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CONNECT2HEALTHFCC TASK FORCE
VIRTUAL LISTENING SESSION - HEALTH CARE PROVIDER FORUM
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* * * * *
(1:33 p.m.)

OPERATOR: Ladies and gentlemen, thank you for your patience in standing by. Welcome to the Connect to Health FCC Virtual Listening Session Healthcare Provider Forum. At this time all of the participant phone lines are in a listen only mode and later we'll have an opportunity for comment.

At this time we'll begin the call with a rollcall. We have the line of Lovisa Gustafsson of the Commonwealth, we have Theresa Mingarell of PAPUC, we have Carey Officer of Nemours Children's, Oliver Spurgeon of NECHC, Jonathan Bailey of Mission Health, Bill Jansen of MetalQuest, Edward Miller of MD Anderson Cancer, Michael Iaquinta from iSelect, Craig Jacobson of Hobbs Straus & Dean, Beth Hahn of Flambeau Hospital, Tracy Hines of CTN, Hank Fanberg of CHRISTUS Health, Sean Grove, BJ Healthcare, Shane Rodebaugh of Baptist Health, Jon Zasada of APCA, and Verné Boerner of Alaska Native Health. With
us today from the FCC we also have Dr. David Ahern, Dr. Chris Gibbons, Michele Ellison, Ben Bartolome, Katie Gorscak, Louis Peraertz, Karen Onyeije, and Dr. Kelly Murphy. At this time I'd like to remind you that today's conference is being recorded. If you would like to queue up for a comment at any point in time you can always do so by pressing * followed by 1. I'd now like to turn the call over to our moderators, Dr. David Ahern and Dr. Chris Gibbons.

DR. GIBBONS: Good afternoon, everyone. My name is Dr. Chris Gibbons and along with Dr. David Ahern, as you just heard, we will be moderating this session today. Thank you so very much for joining us.

The FCC and the Connect2HealthTaskforce are particularly delighted that you decided to join us today. We're really excited because it provides us an opportunity to hear from a group of very important stakeholders from which we don't normally hear. That is the primary objective of today, to hear from you.
So, as you will hear, this will proceed largely allowing you the opportunity to comment your thoughts and tell us your thoughts with minimal or no comment. As time permits we may towards the end have time for more open dialogue. If you're not able to say everything that you would like to say or let us know about please email us or contact us. To provide those comments our email is connect2health@fcc.gov. We will also be sending out an email to each of you who registered and are participating on the call today.

Once again, thank you. And with that I'll turn it over to my co-moderator, Dr. David Ahern to get us going.

DR. AHERN: Thank you, Chris. I will echo Chris' comments. We appreciate you taking the time out of your busy schedules to join us today for the Connect2Health FCC Listening Session for Healthcare Providers. We're very excited to have the opportunity for you to share your experiences in the work that you're doing in your
organizations and in your communities.

As Chris mentioned, we're really wanting to hear from you. So, the format is to have each of you queue up to share your comments with us. We have about 25 or 26 participants on the call today which is great. That means that we will have to limit though the time that's available to each of you. So, I would ask you to be both concise and succinct with your comments, but as Chris mentioned we want to hear from you in addition in writing if there are other items you want to share with us.

With that, I think we can go ahead to see who has queued up first, if we have someone who has joined to speak. If not we'd ask you to do *1, I believe it is, to enter the queue because we're very interested in hearing your comments and your experiences. So, let's see if we can get that process going. You'll get into the queue in sequence and then have an opportunity to speak.

Who wants to be first? Hank, I know you're there.
OPERATOR: Our first comes from the line of Hank Fanberg of CHRISTUS Health. Your line is open.

MR. FANBERG: You beat me to it, David. First, thank you for the opportunity to provide some comments and thoughts for a very important program and need.

A little bit of background. CHRISTUS Health is a large Catholic Health System. We operate in six states and three Latin American countries -- but we won't worry about those for the time being -- corporate office is in Dallas, and we have hospitals throughout the state of Louisiana and Texas. Some of you may have a recollection that in about two weeks' time we will be celebrating the 12th anniversary of a little event called Hurricane Katrina. It was in the aftermath of Hurricane Katrina that I had my first interaction with the FCC and USAC because we had a number of hospitals that were directly in the path of Katrina and then Rita three weeks later. Both the FCC and USAC were instrumental in helping us
to restore our communications functions.

But beyond that, I think there are a couple of things. I've also had the opportunity to be the project coordinator for the FCC Rural Healthcare Pilot Program in Texas which actually started about 10 years ago, it's officially over. I think that provided me some additional insight into the importance of broadband because it really is the forgotten foundation of everything that we want to do. Healthcare is rapidly adopting different platforms, new platforms in terms of delivery, telehealth is becoming more and more prevalent even though there may be some reimbursement challenges still to deliver.

And that change is happening very, very quickly, and the rate of change, and how we are providing care, and the tools that we are using to provide care is happening at a faster rate than the regulatory bodies are able to do as well.

So, I have a couple of thoughts on a couple of ideas. Number one, we know that from our own experience at CHRISTUS we have geographies
where there may not be any broadband available and sometimes that includes cellular in some of our rural and frontier areas in Texas. Number two, actually within your heavily populated cities there are also pockets where access is limited which is probably more of an economic reason than availability. Number three, the needs for speed, broadband speed, circuit speed, has increased as we continue to leverage telehealth to provide initial consultations in emergency departments in the rural facilities where you may be sending images -- not just data but images and video -- and T1 lines are totally insufficient for that but the infrastructure to do more than that may be lacking. Number four, we are sending patients home and we are monitoring them post-discharge. This was brought about in part by the need to keep people out of the hospital for the admission rate with CMS and remote monitoring of this type is something which has not really been -- anything into the home has not been something that really has been addressed by the FCC through the
Healthcare Connect Program.

So, I think it would be a wonderful idea if the FCC could take on some innovation activities and begin to seed some new ways, some innovative ways, of leveraging broadband so we are able to connect provider-to-provider, provider-to-patient and really have an impact by being able to deliver care to where people are. We're becoming a mobile society and we need to follow that. I'll take a breath and stop now.

