirrored our non-Medicaid service data collection after our Medicaid piece and worked with our providers. That met with some objection, but it also wasn't too bad because most of those providers, in addition to providing non-Medicaid services did Medicaid so they weren't totally opposed to the idea; it wasn't totally foreign to them.

Coming back around to the vision that we had for MOTS and filling in some details from the previous slide that I put up, basically we end up with... Then the core piece of this is the Medicaid service data and the non-Medicaid service data that we have; we take that information and basically convert what's very discreet information about the volume and types of services that individuals are receiving and converted it to episodes, based off some business rules and so on that we developed. Because of the set of information that we've collected with this data and the profile data that I mentioned earlier, we were able to link information across our Medicaid and non-Medicaid data and also link information from the episodes that we create and combine it with profile information to basically create the TEDS episode data set. What we're doing here is we're basically combining what we saw the best of both worlds in terms of the TEDS data, which provided us with a broad set of outcome information, along with the Medicaid service data and the non-Medicaid service data that we're collecting that also allowed us to examine the volume and the types of services that individuals were receiving in a much more detailed level than generally what you have to report into TEDS.

Another key piece of this was related to how we end up communicating this information. Our service system is kind of complicated right now in that we have Community Mental Health Programs which are also responsible for substance use services, as well as coordinated-care organizations, which we contract with for Medicaid services, and we have our State Behavioral Health Program, which we do some direct contracting with providers to deliver services. We wanted to make sure that as we were forming this system that we developed also a process for communicating back and forth between MOTS and these groups who are delivering services and designing services. This has been a challenge for us, but we've met with some successes so far, and, at the very least, we're able to provide back a lot of the raw information that submitted into the MOTS data back out to the providers and use that to help with some of the validity checks that we're doing. What we haven't quite gotten to yet and are still working on is some of the higher level information and summarization of data and having that be readily available to come back to the providers and they aren't talking about outcome information.

The MOTS data itself we can use now to track and analyze outcomes across a wide variety of areas and we're able to try and share some of that information back with providers and this basically allowed us to do it at a level that we weren't able to do previously so that we have a volume of information as well as the outcomes. Do things really work all that easily? No, I wouldn't say so. We have problems with matching up episodes of treatment with the profile of data and there's some concerns around the quality of the data input that really goes along with the implementation of any kind of new data.

I'm going to skip on here to the end because I see we're running out of time. Probably one of the biggest issues that we've had to deal with is that we decided to do this internally rather than going with an outside

contractor and like David has already mentioned, there are issues of maintaining leadership buy-in, resources, and things such as that to keep things moving forward; I think that's something that all the states have to deal with. It's just a matter of continuing to emphasize the importance of this and also to emphasize the importance of across the full health system and the importance of us being able to examine BHS.

With that, I will pause and turn things back over.

SF: Thank you very much, Jon, for sharing your information and your experiences in Oregon. I'd like to now turn back to an opportunity to have further discussion with our presenters. One of the things that I'm struck by, both David you mentioned this and Jon, you also mentioned this, both for Washington and Oregon, and, I believe, Minakshi you referenced this, is that 42CFR2 was not necessarily a barrier to your efforts to do data-linking and each of you had some slightly different experiences directing 42CFR provisions.

David, if I could turn to you first, and then others that may also want to respond, but David you mentioned specifically kind of the sharing of risk information, but not certain information that was privileged. Could you talk a bit more about how you navigated that and kind of approached that issue?

DM: Yes and that came up in the context simply of sharing identified health service information from the state agency environment with treating providers in the community, often affiliated with managed care organizations or similar care management organizations. The information that we do share in that context that's related to SUD risk would include, some of the classic examples, would be an emergency department (ED) visit with a diagnosis of SUD, a physician office visit with a diagnoses of SUD, and, also, prescribing ___1:23:22?? in a primary care office setting is another example; in that case it's something that we'd actually think of as treatment, but which our assessment would be, having gone through the legal privacy review process interagency environment, is that those kinds of services are subject to the same restrictions that protected health information is, but they're not subject to the additional restrictions under 42CFR2. Maybe we could have a longer conversation about what the program aspect of 42CFR2 and particulars of the facet there, but hopefully that's kind enough of a sense of what we do allow to be shared a subject to HIPAA because we still need to meet those requirements. Where, by contrast, we would be redacting information from methadone treatments or residential treatment or outpatient SUD treatments, or detox encounters.

