



Clear Communication Practices for Safer Healthcare (Safe Practices 12-16) November 19, 2009 Webinar Transcript

Hayley Burgess: Hello, and welcome to today's webinar regarding the NQF Safe Practices for Better Healthcare, focusing on clear communication practices for safer healthcare. This webinar is co-hosted by NQF and TMIT. I'm Hayley Burgess, Director of Performance Improvement for TMIT, and I will be your moderator today for this call.

We have an all-star cast for you today. Interestingly, each of these panelists is the original contributing author to the section he or she will discuss, so please take this valuable opportunity to consider your questions for Q&A time. I will introduce you to the panelists more thoroughly prior to their presentations. We always begin and end our presentations with words from our inspiring patient advocates. Arlene Salamendra is with us today. Ms. Salamendra is a patient advocate leader and former board member and staff coordinator for Families Advocating Injury Reduction. Arlene, thank you for joining us today.

Arlene Salamendra: Thank you, Hayley. Safe Practices 12 through 16 focus on the importance of communication and the transfer of information from the patient and the family to the healthcare provider. Inherent in the safe practices is the art of listening. The foundation of good communication is listening – really listening to the patient and the family – listening to what they are saying. I would like to thank all of the participants today for attending the webinar, and to NQF and TMIT for their work, making healthcare a safer place. Thank you.

Hayley Burgess: Thank you, Arlene. Many of our audience participants are well-versed in the 2009 update of the NQF Safe Practices for Better Healthcare. This is a group of best practices that are broken into seven functional chapters listed here on Slide 6. The practices are currently being updated for 2010, with an expected release of the next book in January or early February of 2010. Slide 7 is an eye chart of the 34 practices within their respective chapters, and today we'll focus on Chapter 5, which is information management and continuity of care.

At this time I would like to introduce Dr. David Bates. Dr. Bates is the Medical Director of Clinical and Quality Analysis for Partners Healthcare and Chief for the Division of General Internal Medicine for the Brigham and Women's Hospital. He will walk us through achieving success with computerized physician order entry. Dr. Bates is an original author of the CPOE practice and we're delighted to have him with us today. Dr. Bates, thank you.

Dr. David Bates: Thanks so much, Hayley, and it's great to be with you. So I'm going to start by talking about the safe practice. Then I'll talk about the benefits of CPOE, and I want to point out that many of them relate to drugs but there are a lot of other benefits, particularly with respect to use of the laboratory, and then more broadly. I'm going to say a few words about meaningful use, because I think that's probably on everyone's mind today and because there will be substantial resources that are at stake by meeting the meaningful use criteria. Then I'm going to talk a little bit about some of the risks of CPOE and take the two case studies in particular from the University of Pennsylvania Ross Koppel and the University of Pittsburg from Hahn, et al. After that I'll talk about how to implement CPOE well. Then I will talk about how computer order entry fits into the big picture, and I'm going to focus a bit on bar-coding, because we're hoping that that will be added as a safe practice in the not-too-distant future; and then I'll wrap up.

So Safe Practice 16 is on this slide, which is Slide 10, and it is to implement a computerized prescriber order entry system built upon the requisite foundation of reengineered, evidence-based care and assurance that healthcare organizations staff an independent practitioner readiness and an integrated information technology infrastructure. And there are a lot of things that are embedded there, but I think the key things are the evidence-based part, and the note that this has to sit on top of an integrated infrastructure.

Computer order entry is an absolutely central part of the electronic record and it is so centrally important because most of the things that occur in a hospital happen as the result of a physician's order. The implication is that you need to get the physician or other ordering provider to use the computer, and this represents a key opportunity to change behavior. It gives you a lot of opportunities to improve performance.

With respect to medication safety, one of the first studies that was done in this area was the study that we published in *JAMA* in 1998, which found a 55 percent reduction in the serious medication error rate with computer order entry. Serious medication errors are the errors that either harm someone or have the potential to do so. And I'll note here that this is what was at the time even a relatively simplistic CPOE application, it didn't include a lot of the advance things that applications include today. Moreover, there's an even bigger reduction in the overall medication error rate, 83% in one study that we published in the *Journal of the American Medical Informatics Association* in 2000. Furthermore, preventable adverse drug events are expensive and averaged around \$6,000.00 in another study that we did. There have been several systematic reviews of the impact of computer order entry on medication safety and I want to take you through those next. One that we did that was published in the *Archives of Internal Medicine* in 2003 reviewed five trials, which had been published at that time. Two showed a marked decrease in the serious medication error rate, one showed an improvement in the corollary order rate. Corollary orders are orders in which one thing applies that you want to do in another thing. One showed improvement in five specific prescribing behaviors that the authors chose to look at, and the other found improvement in nephrotoxic drug dose infrequency.

In the last couple of years there've been a number of other studies that have been published. One by Shamlian, et al., that was published in *Health Services Research*, looked at computer order entry and medication errors and found a 66% reduction in prescribing errors on average and another study which looked at computer order entry and adverse drugs events, or actual harm caused by medications, identified ten studies, which five showed a decrease in average drug event rates, four showed non-significant trends and one found no effect. I will note that many of the studies that have been done just have not been big enough to detect an effect on the preventable adverse drug event rate. You just need a very big study to do that. And there's also been a number of studies that have focused on the laboratory, and I'm gonna take you through a couple from our organization.

In one trial that we did, we've looked at impact showing charges to providers at the time that they were ordering, and there was no statistically significant effect; but there were \$1.7 million less in lab charges in the intervention group, and our administration felt that that was administratively significant even it wasn't statistically significant.

Other work done like the reminders about redundant laboratory tests and in one study we did, 67 percent of the reminders were followed. The annual charge savings, though, were only \$31,000.00 versus a prior estimate of \$376,000.00. When we looked at why that was, the key factor was that only 44 percent of the tests performed had an associated computer order, suggesting that substantial improvement is possible if you close the loop with a laboratory backend for these orders.

Another area that's extremely important are critical paths and order sets more broadly. And critical paths specify what should happen for a specific day for patients with a particular condition. They're essentially sequences of order sets and we have them in place at our place for 25 diagnoses. Other institutions have even more of this and we found decreased length of stay, costs, and improved satisfaction across the board with use of these critical pathways.

One of the things that we did when we implemented order entry is to require physicians to select a diagnosis at admission, and what that lets you do is to prompt the providers to consider using the path. That increases the likelihood that the path will be selected. Our approach before this was to have a nurse run around and look, for example, for all the patients who'd had strokes, which is fairly obviously not an efficient way of doing things.

So to summarize, the benefits of CPOE are much greater than the direct safety benefits alone, and they represent a small part of the financial benefits. And achieving value depends on building in good decision support. If you're going to do that, you also have to be able to modify it and iteratively improve it because, for example, the drugs that are expensive at any given time are regularly changing.

