>> MS. EDGERTON: Hello, everyone. Welcome to the HRSA Maternal Child Health Bureau Emergency Medical Services for Children's webinar on The Transfer Processes: An Opportunity to Improve Pediatric Emergency Care. My name is Dr. Beth Edgerton. I am the branch chief here for Emergency Medical Services for Children and we're very honored to have an amazing group of speakers to highlight a new toolkit that is available that was developed through collaboration on inter-facility transfer process for children. Again, this webinar will be available after by archive and also is available for CEU's. I'll go through that process in just a moment. Again, I would like to remind people that at the end we will have a question and answer period, so please type in your questions as they come up along the presentation and we'll do our best to address them during the end of the webinar today. If there are questions we don't get to, we will try to respond by posting those at a later time. And again, if you have any questions or technical problems during the webinar, please type those in, in the comment box so our technical support staff here can help out with that process. So I'd like to start off, just to give you a general foundation about Emergency Medical Services for Children; we were authorized approximately 30 years ago and that was to address the special needs of pediatrics. And again, looking at the integration of EMS for children in the larger EMS system. And as you may know, for pediatrics we cross the continuum of care from the pre-hospital setting to the hospital. And as many of you may be aware, over 90% of children are treated in non-pediatric trauma facilities, so especially for the critically ill or injured child that often transfer to a higher level of care is required. But we like to have our receiving facilities obviously be poised to provide the best care they can, but there are situations where further specialty care will be needed and we hope today to really highlight the benefits of this toolkit in assisting in that process. Again, as I stated, EMSC was started over 30 years ago and more recently we have been able to offer grants to every state, the District of Columbia, and all of the United States territories to have some presence in the state. Again, some of our grant programs focus on providing infrastructure within the state that look at quality measures in the prehospital setting and the hospital setting, and one of our speakers will address that more; looking at new approaches to ensure that every emergency department is able to provide the best care possible for children with our pediatric readiness initiative; working with emergency departments across the United States to support multi-site, rigorous pediatric research so that we have the best evidence to develop the care we deliver; and finally, really working to look at areas that have workforce issues or shortages or jurisdictional issues or remote geographical locations. So we've done a lot of focusing on some of our grants in rural communities or tribal communities, so trying to address all of the challenges that might be faced in delivering pediatric care. But again, today we're looking at that specific process of when a child needs to be transferred from one facility to another. As mentioned, there is continuing education credit available for today's webinar process, so we have a Faculty Disclosure Statement so all of our speakers have submitted that and have no conflicts of interest. Again, this is a disclaimer about responsibility or endorsement is not considered with the Continuing Education Organization and the IHS. Again, the actual process and logistics, again, you can receive continuing education but you need to be registered throughout the webinar. At the end of the webinar the link will be provided where you can submit for continuing education time. Again, realize that there is a deadline of September 20, 2013 in which you must have submitted your online evaluation to receive credits. So I'd like to take a moment just to introduce our speakers. We have an amazing wealth of expertise here today. We have Diana Fendya who is based at the EMS Center National Resource Center in Washington, D.C., and she's a trauma and

acute care specialist and has been representing EMSC on this inter-facility toolkit. We have Sue Cadwell from the Healthcare Corporation of America who helped the evolvement and development of this toolkit. We have Lisa Gray, the Director of Trauma Services at St. Mary's Adult & Pediatric Trauma Services in Indiana. And finally, we have Janette Swade, the Executive Director of the Pennsylvania Emergency Health Services Council. Again, over today's webinar we hope that you will be able to address the three objectives that have been put forward. One, to identify availability of appropriate processes and partners to safely and expeditiously transfer children for additional appropriate resources of care; to propose a plan for establishing inter-facility transfer agreements between our own facility and a partnering institution; and finally, be able to evaluate the availability of inter-facility transfer guidelines in your own facility, inclusive of component-specific children and families and needed developed transfer guidelines yourself. So, I'd like to start with Diana. >> MS. FENDYA: Good afternoon and thank you all for joining us today for this webcast. I have been asked to provide some introductory information relating to the need for organized transfer processes for children, and I think probably the best place to begin is to look at hospitals in the United States. We have approximately 5,300 hospitals in this country; 90 of which are freestanding children's hospitals. The majority of these hospitals are small and have an annual ED visit of up to about 16,000 visits annually. Over 1,300 of the hospitals that exist in this country serve rural America. Most of these hospitals are critical access hospitals. They are located in designated rural areas and typically are 35 miles away from another closest hospital. These rural hospitals provide 24-hour emergency care services, they have onsite or on-call medical staff who are available within 30 minutes. They have a limited bed capacity of 25 beds and they have an average length of stay of 4 days or 96 hours. Perhaps the most important requirement of these small rural hospitals that treat probably the bulk of our pediatric patients is that they must have established inter-facility transfer agreements for critical ill or injured patients, or those patients who they anticipate will require longer hospitalization. These rural facilities play a very important role in the provision of emergency care for all children. Next, it's important that we take a minute to look at pediatric emergency care and what the numbers are saying, and as Beth said, over 31 million children access the emergency care system each year and they comprise approximately 27% of all emergency department business. Ninety-two percent of children are seen in non-children's hospitals and that is why it is so critical that inter-facility transfer processes be in place if in fact children require additional resources that are not readily available at the receiving institution. Seventy-nine percent of emergency departments see less than 20 children a day and 50% of emergency departments see less than 10 children a day. This lack of interaction with children often accounts for the provider discomfort experienced when taking care of the critically ill or injured children, and the reason why so many providers in rural and community hospitals are anxious to move children out. Less than 10% of hospitals with emergency departments have a designated pediatric intensive care unit, which we all recognize as being critically important for kids who are severely ill or injured. What we know about kids? Well, we know that adding to the stress that physicians and nurses have in providing care for kids in a community facility kids don't enter the emergency care system for the same reason that adults do. They have different diseases, injuries and unique physiological and emotional responses to illness and injury. And thanks to the advances in medicine and neonatal care, many of these children will have special healthcare needs or chronic illnesses that require the expertise of specialists. Children require different kinds of equipment and sizes of equipment, medication dosing

