

MCHB/DCAFH

Promoting Child Health and Well Being Through HIT

February 12, 2009

KEISHA JOHNSON: Good afternoon and welcome to this MCHCOM.com webcast. I'm Keisha Johnson and I work in the office for Health Information Technology here at HRSA. Our acronym is OHIT. I'll serve as your moderator for today's webcast. I would like to welcome you to this webcast titled "Children and HIT: As a State Title V Director what do I need to know?" This webcast is sponsored by OHIT and the Maternal and Child Health Bureau.

This webcast will be the first in a series focusing on issues surrounding children and HIT with state Title V directors being the primary audience. The focus of the webcast will be the following. HRSA's HIT activities, technical assistance resources available to state Title V programs. Issues and telehealth affecting children and other emerging HIT issues.

Before I introduce our two speakers I would like to briefly announce a few technical instructions about this webcast. Slides will appear in the central window and should advance automatically. The slide changes are synchronized with the speakers presentation. You may need to adjust the timing of the slide changes to match the audio by using the slide delay control at the top of the messaging window.

We encourage you to ask the speakers questions at any time during the presentation. Simply type your question in the white message window on the right of the interface, select question for speaker from the dropdown menu and hit send. Please include your state or organization in your message so that we know where you are participating from. The questions will be relayed onto the speakers periodically throughout this broadcast. If

we do not have the opportunity to respond to your questions during the broadcast, we will email you afterwards. Again, we encourage you to submit questions at any time during the broadcast.

On the left of the interface is the video window. You can adjust the volume of the audio using the volume control slider which you can access by clicking on the loudspeaker icon.

Those of you who selected accessibility features when you registered will see text captioning underneath the video window.

At the end of the broadcast, the interface will close automatically and you'll have the opportunity to fill out an online evaluation. Please take a couple of minutes to do so. Your response will help us to plan future broadcasts in this series and improve our technical support.

At this point I will briefly introduce our two speakers for today's webcast. Our first speaker today is Sheryl us a teen Casnoff. In September of 2005 she joined OHIT as the associate administrator. As the associate administrator she adopts the effective use of HIT about safety net providers and populations. She was previously the director of the SCHIP or CHIP, the state children's health insurance program at CMS known for the centers for Medicare and Medicaid services providing insurance for low-income children and also responsible for designing and implementing SCHIP in 1997. Prior to coming to CMS Sheryl was the director for public health policy in the office of the assistant secretary for planning and evaluation. And a budget analyst in the office of the assistant secretary for management and budget. She also served as a member of the president's task force for healthcare reform.

Our second speaker is Dr. Dena Puskin. She's the director for HRSA's office for the Advancement of Telehealth. Prior to her current position Dr. Puskin served as the acting director of ORHP, also known as the Office of Rural Health Policy, prior to joining ORHP in 1988, Dr. Puskin was a senior analyst at congress's prospective payment assessment commission and developed the model for annual update for medical payment rates for hospitals and worked on numerous economic issues related to rural hospitals and specialized hospitals in the U.S. She currently chairs the joint working group on telemedicine, a staff level interagency committee to promote cost effective telemedicine initiatives. She's also on the board of the American telemedicine association. Now I will hand it over to our first speaker of the day, Cheryl Austein Casnoff.

CHERYL AUSTEIN CASNOFF: Thank you for joining us. I'll go through the slides very quickly. We can start with the first slide but as you heard, my background is really very much focused on child health issues and I'm new to the Health Information Technology world. What I'm trying to do is bridge the gap between HIT as we refer to it and kids. Kids in a lot of ways can benefit the most from what we talk about through Health Information Technology and anyone who has been following the news knows that the new president, as well as Congress, have put a great emphasis on Health Information Technology. This is the beginning of a story. I think what we want to do today is make sure that you're aware of some of the opportunities that exist and as Keisha said, we want to hear from you. What is really important for what you're doing? Who would you like to hear from in the future? Who are some of your colleagues who are really raising the bar on kids? Let's start with the first slide which is what we'll try to cover today, the goals for today.

Next slide. Basically I'm going to talk briefly about HIT. Some of you probably already know this and you can take a quick nap and some just may be new. We want to talk about what is unique about children in the world of HIT. I think it's fair to say that we're in a small group who understand how important HIT is for children. It does not come up a lot in a general discussion of HIT. We want to give you some concrete tools for HIT adoption and effective use. It's not easy and we recognize that and it is going to take a lot of help. I think you've started to get some help from your bureau and some specific things we're doing as well and I'll turn it over to Dena who will talk about specific examples of telehealth and how it can be used to address children.

The next slide is a picture that I like to show because while this isn't 20th century, we keep talking as if we're living in the 20th century. If we could just share information and if we just knew this about kids. If we could share and we can.

That's what the next slide shows you. We're in the 21st century.

Next slide, please. And this is again just a picture of the kids know more than we do today. In a sense this is about how adults can catch up with their kids.

So the next slide is really what we're going to talk about, which is sharing information. It is all about promoting children's health and well-being. So let's get into it.

