

MCHB/ EMSC Webcast

Emergency Severity Index of Pediatric Triage

March 25, 2010

JACLYNN HAYMON: Good afternoon. Welcome to the presentation Emergency Severity Index of Pediatric Triage. My name is Jaclynn Haymon, Program Manager for the EMSC National Resource Center. I will be moderating today's presentation.

Before I introduce you to today's speakers, I would like to go over a few housekeeping notes. Slides will appear in the central window and should advance automatically. The slide changes are synchronized with the speakers' presentation. You do not need to do anything to advance the slides. 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 recommend changing it to 12 seconds.

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Okay. To today's presenters, we have Anna Waller, Associate Professor at University of North Carolina At Chapel Hill, Dr. Debbie Travers, assistant professor at University of North Carolina at Chapel Hill, School of Nursing and finally Dr. Jessica Katznelson, assistant professor of Pediatrician and Emergency Medicine at University of North Carolina at Chapel Hill. First, I'd like to introduce Dr. Jessica Katznelson.

JESSICA KATZNELSON: Thank you, Jaclynn. So just to set the stage, typical Saturday night in the emergency department. There is a full moon, all the rooms are full and the proverbial bus pulls up to triage. Among the passengers are following: six-week-old girl with one day of fever and fussiness. A boy who has hemophilia, he said he fell off the bed an hour ago, he doesn't think he lost consciousness, but vomited on the way to the hospital. A five year old boy with history of asthma, his mom says he has a cold and is alert and curious about everything going on around him. There is a GIRM who fell

earlier while skateboarding, crying and holding her left forearm, which is visibly deformed.

Next slide, please. So with the physician sitting in the back, I have simple things I need to know from the triage nurse. I need to know who to see first, who to see next, are the patients truly emergent and can anyone safely wait and finally how was the decision made? There needs to be a system fast, accurate, simple to use and rules are clear to everyone. I'd like to turn for a moment to my colleague, Dr. Debbie Travers, experienced ED nurse and let her share thoughts how to approach the patients.

DEBBIE TRAVERS: Next slide, please. As the triage nurse in the ED on typical Saturday night like this one, many things influence which patient I take back, whether I just saw the names of the patients on a list in our tracking system and got report from the off-going nurse or whether I actually saw them myself and know which I think is sickest. My comfort level with Pediatricians, knowledge of high-risk Pediatric situations and perhaps even what types of rooms we have open in the back and other issues, such as is the only open bed in a bay next to a loud vomiting drunk patient? Through this talk today we hope to address these challenges related to Pediatric triage and provide work toward providing triage nurses with standard accurate method of quickly sorting patients. Three speakers today are part of a team that work together on a project funded by EMSC. I'm an ED nurse in triage researcher, Dr. Jessica Katznelson, is Pediatric emergency physician and Dr. Anna Waller is an emergency medicine

researcher with a docket in attorney ilchild HELT. Later we'll share names and affiliations of the rest of the team.

Next slide and back to Dr. Jessica Katznelson.

JESSICA KATZNELSON: Jessica Katznelson: Thank you, Dr. Travers Our project, I will spend a few moments talking about the history of triage and current status in the United States and abroad. I will talk briefly about Pediatric triage, history of the emergency severity index and need for the study and turn things over to my colleagues to discuss study methods and results, as well as plan for dissemination of the result and finished products. We'll welcome questions from you at the end of this and as Jaclynn said, feel free to submit questions via the interface as we go along.

Next slide, please. I need to justify the money my parents spent on undergraduate science degree. Few quick words where concept of triage came from. The word triage comes from the French verb meaning to sort and I won't attempt to pronounce it in French arch taking Spanish. Triage was developed on the battlefield during calendar World War II. Enough advances in medical science to potentially save the lives of soldiers who would have died in the field in previous conflict.) System was needed to sort those who could not be save Friday those who could and those in the second group to decide who needed immediate care and who could safely wait. The goal then as remains with triage today was the best utilization of limited resources.

Next slide, please. In the 1960s, there was a significant increase in the number of patients taking care emergency departments across the United States. There was no longer the ability to simply care for everyone who presented simultaneously and recognizing first-come, first-serve was probably not ideal when it came to ill and injured people. It became clear emergency departments needed some sort of system to sort patients based on acuity. The military triage system was adopted and over time adapted and refined until it eventually evolved into the triage system that exists today.