processes, they require different treatment protocols and guidelines than those used in treating adults. And they often need pediatric specialists to treat their illnesses and injuries. Unfortunately, though, the resources and pediatric specialists needed for optimal care of children are not always readily available where children live, play and attend school. Beth alluded to workforce shortage issues. This is particularly true when we look at the sparseness of pediatric specialists. The American Board of Pediatrics reported in 2011 the availability of approximately 52,800 board-certified pediatricians in the United States. With a pediatric population of 74 million, the ratio of board-certified pediatricians to children is 1 to 1,400. Pediatricians serve as the primary care physicians for most children, but more than 970,000 children living in 47 states do not have access to a primary care pediatrician. In looking only at severely injured patients, the national trauma databank that collects data on all injured patients was able to document the transfer of over 26,000 severely injured children in 2007. These were children who needed additional levels of trauma care and specialty services. The preceding information supports the need for organized inter-facility transfer processes and that such should be established proactively, not when the child enters the emergency department. At this time I would like to move on to a brief discussion regarding the EMS for Children's performance measures. This was an effort to reduce some of the inequities of pediatric emergency care nationally. This initiative began in 2004-2005; it was a time when the program began to identify what were the measures that could be used to evaluate an element or a process of healthcare delivery for children. The EMS for Children's program defined 10 performance measures for benchmarking during this time period and that these 10 performance measures would assist in integrating the needs of children into the existing emergency care infrastructure nationwide. These quality measures include structures or processes of care that have a relationship to positive health outcomes and are controlled by the healthcare system. The process for developing the 10 performance measures was very comprehensive and included the examination of more than 110 elements impacting emergency care across the continuum of care by a panel of EMS for Children stakeholders. This review included the best available published evidence and was a consensus-driven process by these national emergency care leaders. Establishing inter facility transfer agreements and/or memorandums of understanding along with inter facility transfer guidelines can be adjuncts in assuring that children have access to pediatric specialists and needed resources not readily available nationally. Aggregate 2010 data collected by state EMS for Children grantees showed that only 38% of facilities had inter facility transfer guidelines including the recommended specific components for children and families. And additionally, that only 59% of facilities had inter facility transfer agreements in place to facilitate movement of children to higher levels of resources when needed. Planning for transfer is essential for facilities where pediatric resources are not readily available, but as most receiving hospitals would think we get the patients, we don't need to have agreements or transfer guidelines in place, that is not actually true. These agreements and guidelines are critical for all receiving facilities as well to facilitate disaster preparedness, because those hospitals with the most pediatric resources are probably going to be the very same hospitals in a disaster that will need to increase their search capacity to accept pediatric disaster victims. And agreements and guidelines will assist in facilitating transfer of the less sick and the more stable patients to other care facilities. Community emergency department providers referring and receiving facilities are well aware of the complexities of transferring those needing specialty care expeditiously. But just as they are aware, so are families. Families are aware of the need to safely move their children to needed

resources when resources are not readily available in their own home or community hospital. The story I would like to share is a story that has been contributed by one of our Emergency Medical Service for Children's family advisory representatives. Each of our state EMS for Children's programs has a family representative on their EMS for Children Advisory Committee. These family representatives often have a personal and powerful connection to the emergency care system and try their best to advocate for improvements of the system for the children in all communities. The beautiful child that is in the right-hand corner of this slide is Skyler. Skyler was 8-months old when she was injured when an adult accidentally tripped and fell on her abdomen. She experienced shortness of breath immediately after the incident and her mother wisely took her child immediately to her pediatrician, whom upon examination requested that the mother take the child to the local emergency department where x-rays would be ordered. The child was taken to the local community emergency department where x-rays were obtained. Unfortunately, those x-rays took over two hours to get. Upon review of the x-rays, the mother was informed that an intra-abdominal injury was suspected and they encouraged the mother to have the child transferred to another hospital with both a pediatric intensive care unit to help with her care and an operating room with a pediatric surgeon to assist in surgical repair of suspected intra-abdominal injury. The mother agreed to have the child transfer and processes were put into place. The hospital called a higher-level care facility, which was approximately an hour away. And unfortunately, there were no pediatric critical care beds found at that facility. A second call had to be placed before they were able to find a hospital with an intensive care unit that had capacity to provide care for Skyler. Transfer, identifying the hospital and getting the hospital to send out the transport team took approximately two hours and the transport of the child to the new facility took an additional hour. All in all, it took approximately 5-6 hours for Skyler to get to the eventual care facility. It took two hours for Skyler to have her surgical repair, after which she was admitted to the intensive care unit for a couple of days of really intense care. Unfortunately, all of the provisions of care at this time did not help keep Skyler with us today and as a result she expired a couple of days after being received at the referring facility. In 2009, as we were beginning to get data coming in on our performance measures, the EMS for Children's National Resource Center reached out to some of our partners, the Emergency Nurse Association and the Society of Trauma Nurses, to look at the potential development of a comprehensive resource to assist hospitals and emergency department leaders in establishing inter facility transfer processes. Both the Emergency Nurse Association and the Society of Trauma Nurses realized the criticality of having organized processes in place to facilitate movement of children to the appropriate resources. Five representatives from the Emergency Nurse Association and five representatives from the Society of Trauma Nurses agreed to work with the EMS for Children's National Resource Center. Because of their efforts, over a nine-month period, the inter facility transfer toolkit was developed. This particular toolkit consists of 10 sections. There's an algorithm for establishing inter facility transfer processes; there is a section on rules and standards that support the establishment of agreements and guidelines; there are some leadership talking points if you need to have some points to take to leadership to encourage the development of these processes; there's actual samples and templates of agreements and guidelines within the toolkit that can be downloaded and adapted to meet individual facility requirements. There are quality improvement considerations that can be considered as folks are working on inter facility transfer processes, cultural and family considerations when folks are planning out inter facility transfer processes, a couple of case studies, one

