# ASPR TRACIE Webinar Transcript
# Pediatric Issues Informing Current and Future Disaster Planning
# October 3, 2024

**PowerPoint Presentation:** https://files.asprtracie.hhs.gov/documents/pediatric-issues-informing-current-and-future-disaster-planning-ppt.pdf

**Link to recording:** https://attendee.gotowebinar.com/recording/6860336173661076395

**Rachel Lehman (RL)**

On behalf of the U.S. Department of Health and Human Services Administration for Teacher Preparedness and Response, I'd like to welcome you to the Pediatric Issues Informing Current and Future Disaster Planning webinar, which is hosted by ASPR's Technical Resources Assistance Center and Information Exchange and ASPR's Pediatric Disaster Care Centers of Excellence.

Before we begin, we have a few housekeeping items to note.

First, the webinar is being recorded.

To ensure a clear recording, everyone has been muted.

However, we encourage you to ask questions throughout the webinar.

If you have a question, please type it into the question section of the GoToWebinar console, and during the question-and-answer portion of the webinar, we will ask the questions we receive through the console.

Questions we are unable to answer due to time constraints will be followed up directly via email after the webinar.

To help you see the presentation better, you can minimize the GoToWebinar console by clicking on the orange arrow.

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**Next slide.**

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**Next slide.**

My name is Rachel Lehman and I'm the acting director of ASPR TRACIE.

And let me begin by saying thank you so much for joining today's webinar.

I also want to thank you for what you do on a daily to enhance preparedness, response and recovery activities at your healthcare entities and in your communities.

Your role is vital in addressing the daily and arduous challenges being presented.

So your willingness to spend the next 75 minutes with us to further advance your knowledge is noteworthy and greatly appreciated.

I also want to convey my heartfelt thanks to our amazing moderator and presenters.

Your willingness to lend your precious time and share your substantive expertise so others may benefit is commendable.

And I'm very appreciative of our continued collaboration and partnership with ASPR's Pediatric Disaster Care Centers of Excellence.

And just lastly, many thanks to the astounding ASPR TRACIE team for coordinating the session.

**Next slide.**

To ensure ASPR is meeting the nation's medical and public health needs before, during, and after a disaster or public health emergency, we're focusing on four key areas, preparedness, response, partnerships, and workforce readiness.

**Next slide.**

For our new friends to ASPR TRACIE on the webinar today, this slide depicts the three domains of ASPR TRACIE, Technical Resources, Assistance Center, and Information Exchange.

If you need technical assistance or you cannot find the resources you are looking for on the ASPR TRACIE website, please do not hesitate to reach out.

Simply email, call, or complete an online form and we'll promptly respond to your inquiry.

**Next slide.**

So, this webinar is very timely as we answer the fall and winter virus season.

Remember to utilize our pediatric surge resources page, which has resources that can help healthcare workers address pediatric surge and viral respiratory illnesses.

And for all hazards, utilize our Pediatric and children's topic collection, which can help healthcare facilities, healthcare coalitions, and other health and medical providers consider the specialized care and resources needed for children prior to, during, and after an incident.

And of course, please utilize the Pediatric Disaster Care Centers of Excellence.

They provide invaluable services and resources for you to use.

**Next slide.**

It is now my pleasure to turn it over to Joseph Lamana, the Director of the Office of International Operations.

Over to you, Joe.

**Joseph Lamana (JL)**

Well, great.

Thank you.

And I look forward to hearing how this discussion carries on, but I wanted to start by recognizing and celebrating all of the progress that the Peds community has made over the last five years or so to address healthcare for kids during disasters.

I attribute much of this, in large part, to our partners and our three centers of excellence, which you'll hear more from them in a little bit.

But we cannot pat ourselves on the back and call it a victory.

The health threats to kids is growing and is becoming more complex and interconnected.

My point in case is the current hurricane response in southeast United States, and also that it happens to impact the supply chains with the interruption of product from a Baxter facility down there, or the impacts of the port strike that we're seeing right now on the East and Gulf coasts.

Or, and as was stated, the winter is coming and there is continued concerns about another tripledemic.

All of that will be front and center.

And all of this calls for even greater planning and collaboration.

We need now, more than ever, to build continued focus on, from ASPR, on kids' issues.

We have the Centers of Excellence, the National Advisory Committee on Children and Disasters, another program within ASPR, the Regional Disaster Health Response System, and of course my office, to name a few key partners.

There are many more, clearly.

So let's get moving.

The next speaker is going to be Dr. Michael Anderson, and I'll pass the torch over to him.

**Michael Anderson (MA)**

Joe, thanks so much.

Just a couple of brief “thank yous”.

First, to Rachel, Audrey, the entire ASPR TRACIE team.

This looks so easy and flawless, but the amount of work it takes to put a webinar on like this for some 600 people and growing is just an enormous amount of work.

So my thanks, not just for this webinar, but you saw from the resources what incredible work they put in each and every day.

I also just want to thank Joe.

His just stalwart leadership, his advocacy for this work is really the reason it's successful. So Joe, thank you so much for all that you do.

This is a really important topic. We'll try and get as much done in 75 minutes as we can.

As Joe and Rachel both pointed out, it doesn't seem like we get a break from talking about kids and disasters because there's always a cycle of something coming.

And we're going to talk with our three and four panelists about the current situation from Helene about the potential supply chain issues going into the fall and winter.

And of course, RSV and flu and COVID going into the winter.

We've got a lot of big issues to talk about.

So without further ado, I'd like to welcome our three principal investigators from the COEs to come on camera.

I'm going to ask them to briefly introduce themselves.

And then Dr. Dahl-Grove will go through some really impactful and important slides.

So I'm just going from West Coast to East Coast.

Dr. Chris Newton.

**Chris Newton (CN)**

Hi, everybody, I'm Chris Newton.

I'm a pediatric surgeon at UCSF Benioff Children's Hospital in Oakland.

I am the PI for the West Coast version of the pediatric disaster centers.

We call ourselves WRAPEM.

Thank you. Dr. Kaziny.

**Brent Kaziny (BK)**

Hey, everybody.

Thank you for having us on this webinar today.

My name is Brent Kaziny.

I'm a pediatric emergency medicine physician at Texas Children's Hospital Baylor College of Medicine, and I'm the PI for the Gulf 7 Pediatric Disaster Network.

Thank you. And last but certainly not least, Dr. Deanna Dahl-Grove.