The next slide is really why is HIT important for children? And you'll have access to all of these slides. As I said I'll go through it pretty quickly. There is no question that HIT is simply a tool. It is all about quality and effectiveness and efficiency of healthcare. Again, when you listen to the dialogue about HIT coming from Washington, it is about quality, it is

about efficiency, potential cost savings. It is not just about buying equipment and that is so key for kids. And then it's about the families. You all deal with families who have children with special healthcare needs and children with complex issues. How can we empower families to help deal with their children? And then you have personal health records which really is a combination of what you can get through the providers as well as real ownership on the part of the patient, including children, including adolescents and I'll highlight later on how important it would be for children to begin to be empowered to take some control over their own healthcare. And then it's really important, of course, for children who are away from home. My first week I always talk about was Katrina. You found all these children who had no immunization health records and school health records and so anxious to get them integrated into their schools and communities and there was no information. If you think about KATRINA I think that's why HIT is important to children. This is unique to kids. How many health programs as well as human service programs touch children. And I just attended a meeting where we were focused on Human Services and you hear about these tragedies where four children were found dead in a home. At least 20 different human service programs were probably touching those children but those programs were not talking to each other. The information was not being linked between schools, between foster care. So again, it has great power to link the health and social service programs and exchange information, and particularly for some of the most vulnerable we talk about, foster care children, children in Medicaid who are being touched by so many of these other programs. And I'll also talk briefly about the positive side about this. How can we make sure that children benefit from all programs that they're eligible for?

The next slide talks about what are some of the challenges for kids? HIT in helping children is a little bit more complicated probably than even adults. We have to recognize

that. First of all, there is no single child. And again this is different than adults. As a child ages and grows we'll talk about differences in privacy, confidentiality, in the lab tests and the growth parameters and we'll talk a little bit about how we have to make sure that electronic records recognize how children grow and they need to be able to measure and express these changes. Things like growth charts, BMI, all of that needs to be pediatric friendly and we've made some really good progress in the last year around that.

On the next slide we talk about providers and it is so important to make sure that we don't build it and leave out the pediatricians. We know pediatrics has lagged behind other special test in the uptake of electronic health schools. Cost is a barrier and thereby a real challenge about how appropriate the electronic records systems are for pediatrics. In addition, we know in general that solo and small practices are less likely to be able to afford and adopt Health Information Technology and, of course, that's more prominent in pediatrics. Then it has not been a user-friendly program or package of electronic health records for pediatrics. So pediatricians were not necessarily anxious to adopt these products that were really adult-oriented.

On the next slide I'll give you a little data about the uptake. It is a little old. In 2005 there were about 14% of pediatricians in Florida using EHRs but around 21% of primary care pediatricians in the country had EHRs. We know the large practices were more likely to report the EHR use and the small practices were less likely.

Well, let's talk about some progress on the next slide about what is happening in the world of electronic health records. And I won't go through these in great detail but we know that the health level 7 language for children has definitely helped create functions that are child specific, including well care, newborns and things like that.

On the next slide, we know that it also is supporting now ambulatory and in patient hospital care for some of the chronic diseases and in addition, there has been a special group created by the certification commission for healthcare information technology, otherwise known as CCHIT has more funding. New federal funding from the federal government anyone purchasing an electronic record will have to purchase the C HIT process. In May 08 they had specific child health products and a Child Health Work Group and they're focusing on some of the pediatric needs such as weight, neonatal and things like that.

On the next slide let me just whip right over to personal health records and talk a little bit about how important those are and again some of the challenges and we'll talk a little bit about privacy and security here as well. The whole focus has been on adults and has lacked in some of the particular functions that are needed to make sure that families can track pediatric immunization and some of the development.

Let's move on the next slide to particular privacy issues. You'll see that there are many citations here from a recent pediatric supplement that was specific to HIT. I didn't give you each of the articles, but there is a supplement that hopefully many of you can look at and there are three or four page articles that discuss each of these. I won't go through details but we know that HIPAA considers minor children to be deserving of special protection against harm and risk. It's important, the whole privacy aspect of these records. Then we know there are roles for parents, guardians, state acting on behalf that may affect how these records are shared. So while there is impetus to protect there are also special circumstances where there is particular access to the information.

On the next slide we know that HIPAA defers to state law on questions of privacy in the case of minor children, so each state may have a different law. And then -- but it does also prohibit disclosure to third parties such as health agencies, schools and social welfare agencies without specific consent. When we talk about merging information from the school systems from some of the social service systems, we know there are particular barriers to that issue.

On the next slide we talk about some of the unique privacy challenges for children. And again, you don't face this in the adult world. An adolescent is different in the privacy area and their access to medical records may be different depending on the state. Therefore, either personal health records or electronic records are going to have to be designed to recognize these differences and access and what kind of permission is going to be needed for an 18-year-old that may be very different than a 12-year-old, for example.

On the next slide we talk about some more privacy issues. In terms of adolescent care and foster care and consent for treatment. And even in terms of sensitive health information like pregnancy and sexually transmitted diseases. When does parental notification occur? These are all issues we face today in the paper world. It's a little more complicated and people are more nervous when you talk about these exact same issues in the electronic world. Not that everything has been solved, but I think it's important to recognize that these are challenges, certainly.

Let's move onto the next slide where you talk about emancipated and unemancipated minors. A unique issue for children and how emancipated minors must be given access to their information and how does that happen? And then where does parental control come in?

So let's move on to the next slide on HIT and enrollment. This is the positive side. I think many states and hopefully many of you on the call recognize how important it is to use the electronic systems to help enroll eligible children. We know there are millions of children and with the expansions in chip and Medicaid there will be more children eligible for the programs and not enrolled. HIT can help do that. And so many states are using online applications and other Internet applications to not only enroll children in public insurance programs but certainly other programs as well. We know that children churn from program to program, to Medicaid, to chip, to underinsured to private insurance. We want to make sure the information goes with the child. It's a repeat of the visit and repeat of immunizations if the records don't go with them. So many things can be improved by sharing information. We talk about outreach and how HIT can be used for that. And we have specific states that are doing Medicaid enrollment via web or reaching out to uninsured children through emergency rooms or linking food stamps electronically with eligibility.