of which includes Skyler's story, and a resource library. It took the committee approximately nine months to get the toolkit developed. It was released in February of 2013, this year, in collaboration with the Peds Ready Assessment that was going on nationally as one of those tools that might be of help to emergency departments across the country as they worked on Peds Ready pieces. And at this point I would like to thank the members from STN and ENA for all of their efforts in getting the toolkit together and I'm going to transfer the presentation over to my colleague, Sue Cadwell. >> MS. CADWELL: Thanks, Diana. And thank you, all, again, for joining us today. I'm going to attempt to outline for you the importance of transfer agreements in the process of getting children transported to appropriate levels of care without delay. For me, working emergency services began in the state of Tennessee, which has a very formal hierarchy of pediatric care facilities defined by state rule. This includes a requirement for all facilities to have transfer agreements to one of the four state comprehensive regional pediatric facilities. Currently, I work for the Hospital Corporation of America or HCA, which represents 170+ hospitals in 20 states. Coming to HCA was eye-opening in many ways; I was responsible for leading a pediatric standardization effort in our 170+ emergency departments based on the 2009 joint policy statement guidelines for care of children in the EED. One of the requirements, or recommendations, rather, of the joint policy statement is the establishment of inter facility transfer agreements. And again, someone coming from Tennessee, I thought that that would be an easy list. Not a problem, right? Well, wrong. Some states do not require transfer agreements as Tennessee does; yet many of our facilities in those state reported difficulty and perceived delays in transferring patients to tertiary care facilities. Furthermore, in at least one of these states, if you do have a transfer agreement from a specific facility, you are expected to use that facility unless the patient chooses otherwise or the patient's condition warrants using another closer, for example, facility. Exceptions will need to be well documented. So, in other words, if your patient states a preference for another site or the patient's condition necessitates that you send to a closer facility, you must have that exception well documented. I mentioned that 16 states have guidance for transfer agreements currently. In the inter facility transfer toolkit that Diana referenced a few seconds ago there is a listing of those states, and so to find that you can follow the link on this slide. Again, it is located within the rules and regulations section of that transfer toolkit to include links to all of the state requirements. Of note: many of the folks that we were talking to in our pediatric standardization work equated the need for transfer agreements to aid in the transfer to trauma centers, especially in those states that don't have designations for pediatric trauma facilities. It is useful to note, I think, that in the state of Tennessee, for example, only 25% of pediatric transfers involved trauma patients. In fact, the case that Diana referenced for you all was a medical or non-trauma surgical transfer. While some states require transfer agreements for trauma patients only, and you will see that in that list I referenced, it might be useful to enter into them for non-trauma surgical or medical patients as well in order to avoid delays. So what about EMTALA? Transfer agreements do not impact EMTALA requirements. Federal law must still be followed. However, a receiving facility must have both capability and capacity in order to accept a transfer. And again, if you go back to Diana's story, the original facility did not have the capacity to accept Skyler. The sending facility, further, must have adequate documentation that patients are stable prior to transfer. If they're not, and it is felt the patient must be sent immediately, the certificate of transfer must accompany the patient. In addition, EMTALA does not apply to inpatients, for the most part, although some states do reference inpatient in their EMTALA guidelines.

Agreements may help mitigate delay in transferring these medical or non-trauma surgical patients as well. So the transfer agreement versus the Memorandum of Understanding, what is the difference? As it turns out both of them are binding agreements. Usually the Memorandum of Understanding is entered into for a specific service and may be used if a facility is hesitant to enter into a formal transfer agreement. The major difference is that the transfer agreement usually spells out legal parameters, and examples of both of these may be found in the inter facility transfer toolkit. A link to which is included on this slide. So if you decide that your facility needs to enter into a transfer agreement, what do you need to do? First, you need to determine whether or not your facility indeed has any transfer agreements already in place. You may actually have them as some of our facilities discovered when we went through our standardization process. You need to determine the requirements around executing them; if they are present in your state. And then you need to determine the need for these agreements or Memoranda of Understanding. For example, if there are document delays in getting patients to higher levels of care, if your geography necessitates that you have a transfer agreement in place. Understand, however, that some facilities are still hesitant to enter into transfer agreements or Memoranda of Understanding. Then find a partner. The importance of the transfer guideline will be discussed later in this webcast, because once you've found a partner, you need to define for your facility exactly what to do for these patients to get them ready to transfer. And the transfer guideline will be discussed, as I said, later in this webcast. My colleague Lisa Gray will now explain the impact of transfer agreements on trauma transfers. Lisa? >> MS. GRAY: Thank you. Thank you, Sue, and thank you, everyone, for joining us today. I'm excited to have the opportunity to speak with you all about my experience with the toolkit. I did represent the Society of Trauma Nurses on working with the inter facility transfer kit, and I hope to bring my personal experience into this discussion today so you can all learn from what I have done in the past, to help you move forward in your institutions. I will also note that the majority of my discussion is very specific to the pediatric trauma patient; however, please know that all of these processes are very applicable to the pediatric medical patient as well. So it crosses over very similarly. One thing of note is that I work at a hospital, and we are verified pediatric and adult level 2 trauma center and we are verified by the American College of Surgeons Committee on Trauma. Therefore, transfer agreements are a requirement from the college, so that was a must before we could move forward in our process for verification. So I will start with just a little bit about background about where do pediatric trauma patients receive care in the US. Diana and Sue both talked a little bit about this. But what we do know is very hard to determine where kids do seek their pediatric trauma care. It's very difficult to inventory adult and pediatric trauma centers across the US. Some states have state designations, some states use only the American College of Surgeons Committee on Trauma; it is just difficult to establish an inventory exactly where these kids are getting their care. There aren't many mandates in place and the process of self-selection or self-designation complicates information a lot. For example, a hospital could say, yes, I am very equipped to take care of pediatric trauma patients and, therefore, I am a pediatric trauma center and we all know that that is likely not the case. And again, like I said, it is very hard when measuring trying to compare apples to apples. It's just difficult to ascertain the number of pediatric trauma centers in the US. Peds specialty care is a significant barrier. Pediatric surgeons are very limited and continue to be a shortage throughout the country. There's been attempts, attempted studies to figure out where kids are receiving pediatric care. Essentially the conclusion is that it is difficult to figure out where they are and that it validates