**Deanna Dahl-Grove (DDG)**

Hello, everyone.

I'm so glad to be here today, and hopefully we'll be able to pass along some great information for you.

So I'm a pediatric emergency medicine physician at UH Rainbow in Cleveland, Ohio, and I am a co-PI for Region 5 for Kids, which is primarily located in the Midwest.

**MA**

And, Dr. Dahl-Grove, I believe you're going to be presenting the slides on behalf of the speakers.

**DDG**

I'm going to tell everybody.

So these first few slides are just to set a level playing field so everybody understands kind of where the pediatric COEs are and what we do.

This is our disclosure for all three of our grants, so you can go to the next slide.

So I think it's really important to understand the need for kids.

So I think you watch recent healthcare crises, you see what happens. During the COVID pandemic we saw the mental health crisis really, you know, just exacerbated what was going on during the respiratory surge, which was a couple of years ago.

There were facility issues as far as capability and capacity.

And so I think those are the most recent things we see, but there's always these short little stories that come out from these disasters, from the wildfires to probably this Hurricane Helene that are going to emphasize some of the disparities that actually happen to kids and some of the limited resources and things like that.

And that's why we're here to help minimize some of those.

**Next slide.**

So when you look at the numbers, these are just a slide to sort of let you know that kids are make up about 25% of our nation's population.

And when we start to look into the deep depths of the number of kids we actually serve in emergency care, it's about 30 million per year.

So there's a lot of kids that are actually getting served, but when you actually look at where they're actually getting in their care, most of the care is happening in non-children's hospitals.

And when we did a deep dive into looking at other hospitals' disaster plans, we note that probably only less than 50% of hospitals actually have a pediatric-specific disaster plan, and it's not even a complete one at that.

And then the last score that's actually on here is actually a pediatric readiness score that just looks at hospitals across the nation and how ready they are to just take care of kids in emergency departments.

**Next slide.**

This is just a timeline to let you know what's happened in our federal government over the past 40 years or so with pediatrics.

So, EMSC is Emergency Medical Services for Children.

It was authorized back in 1984 and has actually been an amazing program that's in 50 states and seven territories.

And this, they then proceeded to launch the National Readiness Project.

And then in 2016, the Emergency Medical Services Innovation and Improvement Center was actually formulated and continues to this day.

So that moves us to 2019 when ASPR actually went ahead and launched the NOFO for the first two pediatric centers of disaster excellence, which include WRAPEM and Region 5.

And then we were joined in 2022 with adding a third pediatric center of excellence in Gulf 7.

So this is just a very brief timeline of what has happened in our nation with regard to pediatric disaster preparedness in the emergency spectrum.

**Next slide.**

So back in 2018, ASPR actually formed the Regional Disaster Health Response Systems with RDHRS1 in the Northeast and then the program in Region 7 in the central United States.

And so I think it was really a terrific way to start getting coordinated healthcare structures going in these different regions and I think that is why in 2019, We can go to the next slide, they were actually formulated the Pediatric Centers of Excellence.

So these just gives you an idea of where we're located, when we are awarded, and who the states are that are involved.

So we'll get to another slide that will give you a very great picture of what the pediatric assets look like in the United States.

So we can go to the next slide.

So, the ASPR had a vision back in 2017-18, and I believe this, Chris, is from Dr. Cadillac.

And this is just a really great idea to sort of see the three tiers of how we actually think about responding to disasters.

And you can see that the RDHRSs and that the Pediatric Disaster Centers of Excellence actually fit into this middle tier, were really there to help sort of look at regional disaster response. And that's where we really function very well.

And you'll understand some more of the work that we've done and how we do this on a regional basis as we talk today.

**Next slide.**

This is the pictorial graph that I mentioned that sort of gives you an idea of the federally funded networks for children in disasters that has been created over the past six years since the implementation of the Pediatric Disaster Centers of Excellence.

You can see that the blue is actually WRAPEM.

The green is actually Region 5 for Kids and purple is the Gulf 7.

The red dots actually represent another network which is the Pediatric Pandemic Network which actually includes 10 and now upwards of 12 hub hospitals that are really concentrating at looking at improving disaster care for children in children's hospitals and helping children's hospitals to be leads in their communities with regard to disaster preparedness.

All of the states actually have EMS for children at the state level, and they're all incorporated there.

But this also just gives you an idea of the breadth of what's going on.

So you can see that the gray areas are actually areas where there are no pediatric disaster centers of excellence.

And I would say that the work that we do is not stuck within the boundaries of our states.

We definitely reach out to other regions across the country, and I think it's really important to understand that RDHRSs are also in those regions, and so there's a lot of coordinated care that has actually been able to go on because of our connections.

**Next slide.**

This is the core principles, which I think are really important to understand about how we, as Pediatric Disaster Centers of Excellence, actually see ourselves.

So we really seek to coordinate these public-private partnerships.

We really seek to have equity across all of the states that we actually serve.

We have a lot of academic environments and institutions that are actually involved in what we do with a lot of talented staff that are there, but we really seek to have no labels with our institutions, even though those are the leads for our grant funding.

But we really try and take that out of the conversation.

We try and have very simple and constant communications and really are seeking to be in an focused as we move forward.

**Next slide.**

These are the pillars on which the pediatric centers of disaster excellence have been built.

So we really seek to increase the capability of coordinated disaster care across the regions that we work in, in the whole United States.

We're trying to strengthen disaster plans and coordination wherever they exist.

And we're really looking at how to build capacity in all of the nation across the board, especially within our regions, obviously using our regions as demonstration projects for coordinating care.

We look at increasing the healthcare professional educational competency, which will actually increase capability and capacity across the nation, and we really have an emphasis on looking at situational awareness within disaster care, and we'll talk a little bit about that today.

**Next slide.**

These are how we're making a difference in the whole entire disaster cycle.

So from prevention to mitigation to preparedness, response and recovery, we really seek to operate in all of these five areas in order to make a difference.

**Next slide.**

So how do we contribute to pediatric preparedness capabilities?

So we really tap into a lot of subject matter experts.

We try to do consultations where real-time response on situational awareness may be needed.

We try to identify gaps as we're moving through in creating projects that actually close these gaps.

We use creative resources from our institutions, pediatricians, caregivers.

We like to listen to families.

And we like to listen to the practitioners that are on the ground and in those small rural areas to really understand what their needs are.