DR. AHERN: Thank you so much. That was really very helpful to us and we appreciate your experiences. I would just take this moment to remind our participants that the questions that you were sent on that two-page document, the Broadband Health Technology Public Notice, any of those questions we're interested in feedback and your experiences, so that's a reference for you. Again, I want to remind the participants that in order to be on the queue to share your experiences you do need to press *1 and we're now beginning to see that which is great. So, let me
turn it over to Justin. If you would ask the next
participant to identify themselves.

OPERATOR: Absolutely. Our next
participant is Jon Zasada of APCA. Your line is
open.

MR. ZASADA: Good morning. My name is
Jon Zasada, I am the Policy Director for the
Alaska Primary Care Association. We support the
operations and development of Alaska's federally
qualified health centers. My tactic for responding
to this was to have a couple of bullet points for
each of the questions.

A little bit about us. Federally
qualified health centers in Alaska, there are 25
organizations, 169 sites. Of those 169 sites, 156
of them received USAC RHC broadband subsidies to
the tune of a requested $88 million in 2016. It
is one of the largest expenses for the health
centers that we serve. Alaska's health centers
are spread throughout the state of Alaska in
communities large and small, tribal and
non-tribal.
The primary challenges for providing rural and frontier care in Alaska include reliable workforce, small communities, distance of regional health facilities, and a range of others. The use of broadband technology in Alaska's rural health centers includes telehealth visits between small health centers or community-based sites including schools and other facilities, cloud-based electronic health records and prescription systems, use of contracted imaging for sonograms, x-rays, and other services related. We have one health center that provides a virtual emergency room with a dedicated connection to the largest regional hospital in Alaska, based in Anchorage at a distance of 1,300 miles between the health center and the hospital. There is also limited use of in-home monitoring.

In terms of the future uses that you requested, the state of Alaska did engage in an omnibus Medicaid redesign in 2016 that has resulted in a relaxing and expansion of licensure and other issues to allow an expansion of billable
telehealth services, especially behavioral. I think looking into the future also additional opportunities for patients to do self-monitoring and reporting for care coordination and case management with distant providers.

Then, finally, one other future use would be the new VA telehealth initiative that is scheduled to rollout in Alaska later this year. And I personally have some worries that in its rollout many of the potential users might not have the speed of broadband adequacy on their personal devices to take full advantage of that, and I do think it would be a shame if expectations there are not managed.

In terms of health providers' technical requirements and needs, right now, I'll be real honest, I think we're very happy with what we can get and are always trying to secure the minimum FCC adequate access of 10 upload 3 download. I will be submitting additional information following this conference with comments from the IT staffs in a number of our health centers.
The non-technical issues related to broadband adoption, I would say really the primary impediment at this point in time is a looming sense of financial risk if the subsidies of the RHC Program are not reliable in the future. I think you could see small providers looking twice at the dedicated broadband that they're currently using if they think that they're going to have to pay an increased amount of that cost in the future.

All that being said, many health centers in Alaska are fully engaged, have built up their systems based on reliable, dedicated broadband with speeds as fast as they can get in the communities where they are and with the past knowledge that the subsidies necessary have been available.

In terms of finally increasing public awareness about the availability of benefits of broadband as they relate to health in rural areas, at least in the state of Alaska I think it would be important for the FCC to help bridge the divide.
of knowledge between the E-Rate Program and the Rural Health Program. When we speak with Alaska legislators they don't necessarily see the connection between the two programs and how they operate and I think going forward that could be valuable.

And I also think that increased outreach between the FCC and municipalities in the state government could be very important. I know that during our last legislative session a group of rural health broadband advocates are working on getting a resolution of support for modernization of the RHC Program, and again, additional outreach from the FCC would be valuable in that process.

That concludes my comments. We very much appreciate these listening sessions.

DR. AHERN: Thank you, Jon. That was fabulous. We really appreciate you providing responses to all of the questions and obviously very thoughtfully putting the time into that. We particularly liked that you're balancing sort of the challenges and the barriers that you've
experienced but also some of the bright spots in Alaska, and I think that's important for us to hear and to document.

Again, I would remind our participants that this is an opportunity for you to communicate to us what are some of the important areas that you want us to highlight, what the FCC can do to address some of the challenges that you're experiencing in your particular areas of the country. In order to do that we need to have you do *1 and please tell us your story. With that, I will ask Justin if you would introduce the next speaker.

OPERATOR: Absolutely. Next we will go to the line of Jonathan Bailey of Mission Health. Your line is open.

MR. BAILEY: Good afternoon, and thank you for allowing us to have this opportunity. It's a great opportunity to not only hear what's going on but to share some thoughts. I appreciate your time.

My name is Jonathan Bailey, I serve as
the Chief Program Development Officer for Mission
Health. We are a seven hospital health system
located in western North Carolina and we are
headquartered out of Asheville, North Carolina.
And we have the unique opportunity of really
providing care as the region’s only tertiary
referral center to both very rural areas that are
geographically dispersed as well as metropolitan
areas that suffer some areas of lower-income
impoverished areas that don’t always have the
financial means to be able to afford access to
broadband technologies.

We’ve taken a very, very aggressive
approach into the work of expanding virtual care
and telehealth offerings throughout western North
Carolina. As we look at the future, as we think
about healthcare delivery, our view is that we
need to accelerate this and to really help
leverage the use of broadband and the assistance
of the FCC to continue to help us be able to reach
these rural areas, particularly in counties that
are anywhere between 0 to 20 percent of coverages
for download and upload speeds and to be able to help leverage this health technology so that we can really take powerful impact to lowering our overall cost of the healthcare delivery system. We're currently offering virtual care services in 20 different clinical specialties and are touching about 10,000 patients per year. And through audio/video connectivity, we do a lot in behavioral health and some of the higher acute areas, but we know the opportunity out there to touch and impact lives is significantly greater. Just as was talked to by I think Hank, relative to our ability to connect with patients in different locations there are some areas in particular that we believe the FCC could be helpful to enable further reach, and that is in areas such as schools. The ability to reach different school locations and help to ensure the broadband access and the connectivities are there in all the different schools is essential to ensure we can connect with those school-based telemedicine programs.
And also really the home. I think in the commentary, in the initial handout, was this "hospital in the home." We believe that's a huge opportunity going forward where patients in the future will be admitted to their home, but that means the home has to have the right kind of connectivity so that we can have the monitoring and the ability to get into that home, to be able to know where the patient is in their clinical recovery basis and that the interventions we're taking are actually making an impact. That's probably I think one of the biggest areas of opportunity where we are struggling.