the need for hospitals to utilize the toolkit to improve their overall pediatric trauma care. Even in states with fluent trauma systems, like Sue had mentioned, a large proportion of the severely injured children are treated in non-trauma facilities, so it is important that we get this education and information out to all communities. Again, most pediatric trauma care is rendered in non-pediatric trauma centers. Approximately 17.4 million kids do not have access to trauma care within 60 minutes. So, again, small, rural hospitals are critical and key to being prepared to assure that kids are transported in a rapid-fire fashion to the appropriate level of care. So, my example, my learning experience is from a rural trauma care in the state of Indiana, my hospital is located in southern Indiana; we are a border state, so we have patients from southern Indiana, western Kentucky and southern Illinois as well. Indiana as a whole does not have a formal state trauma system. We are in the process of building that, so we have no Indiana trauma regulations at this point. We are working on that. The eight trauma centers that are verified in the state of Indiana are all done so by the American College of Surgeons Committee on Trauma. What we do know about Indiana is that we have more miles of interstate highway per square mile than any other state. We are very rural and the required transportation time for trauma patients is a significant challenge across the Tristate region. Our trauma centers are located right in the middle of the state, and at the very south tip and the very northern tip of the state. In between there are lots of geographic areas that are very rural and in those areas it takes over 60 minutes to sometimes get a patient to the proper level of care. So I will talk a little bit about my experience with pediatric regional trauma system development, specifically pediatric regional trauma system development; and my unique position and the ability to utilize this toolkit as an outreach tool, an education tool for hospitals in my district and in my region as they build their pediatric care programs in their emergency departments and within the EMS system as well. What is important to know is that organizing pediatric trauma care within a region is key. We all know that we need to know the capability and the resources available within our own institution. What taxes our own institution? I am familiar with the hospitals in my rural community, but more than one trauma patient, specifically more than one pediatric trauma patient, is a tax on that system, so it is important that we know our capabilities, know what resources we have available, and most importantly utilize the leaders within our region as level I or level II trauma centers, utilize their resources and their knowledge to help build smaller programs in their rural area. As the toolkit states, pediatric care, and then Diana actually stated this as well, pediatric care is often high stress for staff, it is complex; it's high stress for patients and parents as well. So preplanning most of these processes or all of these processes is very critical so that we all know that when we are challenged and stressed, and anxiety is heightened, it is always best to have a preplanned process algorithm guideline in place. So a little bit about my facility, I am in a 391 bed hospital; we see about 65,000 ED visits, we have about 65,000 ED visits a year; 12,000 of those being pediatrics. We have a pediatric unit of 23 beds and 7 pediatric intensive care unit beds. We have two pediatric intensivists, two hospitalists; however, we have no pediatric general surgeons or subspecialty surgeons. So, therefore, it is very important that we align and collaborate with specialty centers that have those unique subspecialties in place so we know which patients of ours need to go to a higher level of care. This gave me a unique opportunity when I was involved in planning the toolkit because not only do I take this out to rural hospitals as a tool and a guideline for them to build their processes, these are processes that need to be in place at my hospital before we started building our trauma program. I can fortunately say now that our program has matured; we have been a verified

trauma center for about seven or eight years, so we have had transfer agreements for quite some time. We are geographically located about 150 to 200 miles from tertiary care centers, from level 1 trauma centers, both pediatric and adult, so a lot of these things have been established, were established before I came into my role, but I now have the unique opportunity to help other, smaller hospitals to develop these things as well. So organizing pediatric trauma care within a region or a state is critical. All hospitals and pre-hospital services need to develop transfer agreements and protocols so they can guarantee the rapid flow of injured children. Again, transfer agreements and protocols are critical to make this process more fluid and work for the system. Oversight, we do have oversight by our state trauma authority; again, we are not a fully functioning state trauma system, but we are in development, so we assure that all of our state trauma authority knows how we're proceeding within our region. We have very much taken the bottom up approach to trauma care. We want to meet the needs of our providers in the rural community and then funnel their struggles and challenges up the line, so it is our responsibility to help them. We also know that rural, remote facilities care for approximately 89% of all pediatric emergencies, so assuring that these processes are in place again are critical. From my experience we have been able to utilize the inter facility transfer toolkit to improve the quality of pediatric care in the rural community. Again, the toolkit is fairly new, but these are systems that we have been putting in place in our district for probably around 18 months now just because we are the lead trauma center in our region. But now I have something, I guess, solid and concrete that I can take for examples, and what's been a benefit is not only now do I have examples from my hospital, I have unique examples from other systems and other hospitals that may be more applicable to the rural hospitals in my community. Along with the toolkit we've also used the Rural Trauma Team Development Course to really focus on the team approach and the initial assessment and stabilization of the injured child. Although the course at this time is adult-content, we have tried really hard to incorporate pediatric content and discussion along with that adult content. We even have gone as far as to take a very basic pediatric simulation mannequin to the rural facilities with us and have done some simulation, some very basic pediatric simulation in those rural hospitals' ED trauma-base. So we can really stress again the importance of a team approach and the goal of making a decision to transport that pediatric patient to a higher level of care and making that decision within 15 minutes. It's likely that you know when that child rolls in the door what capabilities your facility has. And making that decision in a timely fashion, obviously the goal is 15 minutes, but making that decision in a timely fashion can have significant ramifications on the overall outcome of the pediatric patient. So building our regional trauma system plan, quality improvement, education are our focus. Performance improvement and follow-up and feedback has been key. We have developed an open communication tool and feedback as a result of these relationships that we have built with our rural facilities. We go to them if any opportunities arise to help them with education; we do not ask that they come to us. We try and go to them. We also have a weekly, what we call weekly trauma rounds, but we present our pediatric and adult trauma patients in a real-time setting. It's attended by physicians, clinicians, the whole multidisciplinary team, and our pediatric medical director participates. And those outlying providers can webcast in so they can get real-time feedback, answer clinical questions and, more importantly, give their input on the challenges that they faced during that initial resuscitation of the pediatric patient. As we gain experience and develop our regional trauma system plan a little further, we will continue to monitor our transfer processes for opportunities for improvement. We also try to