And we are very inclusive about health disparities and equities across the board.

**Next slide.**

These are our partners that we were alluding to.

So you can see that they're quite vast, but we all are, at the center is children and families, whether they're children with special healthcare needs or adolescents, people that are in our foster care system, we look to seek on and serve all of them.

So we work with both hospital association, federal partners, healthcare coalitions, community hospitals, foundations, NGOs, local agencies, pre-hospital, academic centers, EMS for Children, Pediatric Pandemic Network, we work with all of them.

**Next slide.**

his is we are here for you, and we want to hear about all the things that are going on.

We've created toolkits, education, we've looked at systems development, creating guidelines and standards, really work to connect people across the board, you know, who does somebody know and how can we help advance the care for children in the area that they're actually interested in.

In addition, we do advising for CME support, as well as considering data and research.

**Next slide.**

This is who we are and where we actually do a lot of our work.

These are all of the groups that we have represented, both in all three of our Pediatric Disaster Centers of Excellence.

We often do a lot of core data care, especially in things like drills and exercises, education.

We look at all of these things, because doing our work in silos will not be helpful, so we really try and share the things that we do and best practices that we learn across all of our centers.

**Next slide.**

This is actually a highlight of probably the Pediatric Disaster Centers of Excellence in action.

You can see that we responded during the respiratory surge, and I think we were really proud of how we approached this.

We held a series of 10 ASPR-hosted town halls in all of the regions across the United States to hear what was going on in their jurisdictions, to see if there were chances for us to understand not only what was happening there, but to actually provide real-time situational awareness to us, as well as helping them to seek solutions.

**Next slide.**

This is where you can follow us.

We actually have a website called pediatricdisaster.org, and I'd encourage you to take a look at that.

That's where you can actually go to all three of the pediatric COEs' websites, and you can see the tools and toolkits, exercises, after action reports, things that we've actually created, educational tools, infographics, but we will hopefully highlight some of those things during our panel discussion, which is coming up next.

**Next slide.**

**MA**

Dr. Dahl-Grove, thank you so much.

A really incredible summary of amazing work at all three of the centers, as you point out, at a lot of different federally funded centers as well.

I'd like to welcome Dr. Jonathan Kohler, if he could turn his camera on and come on to the panel.

And when he does that, I wonder, Chris Newton, if you would do the honor of introducing Dr. Kohler?

**CN**

Yeah.

Yeah, Dr. Kohler.

Well, I know I'll let him speak for himself as well.

But just for transparency, we wanted to bring on an expert and a voice that could speak to rural access for pediatric healthcare to blend in with this panel.

And so one of the national experts in my mind is Jonathan.

He's a pediatric surgeon at UC Davis and there's so many organizations when it comes to rural access that he is deeply involved with.

I don't know, Jonathan, any of you want to highlight?

**JK**

Thanks, Chris.

It's a pleasure to be here.

And yeah, I'm the Pediatric Trauma Medical Director here at UC Davis and the immediate past chair of the Access to Surgery for Kids Committee of the American Pediatric Surgical Association.

I really have a lifetime and certainly whole career interest in rural access for children.

I'd spent five years in Wisconsin before I came out here and in both places, I really cherish the opportunity to build connections with our rural community partners and figure out ways for them to take care of children in their home environments.

I also serve as a consultant for the PPN in that area as well.

**MA**

Really great to have you here.

Thank you so much, Jonathan.

Let's get right to the questions.

And for the almost 700 folks that are on the line, we're going to bring questions from really three sources.

We've come up with some things that we want to talk about betwixt and between the panelists.

Your questions are being filtered in as well.

And then I'm really going to encourage our four panelists there's some avenue we didn't go down to please add to the discussion.

We were having a discussion in the waiting room before the webinar began.

Unfortunately, we're giving this webinar at a time of yet another disaster affecting children in the United States, and I would just open this up to any of the COEs.

I think one of the things that you all have done so incredibly well, we didn't really put in the slides, is inform federal partners up the chain, if you will, about what's going on in the trenches.

And folks may know we host a monthly pediatric interagency group.

And I will say between the COEs and the PPN, you provide incredible insight into, the data may say this, but this is actually what we're seeing in the children's hospitals.

And going into fall and winter, I think that interagency group is really a gift to the federal partners that are trying to figure out what's going on.

However, we're now in the middle of an evolving disaster.

Obviously people have seen the media reports from Asheville and other areas.

And I think some of us are getting antsy that we want to bring ground truth up the appropriate disaster chain so that kids' needs are being addressed.

And now, Chris, you and I have had a couple of discussions about this just from your vantage point and for all of our panelists, I guess, two questions.

What are you hearing from the ground?

And we can get more formal through other channels.

But number two, how can we continue to improve or iterate?

And Deanna, you had some really good points on this, of bringing the ground truth up through the regions and the states to the Feds.

So Chris, I'll start with you, then maybe turn to Deanna and open it up.

**CN**

Yeah, and I'll acknowledge it's a pretty tough question to answer of specifically what's going on right now today in Southeast US.

It is definitely a changing dynamic from day to day.

We have, in our groups, held emerging threats discussions.

This is combined between the HRSA PPN and the COEs to hear from folks in various states in the Southeast.

There's no doubt as things began, the big issues were the primary concern.

The big issues meaning there's no power, there's no water, there's several hospitals that are needing to partially or fully evacuate, you know, those are massive infrastructure issues.

As those are getting addressed one by one, maybe some of the concern and worry is some of the ripple waves and smaller issues that are going to have some long-term effects.

So, there's a large geography of rural communities that are hurting right now.

And no power, and no water, and no access, and no communications is a very big deal.

And we hear anecdotally, but one of the concerns is I'm not sure we really know, you know, where all the kids are that are currently, you know, having problems and how to get to them.

**MA**

Dr. Dahl-Grove, others want to weigh in on this?

**DDG**

Yeah, so, and I think, Chris, you bring up some good points, and I think that it's important when we think about those super small communities that the healthcare providers that are there are affected also.

Their livelihood is affected, they're small offices, and because of the geographic challenges that can happen in Appalachia, you know, getting from point A to point B doesn't just take 20 minutes, it can take an hour to two hours.

So if you can't go to your local healthcare practitioner for your needs, your local pharmacy isn't open, those kinds of issues are super important to the families and children that are there.

And I think that going forward, we really need to think about having a way to communicate with those rural practitioners.