Next slide, please. Today essentially all emergency departments use some form of triage with the simple goal of identifying those who need immediate care and determining how long everybody else can safely wait for treatment. All triage systems use defined set of criteria and generally include a combination of the following: Chief complaint, you're probably worse off if you complain of pain if you cut your finger off ; age, we tend to be more worried (inaudible), vital signs if they are abnormal, clearly a red flag ; and finely nebulous concept of distress, as my mom would put it, how sick someone looks.

Next slide, please. There are multiple triage systems currently in use, ranging from three level system that simply separates patients as emergent, urgent and non-urgent to complex five-level systems. Several countries such as Australia, Canada and the United Kingdom, adopted uniform triage systems for all emergency departments, but no such national system currently exists in the United States.

Next slide, please. In the United States, every hospital chooses for itself which triage system to adopt and each hospital does its own training to teach nurses how to use that system. In practice, this means there are multiple three and five-level systems currently in use across the country. The American College of Emergency Physicians and the Emergency Nurses Association have both recommended uniform five-level triage system be adopted nationwide, but that said, no single system has been endorsed. Part of the reason for that is concern over adequacy of Pediatric criteria and lack of good validation study in the Pediatric population.

Next slide, please. The Emergency Severity Index is five-level triage system developed in the 1990s by a group of emergency department physicians and nurses. It aims to sort patients both by acuity and unlike other five-level systems by expected emergency department resource utilization. It contains Pediatric specific criteria and has been well validated in multiple adult studies. Prior to this project, however, there had been minimal research into the use in children and what did exist was mainly small, single center studies.

Next slide, please. So why did we undertake this study? As I mentioned, there were no five-level triage systems well validated in the Pediatric population. ESI, Emergency Severity Index has been shown to work well in multi-age and adult studies. If it were validated in children Emergency Severity Index would be a powerful tool for emergency department triage of all patients from neonates to geriatric population.

Next slide, please. The questions we set out to answer were as follows. Is the Emergency Severity Index a valid tool in the Pediatric population? Could we identify specific things about the tool that need to be improved upon or changed for Pediatric patients? And finally, could we create a standardized training program to better teach nurses how to implement the ESI in the Pediatric setting. At this point I'm going to turn things over to Dr. Anna Waller our study PI to talk in detail about project methods and results.

Next slide, please.

ANNA WALLER: Thanks, Jessica. I'll provide an overview of the targeted issue grant study, including details about our methods and presenting results from our work on reliability.

Next slide. We were funded five years ago by the HRSA emergency medical services for children program through targeted issue grant. Our project focused specifically on Pediatric triage, which is included in a broad definition of emergency medical services. The project included the participation of seven EDs and three different states and was funded for three years, although the work on the project is still continuing.

Next slide, please. The funded study included a coordinating center at University of North Carolina's Department of Emergency Medicine in Chapel Hill. Compared to earlier research with the ESI, this study expanded Pediatric expertise of the research

team by adding Dr. Jessica Katznelson emergency medicine program as well as two additional sites with both high volume of Pediatric patients and Pediatric expertise.). These were WakeMed in Raleigh, North Carolina, and Primary Children 's Hospital in Salt Lake City, Utah. This has been a great research team with lots of pertinent expertise to bring to the project. We've been fortunate to work with all of these folks, alex ROES en and (inaudible) in Allentown, Pennsylvania, Nancy Meacham in Salt Lake City, Doug Trazenski at WakeMed in Raleigh and Dave Idol at YOSHG and (inaudible) and I want to thank the folks for their great work to get the project done.

Next slide, please. Our study was a before, after intervention study with the goal of improving the ESI for use with Pediatric triage in the emergency department setting. We designed the study in three phases, phase one ran from March 2005 through August 2006, and included baseline or before measures of reliability and validity for the ESI with Pediatric patients in our seven participating emergency departments. Phase two ran from September 2006 through June 2007 SXEVEN included analysis of our data from phase one and the development and implementation of Pediatric ESI educational intervention based on those results. In phase three, which ran from July 2007 through August 2008, we involved repeating the reliability and validity testing of the ESI and we did follow-up measures from our educational intervention, which we implemented at the end of phase two. There is ongoing phase four, which includes analysis and determining final results and recommendations from this work.

Next slide, please. Phase one included baseline measures for reliability and validity of the ESI for Pediatric triage. We measured reliability in two ways, by presenting scenarios or case studies to nurses as part of training on the ESI and by having a research nurse double triage sample of Pediatric patients at each site. The case studies represent hypothetical situations, whereas double triages were real-world use of the ESI for triaging Pediatric patients. Validity was measured by abstracting data for Stratified sample of Pediatric ED patient visits at each hospital. These data included information about the ED visit from the triage information that included the ESI level through to discharge and were used to assess outcomes of patients assigned to various ESI levels.