be very non-punitive in these feedback opportunities, but yet at the same time stressing the importance of children getting the appropriate care. So again, the goal of the development of our pediatric regional trauma system is to improve overall pediatric trauma care. The goal of the toolkit overall is to organize, it's for organize and safe care of injured child, and improve pediatric care in our region. We hope to see a reduction in morbidity and mortality due to injury as a measure of success in our pediatric trauma system. We are still, again, in our infancy stages, but are hoping to see some real positive outcomes as a result. I think it's important to note that as the toolkit states it is constructed for a, I think our goal is to make sure that rural facilities are impacted and get the benefit of the toolkit, but regardless of the size of your hospital or the scope of your service, it is applicable for anyone. So we know that the care of the injured child requires a complex team to come together to provide high-quality care under very stressful situations. We are hoping that the future of pediatric trauma care will be a result of the development of strong regional, state, and national trauma system plans that are very specific to the pediatric population. As we prepare our emergency departments and hospitals throughout the country, our goal is standardization guidelines, algorithms to make pediatric trauma care as beneficial for everyone throughout the process. So in conclusion, we all know we hear oftentimes that children are not little adults. Trauma in rural communities kills more children than in urban communities. We, like I said, live in a very rural community. We have a significant Amish population; we have a significant amount of children who ride ATVs very unsafely, so activities that are a result of living in the country result in often sometimes more significant injuries. The pediatric trauma, the inter facility transfer toolkit can be used as your foundation to build this system. I would like to stress the importance of, I think, personal relationships are key. If you have the manpower and ability, if you are a higher level of care, go to your rural, smaller communities and help them develop these programs. And if you're that small rural community who needs help with pediatric trauma care, you reach out to the most appropriate facility that would be the expert for pediatric care in your area to move forward and build some of these initiatives off of the toolkit. At this time I would like to introduce my colleague Janette, and she will wrap up for us. >> MS. SWADE: Thank you, Lisa. Good afternoon, everyone. I am pleased to discuss some successful concepts in regard to partnerships to build buy-in for the transfer concepts within your state or organization. I'm sure you have all struggled with program awareness and implementation. I certainly know I have and it can be a very frustrating process that can take a significant amount of time and resources, and, unfortunately, can yield limited results. In Pennsylvania, we found some success with partnerships that may be beneficial to each of you. I first want to address some statistics about the Commonwealth of Pennsylvania so you can identify with the challenges associated with our diversity and size. The population of Pennsylvania is nearly 13,000,000; we have over 46,000 square miles. We have two metro areas, which I know you're familiar with, Pittsburgh and Philadelphia- go Eagles- and a significant rural area, mostly in the central to northern tier. There are over 1000 EMS agencies, 3000 fire companies which some of those actually provide EMS, 200 hospitals, 31 trauma centers (6 have a designation for pediatrics) and over 50,000 certified pre-hospital providers. The Commonwealth of Pennsylvania administers the EMS program through the Department of Health. Within that structure there are 15 regional EMS offices with a direct reporting relationship to the Department of Health. Pennsylvania also has an advisory body and this is the organization that I work for. It's the Pennsylvania Emergency Health Services Council. The Pennsylvania Emergency Health Services Council, or PEHSC, was actually initially formed as a satellite of the Hospital Association of

Pennsylvania. We have a very unique working relationship between the government agency, the Department of Health, and our nonprofit corporation. This has been in place since 1995 and has built a system where we can just discuss issues at all levels prior to implementation. The relationship is also unique in another way because our advisory body has a staff of six, where many similar organizations do not have a staff. This gives us a unique opportunity to work on a variety of projects and to build the needed relationships for implementation. This working relationship with the Department of Health and the structure in Pennsylvania has given us many opportunities, one of which is the EMS for Children grant, which we worked on cooperatively with the Department since the 1990s. So we have actually been doing this since the early part of the program. I think it's important to understand more about how the advisory body is structured, so you can see some of the partnerships that we have developed for this project, but our structure is simply an organization made up of organizations. We do not have individual members; we have delegates representing the organization. We have key organizations which are listed here. The process is actually twofold to provide by specific department. We have a system of committees and task forces where field providers generate recommendations, and the field provider -- I use that term loosely- can be the pre-hospital providers, it could be a group of physicians, it could be a group of dispatchers, it just depends on what the actual issue is. One of our working committee is the EMS for Children Committee, which, again, is focused on the emergency care needs of children, and the federal grant activities. The committee, whichever one it would be, would work on recommendations, come up with some structured recommendations that they think are appropriate for the Commonwealth and then they forward them to our board of directors, who again are the delegates of the organization who are statewide in nature, such as the American College of Emergency Physicians, the Hospital Association of Pennsylvania, Emergency Nurses Association, the Pennsylvania Trauma Systems Foundation and the Pennsylvania Medical Society. At that level they review the field recommendations and decide whether to forward them to the Department of Health for consideration not. So, what does the Advisory Council really do? Well, we've described the basic advisory function, which we have actually been doing informally since 1974. The relationship was recognized officially in the Pennsylvania's EMS Law in 1985 and has been funded by the Commonwealth EMS fund which is made up of fees collected for traffic violations since that time. I would like to share with you some concepts and examples of field recommendations that we make. We typically make recommendations in regard to the medications and equipment on the ambulances; we also make general policy recommendations; we have worked on statewide programs to include the state plan document itself; and most recently, we worked on critical care paramedic programs for both clinical and education standards. We have worked on rescue standards and education as well as recommendations for telecommunications. We have worked directly with the Department of Health on the development of Pennsylvania's state-wide pre-hospital protocols for EMS. So, what does this really have to do with the inter facility toolkit? Overall, we can attribute our program's successes to relationships. And since our organization was established to foster relationships, and this is how we accomplish the majority of our work, this is a good example of the linkages. In general, overtime, we have [indiscernible] organizations have done to introduce programs. We have done intense marketing campaigns, which use a significant amount of staff time and money, only at the end of many, many days to find our success to be limited. I have been at many meetings where our concept is discussed for a program that we have developed and have been marketed in our [indiscernible] marketing for years, but no one knew