And I do know that there are some situational reports that come out from our partner in Healthcare Ready with regard to pharmacies and things like that, but there's probably some pharmacies in those smaller communities that aren't even enrolled in that program.

So somehow letting a situational awareness of understanding what our healthcare practitioners are doing so that they can actually serve those families is also really important.

**AM**

Jonathan, Brent, other things to add?

**BK**

Yeah, I'll just add, you know, I think that this recent Hurricane Helene highlights the importance of the COEs in that interconnection and networking among these children's hospitals has really provided the ability to kind of phone a friend, maybe in a more formal setting and way.

I can tell you through G7, we were in close communication with our partners at Emory and Children's Healthcare of Atlanta prior to the arrival of the storm and sharing some of the best practices that we've implemented being no strangers to hurricanes in Houston prior to the arrival of Helene in that greater Atlanta metropolitan area.

And that those kinds of conversations continue and evolve beyond this.

I think the big thing looking at what's been going on specifically in Western North Carolina, is this is the time to kind of echo what Chris and Deanna have already mentioned, where there's a lot of response, but we know that this is going to be a recovery that's going to take years really to get the healthcare infrastructure in particular when it comes to general pediatrics and the medical home back up and running to the place that it was before, if that ever does occur.

And so I think kind of continuing to observe what's going on, gather the information and data, share best practices from the COEs and from other partners that we've identified with folks on the ground continues to be kind of an everyday call.

**JK**

Yeah, I would absolutely echo the importance of that phone a friend.

You know, we've done a huge amount of outreach to rural surgeons and emergency departments and ask them, you know, what do they want from us and how can we provide useful tools to them?

And one of the things that we hear most often is like, we're very happy to know more about the workup for appendicitis, but what we really want is a phone number of someone we can call when we don't know what to do and we're not sure how to manage a sick child.

And so creating both formal and informal ways to be in contact with our rural partners, I think is absolutely essential and difficult to do.

You know, one of the things we really struggled with here in Northern California is just having a situational awareness of where pediatric resources exist.

So who has an open PICU bed, who has available floor beds, that's something we really encountered in the tripledemic when we really would have benefited, I think, from a higher level form of air traffic control for children and have struggled to get that, though there are now some really exciting initiatives underway to try to implement that out here.

And, you know, I think that notion of rebuilding and creating, you know, recreating those medical homes is so important too, because I think, you know, the data is still sort of trickling in and pretty delayed, but it does seem as though after COVID, when pediatric resources were sort of turned over to the adult influx, they have not bounced back, you know, in terms of inpatient care, and we certainly see that the lack of familiarity with management of children in rural settings and smaller community hospitals, who are now very quick to transfer to children's hospitals when kids come in, is very concerning because, you know, that assumes an effective ability to transport those children to available beds and a way to get them there.

And one of my friends in the pediatric surgery space always says that the best way to be ready for a disaster is to be ready for a Tuesday.

And I think that that absolutely holds true, you know?

So what can we do as an organization to provide places with the tools that they need to take care of kids on a daily basis, not just when, you know, a hurricane rolls through?

**MA**

So important.

It's really well said.

Hey, Audrey or Rachel, could you go back to slide 17 for a second?

I want to go on to a different issue.

And once again, thanks for folks that are bringing questions in.

I believe it was slide 17, there we go.

So from this humble pediatrician's assessment, this is a really important, amazing, and to be celebrated map because the COEs up until five, six years ago weren't there.

The Pediatric Pandemic Network wasn't there.

So going from zero to 100 miles an hour is really terrific.

But my question for the group is twofold.

And we're going to be having an in-person meeting next Monday and Tuesday with the COEs and PPN to talk about this.

There's some blank spots.

And I know we talk about collaboration and cooperation, but the Plains states and the Northeast are gray.

And I think just for the audience of 700 folks or so, could you talk about the ways that the available or already funded assets are working to make sure a child in Missouri or a child in Maine, you know, has the same benefits as other kids.

And then my follow-up question is, what are some potential strategies to make this map look more shaded with your kind of wonderful expertise, and I'll open up to anyone.

**DDG**

So I'm going to take this one first.

I think one of the initiatives that we actually started with Region 5 and the assistance of seven and WRAPEM was that we started a cross sites pediatric group and this has been it's been going about a year now on and it's a great conversation we actually pull in all the pediatric experts from the RDHRSs and they're starting to you know sort of concentrate on that and they've done

some exercises we've participated in those from Region 7 into or from into Region 5, into Region 7.

And I think that the sharing of information, it all comes down to knowing people, as Jonathan alluded to, you know somebody, and it's who can you call, how can you create situational awareness?

And I think that's been a really great forum to share information with the RDHRSs across the board.

And I think that getting our information out to the HCCs, getting it out to our regional ASPR hospital preparedness groups is actually really important too.

But that's one of the initiatives that we have actually done that has been very fruitful.

And I think getting our name out there has really made it possible.

I'll let Chris and Brent.

**BK**

Yeah, I'll just add I think the other key thing is while you're looking at these colored in states, that doesn't mean that we don't connect with the states that are grayed out as well.

And we have so many contacts in these states that are not filled in and formally members of our kind of efforts.

You know, one of the G7 educational products is being delivered in Kentucky, so a two-day course on pediatric preparedness for the healthcare provider.

Those are things where we're really trying to get out to those other areas outside of our formal networks and collaborate and share these resources.

I think we've really tried this past year to really kind of unify our efforts and kind of streamline the way that we deliver and disseminate those work products across the country and recognizing that things like social media have no boundaries, we're hoping to get the word out of some of the stuff that we've been working on beyond kind of these more formal designations that you see on this map today.

**CN**

Well, and I guess the only commentary that I would, I agree with Deanna and Brent, and so I won't repeat what they've just said, but maybe I'll comment on what's next for this map.

So as they said, there's a great deal of the work that we do that is halo effect.

So us trying to make other programs better when it comes to taking care of kids.

So Deanna mentioned this on the RDHRS groups, us, you know, collaborating with them.

That covers Boston, Atlanta, Nebraska, Colorado.

The PPN is a network of hospitals that covers, you know, multiple hospitals, you know, around the country.

All right.

That's filled in some of those gray areas.

I still believe, and I think the shaded parts we would envision expanding those.

So each of those three shaded areas are supporting in a more formal fashion additional states.

And I think that's a big ask.

That's an investment.

I think we're not there yet.