Next slide, please. We should be on slide 22 at this point. In phase two we completed our analysis of our base line results and conducted comprehensive review of both the peer reviewed literature and the nursing education literature that was relevant to Pediatric triage. We then shared our study results and our literature reviews with our research team and an advisory group made of Pediatric emergency department clinician volunteers from around the country. Based on our results, the literature review and input from the expert review, we created Pediatric specific ESI resources. These were then used to train in a train the trainer session for trainers from each of our study sites. They then used those materials to train all triage nurses at each site before re-measuring reliability and validity during phase three.

Next slide, please. Next I'll share key results from our baseline measures of reliability of the ESI for Pediatric triage. I'll start by presenting our case study results and then move on to the double triage results.

Next slide. We wanted to evaluate the reliability of the ESI with a set of case studies using inter-writer reliability. This is the agreement between different raters, in this case triage nurses, and the gold standard. Our gold standard was the consensus of our research team, so-called expert panel. We measured inter-rater reliability by comparing triage nurses ratings of the case studies, what ESI level they assigned each patient to and compared them to the gold standard. We used a weighted kappa, which looks at level of agreement between the two raters. So this perspective evaluation included the first stage concluded 10 case studies that involved those adult and Pediatric patients and we tested this in eight emergency departments in four states so it represented those academic and community hospitals, as well as general and Pediatric emergency departments. All the nurses that participated attended an update training for the ESI and this was conducted in the summer of 2005.

Next slide, please. So for this first case study we had 60% response rate from the 367 triage nurses who attended the ESI training at the eight emergency departments. We found kappa was higher for cases involving adult patients and concluded Pediatric patients were AUCH miss triaged over triaged or under triaged. So that set up the second part of our case study.

Next slide, please. First I will show you an example. This shows an example of one of the case studies that we used in that first set N. This case a fussy infant with elevated temperature. They're considered high-risk patient due to the young age and the high temperature, thus this should have been classified ESI 2. Most of our nurses in this part, 69%, got the ESI level correct for this scenario, but almost a quarter would have under triaged this patient.

Next slide. The next step in our reliability work was to develop and test a set of 40 case studies specifically about Pediatric emergency department patients. These were tested in seven emergency departments among triage nurses who attended the ESI update training.

Next slide. Again, the response rate was not ideal at only 57% but overall cap was good at .77. However there were statistically higher agreement for trauma cases compared to medical cases. We concluded the case study is effective way to assess nurse usage for ESI for Pediatric patients and there need for improved education related to medical patient triage.

Next slide. The second part of our reliability study was to conduct actual double triages in realtime in the participating emergency departments. One expert research nurse traveled to each site to observe 100 Pediatric patient triages. She was blinded to the triage nurses ESI rating for each patient as was the triage nurse to her rating. She

observed no more than 10 patients per nurse, thus absorbing the decisions of more than 1000 triage nurses across the sites.

, please. The double triage is produced overall cap a n of .57 for moderate (inaudible) between triage nurse and triage nurses. Onsite observation provided insight into the Pediatric triage process.). These data indicated that nurses were reluctant to use ESI 1 or ESI SFOOIF resulting in both under triage of the sickest children and over triage of the least sick. Those most likely to be mistriaged included infants, patients with either respiratory or rash complaints and those with medical as opposed to trauma conditions.

Next slide. Now I'll turn over to Debbie Travers to tell us about dissemination activities.

Next slide.

DEBBIE TRAVERS: So for validity results, slide 32, in this part of the study we conducted a prospective evaluation of ESI validity by comparing the ESI levels to three outcomes in-patient admission, ED length of stay and ED resource utilization ; resources such as how many procedures, tests and specialty consultations these patients had during their emergency department stay.

Next slide. We enrolled 1173 Pediatric patients total, exceeding our target of 200 patients for study site. With equal numbers of patients seen in the summer and winter and in each ESI level and to get that sample of 1173 patients we actually screened 15,467 patients.

Next slide. Since our sampling plan was directed at stratified by five ESI levels cot HERT was not evenly distributed across age groups. You can see less infants in the five to nine year old group and more patients in the one to four year old group and the above 10 -- 10 and above group.

Next slide. As far as patient outcome, we found the ESI level was correlated with all three outcomes, admission, ESI resource utilization and length of stay.