about it. With tightening budgets and less and less staff time to dedicate to the marketing side of projects, we have realized the direct relationships with organizational leaders will get results much faster than the traditional methods we've used in the past. So the connectivity within the relationships we have built can be linked to several things as seen here. Obviously, our committee level meetings where we have many organizational reps who participate and hear project statuses, and our quarterly board meetings where all committees report out, as does the Department of Health and other key state-wide associations, this gives an opportunity for everybody to be aware of the statewide efforts and program developments. We have established a small working group which is called the Trauma EMS Quarterly Lunch Group, which is comprised of the Hospital Association, the Department of Health, the Trauma Systems Foundation, The American Trauma Society, The American College of Emergency Physicians and PEHSC, where we have a very intensive info sharing over lunch. This is where most of the magic happens in Pennsylvania. This group is limited to these organizations and their executive directors, so we plan to work on projects together. The same group overall, we connect with our e-newsletters and our social media, so we have a back and forth where everyone gets a more up to date account of programs and activities. I should also mention the day to day staff linkages that support program knowledge and implementation. Our staff model is fully integrated into all activities of our organization. In this way each staff person can continue to promote relevant activities and programs to the proper audiences, and link with other organizational staff members to build program buy-in. For example, these basic relationships assisted us in the forward progress that we have had with the inter facility toolkit. The constant weekly linkages with the information back and forth between the Trauma System Foundation and the Hospital Association has moved the project forward in Pennsylvania; as both organizations have shared their toolkit to their member hospitals. It has also build interest in the project in an effort to coordinate changes to the policies within the trauma center accreditation process. These policies are building blocks to promote the agreements and can assist smaller transferring hospitals with templates for transfers. So, now that the key players in Pennsylvania are on board with the concepts of transfer as outlined in the toolkit, and we can move into specific goals for implementation. First, we're looking- and this is just dialogue that we have had in our quarterly meetings- we are looking at securing data on actual transfers so we can identify other areas for discussion and program enhancements. Building links between the hospitals to develop agreements, especially larger facilities to assist smaller facilities with agreement terminology. Clearly, we should communicate the toolkit to EMS and educate them on what a proper transfer should look like in the field and how to understand the efforts to improve transfers in general. I'm sure we will uncover many pieces to share with each of you in this process. And lastly, we should work to close the loop on transfers related to facilities, especially in regard to discharges from trauma centers to rehab and the like. In conclusion, it's become clear to me and to our operation at the council that time spent on relationships and the right organizations will yield early movement success with program implementation, and we can save significant time and money on global marketing campaigns. Thank you for this opportunity to share our progress. >> MS. EDGERTON: Thank you, Janette. Again, this is Beth Edgerton and I would like to make one correction, and I apologize to Sue Cadwell, that her organization is actually the Hospital Corporation of America. So again, I apologize for our typographical error. If attendance on this webinar would like to submit questions, now would be a great time to move that forward. I have a few that I would like to start the conversation with. First, I'd like to thank

our speakers for their thoroughness in discussion in what I think is really helpful is the different venues and perspective you all come from. And again, they were all very mild-mannered in sharing their contribution to this collaboration. I think it's so important that it represent not only the Emergency Nurses Association, but the Society of Trauma Nurses, Emergency Medical Services and then adoption by state systems such as Pennsylvania. So again, there is a lot of power in that collaboration when we try to reach out for partners. I was hoping, Janette, maybe you could address a little bit of your ability to reach transfer agreements regarding the non-trauma patient or have that process where you develop the inter facility transfer agreements and comprehension. I think Lisa kind of alluded to that challenge of types of patients that we anticipate needing transfer versus the actual volume of where the transfers occur. >> MS. GRAY: In terms of medical patients? >> MS. EDGERTON: Yeah. >> MS. GRAY: At this point, I think the Hospital Association just introduced the concept to the hospitals; I don't think they have done a lot of the legwork yet, but the knowledge has been shared, that this whole toolkit is available and the dialogue has started. >> MS. EDGERTON: What has been kind of, if I can help those that are listening to this, what has been kind of the main challenges or questions that have been put forward to you of why do we need to do this? >> MS. GRAY: To be honest with you, I really don't think a lot of people have asked why do we need to do this? I think they want standardization on what they're doing and they want to do it. >> MS. EDGERTON: No, it is good to hear, because, again, I wanted to kind of get your perspective since you have a systems level in place, and then I was going to kind of reflect to have Lisa respond as kind of being in the field and going from hospital to hospital of are there key questions or challenges that you have faced or heard that you could help those that are listening kind of understand what they might face as they try to implement these inter facility transfer processes? >> MS. GRAY: I have to say, I agree, I haven't gotten much feedback as far as challenges that folks are meeting. I can say that the feedback we get is anything that we can have to be more prepared to care for the pediatric patient, we want. So as our trauma system is developing, many of these processes are starting to take place, so it's just a natural, I think, adjunct to building the pediatric piece at the same time so we have the luxury, the ability to do that process. But again, I think that- I haven't really heard of any questions regarding specific challenges that folks are facing to get this done. And part of that may be we have transfer agreements with all of these hospitals anyway when we set up our trauma center; however, we want to assure that they have transfer agreements with other centers as well, not just us. So I haven't heard much feedback as far as challenges at this point. >> MS. EDGERTON: That's great. And again, I don't mean to be negative on my questions, but just again, sometimes it's nice for those to understand when we have [indiscernible] that have been successful in their systems to understand how they have kind of responded to challenges. And again, Lisa, can you help, we have another question that kind of asks the role of the state trauma committee, and I wasn't sure, I know you talked about your regional trauma system or plan, and I wasn't sure if you have been able to pull in the state trauma committee or do you see a role for that? >> MS. GRAY: Really, at this point our state trauma committee has only been in place for two years and the committee is very, right now their focus is bringing up designated and verified level III's, and hopefully, eventually level IV's. So we've really had an open dialogue with the state committee. One of my medical directors sits on that committee, so essentially we are just assuring that they are aware of all of the processes that we are putting in place in our region to build our regional committee and system from the bottom up to them. So we ask for their feedback and if they have any suggestions or hesitations about processes that we