But to answer your question, I do think we can get there.

**MA**

Really good stuff.

And just to that point, a question came in in the chat.

There's so many amazing urban children's hospitals that are highlighted by a point, but the great majority of care, as Deanna pointed out in the presentation, is in a community hospital, a rural hospital.

They probably see one kid hit by a car every two years.

I'm making up the statistics.

So there's a question from the audience of how does one get rural volunteer paramedics, or PAs in community emergency departments?

How does that group of really important caregivers get engaged in this preparedness work and to prepare for a Tuesday, as Jonathan said?

**BK**

You know, I think that question highlights, I think, one of the questions that we didn't really touch on earlier, which is kind of how these different groups on this map interface.

And when you think about things like the Pediatric Pandemic Network our HRSA-funded partners that really have a very keen focus on children's hospitals.

You think about EMS for Children, Innovation and Improvement Center that is really focused much more on community and pre-hospital.

And then you look at us and we're really kind of take all comers.

So we're really involved in anybody engaged in preparedness and response across the continuum of care.

And this gives us the opportunity to leverage things created by some of those other partners of ours and disseminate them, create pilot projects within our regions that we can hopefully prove successful and then share with these other more nationally recognized networks and really learn and share from each other. So I think that's one way I think we reach those folks.

I mean, I think the other thing is I do think it's important to kind of get one's own house in order prior to telling the rest of the world how to do things.

And I think we sometimes overestimate how prepared children's hospitals are across the country for disasters.

And so starting there, but developing products that are applicable to any hospital, whatever its shape or size is, is important as well.

**CN**

Yeah, and, you know, and I want to get Jonathan to get a chance to comment on your question because I think it's, it really is quite important, but I will offer one answer and one specific program, and that is the concept of Peds Ready, the, you know, program that has rolled out around the nation, and this is not just children's hospitals, it's theoretically every hospital in the U.S. taking, you know, a survey of what does it mean to actually be ready to take care of kids.

And that includes having, you know, an individual in your ED, in your EMS, that is the Peds Champion.

That's a fantastic program. It's the first, you know, building block.

The second stage of the building block, however, is also the Urban Children's Hospital Tertiary Center hub being strong enough to support those PECs out in the rural communities.

There's got to be, as Jonathan was saying, they've got to exchange cell numbers and know each other and those PECs that are trying to build a Peds program in rural America need to need to be able to phone a friend, and that’s on us, we need to be there. Jonathan, did I?

**JK**

Yeah, I think that's an incredibly valuable point. And I mean, Peds Ready is a great example of a tool that's been developed for rural places to use to be sure that they have the right staff, the right QI, and just the right material to take care of children.

Do they have endotracheal tubes that are the proper size? And it has been demonstrated that a high score on that checklist is correlated with better outcomes for injured children in trauma.

So I think that's hugely important, but I could not agree more about the importance of us being partners to rural centers. And I think it's very easy.

And I just have to remind myself about this all the time.

When you live in a world of tertiary care and you spend a lot of your time at meetings and on webinars talking to other people who live in the world of tertiary care, it's very easy to forget or never come to understand the state of rural healthcare.

So Mary Fallot, who's a real leader in PPN and has done an extraordinary amount of work in rural healthcare in Kentucky, where she's based out of Louisville, invited me to join her as a member of the Northern Plains Rural Surgical Society, which is the only rural surgical society in America representing originally the Northern Plains, but now that they're actually renaming themselves the North American Rural Surgical society.

That meeting happens once a year and it fits in the back of a restaurant. There's 50 people.

And that's who can come because everyone else is doing colonoscopies for their entire community and you know, operating on the side.

It is really hard that that world doesn't have the same integration into like all these conferences and conversations.

And I think it's easy to sort of think that that's because they don't want to.

But the reality is that, in my experience, reaching out to rural centers, they're thirsty to have a partner and to do a better job of taking care of kids and to have the tools to do that. And I think that can take the form of any number of things.

COVID did a terrible job of preserving pediatric capacity in the community, but did an amazing job for Zoom and creating webinars, tele-mentoring sessions, opportunities to just get people together and talk.

We do didactic sessions that are 10 or 15 minutes on appendicitis and then 45 minutes of what are you seeing in your communities?

What questions do you have? And here's my cell phone number.

I think the opportunity to engage on that sort of personal level is why a lot of people go into rural medicine.

And I think they respond really well when we in the sort of ivory towers reach out to them and offer to be their partners and are accepting of the fact that they aren't going to be able to do everything and they're not going to be so familiar.

The other thing I think that's really important that we have done a bit in WRAPEM and I think there's infinite potential is creating just-in-time resources, right?

So, you're in an emergency room, it's three in the morning, someone says, you know, the local EMS says, I'm bringing in a three-year-old with horrible bronchiolitis, and you haven't thought about that in a while.

Like, what are the rules for like, how do you effectively ventilate and oxygenate that child? You know, is there a three-minute resource you can get?

And we've been really trying to build out that library of three-minute resources, you know, the kid's on the way, what do you really need to know?

**MA**

And those were incredibly helpful during the tripledemic, which we'll get to.

Chris, I want to, and I'm just going to take two minutes, I promised myself I wasn't going to use the following word in this presentation, but I'm breaking that promise.

I'm going to use the word money, and I hate to use the word money, but Chris, I could not agree with you more that children's hospitals, big health systems, academic medical centers should, will, and can really help those pediatric emergency care coordinators and help those ERs.

But this notion of public-private partnership means there also has to be investment.

And can you just walk me through what you've seen?

Because I'm a government contractor.

It can't always be government.

Can you just spend two minutes on what are those public-private partnerships look like?

And sometimes a very tough time fiscally for hospitals as well.

**CN**

Yeah, well, and let me say, I think some of the fiscal question and the catchment area question and who is the hub and how do we float that really is valuable to have trauma systems.

So a level one trauma system, not just a hospital that moves patients on a day-to-day basis on your random Tuesday, is fiscally and legally geared to have those broad partnerships.

So that infrastructure in many places is built and valuable, you know, I think it needs to be fostered on a pediatric level and on a disaster level a little bit.

And so I don't think it's a huge ask of independent children's hospitals that have a trauma center to embrace helping your community feeders with Peds Ready.

That's an easy sell.

I think maybe the tougher fiscal piece of this is telemedicine and Peds Ready and having those connections, those are all fantastic.

I believe in them heart and soul.