On the next slide we talk about quality. Again, HIT to us is just a tool to quality and effectiveness of care. And so certainly by sharing information, improving communication across systems and across providers, we know we have data in the slides that show how much better the care is, and how more likely you are to do immunizations and to do screening and other screenings. On the next slide there are more examples of how important it is in mental health. We know there is a major disconnect between primary care and mental health services but linking these systems together will help refer children appropriately. Make sure the information flows back to the primary care provider. Prescribing is another example. Knowing whether the prescription was filled and refills being filled. If some are being filled and not others. It all becomes available in the

electronic records and empowers the provider as well as the family. We have an example in Florida of an inappropriate use. A woman said my son is getting married and I would like to get a refill ahead of time and they said fine, no problem. They filled it. 20 minutes later she showed up at the next health center which fortunately was connected in the information world and she said oh, my son is getting married and I would like an advance on my prescription. They said no problem. They went in her record and they said excuse me but you already did that. From a fraud prospective it is a powerful tool at the state level. If you think about a lot of the expenditures in Medicaid a lot is inappropriate expenditures. This is a powerful tool to help improve that. HIT and special needs children. This is a no-brainer. When you have children who are touched by so many different systems and so many different services and parents who literally walk around with file boxes for their children or give their child a card to hope that somebody knows who to call if there is a problem, well, if there is a way to access that information instantly, it just is such a no-brainer for these children and the families and the providers. And these again are examples of how any person who is chronically ill, how HIT and the sharing of information can help.

On the next slide, we talk about empowering families. And helping them help manage their children's health. And there is some telemedicine activities that Dena will talk about later but also personal health records where the child, you know, we have such a major obesity ep -- epidemic. We're talking about a generation of children computer literate and dependent and there is some evidence when they take power in watching their own health status they begin to understand relationships oh, I ate too much yesterday or I had too much salt and my blood pressure went up. These are ways that children can be empowered.

And the families as well. On the next slide we talk about disease management. And certainly for chronic disease, for health maintenance, wellness, mental health, substance abuse, all of this information can be given to the families or the child to watch their own health as well and then sharing it with the provider.

So let's move to the next slide and talk a little bit more from your perspective at the state level about how HIT is being used to assist in program planning. And beginning to use data from different systems. And constructing electronic records from different parts of the organization. And I know that HRSA has begun to support some of this activity through the Maternal and Child Health Bureau in terms of creating child health profiles that could go with the child as well and hopefully in some future issues we can talk in more detail about that.

So what are the lessons on the next slide that we should all take from this? That is, don't reinvent the wheel. While this is moving very, very quickly, there are folks we call them the early leaders in some cases are out there doing things. They've learned how to do some things. They learned what didn't work. Learn from your colleagues and other states. Use existing building blocks wherever possible. Don't throw everything out and try to reinvent the wheel. Utilizing financial incentives, that could get very interesting very quickly. We don't know anything yet but certainly through the stimulus bill HIT is a very big priority. And make sure that you do everything with an eye towards the future. Again, we started with let's not do this in the 20th century, let's do it in the 21st century.

On the next slide is the first of hopefully many opportunities to look at how HIT funding may help particularly states in this case in the chip reauthorization there are two provisions specifically for grants to states to create demonstrations around improving care

through electronic records and other innovative models. So if you haven't already, you may want to get in touch with your chip programs in the states that ties into any of the program you represent by the Maternal and Child Health Bureau.

On the next slide there is another demonstration about encouraging the development and dissemination of model electronic health records for children. So I think this is just the beginning, again. This is the first time I think that you've seen a child-focused HIT initiative coming out at the federal level through legislation. Let's move quickly to the last few items and these are tools that hopefully will be helpful for you but we're also reaching out to you to help us build those. As I said, kids and HIT have just not been a big focus in the HIT world. So we have begun to develop a specific toolkit with the help of the Maternal and Child Health Bureau that is very much how HIT can help promote the health and well-being of children. This is just a landing page. This isn't up yet but it will be shortly. There is a broader toolkit that you can go to right now which is on arc's HIT website. You'll go to the HIT portion of that.

Let's move to the next slide. These are all proposed modules. What we're looking for from you is are we asking the right questions? And do you have any specific resources that we could put into this tool box? What this is about is other people's resources. Those who have already done things, we want to share that with others and so they're very, very specific examples. We don't create new policy here but, for example, in our broader toolkit, what does a job description look like for a CIO in a health center, for example? So as we go through these questions and you see under the general topics that you might have something to contribute or you think there are additional questions, you can see contact information in a few slides. I would very much encourage you to get in touch with

us. This is just an introduction to children's health IT and what is it? It introduces the toolkit.

On the next slide we talk about pediatric-friendly electronic medical records and questions that you and your colleagues are going to ask, what is the return on investment if I do this? What will I get out of it? How do I convince my board, my partners, my governor to do this? And is it pediatric friendly? These are some examples from module 2.

On the next slide, a very big priority for all of you is building a medical home for children. This module is going to look at how Health Information Technology be used to empower the creation of a medical home. And many of you hopefully do have some examples of this and we'd very much like to see that.

On the next slide, we talk about cross sector coordination and this module is being supported by the mors foundation. Not just looking at the health components but social services, schools, creating linkages among all the programs that touch children. It is not just about their health but it is about their wellness. This one we're actually doing a white paper background as well as the module.

On the next slide we have facilitating enrollment in public health insurance programs. I talked briefly about this earlier how important it is to make sure that wherever the child is their insurance information goes with them. If they're eligible this can help facilitate it.

Module six on the next slide is involving families and we talked a lot about how important it is to empower families to Health Information Technology.

Module seven improving quality on the next slide. It's all about quality and these things are interrelated but how can we improve quality, he I -- and efficiency.