So how should you prioritize in terms of thinking about what decision support to put in? Well, one study that I think is instructive in this regard is a study that was published by Kaushal, et al., from our group in *JAMIA* in 2006, and in that study we looked at the return on investment within patient CPOE. The cumulative net savings in that study were \$16.7 million over 10 years, with a net operating savings of \$9.5 million. And the leading contributors were renal dosing guidance, which many systems today don't necessarily include. Tools to help nurses. That was something that we hadn't really expected, but it makes sense, because nursing time is such a big expense in most institutions. Guidance about specific drugs also was important, and average drug event prevention was also important from a cost perspective.

So then next I'm going to take you through a very short review of meaningful use. I'm fortunate to serve on the Health IT Policy Committee and on the Meaningful Use Subcommittee of the HIT Policy Committee. And our task has been to make recommendations to the government about how to spend the nearly \$50 billion which has been allocated towards providers to stimulate them to adopt health information technology. So things started in 2009 when the high-tech law was passed. By 2011, the idea is that people will begin to capture and share data. By 2013, the idea is that things will be advanced further and there will be advanced care processes in place with decision support; and by 2015, the aim is to be all the way up to the point of having improved outcomes. If you look at the meaningful use matrix and decision support hospitals, in 2011 the goal is to have 10 percent of all orders ordered through CPOE. Initially we'd asked for a higher proportion than that, but this was the single item that the meaningful use group got the most feedback about and we backed off on that deadline. But the intent is for hospitals to at least be started on this. In addition, you have to have in place direct drug-drug allergy and drug formulary checks. You have to have an up-to-date problem list, which many institutions today won't have, but which has a lot of benefits from a variety of perspectives. You have to be able to generate lists of patients by condition and you have to implement at least one clinical decision rule related to a high-priority condition. The idea there is to get people started down the road of implementing more decision support.

By 2013, hospitals are required to use CPOE for all order types, in addition to using evidence-based order sets, which should be a high priority for anyone implementing this, to conduct closed-loop medication management, and that includes bar-coding, which we'll say some more about in a little bit. To use clinical decision support at the point of care and in addition to retrieve prescription fill data which will also be challenging for most hospitals, since very few are using fill data today.

Now, things I can go wrong when you implement CPOE, and I want to take you through some of the data about this. Ross Koppel, et al., evaluated a commercial computer order entry application at University of Pennsylvania, and they asked the users about their impressions about the system. They found a number of situations in which what they referred to as a leading CPOE system facilitated medication error risks. They noted that it often took many screens to do some things, and that the views the providers needed were often not available. I'll point out that others, including particularly Joan Ashe from Oregon, have also reported on this, so this was not a surprise to the informatics community. And I'll also note that the application that the authors studied was actually a relatively old application.

There are a number of issues with the Koppel study, the most important of which from my perspective was that they didn't actually count errors or adverse events; and Dr. Koppel, in private conversations with him, says that he believes that even the system that they're doing actually probably reduces the medication error rate. They have also said that other studies focused only on the advantages of computer order entry and that allegation is just not accurate. For example, our prior work found that errors that were created by the application as well as the ones that were prevented and looked at the net, and as I noted, the CPOE application that they studied was a very old one; but this paper stimulated a lot of valuable debate and I think it did identify two particular key points, the first of which is that you have to change your system after you implement it or you won't get where you want to go; and the second and even more

important point is that software alone is insufficient. This is very much a people-oriented process, and you have to get everyone in the institution engaged in CPOE if you want to make it work well.

Perhaps a more troubling study came from Hahn, et al., from the University of Pittsburgh. In that study, they studied children who were being transported in for special care. They found that the mortality rate increased from 2.8%-6.3% with an odds ratio of 3.3 after they introduced the commercial computer order entry application. The study had some limitations, so the design was before and after and they made a number of other changes at the same time the computer order entry was implemented; and for reasons that still aren't clear to me, they didn't report the overall mortality rate in the hospital. This was clearly concerning. There are a number of things that are notable about the way that they actually implemented. First of all, computer order entry was introduced very rapidly over a six-day period. Second, after implementation, order entry was not allowed until the patient had actually entered the hospital physically and had been logged into the system; and in the past, many of these children were coming in in helicopters or ambulances and the orders had been written while the child was on the way in, so that everything would be ready to go when they hit the door. And that was no longer possible after implementation, the way that they did it. In addition, after CPOE implementation, all the drugs – including the vaso-active agents, which many of these children needed – were moved to the central pharmacy. A rule was also implemented which prohibited the pharmacy from processing medication orders until after they were activated. Many orders were not available initially. And then that result was substantial delays in care delivery.

So several comments about the study. First of all, it was very weak methodologically, but despite that, increase in the mortality rate was very large and of obvious concern, and I do think that introducing the substantial delays in this group could easily have caused – this organization caused the increase. The organization broke lots of the rules for implementation and I think it's essential for other organizations to handle the sociotechnical aspects better than this. Subsequently, a number of other institutions have implemented the same CPOE application and have actually seen a decline in their mortality rate.

So what do you need to do to be successful in implementing CPOE? Well, I would suggest that anyone will have issues that leadership needs to deal with. It's important to keep in mind that, despite the pain at the beginning, getting to implementation will be worth it. You do have to pay attention to details that achieve value. That doesn't simply come with successful implementation. And finally, it's a much bigger change than anything most organizations have tried previously on the IT process, so it just is a really big hurdle.

We did a national study in which we surveyed a number of institutions that have been successful with implementation and the critical success factors that emerged were the following. First was strong leadership and long-term commitment to being successful in this area. Second was creating a culture of innovation – a willingness to try new things. Third was excellent project management. That's absolutely pivotal in doing something that's as big as this. The fourth was attention to clinical processes, because this changes workflow in a variety of ways. And finally, a focus on quality was very important.

If you're going to get the benefits it takes a few things. First, you have to successfully implement it. But that's just the beginning. You also need to decide on a core of decision support. You don't want to implement too much decision support early on because it can turn people off, but you do need to get the decision support eventually; and to do that you have to have organizational structures that enable groups to reach consensus. Not all that sort of meeting has to be face-to-face. You can use a product like e-room or other consensus structures to look at together offline. You also have to make a lot of changes in the application, and that suggests that your architecting has to be agile. You have to dedicate sufficient resources to keep up. Many institutions think that they'll just do this and write a check and be done with it, and it doesn't work that way. You have to have people working on this and making additional changes. The rule is to have a very long cue. Ours is longer than I'm proud of. And you do want to start well and go slowly, as I mentioned before, but you need to end up with enough decision support or you won't get the benefits that you want to see.

With respect to figuring out where you are with decision support, that's been a hard thing; but to fill that gap, a group has developed – with sponsorship from AHRQ and the National Quality Forum and Leapfrog – a CPOE assessment tool, and this work has been led by David Classen. What the tool does is to give you a score regarding how you're doing with decision support. And without a tool like this it's pretty hard to know where you are with respect to decision support. A number of institutions have found that they had many fewer employees than they thought they did. The way that this actually works is that the tool actually simulates electronic record use with CPOE, and you're given a few test scripts with a patient who has a number of characteristics. They have an age, a weight, a morphine allergy, and a normal creatinine. And then you have someone sit down with that and observe and record the type of advice that's given, if any.