They're not going to be enough.

I think you also have to have a pediatrician in rural America.

And to have a pediatrician and a Peds ER and someone there that is physically at the bedside, there's got to be a way to pay for that.

And equity in payment infrastructures between adults and kids and getting you know, the right fiscal infrastructure to rule America is, it's a challenge.

Deanna and Brent, I know you spent a lot of time thinking about this.

How about your side?

**DDG**

Yeah.

So, I'm going to say that, you know, I think the fiscal challenges are really hard.

I think that, you know, we, after COVID, we saw healthcare providers of every discipline in healthcare are leaving in droves.

So finding ways to be able to create capability and capacity, especially in the rural areas.

Your rural people, whether you're an EMT or a nurse, they're probably wearing three and four and five hats at probably more than one institution.

So we have to find a way to, I think, as the COEs, and it's not a big blanket that's going to work everywhere and everything.

And I think it comes down to that connection again, of the people that you are getting to know.

So, you know, the exercises that we have conducted, you know, on virtual platforms, fantastic.

But you know what, where it really comes down to, it's the actual in-person exercises and the strategic planning and education that we've done.

And that is so important.

And so creating the bandwidth for those people to connect, not only with the regional pediatric COEs in some way, shape, or form, but that encourages them to have partnerships with other people in their communities that they know and so on.

And I, you know, it doesn't answer the financial question, but it does answer some of the, I think, just resilience and support that you create when you create these personal connections with people and you support them with tools and education.

And hopefully, we can stop some of this tide of people leaving.

You know, especially people choose to live in rural areas for a lot of different reasons.

You know, maybe a financial reason for their family, it may be because it's a place that has a lot of memories, it may have all their family members may live there.

There may be a morass of reasons why people live there, but I think we need to understand that as, you know, people coming from urban and well-resourced environments, that whatever small tools we have, whatever kind of sustainability we can add in to create resilience among those healthcare providers that work in those systems will be really important.

And I'm not sure, it's maybe more pediatric COEs, maybe expanding out so that we can support more people to do this and it's really helpful, it's hard to know.

**BK**

Yeah, I think we've been challenged with a lot of things and I think there's been a big focus on the decrease in pediatric inpatient capabilities and capacity in kind of outside of these large academic centers.

But the reality of it is even these larger academic centers are struggling fiscally as a result of decreased reimbursement at the end of the PHE.

There's many, many things, you know, you could go on and on with that.

And so I think they're, you know, our goal, I think one of our goals is to really decrease that activation energy to get somebody where we think they should be or where they need to be related to pediatric disaster preparedness and response.

So it's hopefully not looked at as adding more work to folks, but giving them the tools to be able to integrate best practices that we've looked at, or giving them the education or the just in time kind of snippets that WRAPEM has put together to make it where they're not having to reinvent that wheel and they can get things done quicker and implemented quicker in their locations, whether that's rural or urban or what have you, community hospital, children's hospital, what have you across the system.

**MA**

Fantastic.

I want to get to the coming fall and winter and some other issues, but this is a map of the United States and the territories.

But I know for a fact that we are getting calls, you are getting calls from international partners that say, what is the public-private partnership?

How do these nodes work?

And once again, thanks to Joe Lamana, who also runs the Office of International Operations, this notion of these centers, both from HRSA as well as ASPR, are really starting to take off in like four minutes or less.

How do you see us interacting with international partners that just want to take good care of kids during a really bad Tuesday or a really big scale event as well?

**CN**

Well, and I'll comment briefly just to reflect on some of the things that we've already begun to engage in.

And some of the things that we've done that have been low-hanging fruit is very analogous to the rural discussion we were just having.

So when you ask yourself, what can you do, you quickly get to, well, I can get on a Zoom.

I can offer advice, I can consult.

I've got these tools, I can share those.

And I think that's where we begin internationally.

When, you know, there's individual, you know, entities, wherever they may be, whatever they're going through, you know, us being open and willing to get on a call and get on a Zoom and share what we have.

I don't know if there's, you know, if there's a role for us to, you know, help replicate what we do in different parts of the world, because I don't know how every part of the world works.

I think it depends on, you know, what region of the world you're talking about, what their resources are, what their countries are, but I can certainly share my three-minute just-in-time on how to help a kid who's in respiratory distress.

That's easy.

**BK**

Yeah, I would just add that I think one thing that we're trying to look at specifically this year is making that bidirectional, right?

So we know that there are folks that have responded to humanitarian crises across the world and have developed tools and tool kits and frameworks for reviewing this stuff.

And not is it, it's not just us kind of tweaking or modifying products that we've developed, but what are some things they've developed that could very well be applied domestically?

And so I think that's an important part of this is that it's really a partnership and trying to see how we can both learn from each other, not just us kind of tell people what we think they should be doing.

**CN**

It's a good point.

**MA**

So important.

**DDG**

Yeah, I agree, both with Brent and what Chris said.

I really think that listening to what their concerns are and understanding what their systems are might even give us some ideas how to improve things in our systems.

So it may be a nice dialogue of good sharing.

**MA**

And great organizations like World Association for Disaster and Emergency Medicine (WADEM), the ties that we have, the World Health Organization (WHO), like there's some really good bridges that you guys already helped us build.

Could we go to slide 25 really quick?

This is going to turn into a six-hour webinar if I don't manage the clock a little bit better here.

So it's October.

October is a time of celebration in the DMV area because it's not 106 degrees.

It's actually nice weather.

But every children's hospital and every pediatric care provider knows that you kind of take a deep breath and figure out what the winter, you know, viral season is going to be like.

I just want to sing your praises for a second because this particular report has been shared with the White House as they think about lessons learned and what we should be doing better.

So once again, this work is really well received throughout the federal government.

However, going into fall and winter, I would love your notion, knowing the intricate details of this report, what still causes you concern? What are some things that are still high on the we have to prepare for winter better, not very articulate, but I know that the things you've identified still need a lot of work and what rises to the top of you're still concerned about list.

**DDG**

I think my biggest concern is a repeat.

**MA**

We don't want a rerun.

**DDG**

And that we're still not and that we're still not quite there. But I, you know, the things that came out of that are the communication and the situational awareness, those are the two things that came out of that.

And our state partners, our HTCs, they actually reach out to us now when we start to get into this.

You know, there's a lot of push both from CDC as well as AEP to really think about not only vaccinating your kid, but what does it mean to be going into flu season?