On the next slide is leadership characteristics, maybe something for for all of you. How do you set the stage for your state to make sure that they understand the importance of Health Information Technology?

On the next slide, I would again encourage all of you to please get in touch with SOPHIE Miller. If you have any tools or questions, you have my contact information at the end and I would be happy to talk to you. Let me turn it over to Dena Puskin who will give you some very specific examples of how telehealth can help in the delivery of care for children.

DENA PUSKIN: Thank you, Cheryl. I am going to try to be fairly brief and give you some examples and build a lot on what Cheryl said. What has been the vision? Because HRSA has been doing telemedicine/telehealth for a very long time in cooperation in many of our programs with the Maternal and Child Health Bureau. And basically as we're going to talk more about this, we see there is a toolkit, a very different kind of toolkit but a toolkit to improve how we deliver quality healthcare services and improve access to those services. So we start with a vision. Everyone has a vision. Ours is a very simple one, the world as we would like to see it, which is no matter who you are or where you are you get the healthcare you need when you need it. And timeliness is often a key in getting healthcare and so we're saying you know, we need to be able to start to use technology in a more effective way to do that.

We go to the next slide we'll just do a little -- a few little definitions. Terms get used interchangeably and sometimes it's helpful to say what do we need? When we use

telemedicine at HRSA we mean the use of telecommunications and information technologies to provide clinical services when distance separates participants. A range of clinical services, not just those delivered by physicians. When we talk about telehealth we're talking about a much broader definition. Which is the use of telecommunications and information technologies to support healthcare services when distance separates the participants.

And so if you go to the next slide, we have a visual of this that may help to put some perspective on it. Telemedicine is the inner circle. It is really from this vantage point the use of these tools to deliver clinical services. Supporting that is health professions education, administrative services, evaluation research where we're using the tools to actually research it, homeland security, public health, consumer education/outreach and rural health information -- regional health information sharing. Why we do this is almost all of our programs at one time or another were involved in much more than just delivering clinical services. The focus has been on clinical services to many of our programs because that has been where many of the questions have been. Can you use this to deliver clinical services? How do you do it? But adjunctive to that is the administrative uses of it, the educational uses. For example, do you use -- how you use the technology to train people at a distance, distance education. But also how you use the technology so people are trained on how to do telemedicine. So it's both ways. And there are enormous technologies.

Let's go to the next slide, please. So a different kind of tool box. We're thinking of a tool box of technologies applied to diverse healthcare needs in a wide range of setting to connect people to improve access to healthcare services. Again, the focus is on the delivery system. Not on the individual tool. Getting the right tool is necessary, but as you'll

see, far from sufficient. It is really how we are going to use technology to reinvent our healthcare system in many ways. How is it going to fit in? Let's look at some very specific examples that I think may be relevant to the kinds of programs that you support.

Next slide. This is actually a picture from our Arkansas ANGELS program.

If you go to the next slide we define what ANGELS is. ANGELS is the Antenatal and Neonatal Guidelines, Education & Learning System. It's at the University of Arkansas, which uses interactive video technology, videoconferencing as we're using here today in many instances, in weekly telemedicine conferences that enable local physicians to confer with maternal, fetal medical specialists in realtime about cases. A combination of mentoring and consulting and we use a variety of technologies. Ultrasounds can be read in realtime and ANGELS offers assistance in training local technicians to be more effective. Naturally ultrasound services and also in sending them. Because actually how you you set the technology up is more important than the individual pieces or toys. Consultations are available that allow patients, local physicians and University of Arkansas Medical Center physicians to talk together, see each other and bring subspecialty support to people in their hometown. They have a call center to provide 24 hour support for physicians to consult on maternal/fetal issues and management issues. And as a part of ANGELS outreach effort, women seeking support for concerns relating to their pregnancy, labor and delivery or postpartum can also utilize the services at the call center. ANGELS is a very popular program. It is very well publicized and put on national TV programs and basically it uses many technologies. Let's turn to the next one and we talk about TeleKidcare in Kansas.

This is actually a teleaudiology consult but the range of services -- next slide, please -- and what they are basically -- they're in the schools in both inner city, Kansas City, in Kansas, as well as in rural areas. And what happens is they bring the doctor to the school. And what do we have as a problem in many of our schools? It's that -- many of our underserved communities, we basically have no school nurses or if they do they cover 20 schools. Who is handling it at the school level? It's the secretary, the teacher. And so there are huge problems, actually, when kids come to school and they're sick and they aren't getting primary care. They're not getting the care they need. So in TeleKidcare what they've done is they have a unique healthcare delivery system that they've actually extensively studied for cost effectiveness, unlike a lot of programs, has quite a bit of data and they've demonstrated overcoming access issues in very underserved and poor populations. Overcoming some of the transportation barriers and language barriers in urban areas. They enable school children with acute or chronic healthcare conditions or mental or behavioral health concerns to see the doctor from the school nurse's office. There is parental consent but basically they're running clinics at the schools and they are using both videoconferencing and they use what we call store and forward. For those of you that may not be familiar with the technology store it forward, technologies are like radiology, dermatology. Take an image with a regular camera and use a digital camera and send the pictures on and have a specialist interpret them and we may do a videoconference with the patient. The advantage of this program is you can bring the parents in and you can do joint conferencing and use a range of specialists in an efficient way.

Let's go onto the next slide, next example. Child abuse. A huge problem in terms of how do you diagnose when a child is being abused versus just being clumsy? Especially in some of the rural hospitals, where they don't have specialists and where, in fact, the risks

of misdiagnosis could ruin a family. On the other hand missing it can end up with dead children.