The tool works in more detail as follows: so the hospital logs on, they do a sample test, and then they get the patient criteria. They program those criteria, which takes a while, typically. And they download and print 30 to 40 test orders, then enter those orders into the CPOE application and record what actually happened. The hospital then self-reports on the Leapfrog website. A score is generated against a weighted scheme and you get a report. The aggregate score goes to Leapfrog and the order category scores go to the hospital.

So how does CPOE fit within the broader context? Well, I don't want to suggest that CPOE is the only technology that can improve medication safety. There are lots of technologies like that which address different stages of the process. Other technologies which are also important include bar-coding, which I'll say some more about in a minute; smart bumps, which know which drug is being given and can warn a nurse if they provide too high a dose; and also computerized monitoring for adverse drug events, which are approaches in which you have an application which sits over the database and looks for signals that are of interest and then lets somebody, usually a pharmacist, know if there is an issue.

With respect to bar-coding, it's increasing widely used. About a quarter of hospitals today are using it. There's clearly a very wide use in the VA, nearly universal use. The published evidence base is still modest, but it's growing. It is going to be included in the meaningful use criteria for 2013 and it's also likely to be put forward as a safe practice. Here're some data from a study that we did that look at dispensing errors and potential adverse drug events and we studied this before and after putting in bar-coding. We did this actually before doing this as another study, which we hope will come out soon on the administration error rate, but we found that bar-coding the medications in the pharmacy resulted in substantial improvements. A 31% reduction in the overall dispensing error rate and a 63% reduction in the potential adverse drug event rate. That study that came out in the *Annals of Internal Medicine*, 2006.

So to wrap up my part of the presentation, computer order entry appears highly beneficial in the aggregate, but it can create new problems as well as prevent them. And if you want to be successful, you have to monitor for those and engineer them out. To realize benefits, you have to have strong implementation and later implementation of good decision support. It's important also not just to have CPOE but to implement it well, as the Hahn experience illustrates. And you also have to make sure you have the refinements in your decision support. Some of the easiest things are probably not the highest yield. I'll stop there and hand it over to the next presenter.

Hayley Burgess: Thank you, Dr. Bates. If you have questions for Dr. Bates, you are welcome to begin entering those in the lower right-hand corner of your WebEx screen, and we would appreciate that as we will open up for questions after Dr. Angood speaks. Our presenter is Kimberly Visconti. Ms. Visconti is the discharge advocate for Project RED, which is the reengineered discharge at Boston Medical Center. Dr. Brian Jack and his team originally authored the Discharge Safe Practice. She will discuss for us using the RED Program to implement the discharge system safe practice. Ms. Visconti, we are excited to hear from you and about this successful program and especially from the nurse's perspective. Thank you for joining us today.

Kimberly Visconti: Great. Thank you, Hayley. As Hayley said today, I'll be talking about using the RED engineered discharge to implement National Quality Forum Safe Practice 15, and I'll be doing that describing the components of the Reengineered Discharge Project.

Current hospital discharge is a non-standardized core quality process. Studies show that little time is spent on discharge teaching and patients are not prepared at discharge. Poor communication between providers makes the transition from hospital to home hazardous. People are most vulnerable when they are admitted to the hospital. Anxiety and stress levels can be high, and the discharge instructions that they receive from us can be overwhelming. A 2000 article in *JAMA* highlights the communication deficits related to the discharge summary. The discharge summary is often the only means of communication regarding a patient's hospital stay between inpatient and outpatient clinicians. Many times, however, it is not available at the first post-discharge appointments. Moreover, key components are often missing, compromising patient safety and increasing the risk for adverse events. For example, pending test results are missing from 65% of most discharge summaries.

Steven Jencks published an article in the *New England Journal of Medicine* this year stating that 20% of Medicare patients who had been discharged from a hospital were readmitted within 30 days. This not only has a negative impact on patient health and safety, but also contributes to increased healthcare spending. If approved, President Obama's 2010 budget plan would decrease Medicare payments to hospitals with high rates for readmission, giving incentives for hospitals to overhaul their discharge protocols. Project RED, which showed a 30% reduction in hospital utilization within 30 days of discharge, is an evidence-based way to do this. With all this in mind, the objective of Safe Practice 15 is to ensure effective transfer of clinical information to the patient and ambulatory providers at the time of discharge. To that end, the RED discharge provides submissions with timely, accurate information and explains clinical information to patients in a language that they understand, enabling them to actively participate in post-hospital care.

You're now on Slide 44. RED meets the NQF Safe Practice 15 objective using 11 mutually-reinforcing components. These components of the RED discharge were created by the RED Team and endorsed by the NQF Safe Practice on hospital discharge. We believe that implementing these components delivers a high-quality discharge. In our study, patients who received RED using these 11 components showed decreased hospital utilization after discharge and increased patient satisfaction and preparedness for discharge. Next I'll describe each of the 11 components, the first 10 being in-hospital activities and the 11th occurring post-discharge.

Educating the patient about his diagnosis through the hospital stay. Discharge planning ideally should start as close to admission as possible. Discharge planning on the day of discharge is very ineffective, leading to many errors and omissions. We liken it to cramming for an exam on the day of the test. Patients cannot be well prepared in this manner. The RED intervention starts within 24 hours of the patient's admission to the hospital and continues every day until the patient is discharged from the hospital. As discharge advocates, we meet with the patient everyday to allow for teach-back. We update him on new information and answer any questions that he might have. We also give the patient a business card with our phone extension so he can reach us using his bedside phone if needed during his hospital stay. And we also touch base with his medical team every day, to find out what the plan is for the day, what other things we need to set up for the patient, or any other teaching that they feel the patient needs.

Making appointments for clinicians for their follow-up and post-discharge testing. We attempt to schedule all primary-care appointments within two weeks of discharge from the hospital. Prior to making these appointments for patients, we review with them the location of their PCP, we ask them what is the best time of day for their appointment, what days of the week they can make it, and how are they going to get to their appointments. If it's maybe another care provider who will be taking them, like their son or their daughter, we might call, and if they're going to need to get time off from work to discuss the time when they can get their mother or father to their appointments. Patients who have appointments that they're able to make it to are very more likely to go and follow up with their PCP. We also discuss with them the reason for their follow-up and the importance that they go to these appointments to make sure that everything is going as it should when they leave the hospital. And also patients, I'm just going back to that point number two, patients who don't have a way of getting to their first primary-care appointment, we will provide a cab voucher for them so that they're able to get to that follow-up appointment.

Discuss test studies completed and who will follow up on results. Often this line of responsibility is not clear. With the RED discharge test and studies done in a hospital are discussed with the patient and we also put these pending tests discussed on her written discharge plan, which we call her after-hospital care plan, so that the patient can discuss this information with her PCP at her follow-up appointment. We also talk to the patient about tests that may be recommended for her to have done on an outpatient basis; and if possible, we schedule these tests or studies for her before she leaves the hospital, so that she doesn't have to schedule those when she gets home.