Next slide. in this graph, hospital admission rates differed significantly by ESI level and this was statistically significant with high square result. 11 one patient had add mission rate of 73% and (inaudible) zero admissions.

Next slide. This graph compares resource consumption for the five ESI levels and we found again statistically significant differences by the five levels looking at high squares. The most common resources were lab studies, 41% of the patients had them, X-rays, 33%, IV Lines, IV Meds, CT and MRI imaging studies and specialty consultations were also common. Length of stay also varied significantly by ESI level this, is not shown on the slide, but we looked at the average length of stay by ESI level. ESI 1 had average length of stay of 156 minutes ; ESI 3 patients the longest 259 minutes and ESI 5 patients shortest at 99 minutes.

Next slide. We looked at under and over triage within the validity cohort. We defined under triage as patients rated ESI 4 or 5, but who got two or more resources or were hospitalized. And we defined over triage as patients who were rated ESI 1, 2 or 3, but got less than two resources or patients rated ESI 1 that were not hospitalized. And of the 1173 patients in the validity cohort, 126 or 11% were under triaged and 186 or 16% were over triaged. We found that nurses in the dedicated Pediatric emergency departments, two of those in the study, the other five sites were not dedicated Pediatric nursing departments. 31% less likely to under triage patients than the nurses in the general emergency departments. We didn't find any differences in miss triage by chief complaint or age but the groups were too small to really analyze the data.

Next slide. So our major conclusions from phase one of our study was first that this was the first large-scale study of the ESI for Pediatric triage and I know that there have been some other recent studies of the P -- ESI for Pediatric population, but at the time we initiated the study several years ago this was to date one of the larger studies and I believe one of the few multi-center studies that included children EDs, general ED and teaching and community and represented different regions of the country. We improved on ESI studies some of the group participated in several ways. Won't, we had a single nurse do the double triages at the hospitals. Our Stratification plan for creating the sample was quite rigorous, we screened 15,467 patients to come up with the 1173 that were included. And we included equal numbers of patients in all ESI levels. Previous studies of the ESI typically take samples that are more representative of the general ED population and thus have very few of the sickest and the least acute patients. ESI 1

and 5 are typically under represented in most studies. We found that reliability of triage with the ESI version 4 for Pediatrics was moderate and that the ESI stratified patients in five distinct groups looking at out dollar comes including admission, length of stay and resources. We identified during the course of phase one of the study areas of difficulty for triage nurses, using the ESI for Pediatrics, which is what motivated us to do the y. We had gotten anecdotal evidence but this study corroborated that and identified the challenging areas. Complex medical patients, those with rash, fever and respiratory complaints specifically and infants less than one year of age and the least and most sick patients. Differentiating ESI 1 and 2 and a 4 versus a 5. We found nurses and dedicated emergency departments were less likely to under triage the nurses in general EDs.

Next slide. So our conclusion at the end of phase one were the ESI works fairly well for Pediatrics but certainly room for improvement. Our goal at that point was to help nurses in general emergency departments who probably don't see sick children as often as nurses in dedicated Pet EDs do to triage patients accurately using the ESI. We focused address Thanksgiving with education al intervention.

Next slide. For phase two of the study, we used the phase one results to create an education al module directed at use of the ESI for Pediatric patients as a PowerPoint presentation within accompanying Pediatric chapter which will serve as supplement to the ESI handbook. We then held train the trainer session for the study sites and these trainers went back and educated the nurses at their study sites. This was done prior to the next round of data collection, which was phase three of the study.

Next slide. In phase three of the study we completed the same methods in phase one with reliability (inaudible) subset of 25 of the original case studies we had started with 40, but refined those down to a set of 25 that had good psychometric properties. Those case studies were then in phase three completed by 254 nurses. We also repeated the double triage for another 501 patients. And for phase three in the validity assessment we enrolled another 1108 patients. We are still analyzing the results of phase three and don't have any new data to report today on that, but will hopefully have some computations forthcoming.

Next slide. Next I'm going to discuss our project dissemination plans, which include both information and specific products we've developed in the course of this project. These include journal complications and other products, some of which are completed and others which are still in progress.

Next slide. We've had two journal articles published to date from this project. First review of the emergency nursing triage education literature and second, the phase one results of the study, the baseline reliability and validity of the ESI for Pediatric. Citations for the papers are available right now through the website for today's webcast and they're in a document called Pediatric Triage References which also include other computations about use of the ESI for Pediatrics including several studies by other authors about the ESI for Peds. Also available through the website for today's webcast is annotated bibliography of the literature. We compile third degree in 2006 as part of

the project so it is not completely up to date but includes foundational triage literature relevant to this project. We have two other journal articles in preparation. One on the creation and validation of the Pediatric case studies and a second one on our phase three results, comparison of Pediatric triage before and after our educational intervention.