I think number three on there was non-technical issues in promoting broadband adoption. I think there are opportunities for crossover amongst our federal agencies to better enable and remove the barriers that are in place today, in particular the geographic barriers that are in place today through CMS that create a disincentive from a financial reimbursement standpoint when we're trying to connect with
patients in these urban areas. While they're urban in nature that doesn't take away the disparities that many of these individuals that live in those areas experience and their struggle to be able to pay for broadband and to be able to access healthcare services.

I think just further awareness in expanding the information around how critical the nature is, both to the public and to our various legislators and policymakers is of critical importance. So, with that I'll stop, and, again, thank you so much for this opportunity.

DR. AHERN: That's wonderful. Thank you, Jonathan. Just as a follow-up question, if I may for you, particularly around the hospital in the home concept, could you explain a little further about that for our participants who may not be as familiar with that concept?

MR. BAILEY: Sure. So, this has been tested out in the EU as well as it's very popular in Australia and it actually made its way to the U.S. Johns Hopkins has done quite a bit in this
area. But in essence the concept is instead when a patient may show up to the emergency department or a physician would have otherwise admitted a patient to the hospital for some sort of treatment or observation, enabling that that patient — let's just take a patient that comes through our emergency department, that they would instead be admitted to their home, transferred to the home, and outfitted with the various technological peripherals, the monitoring equipment to be monitored by a central agency, and have frequent nursing visits and they come and check on a patient firsthand, but the physicians and other care providers would be able to remotely connect in with the patient to be able to see what's going on with their physiological monitoring and/or be able to talk with the patient directly using two-way audio/video, and then be able to make interventions and decisions based on that. It will help alleviate the need for the expensive hospital beds that we have so vastly across the country.
DR. AHERN: Fantastic. Thank you, Jonathan, really appreciate you explaining further your experience with that concept. If there are other participants when their opportunity to comment comes up they want to talk further about that, that's great. Let me ask Justin if he would again go to the next participant in the queue.

OPERATOR: Certainly. We have Beth Hahn of Flambeau Hospital. Your line is open.

MS. HAHN: Hi. I am part of a community group that is currently participating in a pilot project through the University of Wisconsin extension broadband expansion. Our pilot project is connected aging communities. We are located in a very rural area of northern Wisconsin. We are a community group comprised of community members from hospital and clinic providers, health and human services including the aging unit providers and our local broadband provider.

What we are looking at is ways to get seniors connected. One of the focuses of our group, we have several different focuses but the
main one that we're looking at is telehealth, telemonitoring, how can we get seniors connected in northern Wisconsin to their healthcare providers, that might be home health providers trying to monitor patients following a hospital stay or the hospital trying to prevent a hospital readmission has been addressed previously.

Connectivity in our area is definitely an issue, reliability and speed from patients' homes and even sometimes with the healthcare providers travelling into the field, and how do we get seniors to want to be connected for health issues or just for social media. We're trying to figure out different ways to get seniors to feel that this would be a valuable service for them to have in their home.

Our broadband provider has been trying to expand availability in our local counties by providing more fiber optics and laying more fiber optics but that's always a cost to that provider. So, looking at ways that broadband can be adapted, specifically with my focus on the healthcare
settings, and how do we get people connected, and then is there funding availability once we talk them into being connected then how do we get them to be able to utilize the services that we're trying to provide to them.

So, it's a totally voluntary community group that's trying to figure out ways to utilize this within our organizations and for the good of the community. I'm hoping that some of the information that I'll receive today on the listening session is some insight into additional funding opportunities that we can continue to do this group after our two-year pilot project is over which is minimal funding. But just trying to get out there and explore opportunities for our seniors and people within our healthcare community as a whole.

So, I appreciate the listening session and I've already learned a lot from what I've heard, so very interesting. Thank you.

DR. AHERN: Thank you, Beth. Actually, one brief follow-up question, if I may. Of the
monitors that you're using to connect seniors in your project do you know if they're wireless? What are the sort of technical communication aspects of it, do you know?

MS. HAHN: What we're looking at right now and what we're utilizing is they are not wireless, they are wired just because of the connectivity within patients' homes. We're just doing it by an internet connection. Right now we're also looking at patients being able to get a smartphone or utilize a smartphone or some type of an iPad system if they have availability to wireless within their homes. But right now we're just trying to do it with fixed.

DR. AHERN: Thank you, Beth. Appreciate that. Before we move on, we've actually had a number of additional participants join the call since we began. Justin, I wonder if you could introduce those additional participants before we proceed with the queue?

OPERATOR: Certainly. We have been joined by Ken Stigen of RCMH, Seva Kumar of WSHA,

DR. AHERN: Great, thank you, Justin. Again, for those that have just joined this is an opportunity for your as participants to share your experiences with the Connect2Health FCC Taskforce. The questions that were sent to you, the two-page document, are the questions that we are particularly interested in hearing your experiences about, but any areas that you want to focus on in telling our story to us would be greatly appreciated. In order to do that we need to have you press *1 on your phone so that you can get into the queue. We're trying to see if we can build this queue up to make sure that we have as many participants joining in on the conversation today.

I know this is a little bit different than perhaps other calls that you've had where it's been more of a discussion and we will have an opportunity to do that before we conclude our session today. But please do *1 and you'll be put
into the queue for you to be able to share your comments.

Justin, I do think we have another participant ready to contribute.

OPERATOR: Absolutely. Next we go to the line of Michael Iaquinta, of iSelect MD. Your line is open.

MR. IQUINTA: Thank you. I'd like to thank the FCC for allowing us this forum. This is really great and obviously well-attended.

Once again, my name is Michael Iaquinta, I'm with iSelect MD. We focus on two areas. The first is delivering telemedicine services either through voice or video utilizing broadband technology to folks in rural areas for either primary care and one of the new things that we've been developing over the last six to eight months is Obnet which is recovery and treatment for the opioid challenges we have. We do that through outpatient-based medication assisted treatment.

So, the challenges that we see, first of all the uncertainty whether the Affordable Care
Act and obviously repeal and replace, high deductible programs that impact lower-income folks, broadband users in rural areas, and also the looming and physician shortages that we're seeing. So, what I wanted to share was, once again, some of the things that we're doing and how the FCC and healthcare providers that focus on broadband delivery methods can help reduce cost and improve access to areas of care.