have put in place, we want that. But because of the system as a whole being fairly new, we have not been, we have not had any stops at this point. I don't know that make sense or answers your question. >> MS. EDGERTON: No, and again, I think what's been nice about the format of our webinar again is Sue kind of representing the hospital perspective and a consortium of hospitals, and then your perspective, Lisa, of really understanding kind of that rural facility and then being a trauma designated facility, and then, Janette, you kind of have the state EMS committee and relationships there at the organizational level, so it's been nice just to have those different models I think for people to hear, depending on what their structure is or where they're kind of champions are within the state. I also wanted to turn it over to Diana to see if she wanted to bring out up some other points, since I know you have been an active component in the development of this toolkit and the dissemination. Diana? >> MS. FENDYA: Thanks, Beth. Yes, I think the one piece that we talked about when we put the toolkit together was we went back and looked at the EMS for Children's performance measures and looked at whether or not they truly were applicable and how they related specifically to trauma and pediatric medical patients, as well as looked at some of the data. The initial concern many folks had was that perhaps the right person didn't answer the question appropriately whether or not guidelines exist or not. And the reality of it is, if it was a staff nurse who answered the question and maybe she's not in an administrative role, he or she actually needs to be aware of whether or not there's agreements, and whether or not there are specific guidelines, because they are the ones who are preparing the patient for transfer. It's not the administrator of the hospital who is dealing with hospital budget pieces. So even if agreements and guidelines exist in institutions that information needs to be shared down to the provider level so that folks know, especially in community hospitals there are a lot of [indiscernible] are contracted out physicians who are providing emergency medical care, they're not going to know who your agreements are with. Therefore, they are going to be dependent upon the nurses who work in that emergency department to help them facilitate transfers. So that would be one piece. The other piece that I would recommend that folks look at, the performance measures define some specific components and there have been questions over the years why those components. Some of them are very point-blank right in there; define process for initiation of transfer. If I have an agreement with Lisa's hospital, that's wonderful to transfer the trauma patients, and then I have an agreement with Sue's hospital to transfer medical patients, the person that I contact in each of those hospitals it may be the trauma surgeon, it may be the emergency room doctor, it may be the chief resident. That is going to vary from facility to facility, and that is important when you're getting ready to plan to move a child from one level of care to another. So finding out who that individual is that you need to contact is critical. Planning for transfer, what is the appropriate service? Is it appropriate that the child be airvaced out? Or is it appropriate, can the child go by a BLS or ALS ambulance? That is going to be dictated by a lot of different things that are going on in the emergency department, and as a result the care providers are going to need to think through that and there is probably an algorithm that the hospital should consider developing. Several of our states who have focused in on inter facility transfer have done a great job actually identifying triage criteria for transfer- which patients need to be considered for transfer? Burns are an automatic that folks can relate to. If you don't have a burn center, you probably don't want to be taking care of those patients and you need to have an agreement with a center where there are burns. The Trauma Center Association of America, they did provide some documents in the inter facility transfer toolkit and there are recommendations from a national group from the Trauma Center

Association of the types of pediatric, injured pediatric patients that should be considered. So that would be another group. And I guess one of the pieces that folks don't think about very often, but because many of us are mothers and many of us are family members, if your child were being transferred, wouldn't you like to know what hospital he or she is going to? And yes, you signed a consent, but did somebody bother to give you the directions? And did somebody bother to give you the name of a contact at that receiving facility? There is nothing more scary to a parent than to have their child leave a hospital where they were originally comfortable in bringing that child and then have them transferred to higher levels of care and not know where they are going to be going or how they will, or who they contact when they get there. Are they going to the emergency department? Are they going to the operating room? Are they going to the pediatric critical care unit? That is just common courtesy and it is something that all families, when their loved ones are being transferred, want to know. So that would be another piece that should be in your guidelines, and that's a piece that, to be quite honest, needs to be worked out between the hospital that you have an agreement with and yourself. The hospital that is going to be receiving your patient should be providing you with directions. Many hospitals go so far to provide a physician order form, it's sort of a tablet that you pull off a sheet that has directions from hospital A to hospital B. It also may even have a fill in the blank, go to admitting to find out where your child has been moved to or go immediately to the EED; those are the kinds of specifics that our family members want to see in the guidelines so that they know exactly where their child is going. And I think those are probably some of the critical pieces that I have seen over time that have been questioned that need to be included in guidelines, and I am going to turn this over to Sue because she's dealing with it more recently and maybe they have been able to come up with a consistent process over at the Healthcare Association, HCA. Sue? >> MS. CADWELL: Yes, at HCA what we did was draft what's called just a sample guideline, because we are across so many different states, we couldn't really have a solid template for everybody to follow. Some requirements for the transfer agreements, for example, might be different and every facility, by the way, has a different way for the ED physician or ICU physician to figure out what is the best way for a patient to assign a transport service. So what these transfer guidelines included were the bullet points that were from the requirements for Performance Measure 76. So in other words, there is a defined process for initiation of a transfer. So, for example, the referral hospital defines what the referring physician needs to do, who he or she needs to contact, and then what exactly they need to do to package the patient, if you will, to get them ready. And the referral center has to advise, they will advise in most cases what type of service to send. So if they hear the history of the case or in one of those odd but wonderful cases where you might have telemedicine available, you can actually see the patient, they may decide that air transport is the best, or a specific ground pediatric transport care may need to be used, and they will send them at that point. Some of the transfer agreements state that the referral facility, so the facility accepting the patient, actually is the one to initiate the transport service. But all of that needs to be addressed ahead of time so there is no confusion as to who does what or what sort of services is recommended, and most of our facilities are very grateful to allow the tertiary care center to define that process. We also included the process for selecting the appropriate care facility, which isn't hard if you have transfer agreements already in place. That's done for you. If it's a burn center, and there's a burn center that you use, that's the facility you send to. If it is peds trauma or peds surgery, and you have a center that you transfer to, that's it. If, for example, you're in the state of Tennessee and you