Next slide. We can talk a little bit about this. One example of this, it's not the only one. The University of Florida at Jacksonville and the Florida child protective services has come together and have 23 child protective teams that provide 24/7 essentially support services to health providers and families. The teams are composed of physicians, nurses, nurse practitioners, case coordinators who remotely evaluate children at a distance. So, for example, children admitted to a hospital and if there is a question they've called up on the videoconferencing system and the specialist consults with the child, the family member and health providers to determine and evaluate physical/mental abuse and neglect. All ages are appropriate. They have adolescent specialists as well as infant specialists. And they use a combination of videoconferencing, still cameras and scope. I don't have a picture of the scope here but basically imagine that I'm looking in the ear of a child with a scope or looking at a stethoscope or in the case many of this is sexual abuse so they use the scope and they basically have a camera at the end of it. They send the image. This has been extraordinarily successful in Florida. We supported early on 15 years ago evaluations of this. This has grown to be a very, very important program because they don't have the specialists. Next example. Cheryl talked about children with special healthcare needs and we've been working in this area for a long time and financial. That's a picture of actually a child who can speak but using instrumentation is actually talking and doing some motor exercises with some people facilitating, a presenter with the remote specialist at the other end.

Next slide, please. What we are really facing in all of these areas is provider shortages. Not just maldistribution, really shortages of specialists. That in rural areas, of course, are

incredible but even in urban areas we just don't have people who are around the country who can do a lot of this, or do it well. And so -- often you need multidisciplinary teams to address the needs of these children. Nationally about 13.9% of children had a special healthcare need in 2005/2006. We have had very limited resources for them especially for low income children who end up in emergency departments and they're seen by a primary care physician who really don't have the skills to evaluate what they're seeing. So what these programs have done is we have essentially the same videoconference and same tools we've seen in child abuse being able to be used to initially diagnose and tools for rehabilitation, audiology and other to do follow-up in specialized setting. In Texas we have a program to do that. And so we have a range, and I've been working with Irene Forsman here on some teleaudiology programs and funding. Again, the same tools apply to different applications and different settings.

Next slide, please. Let me talk about dentistry and the concerns that I know all of you are probably more aware of than I am of the lack of dentists to take care of poor kids. And so handle things in a timely manner.

Next slide, please. What you see actually in that picture if we go back to that picture is you can see the child and actually there is a dental scope they're taking any images can be seen remotely by the dentist.

Next slide. I don't know if that image is very good. I'll give one example. The University of Rochester where I used to teach at the medical school has established telehealth centers in six inner city elementary schools and seven childcare centers. They use an interoral camera that record dental impajjs and send the images to the University of Rochester where a pediatric dentist refers to the images and provides assistance. They contact the

child and guardian and assist them in getting appropriate care. In the first nine months of 2005 123 children were seen in this program with 40% of the children screened and inner city care centers also. Without care, those can turn into abscesses and pretty horrible things. Now, what has been one of the keys here, this is true of all of it. This is really used for screening. We now have more programs where they're actually trying to guide remotely mentoring some delivery of services. We have a licensure problem, though. In many states they won't let people other than dentists do certain things and that is a problem. Dental hygienists can be guided quite a bit and that's what we're seeing more and more being done. What we see here, you find a child with active KARIES you have to have a place to send them. When we have community health centers that do dental, terrific. In many parts of the country, we don't. And this program works because ultimately there is someone at the other end who will the services. So the key in implementing many of these programs is we don't want false promises but on the other hand the technology has to be part and parcel of the delivery system. The next example is emergency care. If you could picture actually to the University of California Davis, you may know the man in the picture, some of you. And Jim has been very active in this area.

Next slide, please. And what we're seeing is telemedicine increasingly being used in rural and remote areas that don't have the volume of pediatric patients or resources to support pediatric emergency and critical care services. This is a huge problem. Cheryl has made a good point about how kids are different. Certainly they are different. You have to have the right equipment. For example, at the UC Davis in Sacramento they've used telemedicine to facilitate the availability of these services in northern California 24 hours a day, seven days a week. The equipment is installed at UC Davis intensive care units on the home of its pediatric critical care physicians. As well as in the hospitals in the remote rural areas. So the physicians can take essentially and provide care from their homes or from UC

Davis. It has improved the quality of care. UC Davis is one of those places that actually has the ability to measure and monitor what they're doing. It has allowed patients to be screened in their own communities avoiding costly and traumatic transfers and allowing them to stay with their families and basically it's helped the referring hospital to stabilize a child in those instances where they must be transferred so that they can be transferred to the pediatric emergency departments. The more knowledge following them and as a result higher outcomes. In all the trauma work in adult as well as kid we've seen you don't always avoid the transfer but the outcome of the transfer is much better.

Next slide, please, on family voices, this is a project that we actually co-funded with the Maternal and Child Health Bureau a while ago and it has gone on. This is designed to inform families about telemedicine's potential to enhance the way families get care especially with children with special healthcare needs. They've had two major projects we helped fund. Bridges, not boundaries which is a booklet that includes a checklist of what patient families can add, what they need to look for and then they have a program -- a report on family voices, telemedicine report, detailing the features of any of the programs and issues about the importance and suitability of telemedicine in children. Most important here is that families need to know what telemedicine can and cannot do for them. What to ask, what the right questions are.