Organizing post-discharge services. At Boston Medical Center, there are many different clinicians who organize post-hospital services. We collaborate with other clinicians involved with the patient to ensure that the patients understand the services that they're going to be receiving when they leave the hospital. We talk to them about how they're going to be receiving the services, and we document this information on their after-hospital care plans. For example, if we have a patient who is going to be having a visiting nurse agency come into his home after he leaves the hospital, we talk to the case manager to find out which agency is going to be coming in. The reason for that is that, one, the patient can expect the visit to happen or when he's going to be contacted at home; and we also give him the number to the agency in case he needs to call the agency with any questions that he might have. We also contact the case managers, the social workers, if we identify any issues that we feel that they need to address that they may not be aware of, so we try to use the resources we have to provide the best services for the patient before he goes home from the hospital.

Slide 49 is component number five, confirming the medication plan. I think that confirming the patient's medication plan can be the most challenging. As discharge advocates, the first time that we meet with the patient, we sit with him and we discuss his current medications that he's taking at home, how he takes them, why he takes them and when he takes them. We also confirm the pharmacy that fills his prescriptions, and we attempt to medically verify his medication allergies. Many times patients don't know their home medications or doses, and sometimes they assume the hospital knows what they're taking at home, that it's in their record. If we can't really get a clear sense of what they're taking from them, we call the pharmacy, we might call another family member to bring in an accurate list for us of medications from home, and sometimes we'll call the PCP's office and ask them to fax us over a current list of the patient's medications so that we can get a better sense of what he's taking. Discussing use discrepancies with the medical team should be done as soon as possible. Clearing them up early in the admission enables the patients to receive their correct home medications in the hospital, if that's appropriate. Oftentimes the inpatient med rec can be wrong, and patients are actually getting medications that have been discontinued a while ago, or that they're no longer taking, and there can be omissions to medications that they should be getting in the hospital, because the hospital doesn't have an accurate list of what they're on. Also, getting this list reconciled early in the hospital stay avoids delays on the day of discharge from an accurate medications list. Sometimes there's been a delay in a patient's discharge as we try to confirm up really what her plan is and what the medications are that she's supposed to take at home so that when she gets home she has a clear sense of the accurate list and can compare it to the medications that she's taking.

Another component of this is talking to the patient about her plans to pick up her medications when she leaves the hospital, and what to do if the pharmacy cannot or will not fill a prescription for her. We've had patients who have left the hospital with the intention of picking up medications, only to get to the pharmacy and find out that the insurance that they have either doesn't cover that medication or they have to have a pre-approval before they'll fill the medication; and they go home sometimes without medications that they really need, you know, be it like a prednisone or a certain insulin or a blood thinner. So it's important to let the patient know, first of all, how he's going to get his medications before he gets home, and what to do if the pharmacy can't fill the medication for him. We also offer patients a pillbox to organize his daily medications. It's color-coded and it corresponds to the medication schedule that we give him in his written after-hospital care plan.

Reconciling discharge plan with national guidelines and critical pathways. We refer to the national guidelines when appropriate to make suggestions to the medical team. For example, this may be done for

a patient with a diagnosis of hyperglycemia who has a history of diabetes, and we're looking to see that he doesn't have an order to be seen by the diabetic nurse practitioner or consult into that, so we might suggest to the team that they put a consult into that; or looking at his documented medications and then talking to the patient to find that he doesn't have an aspirin ordered or a statin ordered and that's something that I know a lot of diabetic patients take; so we might question the team as to why those things aren't there for the patient. You know, we find sometimes that some of the doctors are hesitant to add some of these things on, and sometimes they'll refer these things to their primary care physician. I think even if they don't write it, you know, just at least to the team, document it so that the primary care physician can see that this is something that they might want to do. We sometimes will make recommendations that they put it on the discharge summary for the follow-up PCP appointment so that they can see that this is something that should be considered.

Reviewing appropriate steps to what to do if a problem arises. This is done, I think, you know, with even diagnosis-keeping so pretty much on a daily basis going and talking to patients about their diagnoses and what to do, you know, say if it's with asthma. So if you go home and you're using your emergency inhaler for every four hours, then that's the time that you need to call your primary care physician, because your asthma is not well-controlled; and if you are using your inhaler more than that and you can't catch your breath, then you need to call 911. So this we do and we do it every day and we do it with teach-back so we're sure that patients are understanding what we're teaching them. We also tell them where to find contact information for us, for the discharge advocate. If they need to contact us when they get home, we have that information spelled out clearly on the front of their healthcare plan, and also the number for their PCP in case they need to contact their clinical office. So in terms of expediting transmission of the discharge summaries to PCPs, all of the patients that we have enrolled in our study for Project RED or who get a RED discharge, they have their discharge summary access to their primary care physician, along with a copy of their after-hospital care plan to their primary care physician within 24 hours of discharge from the hospital. Oftentimes, you know, we find that the discharge summary, we have it, and a lot of times it's not finalized by the attending, but sometimes that's not done for a couple of weeks, if not more, but we fax over the discharge summary that we have to the PCP within 24 hours.

Assessing the degree of understanding by asking the patient to explain the details of the plan. Again, this is done by teach-back. "Tell me what is the plan for when you go home?" You know, what are you going to do, what are your signs of an emergency? What are signs that you need to call your primary care physician? Let's talk about what you're going to be taking for medication. And a lot of this has to do with teaching, and then we put this all together for the patient in his written plan, which is his after-healthcare plan when he leaves the hospital. The AHCP is designed to clearly present this information to patients at all literacy levels. At times it requires us to contact family members if we find that the patient really isn't taking in the information, or able to tell us back what his clear plan is, we'll call in a caregiver or a family member who helps to take care of that person so that they are aware of what the plan is for when they go home. And at times, depending on language, you may need to use an interpreter to help to get this plan through to the patient.

Give the patient a written discharge plan at the time of discharge. So, again, this is the after-hospital care plan, and that's our written discharge plan for the patients; and we call it that because it was determined that some patients are confused by the word discharge, so we call it an after-hospital plan. This booklet is individualized to each patient and contains these five elements: we include diagnosis, medications, follow-up appointments, pending tests, and tests that require follow-up. We might also include in there things for patients so that they can keep track of their blood sugars at home, like glucose, weight loss, peak flow charts, things to help them keep track of their health at home, and things that they can bring to show their doctor on how they're doing at home. Patients that we have who smoke, we also provide them with information on smoking cessation in case they decide. That's something we encourage them, to stop smoking. If they're not ready at the time for us to call into the Boston Medical Center smoking cessation program and set them up with that, we at least give them the number in the hopes that that's something they'll decide to do when they get home.

Okay, so starting with Slide 55, we have a couple of slides here that show an example of some of the pages that we include in the after-hospital care plan; and this is our cover page, which as you can see

has their name, the date they left the hospital, and the contact numbers that you write on front for the discharge advocate or their primary care physician. If we can, we include a picture of their primary care physician and their discharge advocate. This is an example of a medication schedule and typically it's broken down into morning, noon, evening, and bedtime, if appropriate. And some of the things that we put on there is the reason they're taking the medication, the medication name, how much they're taking, and how they take the medication; and a lot of patients tell us that knowing why they're taking the medication and having that on there is very helpful to them. They oftentimes take their medicine, but they're not really sure which pill is for what. So that's very helpful to them. Also, with a medication schedule, if we have somebody who is on a prednisone taper, that will come out as a separate calendar schedule; and a lot of patients find that very helpful as well, especially when they're on a taper trying to figure out how many pills they're taking every day is helpful to them.