SF: David, thank you. Jon, you also talked about your experiences in Oregon navigating this particular issue as well. What can you share with participants today?

JC: I think the main thing that's really helped us is actually from that very first slide that showed around this is how we're organized. We are organized in such a way that all the responsibility for the various healthcare services of the Health Authority administers our place under one umbrella, the Office of Health Analytics, and as a covered entity we are able to explore and combine the data sets that we have to basically conduct our essential business activities. Internally, it's not really much of an issue for us to navigate that particular issue. It is still an issue more broadly in terms of sharing information back and it's one of the things we're still dealing with in terms of trying to promote more transparency with the data and it's not something that we've totally solved yet.

SF: Jon, thank you very much. We have several questions coming in around a similar theme that I would like to open up to all of the presenters and David, I believe it was focused on some language that you

chose, but Jon and Minakshi, you also referenced, which is the recognition that the data is very complex that you're working with; so you partner with other agencies for whom you are using that data. David, you talked about it in terms of trust and Minakshi talked about it in terms of priorities, and Jon, you've kind of mentioned that. So if I could open up to you: what are some of those specific lessons learned for states who are trying to build it? They may not yet have the full kind of complexity, all of the nuances contextually for that data, but they want to engage state agencies and build that trust. What are lessons learned that you would have for your colleagues across the country as the focus on that particular aspect of data-linking?

DM: One thing that has been effective is to commit to sharing information proactively where analytical work is being undertaken that touches on multiple agencies to have a vetting process where the effected agencies can vet any sensitive work; in part you want this as an analyst to make sure that we haven't missed something in framing the analysis to answer a particular question, but to commit to sharing information and for a lot of folks to weigh-in and to have another round of that potential subject matter expert engagement to help make sure what we might be highlighting isn't an artifact of some change we made in how we did business as opposed to reflecting the inferences that we would be otherwise drawing from the analysis. Share proactively.

SF: Thank you, David.

MT: I've always recommend people starting with other partners that are also at least interested and not trying to start working with the people that may completely need a lot of convincing; even if that may not be your priority agency, but they're excited around you because sometimes it can be children's and family, and each state is organized differently. I think anybody that's more excited, start with them and start demonstrating value because that's what gets the other people convinced.

JC: I would really echo that piece because to the extent that you can get people's interest and see the shared interest in terms of looking at data across the systems, shared outcomes, shared financial impact and things such as that, it really helps motivate and move people forward with this type of work.

SF: Thank you all. I am aware of time and that we do need to transition to closing. Certainly what we've heard from each of you today is really states kind of focusing on really thinking about their analytic capabilities. Moving beyond just the focus on the barriers, but really thinking about how they can have greater value by linking their data. Certainly you all also highlighted the theme of building trust, being useful to some of the priorities of some of your state partner colleagues, as data gets linked and shared and used. And then, certainly, that constant need to collaborate, feedback loops, learn and build as a system and as a collaborative as you're looking at that data and using that. Also, in your remarks was the need to start incrementally; it may smart starting smaller, you may be starting with some initial engagement of a few key partners, and then moving up from there in terms of a set of priorities across your state. So those points were very helpful to us today.

For those participants on the phone, we have highlighted for you several resources that we would encourage you to take a look at to support your efforts and your dialogue in your own state. Certainly, also, we are providing to you the contact information for all of our presenters today. I would also like to note two things: the slide deck will be sent out to all of you who registered for this webinar, it will be sent out to you following the webinar today, so you will have the complete slide deck and we also recognize that there were many questions submitted that we could not get to and so we will be providing individual follow-up for questions that were submitted via the chat function. For those of you who may have

submitted questions sitting with the queue with the operator, we'll also get that information so we can follow-up with you on your specific question.

We want to thank you for participating in this National Dissemination webinar today and thank you, specifically, to our three presenters with your excellent detail that you provided on your own state system. Finally, we'd also like to ask for you to please complete the evaluation form that will appear when you exit the webinar. Thank you, again, for participating today.

[end of tape]