Next slide, please. Well, in the end many people want to listen in to talks like this to know where to get the money. And I think it's very important that our state partners be able to help people find money if they need to. In some instances get it themselves. Our programs for the office of the Advancement of Telehealth are dictated by Congress. We have three programs now. The telehealth network grant program, which is actually due on March 5th or 6th is about networks, supporting networks in rural areas to provide

telemedicine services and evaluate the impact of them. There are only 14 grants being given, this also includes telehome care and telehome monitoring. This is a longstanding program that's been in existence and has moved, quite honestly, to wanting to see not only can you put the programs in place, but what difference does it make? Because that is more and more what Congress is asking. The licensure of portability grant program I just met with 22 states on reportability. It's cross-state practice. Especially in genetics and other areas as we're dealing with -- it's important to have facilitated access and so licensure is one of the barriers. And finally the telehealth center grant program.

Go to the next slide. It's around the country we've supported essentially sectors to help people get going in telehealth. How do you step off the curb? What are the issues, what are the barriers, what should I do first? These centers around the country and while they list certain states they're actually together they cover the whole country. And they're essentially a network of networks to provide technical assistance and essentially encourage people who themselves are interested to learn more or have people in the state that are interested to contact them and work with them, but more importantly as you identify some of your issues, we would be -- as Cheryl has said, interested in hearing what your issues are and we're hoping we can work together to essentially facilitate better use of these technologies for pediatric populations.

Next slide, please. Cheryl mentioned the PORTAL that they're developing, the telehealth section. We're working on that and it will be available in the summer of this year. We have a book out there that is already on our website on how to get started in telemedicine. This like the portal is much more question and answer and user friendly than the book that we have. I do urge you to go on our website if you're interested because the guide was written by 55 people who had to walk the talk and build these systems. So that guide is available,

finally, the last slide because we want to leave plenty of time for questions. In the end we're not interested in the tools for themselves. It's not what we're interested in. We're interested in what difference does it make, what is the impact on improving access to quality services? And people ask me -- we had a conference call yesterday and they said what kinds of measures do I have to use and this kind of thing. Well, you have to use whatever measures will help you understand what impact your program is having and are you reaching the goals that you have set out for yourself. But in the end it has to make a difference to practitioners and they've got to say these tools are invaluable in how I do business. So we work a lot with Alaska and many years ago, probably 15 years ago, we went up there and they had very primitive tools in the villages and many of you know the health aides in Alaska are basically high school graduates being mentored at a distance and they are the only thing -- they're the only providers. They handle everything from tummy aches to limbs being cut off sometimes. And make decisions. We asked what difference did it make to fanny and she said I would quit my job. We asked Emily and this is some of the equipment that you can see. This is equipment. These aides use this to connect and send images, all sorts of images in no matter what the weather. We asked Emily and she said I would kill anyone who took it away from me. That is value added. When we get to that point we know we will have made a difference. Thank you so much and we're open for questions.

>> All right, thank you, Dr. Puskin and Cheryl for your presentations. We can take questions now. During the speakers presentations I went ahead and jotted down some of the questions so they can just pick it up from here.

>> Let me start with a few. We have a question from Carol, actually we have several questions from Carol who apparently is an FQAC. The HIT efforts of state, is there a

central location to go to and talk with folks? I guess sharing information among all of you. The answer is yes, we have a portal. Right now parts of it are still log-in only. A part in the Maternal and Child Health that is a subset of the Maternal and Child Health program but if you could send an email to Keisha Johnson at K Johnson @ HRSA.gov she can get you a log-in to that. As we build these toolkits we were talking about, those are on the public site with is the AHRQ HIT site. You can begin to communicate with each other through that. If you're an FQHC, Carol, there is a robust section where health centers are talking to each other about HIT issues. Now, the next question Carol asked was about funding. This is always a good question. How much is in the stimulus package? The answer is we don't know. You are reading the press the same way that we are. Numbers like \$20 billion are being thrown around. It is important to understand that includes Medicare, Medicaid, Department of Agriculture, Department of Commerce. So lots and lots of programs and of course we have no idea what the final numbers will be and what, if any, impact it will have on HRSA but Dena mentioned specific grant opportunities that are on the street right now. In addition, I didn't include it in my presentation but we do have four federally qualified health centers, networks of health centers to invest in electronic health records or other innovations, those are also out right now and available for competition. So regardless of the stimulus package, there are competitions out there right now and I guess there is the HRSA site where you can go to find out where the grants are.

>> WWW.grants.gov and you go on there and you can use a key word, telehealth, telemedicine. Health Information Technology. Use a key word or look at HRSA or look by agency and it will tell you what the active announcements are.

>> Carol's other question -- another question was Carol is where to get more information about HL7 and CCHIT has a website. Do you know what the organization is

>> I think it's HL7. If people are interested, we can give them the connect if they email Keisha we'll get back with them and give them a list.

>> If you go to CCHIT you'll find it and hit on pediatrics. Now where can we find white papers on EHR or telemedicine equipment? The first place I would send you to is the AHRQ HIT site and the toolkit for health centers, we're building a new one on health centers. Keep in mind the AHRQ portal is specific to HIT and search by key word but there are other places as well.

>> Right. There are a couple of places. It depends, again, what you're trying to do. There are only two major providers for videoconferencing. One is Tandberg and the other is Polycom. What kinds of telecommunications do I have and what do I need? I would recommend a couple of things, first of all, I would recommend that you contact one of our Resource Centers and ask them and see if they can help you. They are being funded by HRSA to help you. So that's the first place. Generally going on the web there are a couple of strategies that I use. First of all, I go to the American telemedicine association and I look up things on their website. Second of all, I Google, like anyone else. I Google. And third of all, I would recommend you go on our telehealth -- the quickest way to get to that is on the HRSA website and look at telehealth and it will get you to the section on the HRSA website, the guide to get going in telemedicine I've listed but also we have a directory on there of our current grantees. It says 2006. Many of them are our current ones. And it tells you, for instance, if you're interested in dermatology look at the chart. It will say who is doing dermatology. Call them. The best technical assistance you can get on any of this is from people who have walked the talk. Not people who are trying to sell you something right out. Someone who has had to do it. If you want to do a pediatric

cardiology, look at there. The content for those people -- there is contact information. Call them up and say I'm interested in doing this. What has been your experience? Or email them. So Resource Centers, current grantees that are doing things, the web, American telemedicine association. That's sort of the way I would approach it.