have the four comprehensive regional pediatric centers, that's pretty much taken care of for you where those patients are going to go. So that piece of the puzzle is eliminated simply by having this defined process in place. The process for patient transfer, including informed consent, is really more for the physician and nursing staff at the referring center exactly what do we do; how do we get informed consent; how do we talk to the patient; how do we make sure the patients are ready to rock 'n roll to go out of the facility in a timely manner. And then finally, the plan for transfer of patient information, so personal belongings, all of that stuff, the medical record, the copy of the signed transport consent, all of that is defined in the transfer guideline and is included in that template that we provided to our facilities. In addition, we made sure to include the requirement for including directions for the family to get to these tertiary care centers. A lot of our facilities may be suburban and it may be difficult for some of the folks to get into the urban areas without the directions. I know that in the state of Tennessee, we have that defined because we too are very rural state in a lot of areas, and for family to get from one of the outer reaches to downtown Nashville, Knoxville, Chattanooga, or Memphis is sometimes a fairly [indiscernible]. And having that set of instructions for them is really a godsend. So if that is all spelled out in the guidelines so that physicians and nurses know to get that stuff ready, and you put that in checklist format, if need be, then you don't have to worry about that being a delay, or families being confused as to how to get where. Does that help, Diana? >> MS. FENDYA: Yes it does, Thank you. >> MS. EDGERTON: We have a question. We changed the slide because someone has asked about the actual link to the toolkit, so that is listed on the slide that's showing. And when you download the slides, the active link is on that slide, too. Sue, we have another question and again, I open this to all of our speakers. The question is stating that there is some research saying that a specialized pediatric transport team can help with outcomes during the transfer to another facility. Have any of you seen models where that is kind of written into the inter facility transfer agreement, or approaches to ensure whether you have a specific condition that that pediatric team is made available? >> MS. CADWELL: In the agreements in Tennessee for some of the CRPCs, not all of them, that requirement is written into the transfer agreement. So, in other words, the receiving facility is the one who determines to send a specialized transport team or not, and then, yes, that transport team gets to the referral facility. They in fact may help to get the patient packaged themselves and they can be involved in ongoing care of the patient during the transport itself. Does anyone else have experience with that? >> MS. EDGERTON: We have another question, too, since some of you have been intimately involved in writing this toolkit. Under the inter facility guideline section, do you have a sample flow chart or decision rule on the process for selecting the appropriate staff transport team to match the patient acuity? Again, is there a cue card to help facilitate that discussion in case you get the wrong person on the other end of the phone? >> SPEAKER: We actually did not approach that particular topic in the toolkit. We were looking at the administrative system components more so. But, that is a very important component of transferring children. And the American Academy of Pediatrics has a pediatric transport section that is well-versed, and works very hard in making sure that the right resources are being utilized for the right types of patient and specific elements to be considered. They have a resource manual, and I don't remember the exact name of it, but I know that they have a manual where things to be considered when planning for transfer, as far as packaging of the patient, are addressed, which may be of help to whomever asked the question. But I think Sue had sort of addressed it to a point in the discussion here in that the receiving hospital, when a hospital has an agreement with

another facility who has greater resources, part of that agreement should include that when Hospital A contacts Hospital B, Hospital B is going to provide some guidance in resuscitating the patient, in stabilizing the patient and preparing the patient for transfer. As Sue said with her facilities the receiving facility actually helps define what the best mode of transport should be for that patient, whether it's their specialized transport team or whether it be an ALS vs. a BLS service. >> MS. EDGERTON: Great. And I know some states, at least in the state of Maryland, that they have a pretty detailed approach to help guide referring facilities to understand that of who needs to be staffed on the ground or air transport, and what criteria, whether it be a condition or how critical the individual is or even just the distance and of what mode of transportation is used. So I know some of those things can be available if people would like access to those. Are there any other questions from the audience? I'm going to put forward while we give a moment for people to write in any other questions they might have is the page on continuing education credit. Again, there's a link there, which would lead you to that evaluation and credit. And also, on your web page you may see the download for the PowerPoint slides and also to take a survey to provide feedback on how this webinar worked for you, topics covered and suggestions for the next time. Again, I really want to take time to thank our speakers not only for the work that they did prior to this webinar and the actual creating of this toolkit, also for those speakers that have been involved in taking the next steps and actually disseminating it in their care settings or systems that they work with. EMSC has been very excited to be part of this process and have it as part of our toolkit on our pediatric readiness site. Again, this is an initiative at Emergency Medical Services for Children to really provide all care setting tools and resources to provide the optimal care for children no matter what that setting might be, whether in the rural or isolated areas or in the suburbs or urban areas. So again, thank you so much for your attention during this webinar. Please forward any other questions you might have and we'll try to address those and post them. Again, this webinar will be archived in a few weeks and you will receive an e-mail if you registered for this talk and you can share it with your colleagues if they weren't able to join us in person. Again, Diana, I know you did a lot of work coordinating this. I don't know if you have any other closing comments before we let people go for the afternoon. >> MS. FENDYA: No. Just thank everybody for joining us and I guess we could say, go get transfers organized, because it's certainly going to impact the emergency care that children receive. It's a little big thing that can make a huge difference when a child is critically ill or injured as little Skyler was. One will always wonder if she had been able to be moved more quickly through the process, would she in fact have survived? So thank you very much. >> MS. EDGERTON: Thank you.