So, right now, our company has five different wireless carriers that we deliver mobile health services to, and we see a significant decrease in cost directly associated with procedures but also more importantly pharmaceutical costs. Because we are what I refer to as symptom and patient specific, when you go into a setting typically you might be prescribed multiple different medications even though you may have gone in there for an ear infection. So, we're seeing significant reduction in pharmaceutical costs to insurance companies, to patients, subscribers.
On the opioid treatment and recovery what we're seeing is in many cases there are two things that really stick out. First of all, in seeking treatment a lot of times with how this has exploded is there's a three- to six-month wait before somebody that recognizes they have a problem can then get in to be treated. Through bidirectional video we can triage those broadband utilizers face-to-face and in real-time, and in a lot cases get them the medications they need to augment the withdrawal they may be experiencing. We treated a nurse the other day that came forward and was able to really get her on the road to treatment and recovery.

The second thing is we see that embarrassment aspect where if somebody wants to show up at a physical location they're there with other people in the community. So, we've really created an opportunity for people to have the confidentiality, privacy, and the access to treatment on the opioid issues.

The other thing is that a byproduct of
this, what we're seeing is a lot of the pharmaceutical players scale back on how freely opioids are getting to the broadband user. What we've done here is we've seen a transition from opioids to heroin and the new drug is now fentanyl, so when the opioids dry up we see them migrate to that.

I think there's a number of ways that the FCC through pilot programs and funding can help improve access to care, especially in the rural areas for those two things: Primary care and for opioid addiction treatment and recovery.

DR. AHERN: Thank you, Michael. Dr. Gibbons has a follow-up question.

DR. GIBBONS: Well, it actually wasn't a follow-up question. I think these have been fantastic comments so I just wanted to reiterate my thanks for you offering them. I know we also have some participants who may not work for provider organizations, hospitals, health systems directly but they work in the area supporting, doing research, doing other things. We'd also
love to hear from the perspectives of those organizations, philanthropies, think tanks and others who are on the call telling us what they're doing, what they're seeing, what they're learning as well. So, I just wanted to reiterate that point. Thanks so much.

DR. AHERN: Thank you, Chris. On that note, again, I would mention that in order to share your comments we need you to press *1 on your phone and that will put you in the queue. Right now there's a short list so you really don't have to wait long to be able to share your comments. We really would appreciate it if you would do *1. And, again, it can be as long or as short now as you choose, but we're very interested in hearing from you on the call today.

Justin, if you would ask the next person to comment.

OPERATOR: Certainly. Our next comment comes from the line of Verné Boerner of Alaska Native Health Board.

MS. BOERNER: Hello, can you hear me?
OPERATOR: Yes.

MS. BOERNER: Oh, great. Hi this is Verné Boerner, President and CEO for the Alaska Native Health Board. I want to thank the FCC for the opportunity to participate in these listening sessions. Broadband is quite critical to the Alaska tribal health system overall.

The Alaska Native Health Board is an advocacy organization supporting the Alaska tribal health system and supports 229 tribes and over 158,000 American Indians and Alaskan natives and thousands more. The Alaskan tribal health system is a critical part of the Alaska public health system, often the tribal health facilities are the only access to care in those rural and frontier communities.

Alaska has over 660,000 square miles and a very sparse road system. In many cases we can only reach the communities by air, water, or on snow machine in the winter. So, having access to telehealth has been a critical part of our care and one that has been developed early on, and
broadband has become an integral part of that system of care.

So, telemedicine has allowed our members to dramatically improve access to care, accelerate diagnosis and treatment, avoid unnecessary medevacs which cost tens of thousands of dollars, and they expand local treatment options as well. Alaska has been quite innovative in developing (inaudible), in partnership, and with the utilization of the Rural Healthcare Program, has been able to also greatly improve medication management, reduce hospital readmittance, increase patient safety, and bring a sense of security for those who manage patients' care. Those are just a few examples of how technology has been leveraged in the state.

I also wanted to take a brief moment to endorse and agree with the comments that were already provided by Jon Zasada with the Alaska Primary Care Association. He did a great job in identifying some of the specific uses with x-rays and cloud-based storage and virtual emergency
room. Those are just great examples here.

One of the challenges that we have seen of recent too in thinking about the sort of non-technical issues is the recent proration of the Rural Healthcare Program. That has acted to destabilize some of our efforts because the broadband is not just part of telehealth, it goes to the total infrastructure of how we provide services. It helps us meet reporting requirements and compliance issues that affect our delivery of care but also our ability to bill and feasibility of our programs overall. Similar to the community health centers, the Indian Health Service just funded facilities are not able to raise our service rates to compensate for any increase in cost due to that proration. So, finding a long-term solution is something that is critical to help support the advances that have been made for providing care in rural and frontier communities overall.

As far as increasing public awareness, the FCC doesn't need me to tell it that in many
rural areas in Alaska many of the community members and communities themselves lack access to high-speed broadband, upwards of 80 percent and in some cases more. Having that general lack of access to broadband is a barrier to help increase the public awareness of the benefits that it brings. So, thinking about different ways that we can utilize the infrastructures that are already there and maybe underutilized to help increase that access generally is one way to help raise awareness.

And then as far as requests for research and case studies, Alaska has 229 tribes and 660,000 square miles to offer many, many opportunities for research and case studies, and we would definitely like to be a part of that. Thank you.

DR. AHERN: Thank you, Verné. That was very helpful and I appreciate your comments. Are there any other participants who would like to make any introductory comments where we can have the line available to them? We can
take a moment to see if anybody else wants to press *1. If not, we can open all of the lines for general discussion and we can begin with a few questions. But this is, again, an opportunity for any of the participants to tell us a bit about your experience in the area you're in with your organization. So, one last request for *1 for any of our participants.

Thank you. Justin, if you would go ahead and have our participant be introduced.

OPERATOR: Certainly, thank you. We have Carey Officer with Nemours Children's. Your line is open.

MS. OFFICER: Thank you so much for the opportunity to speak and tell you a little bit about what we're doing.