>> It's really important. Our general philosophy is hurry and get up into the 21st century but stop and think about what you're doing. Reach out to those who have already done it. There is no reason to make the same mistakes and it is a very costly mistake and we recognize that. Particularly because of the populations that we all serve and the kinds of grantees that we represent. We know folks can't afford to plop down \$100,000 and not use the equipment. Technical -- we work closely with Maternal and Child Health. If there are particular areas that evolve in future calls because of this we'd be happy to continue to build in this area. The toolkit will be out in the spring which is a place to start. We also support health center controlled networks around the country that are very advanced in the use of electronic records. Particularly for health centers. So there are lots of contacts and all of that information is publicly available. Just let me -- Aaron grace, who actually is from AHRQ just sent us an email and reminded me the precise website for the AHRQ HIT site and it will get you to the HRSA toolkit is WWW.healthIT.AHRQ.gov. So hopefully that helps. Go ahead, Dena.

>> I was just going to say, if all else fails, you can call me.

>> Absolutely.

>> You know, if you really are really -- you can call me and, you know, I will answer it or one of my staff will. And we will help you get to wherever you need to go. That's what we get paid for. So that's--

>> Your number.

>> My number is actually on the slide. So, you know, it's often -- before you call us or email us, often good to do a little homework. Because then your time with us will be more effective. But in the end, I want to reiterate what Cheryl said, you have to really understand what you're trying to do, why you're trying to do it, who you're trying to serve, and what you're trying to do that you couldn't do otherwise. Let me give you an example of an instance where I advised that they not do telemedicine. I have done some consulting in Africa and I went over there and they wanted to do some telemedicine and the connection actually between these villages and what they really needed was clean water and the issue of the relative cost and we said you know, given what you need to do and the money you have available, first clean up the water. And it's very important to get -- why would I want to use the tech -- technology. With HIT there is a lot of reasons to press to use it but telehealth there will be similar reasons why technology is what will be used. You have to figure out why I want to do it and who wants it and what's the demand for it? Often we have people who say we have an overwhelming need and then you realize that actually they don't realize that there are people in their own market area that are doing the services and that the effective demand wouldn't be there even though they see a need. So part of their job may be rather than starting to buy the tools, the first is to build the awareness and build what's needed. I have a question here. I have two questions, okay. This is from Maria. The question is can I address how successful medical providers are at both ends of a telemedicine visit and seeking reimbursement from Medicaid and have special provisions been made for telemedicine billing?

>> Good question. Sustainable in telemedicine is finding a way to support it in the long run. In money, no honey. That's a reality of where we are. Now, Medicare pays for a certain amount of telemedicine services in rural areas. Under disease management, actually a lot of services have -- a lot of home monitoring other things. You have to be creative in how you're seeking the funding. Radiology is paid for. Ultrasound is often paid for. The areas in terms of private pay and Medicare, a lot of private payers do pay and sometimes they have special codes like G codes or other. Sometimes they don't. And sometimes they just say well, put the bill in and we'll see and they pay. Medicaid is a different story. Medicaid is all over the place. So in Montana they pay generously for telemedicine. Anything you would get paid for for an in-person visit you'll get paid for telemedicine. Other states follow the Medicare. And other states basically Medicaid just pays for radiology or things that otherwise wouldn't require an in-person visit. It's all over the place. And we have done profiles of Medicaid payments for different states and we're actually going to be doing another one in coming year. One of the problems is with Medicaid is that if you ask, it depends who you ask in the state. And many of our providers have simply submitted the bill and seen what happens. So if you've got -- I'm not sure what state you're in. The other issue is the payment is much more generous in rural. The question is urban. And urban has been a huge problem because the need in urban areas has not been as well recognized by payers as in rural areas and therefore the payment structure in urban areas has not necessarily been there. We have, again, some reports on that and should you want further, please just email me and I can get you some resources on it. Mary Francis has asked, how do we know if doctors in my area are telehealth ready? And the answer really is, telehealth is a lot of different services and a lot of different applications. So really the question is since I don't know where Mary Francis is situated in terms of what state, the question is pretty much what type of services are you trying to deliver and in what types of provider settings? You have to determine that rather than are

my doctors ready. Because it's really a matter of setting up systems. Every state in the union and Guam and the Pacific basin have telehealth programs, every state. And so the issue really comes down to finding out who is doing telehealth in my area, what are they doing, which is why I suggest you start with the guide, and then determine, telehealth ready is not a meaningful term in the abstract. It's not one technology. What service do you want to deliver? And then why would we deliver it by telehealth and then how do we institute it?

>> I have a really provocative question from David I want to share. I don't know if I have an answer. One of the major motivators for use of a PHR is to manage personal expense for healthcare costs which you say could be a direct motivator to those who don't directly pay for services. I think that's a fundamental issue regardless of whether there is a personal health record or not. I think more and more states, through Medicaid and chip are allowing co-pays and cost sharing and certainly individuals who may be in high deductible plans have to focus on this. So I don't think there is anything unique here about children, but I think taking control, taking personal responsibility and making sure -- you know, one of the down sides, for example, of not paying, is that you may not partake. There are some people who believe that if you don't pay co-pays we overuse but there is a philosophy you might underuse. What are the kinds of preventive services one should be getting on a regular basis for either the parent or the child. The other thing that's extraordinarily complicated for children, you can end up with a family whose child is on Medicaid, one child is uninsured. How to keep track of all of that. The other thing that these things help do is empower providers to know if that child is in Medicaid, what, if any, co-pays, what are some of the covered drugs, what aren't covered, what is the whole formula issue? So I think regardless of whether the patient is paying or not, there are so many aspects for the family as well as for the provider of ways that understanding this information in one place could be very helpful.