Next slide. A product of the study we've completed and made available for noncommercial use is the set of validated Pediatric case studies. These are available through the webcast website and are in a document called Pediatric case studies, emergency department triage. There are 25 patient cases there, which nurses can use to rate patients on the ESI. The case studies are designed for teaching as well as opposed to educational evaluation and an example of the case is shown here on the slide. EMS radio to say they are in route with a five year old girl who aspirated a balloon at birthday party. She's alert and drooling and unable to speak. Heart rate 124, respiratory rate 28, oxygen saturation 29% on oxygen. After reading the case, nurses are asked to select an ESI level for the patient somewhere between ESI 1 and 5.

Next slide. Included with the case study is answer key, which rationale for the ESI rating such as this one and here is the case repeated again and you can see the rationale that accompanies this case in the casey document. This patient should be rated ESI level one, life-threatening situation and goes on to describe why this patient should be rated ESI level one.

Next slide. Another product of our project is a chapter on Pediatrics that will be included in the next version of the ESI handbook. The goal of this chapter is to provide nurses with Pediatric specific information to help with triage of children using the ESI. The content was based on our findings from phase one of the project as well as input from ED nurses who contacted us during the study and shared their ideas on how the ESI could be improved for Pediatrics. Here is a list of the content of the chapter. Pediatric assessment, ESI level 1 and 2 considerations ; ESI resources ; vital signs ; and special populations , like the infant, patients with rashes, complex medical patients. We don't have a date for the publication of the new chapter yet, but are hoping it can be released soon as a separate document and later incorporated into the next version of the ESI handbook. We're currently working with the agency for healthcare research and quality on this and they're the ones who published the ESI handbook.

Next slide. Slide 48. We're also in the planning stages of developing an online training module. We're working with emergency medical services for children on these plans. The module will be based on the educational program we developed and piloted during our project. And the content is similar to the Pediatric chapter that will go in the handbook for the ESI and includes Pediatric assessment and that includes general coach to assessment using Pediatric assessment triangle which many of you are familiar with. It includes a section on special population, infant, rash patients, psychiatric patients and those complex medical patients. It also includes ESI 1 and 2 consideration and then the case studies.

Next slide. We want to thank Jaclynn Haymon and her staff at EMSC for Children at HRSA for host Thanksgiving webcast. For funding the project and working with us to make available the products that we've created. We also want to thank Michael HIENS and his crew from Cabs for help with the webcast today and we want to thank the agency for healthcare research and quality or Arc, for funding early ESI work on creating and dissemination, including publication of the ESI handbook and we thank Art for working with us to share the Pediatric chapter. We look forward to hearing your questions about the use of the ESI for Pediatrics. At this point back to Jaclynn Haymon for the next part of the webcast.

JACLYNN HAYMON: Thank you, Debbie. Before we go into the question and answer session, I want to remind you at the end of the broadcast to please submit online evaluation. Please take a couple minutes to do so and your response will help us plan future broadcasts in the series and improve our technical support. So the first question we have is just a general question. Since resource prediction is a major part of the ESI, have you considered changing the ESI for Pediatrics to reflect the fact that resources for children are different than adults? For example, in a child there is much more intensive procedure than in children, but saving locks aren't considered resources in the ESI system.

>> Thanks, that is a great question and actual ly one that we were asked frequent ly during the course of this project. I mentioned earlier and this is Debbie Travers. One of the projects of this study is publication on phase one where we look at reliability and

validity of ESI for triage. We looked at resources because many practitioners told us it didn't make sense that the resource allocation for an ESI rating used in an adult would be used in children since resources can be pretty different. We actually looked at that. In the paper we have a section that describes that and I will just share a bit of that with you from the paper. We found that although the ESI did produce the five distinct categories, including resources, there was this concern about resources being different in children. ESI users would argue it takes considerable resources, place for saline lock in younger patients. In this study we collected data on patients who received saline locks and found 90% of them also later either received iv medication or fluid which are ESI resources. So this really to us sports the current definition of ESI resources and points out the distinction between the ESI, patient acuity tool and resources used as proxy for helping you determine levels three, four or five for a patient and this is distinct from nursing resource intensity measures which do reflect the amount of effort needed to perform intervention on children, such as IV line placement.