So, we come from a little bit different perspective from the fact that Nemours is actually an organization fully dedicated to pediatrics. We have two free-standing children's health systems, one hospital in Orlando, Florida, and one in Wilmington, Delaware, and then also service many
of the (inaudible) surrounding that area. I agree
with a lot of the comments that have been said up
to this point. We currently -- my role in Nemours
is as the telehealth administrator. We are doing
quite a bit in this field. We are serving
children who have acute care needs to chronic care
needs within the home, within the school, and even
on cruise ships. And we're doing quite a bit of
work with primary care organizations and also
other community hospitals and health systems.

One of our biggest challenges is that we
do service a large Medicaid population. While we
service many urban areas, a lot of these families
don't have access due to the cost of the services.
So, that's one of our biggest hurdles, if you
will, enabling and allowing us to be able to
provide the telehealth services into those
settings where they may not have access.

So, we're excited about the opportunity
not only in the urban settings but also in rural
settings to begin to think about what we can do
and how we can have a better exchange within the
home so that our providers can provide these
services into those locations. Many of our
patients and families travel many miles in order
to access this care, so we think it's very, very
important and relevant at this point in time to be
able to have this discussion today and really
think about what we can do in order to improve the
c connectivity. So, thank you very much for the
opportunity to speak.

DR. AHERN: Thank you, Carey. We really
appreciate your input. One quick follow-up
question, if I may. Of the services that you
described, how much of it is wireless would you
estimate?

MS. OFFICER: Probably over 50 percent.
We have found that really works better in the home
setting and we have found it to be difficult in
other settings like schools. So, we're a little
bit challenged from a wireless perspective to have
that kind of access so we try to go hard wire
wherever we can. We have found that the
connectivity especially from a video perspective
has been better.

DR. AHERN: Great, thank you, Carey.

Justin, if you could queue up the next participant.

OPERATOR: Certainly. Next we'll go to the line of Bill Jansen of MetalQuest. Your line is open.

MR. JANSEN: Good afternoon. Thank you for having me. I'll try to be as eloquent as my colleagues and as concise and succinct.

When I originally applied for the listening session, what does MetalQuest have to do with healthcare? Such an odd name. Well, actually, one of the big parts of our business is operating as a trustee for bankrupt healthcare providers, whether it's a large urban center, a critical access hospital, or an individual provider. So, we see every day the need for broadband, just connectivity in general, especially in rural areas or areas where people are more economically challenged.

So, we deliver historical data and we
deliver real-time data, but oftentimes we can't deliver the data for someone who needs to undergo a test. So, if we had that broadband -- whenever the person is educated enough to use -- we can cut costs tremendously across the country in terms of invasive tests, tests of any kind, and just generally the patient would be happier knowing that they can access their data. So, access to data is critical.

We also have the same problem with hospitals. Hospitals will call us, or a provider will call us, they need access to data. We may have a lot of imaging data, but we can't effectively deliver in real-time to, say, a rural facility.

So, those are the big challenges that we see every day, and there is definitely a digital divide. We especially see this with low-income and we see it with the elderly population; they just don't know how to use the technology to take care of their healthcare needs. So, that's all I have and thank you.
DR. AHERN: Thank you, Bill, that was very helpful. I do have a follow-up question. I think there is a major concern among the provider community about some of the uncertainty with coverage and the implications of changing healthcare insurance policies in terms of impact on providers. So, are you seeing more and more risk for providers as a consequence?

MR. JANSEN: Absolutely. I had that conversation today. Changing reimbursement has put especially smaller providers, rural providers, at risk. Large urban providers, it puts them at risk. A lot of that is because the population they serve, they're indigent or they're receiving Medicare, Medicaid or their insurance policies just don't pay enough.

So, one thing that's kind of interesting..., if you believe the data, there will be 400 rural hospitals closed in the next several years. So whether that's true or not, whether it's 100 or 500 it's still a lot. So not only will the patients be without an acute care
facility to attend to their healthcare needs, they
won't even be able to get the data to take another
provider. So, yeah, we see reimbursement issues
every day as affecting the health of the entire
provider community. Thank you.

DR. AHERN: Thank you. Again, one
follow-up question, Bill. Do you see the
providers are doing poorly because they try to
adopt broadband health services and aren't
successful in doing that? Would that be an
accurate appraisal of what you've seen?

MR. JANSEN: Yes. So, they want to
adopt broadband technology but the implementation
costs might be too high and/or but probably more
importantly is the interoperability just isn't
there. So, if you're a large urban center you may
have a healthcare exchange and can easily move
information. If you're using a large EHR system
maybe you can move information between like users
of the same EHR. But, yeah, interoperability is a
huge stumbling block for providers, especially
smaller providers. They want to provide good care
and they do the best they can but they could do better with good broadband, whether it's fixed or whether it's wireless and interoperability issues would go away.

DR. AHERN: Thank you, Bill. I appreciate your answers to those questions. We do have one remaining participant but there's a chance that we could get another one before we go to open discussion, so don't miss your opportunity.

Justin, if you would go ahead and ask our next participant to introduce themselves.

OPERATOR: Certainly. It will come from the line of Edward Miller, MD Anderson Cancer Center. Your line is open.

MR. MILLER: Thank you, and thank you to the FCC for hosting this call today. My comments aren't too different from the others that have spoken out.

We're the largest cancer hospital in the country and in urban areas often have access to specialty care for either oncology or heart or
whatever their complex health condition may be.

But we've experienced here in Texas, a large state, a lot of rural areas, especially when you get to west Texas, there aren't enough specialists that can take care of the needs of the community. And of course our experience is only with oncology and a lot of these people cannot travel but just because it's rural or it's underserved communities.

So, we have been participating in a program that trains primary care providers with specialties to be more attuned to specialty care, they can provide more care than they would have been able to. And we do this through tele-mentoring and other programs like that and it requires broadband to have videoconferences and share data and slides and pictures, etcetera. By doing this it allows patients to be treated in their community at the right time, it doesn't cause delays in care which can end up making their cases much more complex and it can improve outcomes or reduce costs.
But the thing we're running into is that there is a severe lack of broadband, or even wireless services in certain areas that are very rural and the faster uptake in those areas we could definitely expect greater outcomes from these health episodes. And, again, it's not just cancer-specific but you could get a lot more specialty care into primary care offices and they'd be more aware of the conditions that do need to go into in-patient settings in a hospital versus being able to stay home and being able to be monitored remotely as many other groups have already expressed.

So, I guess that's kind of what our hope would be, just that access would increase and I think that would open up the door for a lot of the other programs. Again, I thank you for hosting the call.