This is an example of how we show a patient when their primary care physician appointment is, listing what their hospital diagnosis is; and on this page we would also put other scheduled appointments for patients if they were already scheduled for them, be it with other specialties or if we had scheduled other appointments or tests for them it would also be on this page. Each one would be in a different color, which would correspond to this next slide and into a calendar, so they would know to match it up with the day on their appointment page. So we indicate to them, when they left the hospital, when they're going to be having a follow-up phone call and when their appointments are on this calendar. Other pages that we sometimes put in here, we talk to patients about their diet and exercise, so we put recommendations for diet in there. Either a diet could be the doctor is ordering or recommending, or, say, somebody with high blood pressure, we'd recommend a diet low in salt. We also include with the after-healthcare plan, we will give some of the hospital handouts and go over them, maybe if they're on Coumadin we'll go over their Coumadin teaching, you know, what an appropriate diet is when they're on Coumadin. If they're diabetic, what an appropriate diet is for a diabetic. And then we also talk about, like I said, exercise, you know, are you walking, diet and exercise are also included in this. And this healthcare plan is started on the day of admission. So after we have our first meeting with the patient, we start entering data into the healthcare plan, making it a work in progress throughout the patient's stay. It just makes it much easier to have all of this information started in there, so that on the day of discharge, there's not much to do to finish putting it together for the patient.

And the last component which happens after the patient leaves the hospital is the telephone reinforcement of the discharge plan. And we call patients within 72 hours of discharge from the hospital to assess their status, to review their medication plan with them, review and remind them of their follow-up appointments, and help them to troubleshoot if they are running into any problems, and tell them how they can resolve those issues. Prior to discharge and during the hospital stay, it's important to verify the patient's phone number. Many times contact numbers change and they're not updated in the electronic medical record, making it difficult, if not impossible at times, to contact patients after the discharge from the hospital. It's also helpful to ask what is the best time to call. You want them to answer the phone when you call and when you reach them, you want it to be at a time when they are able to talk to you or at a time that's best for them.

Okay. Although RED was shown to be cost-saving, we wanted to see if we could cut down on the time needed by hospital nurses to deliver the RED component, so we sought to determine if Health IT could assist with providing a comprehensive discharge. Our thought is that Health IT can improve the delivery of the RED discharge. Working with Northeastern University, a virtual bedside education system was developed and we are now in the process of testing Health IT using an ECA or an embodied conversational agent to assist the nurse with the RED discharge; and some of the benefits of the ECA or the embodied conversational agents are enhanced patient education before discharge, reinforcement of this education, emulating face-to-face communication as they would with a person, developing therapeutic alliance, and helping to determine competency; and that we use a lot when the ECA is going over their medication.

Using IT, the creation of the after-hospital care plan is now automated by means of a workstation into which the patient's data is entered. When the information is complete, the after-hospital care plan is

printed out. The after-hospital care plan information is then downloaded to a portable kiosk that is brought to the patient's bedside, and you can see that in the illustrations on the slide of how this is done.

Patients interact with the ECA, whom we call Louise, using a touch screen while reviewing the after-hospital care plan together. After the session is complete, the discharge advocate addresses resulting questions or issues. Health IT pools can assist in transferring clinical information more accurately and efficiently between healthcare settings. And our future goal is to integrate the workstation into the hospital's electronic health record system, allowing for exportation of this information to the patient's ambulatory EHR.

In conclusion, a comprehensive discharge as endorsed by the NQF Safe Practice 15 can be successfully implemented using the 11 components of the RED discharge, improving patient safety, satisfaction and clinical outcome as well as reducing healthcare costs. And I'd like to thank you all for listening, and on this last slide here there is some general information if you'd like more information on Project RED or on how to contact us.

Hayley Burgess: Thank you, Ms. Visconti. What a great presentation and the communication that you all have with your patients and clinicians is quite impressive. The detail is absolutely needed.

Kimberly Visconti: Thank you.

Hayley Burgess: It's very interesting. The discharge systems practice is so closely tied with medication reconciliation.

Kimberly Visconti: Right.

Hayley Burgess: And that always makes me think of Dr. Peter Angood from his Joint Commission days, so here we go, Peter, who really needs no introduction. If you've been in this webinar series with us, he's the Senior Advisor for Patient Safety at the National Quality Forum, and is the lead for the Safe Practices for Better Healthcare. Dr. Angood will finish out Chapter Five for us by presenting on practical implementation approaches to patient care information, which was formerly the critical test result practice, order read-back and abbreviations, and labeling of diagnostic studies. Peter, always a pleasure. We're looking forward to your perspective.

Dr. Peter Angood: Well, thanks, Hayley, and it's actually my pleasure to be here again this afternoon. I learned a tremendous amount from those first two presentations and I would like to thank both presenters for the detailed information and practical tips that we all obtained in that.

This afternoon we are trying to cover these five different practices. I don't have the added advantage of the other two presenters today of still being in the clinical practice environment; but as Hayley says, I spend a lot of time with The Joint Commission, as well as my previous career, addressing many of these issues, and the whole issue of communication is clearly a prevalent and persistent issue in terms of trying to improve the overall quality and safety of healthcare.

Communication, as we all know, still comes in at around 75%-80% of the time as a primary identified item in any of the root cause analyses around the events. And we continue to look for ways to try to improve the communication, as well as to try to have that become part of the culture of healthcare, so that the expectation becomes open flow of information and a commonality of the information for both providers as well as for the patients, and this is much easier said than actually done, for any of us to have happen in the individual institutions, and so those two presentations were pivotal in terms of giving you some practical next steps.

The three practices that I'm gonna cover will be not quite as hands-on in the field, but will be more of a discourse on some of the specifics in these practices and try to help you continue with your focus on how to approach these practices overall.

As Hayley mentioned, the Safe Practice 12 or patient care information had started out as a main focus on the communication of critical test results; but in the dialogue around the safe practice, it really is an awful lot about the whole concept of handoffs or handovers and it's the importance of trying to get the appropriate type of information communicated in understandable segments, so that both the providers who are giving off the patient care or receiving patient care or the patients and families themselves are able to understand what's going on.

Now, as you can see on the slide it's really a pivotal point in all of this. The three sort of main components for me in this are that there is this ongoing fragmentation of care that oftentimes comes in and around hand-overs or hand-offs, and unfortunately these critical test results really become an important component in this communication. As that second bullet on this slide says, up to 50%-51% of these so-called potentially life-threatening critical test results that were – they really are the only ones that get the appropriate attention. And when you audit some of these charts, in 15 percent of those charts actually contain zero information about whether or not the critical test information was actually received or communicated through to the providers. And that's a really sharp number. I think that you know when we look at this safe practice it's beyond the critical test results. The critical test results are kind of the main item that we can look at, but it's really all about communicating to them full or pertinent information and the history, test results, medications, treatments, results, procedure results, etc., and you know many organizations are moving towards improving their hand-off processes; but I just want to continue to emphasize the importance of this hand-over overall.