What does it look like?

You know, all that kind of stuff.

And I think we're able to amplify some of those messages and we're actually have that the fact that this happened makes it so that it's something that actually rises to the top and people actually start to think about in a way that they didn't do that five years ago.

**BK**

I mean, I think one thing is looking at, you know, some of the supply chain issues and challenges with Nirsevimab.

But, you know, if you look at the data out of Spain, Nirsevimab really was a huge win with a significant decrease in ED visits and admissions for children with bronchiolitis.

So what are ways that we can share best practices among our systems and with, you know, outside of our COEs is how do we get this to kids?

So we just launched a BPA for Nirsevimab in our electronic health record for children, But how do we leverage that and do that and take that time when they're, say, in the emergency center as an opportunity for those that are unvaccinated to get, or haven't gotten Nirsevimab yet to get that in to just continue to push on the things that we know seem to be very successful as ways to decrease this.

**CN**

Yeah, and I'll answer, and I'm sure Dr. Kohler will have some overlap comments with mine as well.

I think locally in our area, we painfully learned we needed better sharing of data, better ability to move kids in between systems and we're working on it.

I think there's some things that are making that better.

To answer your question though, I still worry.

One of the biggest lessons learned for me was just how fragile all of our healthcare systems is for kids, you know, not having those pediatric capability and rural, depending on the hub, if the hub gets overwhelmed and they do, and there's a ceiling to how much they can flex, it's fragile, and it can be overwhelmed.

We saw it, but we saw it on a national level where everybody got hit at the same time, and that made it obvious.

What happens when the fragility impacts one local community, and no one knows about it?

Because it's not everywhere. It's just in one small piece of the country and they're hurting, and we just don't know it.

**MA**

Really good points.

**JK**

I completely agree. I think I had the opportunity to be on the other end of a lot of phone calls during the tripledemic in my administrative role here Trying to figure out, you know, can we take this sick child from a small critical access hospital and in some cases, you know, listening to the child code on the other end of the phone because we couldn't find a bed for them anywhere in the state or neighboring states. One of the great benefits of WRAPEM is that you know, we've been able to talk with other states about best practices for them. And so, you know, we've been able to say Oregon has an amazing system for bed allocation and bed awareness, and can we adapt that for California? I think that sort of interplay is super important. The other thing I think where there's a real opportunity, and I know there's been a lot of work in this, is developing better and more tele-mentoring or telemedicine resources so that we can reach out remotely and help with the care of kids in the moment, taking care of specific patients rather than just providing information about generally how you take care of bronchiolitis, you know, having those tele-mentoring telemedicine relationships in place with other facilities that are smaller that, you know, if they're overwhelmed are going to have to keep these kids for hours or days.

**MA**

Yeah, a really important tool.

I want to go now to some of the great questions in the chat or what's coming through to me.

And there's a couple of different constituents that really want to know how they can be involved. And the first is EMS. EMS is the backbone of care in this country.

EMSC as one of the founding, let's pay attention to kids.

But as you develop these networks with more structure and more success, how do you look to engage with EMS?

And then there's another sub question about, think about EMS and rural communities.

So let's just start with our constituents from EMS and how you envision them in these networks and then maybe a little bit on rural.

**DDG**

We conducted an exercise actually in both UPA, Michigan, and then the northern part of lower Michigan in the past year and a half.

And we invited our EMS colleagues, and these are all extremely rural areas, really hard to get transports to, et cetera.

And they were super happy to be there, and I got to say the enthusiasm to be able to work with the Pediatric Centers of Excellence was fantastic.

And we engage with our EMSC state partnership managers in all of our regions and beyond.

And I think disseminate information with regard to that in EMS providers are part of the emergency spectrum where we really rely on their knowledge to be able to help kids before they actually get transported to the hospital.

And I would say that one of the things that I would actually highlight is that there was a recent pre-hospital pediatric readiness survey that just went out that was really important.

It was filled out by the EMSC state partnership managers, just trying to understand the capability and capacity among pre-hospital providers in all the states and seven territories.

But there's actually going to be a pre-hospital disaster checklist coming out, hopefully in the next year or so that's coming out through EIIC.

So we're definitely partnering with all of our entities in both EMSC as well as the constituents in our regions to really look at what EMS needs and trying to listen to what their concerns are and how can we increase their capability and capacity also.

**MA**

That's fantastic. Other notions?

**BK**

Yeah I would just add that I think you know one of the big things is like education and training and through G7 in our two-day course we provide CE for EMS providers. We've given that course now I think 15 times across our region.

We'll continue to do that in the years to come.

And so I think it's again the challenge with EMS tends to be that it's harder to find the connections to make the network build and so anyone that's in that pre-hospital space that wants to connect in our region, go to the pediatricdisaster.org site, click on your respective COE, and get connected.

**MA**

Well done, sir.

One other constituent represented, and we had almost 700 people on the webinar, and I'm just so appreciative of that engagement, is our folks in the health department or the public health department.

And you talk about funding constraints, you talk about doing more with less. I think certainly public health is feeling that.

As you think about the notion of coalitions and how to support these efforts, what role does public health play and what role should it play?

**CN**

Well, you know, I'll answer just by going back to some of the discussion that Deanna started with, you know, in showing the slides about all the different partners that we theoretically work with.

So this is, for the PCOEs, this is kind of part of our genetic hardwiring of who we are.

So we are sitting in the middle of EMS and public health and federal agency and academic center and healthcare coalition and EMSC and the kids, and somehow some of everything we are about is appreciating that and making the right connections.

So public health is absolutely a big part of the discussions.

That means having an interagency group that also includes sharing data with the CDC and the CDC, you know, public health response, you know, programs.

Yeah, they, you know, kind of the, like I said, the hardwired goal here is to bring it all together.

**MA**

Really well said.

Let me get into one operational issue, and then I'm going to ask you each either one tidbit you want all 700 folks to walk away with or one area we didn't cover that you want to summarize in a minute or less.

There's an operational issue, and I don't know if Dr. Sarita Chung from Boston Children's is on, but one of the biggest nightmares during the bigger Tuesday is reunification of children with their families appropriately.

And someone asked, what are best practices?

I know that's an evolving space, but comments on the important topic of reunification.

**CN**

Well, I was about to say, you know, thank you for saying her name, because you're spot-on. I think the work that she's done in reunification programs is, you know, that is the standard. And so we, you know, all three of our groups do not try to recreate the standard.