DR. AHERN: Thank you, Edward. Really appreciate that input.

I think we're at a point now where we can open up all the lines, Justin, and have an
open discussion. If we could go ahead and do that I will ask my colleague, Dr. Gibbons, to maybe begin with a question or two to get the conversation going. This is, again, now an opportunity for all of the participants on the call to comment, respond to the questions, and have a dialogue.

DR. GIBBONS: Great, thanks, David. Again, thank you everybody. This has been fantastic. It's gone above and beyond what we'd hoped for.

I've heard a number of things that I found very, very interesting and fascinating. For one, Hank, in the beginning you were pretty clear about saying that really the need for speed is going up, and you even said that your T1 lines are basically insufficient currently and that's only going to get worse in the future, if I understand you correctly.

But at the same time, I think I heard from Jon Zasada that -- and I want to make sure I'm hearing the right thing -- that 10-3 is
actually okay for you guys, or were you saying that you'll take it because that's all you can get? I'm wondering in general, not only at Hank and Jon, but I'm wondering across all of the groups if the need for broadband speeds are going up as Hank described, and in particular Jon because you mentioned 10-3.

And then there is a second question. I'd love to hear more about the virtual ER program, how that is actually working and if others are doing things like that. Thanks so much.

MR. FANBERG: This is Hank. I'll comment that, yes, I think you have it correctly. And the specific example that I can give. So have one of our San Antonio hospitals is a transplant center and they have patients literally scattered across the state of Texas. There is a certain amount of testing that needs to be done ahead of time when you go on the registry for an organ transplant. And in some of these communities where we have these people there is insufficient
bandwidth just to conduct a virtual visit with the
testing that needs to be done to transfer the
information from the rural location into San
Antonio. And those connections, all that we have
available there right now are T1 lines and we're
finding that we can't even get these visits done
trying to send what I consider to be relatively --
the data that would really need minimal bandwidth,
but we're having difficulty with that.

   DR. GIBBONS: Do you have any sense of
what a minimum might be for you guys? If you
could choose what the minimum would be, what would
you say?

   MR. FANBERG: Well, it's going to depend
upon the location and the area. Someone earlier
had referenced the FCC has what they consider the
standard minimum which I don't recall the number.
But, frankly, when you start talking about if
you're sending data, if you're sending the visual
(inaudible), i.e., any of your images, you really
probably need to start with a baseline of about 10
megs, and sometimes during the day that probably
will not be sufficient but it's a good starting place. We like to do a minimum of 45 if it's available, but that is not always the case.

DR. GIBBONS: I want to clarify because I think you're saying something very important. You're suggesting that, first of all, the need is not a static need, it's not whatever, 100 megs all day long, but it can and does vary throughout the day but to the extent that we don't have the availability when the need is greatest then the entire thing is insufficient. I think if I understand you correctly that's an important insight that we have to think about at the FCC in terms of trying to decide what's adequate. It's more than just some sort of a number, whatever that number is, because the needs vary throughout the day, if I understand you correctly.

MR. FANBERG: Yeah, although again, there is a minimum threshold that will be needed, and I think experience says that that minimum -- and maybe I'm going back to the Connect America Map which came out with some standards, if a
certain amount of bandwidth was available they
said you had sufficient bandwidth in the
community, and our own experience is that their
information is not necessarily correct all the
time.

DR. GIBBONS: Great. Others?

MR. ZASADA: This is Jon Zasada from the
Alaska Primary Care Association again. I was
actually just trying to get back into some
testimony that we provided to the Alaska
legislature this spring, and I'd also defer to
Verné Boerner, our colleague with the Alaska
Native Health Board. We will provide some
additional data or information after this meeting
regarding speed. But I guess in my personal
experience in talking with health center directors
they are okay with the speed that they have.
There are lags that affect the flow of
appointments and the flow of work, but I think in
particular very isolated communities understand
the limitations of the connections that they do
have. I will say also that in communities that
don't have dedicated connections the need for speed of bandwidth in a dedicated connection is of vital importance. And I think this goes back to the person that was talking last, in non-dedicated connections, in a very small community it can very quickly take up to four hours to transmit out a single image for review by a distant provider and ties up the rest of the online work that the clinic may be doing.

Again, all that being said, we like everyone else are continuing to modernize our EHRs, our electronic health platforms. We were just talking yesterday about expansion of in-home and in-community monitoring and all of those require a constant increase in both bandwidth and speed. Those changes are being developed by the commercial providers here in Alaska but they come at a very, very large cost which to this point has been borne without interruption by the Rural Healthcare Fund and with 7.5 percent proration that we saw in 2016 and the peril of a much higher proration for 2017 and beyond. The modernization
of that fund is of the highest priority for both
the non-tribal and tribal systems and for rural
hospitals here in Alaska.

DR. GIBBONS: Great, great. So, again,
correct me if I'm wrong but I'm not hearing you
say that lower bandwidths are really adequate.
You're working with them and you're happy for what
you can get but more would definitely be better.
That's what I'm hearing, right?

MR. ZASADA: Isn't more always better?

(Laughter)

DR. GIBBONS: Well, yeah.

MR. ZASADA: And, again, I think my
homework that I'm taking away for you all and for
future sessions will be doing a survey with our IT
directors to try and flesh out some of these
issues in additional detail so that we can share
that information with you going forward.

DR. GIBBONS: Okay, great. And just one
final question. Can you tell us a little bit more
about the virtual ER?

MR. ZASADA: I can tell you a little bit
and then, again, get you more information as we go. So, basically a patient would present in an emergent situation at the community health center that's located in Dutch Harbor, Alaska which for those that don't know is one of the largest fishing communities in the United States. It has an annual influx of tens of thousands of seafood workers that augment its regular population of I want to say 2,000 to 4,000 people. It does not have a critical care hospital so the emergency room does exist in the community health center. Again, the patient appoints, there's a dedicated connection to Providence Alaska Medical Center in Anchorage. The medical staff at the health center use a range of diagnostic equipment that provides direct feed to the hospital and they are guided in the care of the patient until a medevac can be arranged. Just so you know, a medevac can be arranged -- with the weather in the distant North Pacific can sometimes take a number of days in worst case situations and can cost between $50- and $100,000.
DR. GIBBONS: Wow. Wow. Thank you very much.