What we don't understand really is the full impact of these miscommunications. We have situations that pop up in organizations regularly that are dissected, root causes evaluated, communication gets tagged up; but when you look more critically at the communications piece, then there's this issue of the hand-overs; and what we really need is more information overall in terms of the frequency of the occurrence of these hand-over issues, and what we all want is more in the way of the practical solutions towards those. Now, some of what really works has I think been described in these first two presentations: the CPOE approaches for the medication management, the discharge planning; but there are still some very basic issues that can be addressed within organizations, and the so-called SBAR strategy is one that's getting a lot of attention. The situation, the background, the assessment, and the recommendation, the SBAR approach, many organizations continue to rule those out as they look for ways to make these hand-offs become more meaningful overall.

I think back to my own clinical days of trauma surgery and critical care, and you know the hand-offs were anywhere from "You're a smart person, go ahead and look after everything" and then only to go into rounds and figure out that, "Gosh, well, I'm a smart person, but this patient actually needs an operation and I wish I had known about that;" and then to the opposite where I'll spend an hour and a half doing hand-over information on relatively few patients. So finding the right balance of relevant information that's going to give the providers important information as to how to maintain the care is the pivot point, and The Joint Commission has got a good National Patient Safety Goal related to hand-overs, and I'm pretty sure that most all of you are following that in terms of the practicality and the ways in which to address hand-overs.

Now in terms of some of the specifics on this safe practice, I think, as I have been saying, the gaps or the failures need to be better delineated overall, the implementation in a standardized process throughout an organization, whether it's SBAR or another tool that's used, is pivotally important in trying to get a uniform approach across an organization is, I think, for me anyways, as I have reviewed the success stories in the country, a really important aspect of this whole communication around this medical information, whether it's the critical test results or whether it's these other components of a hand-over. It's the standardized approaches, the uniformity of it across an institution, and then the monitoring of the successes of those strategies.

The added component that we think is critically important in this safe practice is that, related to making sure that the patients have access to their information and whether that's a synopsis, whether that's open disclosure in terms of access to the actual medical chart, or whether there are interfaces electronically between the patient and the healthcare facility in terms of maintaining continuity of the information.

Now a variety of institutions are looking for ways to make that information interface between the patients and the providers more so-called “user-friendly” so that there’s not only the open exchange of the information but also that there are guarantees of the security of that information for the patients as well as for the providers.

The safe practice on this one details a number of measurement strategies that I think can be utilized, and I’m not going to go into all of those at this point in time. There’s a variety of things that the patients and families can do over and above what I just described, but at the end of the day, the communications piece is the pivotal point. The communication around critical tests unfortunately continues to be a big problem, and so as long we continue to have you address it through these safe practices, I think there’ll be some improvement. Utilization of the information technology tools will be important in there.

The next two safe practices are pretty much unchanged in this year’s update, and they are fairly uniform to other initiatives that are out there, whether it’s within IHI or The Joint Commission’s Patient Safety Goals. They’re really just concepts that the read-back and the minimal use of abbreviations are important. The bringing of these together as one practice is a part of our efforts at NQF to simplify all of the activity that’s going on out there. We recognize that harmonization of initiatives, simplifying initiatives, is pivotally important. We continue to work with the other organizations as we maintain and update the safe practices, and I think, while we’ve combined this into a single practice, the two components of it are really fairly simple and fairly uniform across the healthcare setting these days. I don’t want to minimize how difficult it can be to implement those, but it merely is two components that have been in place for a number of years now.

The use of “do not use” abbreviations, that list has been pretty standard. It will be undergoing some updates. The Institute of Safe Medication Practices and The Joint Commission have taken primary responsibility for that in the past. There is difficulty even with this list being in place for a number of years for that success to occur in terms of not using these. And you know some organizations take it to the point of saying, “Well, there should be zero abbreviations within our organization.” Well, that’s very difficult to implement, and then you get the gaming as to, “Well, okay, so there’s the ‘do not use’ list, but we’ve got all these other abbreviations that we are going to use.” And the point is being missed as to what is the purpose of having a “do not use” list. The primary purpose is to minimize the opportunity for error to occur because of these abbreviations overall. And if you believe the literature, there is a number of statistics out there in terms of the frequency of these problems. It can range anywhere from 50% to 2/3 of the time – some observational studies have been out there that detected about a 3%-5% error rate just on transcriptions alone, and that the types of errors that occur as a result of these can be profound; and as we all know the heparin overdoses that have popped up a few different times now in the last few years are classic, and that is related to abbreviation problems; it’s related to decimal placement problems, trailing zero problems; and you know the more that we can be specific, in terms of rolling out institutional programs that focus on, “Here’s the list, here’s the methodology that we’re gonna evaluate the list, and here’s the ways that we’re going to monitor it and try to get improved compliance with decreasing the use of the abbreviations” is important.

Now in terms of read-back, there is an awful lot that still needs to be done on that front overall. The read-back ordering is related, obviously, to the use of verbal orders, and to some degree, is also related to the communication of critical test results and documenting that as well; and it’s difficult, if you think about it, to evaluate the successes or compliance if you’re just relying on a system where there’s no documentation. So what we encourage is that organizations take on some form of standardized process to do the verbal communications. The expectation is set that the read-back will occur, and the expectation is set that a written documentation of that read-back has occurred, and that if it’s successful and no error has occurred, that’s noted; and if it’s unsuccessful, that should be noted as well, in that, here’s the error we found. It actually becomes a near-miss event and that sort of plugs up any process issues that could be evaluated, depending on the depth of which an organization is doing. It’s quality improvement on these. So the read-back, while it may seem a little goofy when you’re first starting on it, actually is a very simple step, but it needs documentation. It needs monitoring and it needs to be put in the regular QI processes overall. The other pieces in this again, those organizations that have had successes have taken on a

standardized process, they have taken on a uniformity around their processes, and there is a review on an ongoing basis. Now some of the high-flow theory is like the ICUs or Emergency Departments are particularly prone to errors because of the high volumes that they're dealing with, not just of patients, but of information and order writing, and it's particularly important in those environments to make sure that some form of a read-back process is in place, and that there is clearly minimal, minimal use of the abbreviations, etc. Now this is also an area where the patients and their families can get engaged, and to help the clinicians or the providers understand that they are tuned in. They have the concerns that the patients are getting the right medication at the right doses, etc., and so we encourage the patients and families to sort of tune in that this minimal use of abbreviations and for orders that are being verbally transmitted, that there is a system in place to make sure that there aren't problems. Just in the last month I've heard of three separate incidences of healthcare providers getting their own care and having the fortitude, if you will, to ask when the verbal orders are being confirmed, and each of these three individuals picked up errors just by making that request between the nurse who was about to administer some type of treatment or medication. So even when you're a seasoned user in the healthcare system, you still need to be vigilant overall.