JACLYNN HAYMON: Another question just came in for any of the presenters. Are you going to create a separate Pediatric version of the ESI?

ANNA WALLER: Thanks, Jaclynn this is Anna Waller. What we've concluded at the end of our work, at least where we are at this point, we don't need a separate ESI for Pediatrics, but rather would like to work with incorporating what we've learned about using the existing ESI for Pediatrics and that is how we've approached it as having a separate chapter about how to use this tool for Pediatrics and getting that into the

handbook for the ESI. The ESI has its own entity and it would really have to be -- to make a whole separate system for Pediatrics would be beyond the scope of what we could do with this study and beyond what we think is necessary. We think that the ESI actually can work well for Pediatrics when it's used appropriately and we think that with appropriate training and tools that triage nurses can use this tool, the ESI for Pediatric patients. Would you like to add anything?

JESSICA KATZNELSON: This is Jessica. The wonderful thing about the ESI it can be used as one tool, essentially from cradle to grave, not just adopted in Pediatric free standing hospital but smaller community hospitals that see patients of all ages and to two separate kwlees ESI would complicate that process greatly. We felt what Anna Waller said, to provide additional education and how to approach the current ESI in Pediatric patients rather than creating a completely separate tool.

JACLYNN HAYMON: Thank you, Jessica. One more question just came in. This is a great presentation. My question is that triage accuracy may be impacted by business of the ED and that the time available for expected triage. In this study were you able to do any time studies looking at the length of time to triage via level three system versus a level five system with ESI? And if you did, what were your findings?

>> We did not look at amount of time necessary for assigning triage levels in this study. This is Debbie and we actually did a study at UNC several years ago comparing three and five-level triage. Pressures or off the study looking at amount of time it did to do

triage. We found children and elderly patients take longer to triage than others, but we did not specifically look at that in this study.

JACLYNN HAYMON: Thank you. I have another comment. It says, specifically while post-docs less than 90% would indicate high risk patient, a nurse-driven protocol allowing for administration of oxygen and albuterol nebulizer provide significant improvement in life -saving measures. Without a physician, I'm sorry, life-saving measures via physician are not required, while physician are not required. I'm sorry, I'm scrolling down. Has there been any consideration to looking at the correlation of a post-doc and ESI in Pediatrics?

That is a great question. This is Debbie. Something we didn't mention during the presentation is that the question of how best to use vital signs with triage levels did come up during this study. However, we did not have enough patients of different age groups in this study to really answer those kinds of questions, but we believe there is a need for some science behind the vital signs cut off for different triage decisions and that something we're just beginning to explore with the data we collected for this study and we hope to continue that investigation because it's an important area to understand. It turns out that in our educational literature review paper we addressed this a little bit. It turns out there is not a lot of hard science out there on the predictive validity for vital sign for triage decisions in emergency departments. These topics have been studied in other areas like intensive care units with the systemic inflammatory response, but this

is not something that has been well studied for predicting who needs to be which triage level at the door of the emergency department.

JACLYNN HAYMON: And I have another question. What about physician activity? Some emergency departments now have physicians actively participating in initial triage? What was your experience with the other sites involving physicians and are there any thoughts of getting this information out to the medical programs for training?

>> This is Jessica. So this study looks specifically at nurse triage, the ESI was designed as a nurse triage tool. It's probably a whole other discussion and debate about the role of physicians in triage, but I think we should remember as we're having this discussion that triage is a single snapshot in time and the goal of triage is to assess quickly who needs to be seen, how fast they need to be seen and with the ESI to give a little bit of information about the resource utilization that those patients may require in the emergency department. It isn't a time to begin taking care of patients. Triage is assessment. Triage isn't treatment and so you could potentially use physicians to triage, I'm not suggesting one couldn't do that, but they would probably need the same intensive training that nurses go through before nurses triage. In all the emergency departments we worked with and just about every emergency department that I know of nurses have to have significant amount of experience in the ED before they are allowed to DW to triage and go through specific triage training. That at least in all of my training and residency and fellowship, is not training that I got at all and I certainly wouldn't want to be the one doing triage without that training.

JACLYNN HAYMON: Okay. This concludes our question and answer session. Thank you again for participating in this presentation of emergency severity index for Pediatric triage. Archived version of the webcast will be available a few days following the live event and again once you go on to MCH Webcast there are additional resources provided on the website including power point slide and annotated bibliography and other case studies. My name is Jaclynn Haymon and thank you very much. Have a wonderful day.