DR. AHERN: Thank you, Hank and Jon, for your comments. Any other comments on the topics that we've been discussing?

MS. BOERNER: This is Verné Boerner with ANHC.

DR. AHERN: Yes, go ahead, Verné.

MS. BOERNER: Thank you. I just wanted to add a couple of statements in addition to Jon's. Again, I think he's done a fantastic job describing the situation.

Some of the other issues that we have seen with regards to speed, not just with the transmission of medical files and records and such, is actually processing and doing the administrative work. A lot of the enrollments and billing that our members have engaged in, they're all sort of online-based and if there's an interruption in the transmission of that or if the speed is too slow it can cut off hours' worth of work that will have to basically be started over
again. So, it does affect the overall productivity of our centers as well. So, that's just one addition that I wanted to add.

Parity is something that the tribal health programs have really stood for and fought for as well. So, the 10-3 is a good baseline but the problem we have is that it hasn't always been consistent or consistently available or reliable. Again, I do think that there are improvements being made, but again, it really depends on that sort of consistent and predictable support that the tribes, the broadband providers, our partners, and the state have sort of worked together. And as Jon has said, addressing the Rural Healthcare Program fund is of utmost priority for our IT usage and broadband usage.

DR. GIBBONS: Great, thank you.

DR. AHERN: Thank you, Verné. I think I might at this point take an opportunity to mention that in the two-page document that you were sent with the questions we also have a request for any research or case studies that you might want to
share with us. So, as was mentioned in the previous participants, if there is additional information that you want to provide we would be very pleased to receive that at connect2health@fcc.gov. That would be very helpful to us.

On that note, I might ask if Lovisa Gustafsson is still on the call from the Commonwealth Fund. Lovisa, I know that the Commonwealth Fund has been working on a breakthrough portfolio and I wondered if there were any projects that you might be able to talk about that would be relevant here in our discussion.

MS. GUSTAFSSON: Hi, yes. I think a lot of our work to date has been focused around consumer access to their healthcare data, interoperability, and a lot of those sorts of issues. So, this is a newer area that we're starting to wade into in relation to that sort of work. So, it's really helpful for me to hear a lot of these issues and the problems that
providers are bringing up given that we're not out in the field working with providers on a day-to-day basis to help inform us in terms of what our priorities are going to be going forward in terms of how we can be thinking about these issues and how we can potentially be doing grant-making around them to solve some of these problems that you are raising. So, really appreciate the opportunity to hear from all of you and your experiences and any of the problems that you are experiencing today or potentially foresee coming down the road. So, thank you.

DR. AHERN: Wonderful. Thank you, Lovisa, I appreciate that. Chris, did you have another question that you wanted to pose?

DR. GIBBONS: Yeah, sure. I was thinking about what we've heard and I also found what Bill Jansen at MetalQuest said very interesting. Similar in some ways to Lovisa because these are not provider organizations, yet the work that they do is critical to provider organizations. At one level, it illustrates for
us -- if I'm understanding you correctly and you
can correct me if I'm wrong -- that when we think
about broadband and supporting health and
supporting providers we have to think more broadly
than just supporting hospitals and doctors and
maybe consumers in their homes and there are other
types of organizations like MetalQuest that are
critical to the healthcare process.

I'm wondering if, Bill, you or others
might have any thoughts for us about any other
kinds of organizations that may not be providing
healthcare from a physician or other typically
recognized healthcare provider, but are critical
in the healthcare process that you think it would
be important to have us think about and try to be
inclusive of as we strive to develop or inform the
development of priorities and other things at the
FCC.

MR. JANSEN: Hi, this is Bill Jansen. I
can think of any number of companies and probably
industries that need to be included in the
discussions. But one thing that comes to mind
easily is just companies that are working on clinical systems and their ability to provider interoperability. So, those kinds of companies really affect not only the provider and the consumer but all the players that are in between. And, of course, you need to have the big carriers involved in it. One of the last things you want to see is limited speeds.

And to answer the previous question, I think really your kind of baseline minimum is 10 megabits at the very minimum. We can hardly push data out for less than that unless it's highly compressed.

But I think that most of these questions are not a question of technology, it's really a question of economics. I mean, we communicate with the Voyager that's beyond our solar system all the time. So, if we can do that on technology built back in the '60s and '70s surely all these other issues can be easily solved.

But, again, I think one of the biggest challenges we have are people that are either
elderly, they don't understand the technology, and people who are of low income, who don't have access to technology. And, of course, there are people in rural areas who don't have access to technology. But, again, that goes back to if you're a provider of technology do you want to go after three people? You want to go after 100 people that live in Alaska or some other far-flung location.

So, that's really, I think, maybe at the heart of it. I don't think it's much of a technology issue. It's really a question of what policy do we want to create to help our country move ahead in terms of its health.

DR. GIBBONS: So, assuming that to be true -- and I'm not saying it's not, I believe you -- what would your suggestions be for an FCC? I mean, okay, this is not a technology issue or at least not mainly, you say; if that's the case, do you see a role for the FCC assuming that these things would be within its mandate? I'm just really trying to get your perspectives on how an
FCC can help address the problems that you see that are impacting utilization of broadband in greater ways to achieve health outcomes. What can we do or what recommendations might you have for an agency if you assume the problem is not a technology problem at its core?

MR. JANSEN: Well, I think that this is a very good start, bringing together interested parties and stakeholders with the FCC acting as a facilitator in a policy body that can bring together all these disparate groups and kind of make sense out of it. That's one of the biggest challenges, right? Getting the people together and figuring out some kind of consensus on a path forward. I mean, that's the toughest part.

Again, I don't think it's the technology but in this case how do you bring groups together, how do you reach a consensus. I think that's the role of the FCC. Then, of course, once that consensus is reached being able to put out the regulations so we're all playing by the same rules.
But, you know, that's tough and with all the changes in technology, technology getting better, of course keeping up with change is its own set of issues. So, it's definitely a big challenge to overcome but it's definitely not impossible.

DR. GIBBONS: Great. Thanks so much.

DR. AHERN: Thank you, Bill. Chris, if I may, we have another question thinking about the future, and that is certainly part of the question set that we had sent out. If participants on the call have thoughts about current and future broadband-enabled health applications could they comment on that? And what kinds of services are we talking about and what kinds of bandwidths and speeds will be need, thinking about the future as healthcare continues to transform? Do folks have thoughts about that?