Similar to the other safe practices is a variety of measures that we have listed out in the safe practices manual, and I would encourage you to look at those and to begin implementing some of these activities overall. Now, the third safe practice that I'll talk a little bit about is the whole issue of labeling diagnostic studies, and this is really all about not just laboratory results, but the X-rays or radiographs as well as any other type of diagnostic study, whether it's the pathology biopsy specimens, anything that's related to a patient that separates itself from the patient, but in which decisions are being made. There needs to be appropriate and accurate labeling of those studies and study results.

We hear all sorts of horror stories of the wrong patients getting the wrong results. Even the wrong patient getting treated for bad diseases like different types of cancer and when they don't really have the cancer. And unfortunately, those types of situations continue to occur. On some large volume studies that I try to evaluate this, the significance of this problem, and depending on how you look at it, it can range from like a tenth of a percent to 5% of specimens being mislabeled that can also be identified in terms of a per thousand specimen rate, and somewhere around a tenth of a percent or 1%. I meant to say 1%. One per thousand is a high number when you consider the volume of specimens and around there, there is, as a minimum at least a few years back, Waiter and others sort of decided that in their evaluations there were over 3.5 million specimen labels from 147 labs that they evaluated and came up with that .1 percent rate that I was talking about. Others have looked at it and put the rate up as high as 20 and 30 percent. It's difficult to know exactly what the ramifications for that are in terms of the outcome, but just the fact that that frequency of error is occurring, you know darn well that there are errors in treatment occurring, and unfortunately, we still don't have a good evidence base overall in terms of the specifics on those outcome numbers, and that's where we really need to head in terms of the research component for those who are academically oriented. The specifications within this Safe Practice again pushed towards a standardized approach, a uniformity of approach in monitoring and evaluating the successes or the deficiencies in those approaches and so really the labeling should occur at the time a specimen is being drawn or the images are being created and that needs to be reaffirmed. You can utilize the read-back technique as well as needed, and the whole issue of the appropriate types of patient identifiers is also prevalent there.

As we all know, The Joint Commission has its two identifiers of safe practice, not safe practice, but Patient Safety Goal, and that is incredibly important, I think, overall in terms to push this identification piece, and then issues of laterality whether it's right versus left when it comes to X-rays. It's important when multiple biopsies are being done, whether it's superficial skin lesions or whether it seems like breast biopsies or endoscopy polyps, we need to always ensure that the right specimen, its location, is being matched up to the right person and that the information gets transmitted through. The organizations that are sort of on the forefront of this are implementing bar-coding strategies as well as other sorts of technology implementation, if you will, whether it's bar codes or other types of technology remains to be seen, but obviously bar-coding is the one that's getting the greatest stick at this point in time. I think that my methods for all three of these safe practices is really, look at the processes that are in place now, look for ways to standardize the processes, set some uniformity into place, and then to really look at how you monitor and how you evaluate the successes or the difficulties in terms of maintaining the success of that

strategy. And each of these three safe practices is pivotal in terms of continuing to improve the communication of information around the patient, so that the information is accurate, it's reliable, and it's consistent during the course of a patient's care, whatever type of facility he is in. The approaches that the previous two panelists took with the CPOE and the discharge practices couple in nicely in terms of having this five set of practices to help ensure that reliability of information. So while I didn't get into specific onsite examples like the other two speakers, I've hopefully been able to highlight some of the issues around these three safe practices, and I'll turn it back to Hayley as we continue with the question and answer period. Thank you for the opportunity.

Hayley Burgess: Thank you, Dr. Angood. I always appreciate your time, and thank you to your staff at NQF for supporting these webinars and doing a lot of the behind-the-scenes work for us. At this time, I would like to open the Q&A session, so if you have any questions, please do fill them in on the lower right-hand screen in the Q&A section, and we'll go back to Dr. Bates as our first speaker, and Dr. Bates, I see you've been manning your questions pretty well, and you have quite a spectrum of them there from ROIs for small institutions all the way to using the information that you get from the CPOEs to improve your clinical practice. I'll turn it over to you, and if you don't mind just walking through some of the high points and further discussions that you've picked up on the questions our audience is asking.

Dr. David Bates: Sure. So one really good question came from Bethany Rogers on the overall value or ROI for small hospitals, and that's been much less certain. The applications that those hospitals use tend to be different. She's typed less than 50 bits. You know, very little data from those hospitals. I think it does make sense for them to pair up with bigger hospitals, if possible. We haven't even had very much data from community hospitals. We recently published a study in which we looked at the adverse drug event rate in community hospitals that just came out this year in the *Journal of General and Internal Medicine*. We actually found higher adverse drug event rates in those hospitals and higher preventable adverse drug event rates as well. A larger portion being preventable. And we'll be doing a study now to look at the impact of CPOE in those institutions again because the vendors that are used in smaller places tend to be different than in larger hospitals.

There were a couple of questions about the Leapfrog CPOE instrument. I've provided instructions about how you can get to that. Let's see, and there's another question that I wanted to expand on. Okay, one question was how to use data that focused on specific clinical practices, and the note was that the facilities now can monitor every keystroke that happened. For example, with smart pumps, that they may see practices that they don't like. That's definitely true and we're still working out how to best use information like that. I think one way that it can be used, which is very helpful, is just from the quality improvement perspective at the local level. For example, if a nurse manager sees that one individual's behaving in a certain way that's different from the norm, the easiest thing to do is just to sit down with that person and have a discussion, and that can help with management. I think it's better to try and avoid using information like that punitively. I'll stop there.

Hayley Burgess: That's a great point, Dr. Bates. I think another question that may be on the minds of our audience and has come up in a couple places is about bar-coding, and you had mentioned that potentially that could be a safe practice, and we will be opening shortly, and Dr. Angood can speak more to this that for nominations for new practices for 2011, so please be thinking about that as other practices we would like to see, but as for bar-coding, Dr. Bates, what would you see as sort of a starter practice for bar-coding? How much evidence do we have for some of the components that could be additional specifications for that one?

Dr. David Bates: The evidence is still, I would say, provocative, but not definitive. I think we're likely to see some more work that will come out soon around that that will solidify the evidence base a little bit. I agree with Peter that it's not clear whether it's going to be bar-coding or whether it will be some other method of identification, and that's not really so much the point, so it might verify deeper. For example, if that approach gets less expensive. I do think that the practice will likely look at bar-coding both in the pharmacy and then the checking of bar-coding at the point of care, and that both of those are likely to be included in a safe practice.

Hayley Burgess: Very good. Any other thoughts on meaningful use? The status of those definitions and when we might hear more from the committee that you're with?