>> Okay. Carol Harington has provided some information. Texas as Medicaid just passed an additional telemedicine services. They have been providing coverage, some limited coverage already. But they'll now pay for E-mental health services and -- but you have to have one in-person visit. That's the variation all over is the need for something to have an in-person visit first and you're paying for follow-up visits, all visits. Are you paying in mental health for essentially medication management but not therapy? And so what different states pay for even if they pay for telemedicine per se, mental health services vary. Also, who gets paid. Physicians get paid, maybe psychologists get paid, maybe psychiatric social workers. In some states they do get paid. Who gets paid and how they get paid varies from state to state. And one of the issues is it's evolving as states begin to see the value of it for not only improving access but also ensuring that there is some cost control on some things. So with that I know Keisha you said you had a very long question that you were going to read rather than send me a note.

>> I'm not writing this one out. This is from Linda Hale. We've found it difficult to have ongoing site staff support to operate and maintain the equipment. Keeping support staff trained, staff competent as well as available during the time needed to operate the equipment such as during outreach clinics in rural areas, any suggestions? Could you also provide the website again for the guide to get it going? Thank you.

>> Okay. Let me start with the second one and then I'll go to the first one. The guide to getting going is on -- it's actually on one of the slides. It is like the third from the end or -- let's see which slide it is. It's the third slide from the end. It says guide to getting started in telemedicine found at. And it gives you a direct link to that. In terms of maintaining staff, a huge problem in rural areas, not just for telemedicine but generally, why? Because the

minute you get them trained, they find a better offer. And they move on. So staff turnover is a huge problem. I think there were two issues. Both staff turnover but also having the technical staff available. The way we have seen these programs best organized is number one, to have technology that generally is so simple to use that many of the technical problems can be remotely handled. For example, in my home computer I have a file system, Verizon can get in and fix many of the problems I have technically from central office because of the way it's set up. That often helps with technical problems for the design of the program. But really your staff or your what we call your clinical coordinators or site coordinators that are critical to make it work. We found out you don't train one, you train multi and you cross train. You learn to cross train people in rural areas so you not only have one person, you have multiple people who can take the task. If you're relying on one person you're going to have a problem in any event. Second of all, -- third of all, maybe, how you design your system with the site coordinators for ongoing training, use the technology to bring them in and use it regularly to update them on issues and create a cadre of network support among your site coordinators, which is the reason we do promote networks, not stand-alones. If you're a stand-alone facility you have to say generally they're contracting with someone to provide the services. Part of the contract is to provide that support and build in the contract a certain requirement for that. I don't know if that's helpful but it is -- I'm sorry, Keisha, who was the individual?

>> Linda.

>> I would suggest you call -- give me a call and I'll try to follow up with some more ideas as I know more what your particular situation is. The generic problem in rural areas is training and keeping staff. I think one of the solutions, but not 100%, is actually to use that

technology to build those networks and build that support. And how you organize your system is critical to the success.

>> Another one. Which one? This one. Carol again.

>> Okay. Licensed clinical social workers and licensed PAs, I'm not sure what a PC is, using telemedicine for -- I actually can't figure this one out. Federal government has incentives that pay off loans in exchange for services for set years. I'm not sure what Carol's question is in terms of telemedicine.

>> Those are the acronyms she mentioned.

>> Could Carol please send it again? If it's a question or comment to repeat it to the group but obviously, yes, we have loan repayment programs. That has to do with clinicians. But I'm not quite sure how Carol is linking it to telemedicine. So maybe if Carol sends it again we can share it with the group.

>> That's it for the questions. If anyone else has any other questions if you can email them to us we have a few more minutes. Dr. Puskin or Cheryl if you want to say something to wrap it up, or I can wrap it up or wait for Carol.

>> Just to emphasize that this was intended to be the beginning of a dialogue and we look forward through your evaluations and through your comments. We got one comment saying this is the best they've ever heard. That's a good comment. We like those. And certainly any other ideas for what you would like to hear in the future, HIT, MCHB telecast, and particularly if you have colleagues or know of people. I think you've heard enough

from us. What we like to do is bring your colleagues out to talk about real-life examples and the nitty-gritty of what they've been doing. If you have suggestions about that, please let us know. If there are topics we haven't touched on at all today even in the overview please let us know. We thank you for participating. Dena.

>> There are specific areas that generally people want more in-depth on. I don't know if this group would. Legal and regulatory issues. The operational. We hit upon it but how do you set something up, which we could have real live people saying here is how we set the service and this is what you have to worry about and this is what we ran into that is a real problem, avoid it. Here is operational issues. Including how you staff, etc. What technology, what really is happening, what are some of the things especially as it relates to this population? How do you work with families and patients in this kind of situation? What are some specific applications, some people are interested in specific applications like how has this been used for rehab? How might this help children with special healthcare needs? What are specifics? We gloss the surface. We went across the top. Reimbursement, there is a question on that. We could spend an hour or so on reimbursement alone. How do these things get paid for. How do you build a business model? How do people build a business model?

>> We're having technical difficulties so we want to thank you and we look forward to future conversations. Thanks.

>> Thank you.