And so, yes, we partner with Sarita and the Boston Group to support them in putting out reunification programs that include how do you drill reunification, how do you test it in your own hospital, and make sure that you've got the right resources.

And that's tough.

That's not easy to do.

**BK**

I was just going to say reunification has been one of our key focuses the last two years for our regional tabletop exercises, one related to a large-scale radiation event and the other being very targeted on reunification, and so I think through things like the COE we've been able to bring together, and this will kind of piggyback on the last question, individuals from state level and EMS level into these exercises to ensure that they recognize the role that they play in reunification as well as the children's hospital or the community hospital that's participating as well.

So I think we've had a particular focus on that the last couple of years, and it will always be something that we'll continue to push out.

**MA**

Fantastic.

Last question before I ask you the question, and it needs an hour in itself.

All five of us are physicians.

We do things based on best practice and science, and yet the science of disaster response for children is really evolving.

Could you talk briefly about both NASEM, the National Academies, as well as the amazing work that NIH is doing?

Because I think that that's yet another network to inform and drive this important work.

**CN**

Yeah, I'll comment a little bit just because we've, you know, part of my work was once again, pulling together various different groups.

So Cinnamon Dixon with NIH has been just such an unbelievable champion in helping to evolve this dialogue.

And that started with an NIH National Academies collaborative that came together about two years ago now and looked, hopefully, honestly, at where are all the gaps in disaster science? And that is if we're going to do this honestly and evolve disaster care for kids, how do we collect data and how do we take the data and implement it in a way that make our systems and our tools better?

So they did this collaborative just a week or two, the white paper detailing all the discussions that that collaborative occurred, and that group is moving forward with partnerships between NIH, NASEM, PPN, White House, all sorts of voices involved in creating a research environment, where we have scholars, and we have grants, and we have studies, and ways to collect data.

So this is new and it's in evolution and it's got a ways to go, but kudos to Cinnamon and the team that started it.

**MA**

And it's always powerful when pediatricians or pediatric specialties get together to make things work.

There's just some special energy there.

With a couple of minutes left and I promise to be on time because there's still a lot of people that have hung on.

I'd like to ask each of you, number one, a tidbit you think that our 700 folks should take away from this amazing hour and a half?

Or number two, maybe an area we didn't cover that we should come back to at some point on ASPR TRACIE.

Dr. Dahl-Grove, I'll start with you.

**DDG**

No, that's a really tough question, Mike.

So I'm going to say, I'm going to follow up with some of the, we created some reunification modules that we broke it down so that community hospitals can use those.

They're on our website.

I would really encourage you to take a look at that.

I think the other concept that's really important is when you go to our website is to actually explore the idea of pediatric medical operations corps that can be embedded into regular MOCCs at the state level.

I think that's a really important point, and I think it'll really help people start to think about how to regionalize pediatrics at their state level and then be able to work across borders, and what does that really look like for each of your states?

And so healthcare coalitions, I think, can be a really important entity in pushing that back up to their states.

**MA**

I toured one at Children's Mercy in Kansas City four weeks ago and was just blown away.

Dr. Kaziny, closing thoughts.

**BK**

I think the discussion earlier about data and the science behind things is an important one.

Having just come recently back from the American Academy of Pediatrics National Conference, we're seeing more and more work done in this space, which is really encouraging, being highlighted by the AAP's Council on Children and Disasters.

So I just, if there are pediatricians in the audience, I highly recommend joining the Council on Children and Disasters, they do some terrific educational programming.

Additionally, I think, you know, as I don't know that I can still say we're the baby of the three, maybe the preteen of the three, you know, we're still continuing to build the network and trying to find partners that are willing to participate and join us in this effort.

So again, just direct people to the website, please reach out to us and we're happy to kind of continue to grow and work with people.

**MA**

Outstanding. Dr. Newton.

**CN**

Well, you know, I got to say the last five years has been just an unbelievable journey.

And the amount of evolution of, you know, all of this infrastructure and the, And some of the improvements that we've been able to do something in making pediatric healthcare resilience better has just been unbelievable.

It didn't happen by accident.

It didn't happen overnight.

I think there is decades, you know, and other programs that led to kind of this golden moment of, you know, all of this amazing work.

My parting comment is this.

I think the next step is figuring out sustainability.

And how is all of this incredible work over the past five years going to all be permanent and here in 50 years?

**MA**

Well said.

Dr. Kohler.

**JK**

Thank you.

I think there are two calls to action.

One is absolutely around the data space and understanding where children are relative to the people who provide care for them.

It is extraordinarily difficult to find that information and compile it.

It's state by state and a real challenge.

And I think there's several people working on that now.

And I think creating new ways to do that effectively and efficiently is super important.

For any individual on the call though, I would say if there's one take home, one call to action that I would recommend, it's trade your phone number with someone on the other side of this conversation.

So if you're a rural provider, find a pediatric specialist and get their number.

Just text once in a while.

And likewise, if you're in a tertiary center, reach out to your rural communities and find a friend.

Because I think that's going to make a huge difference one at a time.

**MA**

Really well said, sir.

And I'll take a moderator's prerogative and have one last closing thought to take the baton from Chris Newton.

This has been an incredible five-year journey.

And as a federal contractor at ASPR, I cannot lobby, but I will say, I agree with Chris, we've got to figure out the sustainability of these models that comes with consistent funding.

And so for anybody on the call, once again, I can't lobby, but I think sharing how important these programs are, how impactful they are and what an incredible ROI these programs provide the nation.

I just think that it's a really great story, but we know there's still a lot of work to do.

So on behalf of ASPR, the Pediatric Disaster Centers, I want to thank ASPR TRACIE again.

Thank all 671 folks that were on this call.

And I believe, Rachel, do I turn it back to you for a quick goodbye?

**Audrey Mazurek (AM)**

Thanks so much, Mike.

This is Audrey.

I'll take it here.

Thank you everyone to our moderator, to our panelists for joining today.

We received a lot of questions during the webinar that we were not able to answer due to time constraints.

So, we will be following up with you via email if your question wasn't answered today.

Please feel free to email additional questions to askasprtracie@hhs.gov.

We will also have this webinar recording and the slides available within 24 hours on asprtracie.hhs.gov.

And on behalf of the ASPR TRACIE team, thank you to our moderator and panelists again.

Thank you to all attendees for joining today.