Dr. David Bates: Sure, so where things stand with that is that the committee made its recommendations this summer, and those were then released for public comment. We got a lot of public comments, many of which did relate to CPOE in the inpatient setting. Revisions were made. All those recommendations were then sent to the office of the National Coordinator and to the Centers for Medicare & Medicaid Services, and they actually have to take the recommendations that we made, which were at a fairly high level, and transform them into something that can be used for payment, which is pretty challenging. Those rules, as they're called, will be released some time in the next several weeks. We're anticipating them in the first couple of weeks of December. They'll then be made available again for public commentary, and then they will be finalized probably in the February timeframe. And there's great interest in getting them done, because organizations naturally want to know what the rules of the game are going to be in terms of payment.

Hayley Burgess: Thank you so much, Dr. Bates. A wonderful presentation and excellent questions. Thank you to the participants for posing those as well. Let's move to Ms. Visconti now and talk about discharge systems. This is a hot topic nationally. National Priority Partnerships are certainly talking about the continuum of care. It's in the safe practices. We know it's important and we know that we fail many times. One of the questions that I saw that was very interesting and is always a challenge is, what if they don't have a primary care physician or what if they don't have a clinician that you specifically are aware of when you're doing their care plan? How do you all handle this?

Kimberly Visconti: Actually, that is a great question, and oftentimes we have patients who come in who don't have primary care physicians, and we actually will set up them up with a primary care physician and their first appointment to see that PCP, and in doing so, we try to do it at a clinic that's convenient for them. We ask them if they would prefer to see a male or a female, so we run into that all the time and we absolutely set patients up with a primary care physician.

Hayley Burgess: That is wonderful, and that leads us to our next question which is how much staff. I see that as a question coming across quite a bit, because there certainly are concerns, especially in these days with budgetary issues where we've been cutting staff and we know that we need staff to help with the discharge process. How do you all manage your discharge advocates, and how does that work for you, and are there other specialties that are involved with you beyond nurses?

Kimberly Visconti: So far, discharge advocates have been used at Boston Medical Center and our research setting. So at this point there really are no full-time physicians or even part-time physicians where we're using discharge advocates. In the study, we use discharge advocates who are registered nurses, so the equivalent of probably one full-time nurse throughout the entire week which would equate down to about five hours or so at a time, I'd say, that a discharge advocate was used. So looking into the future, I mean if, depending on hospitals implementing it, depending on who you know they use, they could use existing staff. They could rework their workflow. Look at different roles and responsibilities of different people that they have, but you don't really have clear-cut answers for that.

Hayley Burgess: It will continue to be a challenge for many of us, I'm sure.

Dr. Peter Angood: Hayley, it's Peter. I'd just like to add a comment on this last set of questions and that is, however the mechanisms are put into place, I think it's important that we step back and make sure what are we actually trying to achieve. While obviously it's to improve communication, but it's also making sure as best as we can that the patients understand what their problems are, what's being done to help manage those problems, and so that as the patients move forward, whether they have a provider or not, they at least give them their own level, whether it's from sales, or a family member, or significant other, they have some rudimentary change, understanding of what's going on. You know, having spent 25 years looking after indigent trauma patients, I know how complex that actually is to get a comfort level from the degree of understanding, but we're at a clearer stage now in terms of our evolution as healthcare systems that the patients need to know their information, and there needs to be a reasonable attempt to have

them understand what their information is, so they can take their responsibility. It's a shared responsibility, but we shouldn't get totally distracted on just having the systems or the failures of the systems there because there is some direct communication needed as well.

Hayley Burgess: Absolutely, Peter. That is a great point and I really like the term after-hospital care plan, so thank you for planting that seed. Ms. Visconti again, wonderful slide deck. I really appreciate how you tied that back to the safe practices based on the components of the Red Program, and you all had some great resources that I'm sure our audience is going to appreciate.

Peter, any last comments from you before we turn to our patient advocate? Any future that you would like to tell us about the safe practices or the serious reportable events? I know that's been a hot topic lately with you all at NQF.

Dr. Peter Angood: Sure, and thanks, Hayley. The safe practices, as we've mentioned in previous webinars, move into an annual update cycle. We have recently completed cleaning up the 2009 version that was just released in the spring, and so we really did not do major substantive change to the safe practices, but we did find some areas where we were able to get rid of some of the duplicity of terms or some ambiguities, and those have been approved by our CSAC, our approval body, if you will, and that will be ratified by the Board in the next week or so, and the update will come out by the end of the year or certainly in the first few weeks of January. And during 2010, we will be doing a deeper review of the safe practices for the release of safe practices in 2011, so keep an eye for the call or the solicitations for additional safe practices. And that is important because that's the information that we utilize to help to revise, update, and manage these safe practices overall. Clearly communication is an important part in all of this, but I would encourage all of you to look at the 34 safe practices, see where you think some gaps or some holes are, and offer up suggestions for how we can continue to move forward. And as we continue to refine the safety portfolio at NQF, we are looking for ways to really weave together the safe practices more closely with the serious reportable events and with the portfolio of patient safety measures that we have. We just met yesterday and today for the first time with the Serious Reportable Events Steering Committee for the update of the existing Serious Reportable Events on this concept of weaving them back to the safe practices, and making them complementary is certainly resonating with that steering committee; so as you have your own ideas for future safe practices, please keep that concept on Serious Reportable Events in mind as well, because we are looking to not just weave the programs, but also to look at ways to make the two programs be highly relevant, not just in the hospital setting, but to other environments and other settings of care as well, so thank you, Hayley.

Hayley Burgess: Terrific update, Peter. You've already heard from Arlene once today as she opened our call. I'd like to turn back to her now for her comments regarding the role of patient advocates, which includes all of us as clinicians, caregivers, and patients ourselves. Thank you again, Arlene.

Arlene Salamendra: Thank you, Hayley. First of all, I would like to make reference to an article you see there on the screen written by Dr. Charles Denham and fellow patient advocates, "Are You Listening? Are You Really Listening?" This article illustrates everything that I would like to say to everyone today as a patient. Secondly, when there's a breakdown in communication between a patient and family and their caregiver, the results can be devastating. Mistakes happen. The impact that this experience would be life-changing to everyone involved, including the providers. If only, if only; those are two words that will be said over and over again. The pain and the sadness will be a memory embedded in everyone's heart. A career full of successes and compassionate care will be reduced to the single incident that will forever haunt the caregiver. Everyday as providers you make choices. Choose to take time to listen, to understand the patient, and to make sure that the patient understands you, and to achieve quality healthcare. This is a journey that we can both take hand-in-hand. Thank you for choosing to be here today. Thank you.

Hayley Burgess: Thank you, Arlene. Your words always remind us of the core of healthcare, which is our patient; and the most simple of error prevention is to listen and communicate clearly. We're running out of time, so we'll quickly go through these last couple of slides. There is a forum on safetyleaders.org. If there are other questions that you have for the panelists, we are happy to entertain those after the fact, so

please do go there. We've already seen some activity today, so that's exciting for us, and then finally, just to remind you we do have a December webinar. This will end the 2009 series, Optimizing Your Workforce for Safe Care, and we'll be putting out the 2010 schedule shortly working with NQF, so thank you so much for joining us today. Our panel has all done a fantastic job, as we knew they would, and we look forward to seeing you in December virtually. At this time we'll end the call. Thank you.