MR. FANBERG: I think, David -- it's Hank. I'd just like to make a quick comment that I think will touch on your question, but I want to go back to the immediate prior discussion.
The FCC sets the regulations as to how we can -- I don't want to say use broadband, but in terms of the programs that it has to subsidize the cost of broadband. And when I talk about the need for speed I'm also talking about the need for speed within the FCC to change its policies. Two years ago I petitioned the FCC to do some of the things that we're talking about today and I'm still waiting for a reply.

So, as the policymaker which impacts what we all can do and how we can do it and who is eligible to be a part of it are going back to the pilot program, and I think this rule still stands, where there were prohibitions on being able to share your circuits with non-healthcare providers. These are policies that need to be addressed, that need to be changed, and in my opinion these are regulatory issues and not legislative issues and those are things that need to be addressed in the process also. And if we can address some of those things that will help the innovation and help us get to where we need to go in terms of being able
to reach new places, new locations, reach
mobility, and provide a variety of services. But
it's those underlying policies that need to be
addressed.

DR. AHERN: Thank you, Hank. Appreciate
that. I think the question on the table was about
the future and services that we can imagine two
years out, five years out. Things are moving very
quickly with respect to healthcare reform and
digitalization of healthcare which we see every
day now in many ways. What are some of the
opportunities and solutions that we think are
going to emerge for which broadband is going to be
critical?

MS. OFFICER: This is Carey Officer with
Nemours. As we think about what the future
entails for the children that we're serving across
a pretty wide geographic area, we really foresee
remote monitoring and providing care within the
home as a critical aspect, predictive, analytic,
and really getting to the source before and being
proactive before something sets in and a child
ends up in our emergency room or ends up as an
inpatient in our health system. So, it's really
pushing care into the home and if we don't have
the right type of connectivity into the home and
at a cost point that these families can subscribe
to then that will never become a reality.

MS. HAHN: This is Beth. Also, to
understand that we're all out here trying to do
this without any funding. There is no
reimbursement for telehealth, telemonitoring, in
patients' homes but we're doing this because we
know that this is for the benefit of the patient
and the care that they need to receive.

Our cardiology patients and one care
patients, if they have connectivity to their
doctor they can save travel of 80 to 100 miles and
a two-hour travel to providers where there is a
lack of providers and they have to wait weeks to
get into a specialty provider sometimes. So,
we're all grassroots trying to do what needs to be
done behind the scenes with the capabilities that
we have and without reimbursement. The medical
community isn't supportive because they know there is a lack of providers and that they can't see everybody one-on-one as much as they would like to. We get referrals, "Do you have cardiology telehealth?" Because the providers know that this is what's needed. But we're here in the background scrambling trying to figure out how to provide it to them at our own cost.

DR. AHERN: Thank you, Beth. So, one of the barriers, one of the challenges, is obviously the funding and sustainable funding in order to support the development of these initiatives, the deployment, and that's sort of part of the challenge that you face and I'm sure many providers are facing today.

MS. HAHN: Yes.

MS. BOERNER: This is Verné with the Alaska Native Health Board. I just wanted to -- the last three speakers I think really did a great job in addressing some of the in-home care issues and some of the innovations that might occur but the lack of access, again, in rural communities is
so incredibly high across the United States and thinking about the regulatory barriers that have impacted the -- I mean, there are efficiencies that are not being tapped into that because of the limitations as to how they can be used is part of that.

When you think about non-technical issues, if you look at immunizations and you don't have a critical mass having access to those immunizations they're not effective. And similarly, with broadband if you don't have that critical mass with access to it you're not going to build that sort of awareness of it overall and then these innovative approaches can't get off the ground quite as easily. So, I think that's a part of an artificial barrier that might need to be addressed. Thank you.

MS. ZASADA: This is Jon, also in Alaska. I guess I had an experience recently that kind of gave me a little bit of perspective. I'm pessimistic about the increased affordability of rural broadband for residential use and I'm also
somewhat pessimistic about how much more affordable cell plans are going to become. I was recently in rural northern Canada, the Yukon Territory and the Northwest Territories, and in response to their desire to lower costs and increase access to in-home monitoring, they actually deployed old school 3G teleconnectivity and monitors that maximize at that level of speed in order to at least have a minimum base of home monitoring available for their patients. I know in talking to them that this is also a model that has been used in other rural countries that have centralized health systems. So, again, I think it's good to get it out on the record as one opportunity that other places are trying.

DR. AHERN: Thank you, Jon. I want to be respectful of time for participants. We're near our two-minute mark. Are there any other brief comments that any of our remaining participants would like to make before I turn it over to Chris for final comments? Hearing none, Chris, did you want to wrap up?
DR. GIBBONS: Sure, thanks, David.

Again, let me on behalf of David and the entire Connect2Health Taskforce and the FCC thank each and every one of you for taking the time out of your busy schedule to give us your critical insights, your findings, and your thoughts.

We heard many things and I'll just briefly tick off a few of the top ones that impacted me. The increased need for more speed, problems around access and affordability, reimbursement. But also there are non-technical issues that get in the way and that there is a feeling that the FCC can have a role in overcoming those non-technical issues, if it's coordinating, getting people together, particularly in community is important. And also, as the last caller just talked about, sometimes low-tech technologies can be useful on an interim basis to get through a problem.

These are all fantastic. We look forward to continuing the conversation with you again. Please feel free to send us anything else
you would like us to know or did not get the
chance to tell us. Our email is
connect2health@fcc.gov. Thank you, again, for
joining us today.

DR. AHERN: I would just also thank you
all for joining us on the call today. We greatly
appreciate the time that you've provided and your
input. We will now conclude the session. Thank
you.

OPERATOR: Ladies and gentlemen, that
does conclude the conference for this afternoon.
We do thank you very much for your participation
and using the Executive Teleconference Service.
You may now disconnect.

(Whereupon, at 2:59 p.m., the
PROCEEDINGS were adjourned.)

* * * * *
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I, Carleton J. Anderson, III do hereby certify that the forgoing electronic file when originally transmitted was reduced to text at my direction; that said transcript is a true record of the proceedings therein referenced; that I am neither counsel for, related to, nor employed by any of the parties to the action in which these proceedings were taken; and, furthermore, that I am neither a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

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Expires: November 30, 2020