May 12, 2015

Breaking Down Barriers to Aseptic Catheter Insertion

Speaker 1: The following is a recording of the Kathy Drury May National content calls with the American Hospital Association on May 12th, 2015, at 11:00 a.m. Central Time.

Speaker 2: Excuse me everyone. We now have all of our speakers in conference. Please be aware that each of your lines is in a listen only mode. At the conclusion of today's presentation, we will open the floor for questions. At that time, instructions will be given as the procedure to follow if you would like to ask a question. I would now like to turn the conference over to Ashley Hoffman. Ms. Hoffman, you may begin.

Ashley: Hello everyone, and thanks for joining us. We're excited to have you with us at today's event, which will focus on proper insertion techniques. Before we begin today's presentation, just a quick reminder that this event is a webinar, so please be sure log through the webinar link in order to see the slides. We also know that many attendees prefer to download the slides prior to the webinar, so I just wanted to remind everyone that the presentation is uploaded to the project website approximately one week before the webinar. We'll also be posting a recording of today's event to the project website later this week.

Now, I'd like to introduce today's presenters. With us we have Dr. Milisa Manojlovich, an Associate Professor at the University of Michigan's school of nursing, and a member of the board of director's at the AACN Certification Corporation Board. She is currently co-investigator for 2 projects funded by the agency for health care research and quality, expansion and the national implementation of a comprehensive unit-based safety program to reduce CAUTI, and also the national implementation of CUSP to reduce catheter associated urinary tract infections, in long-term care facilities. Dr. Manojlovich is interested in understanding how the practice environment in acute care settings affects nurses' communication with physicians and how this relationship contributes to patient outcomes.

Also with us today is Stacy Martin, the manager of infection prevention and control program at Moffitt Cancer Center. She received her B.S.N. from Florida State University and has worked in infection control for over 20 years, and at Moffitt for 9. Stacy is board certified in infection control and remains active in both state and local infection control organizations. She is the CAUTI committee chair person in a national group of comprehensive cancer center infection prevention.

Also with us from Moffitt is Stephanie Carraway, an infection prevention specialist. She currently holds a graduate certificate in infection control from the University of South Florida and will soon complete her master’s in public health with a concentration in infection control. Stephanie has been in infection control for 5 years and is also very active in state and local organizations. She is responsible for the CAUTI surveillance improvement activities at Moffitt Cancer Center. Now I would like to turn the call over to Dr. Manojlovich.

Milisa: Thanks very much, Ashley. Hello, everybody. I'm just so happy to be here today and talk to you about infection prevention through better techniques of aseptically inserting urinary catheters. The first thing, though, is I'd really like to understand what is your role at the hospital, so if you wouldn't take a minute, please, to answer the question on the slide, it's a polling question for you, I'd like to understand who we have on the call with us today so that I can perhaps target some of my comments to the groups who are best represented. If you could just take a minute now, and let me know what is your role at the hospital, please. Fill in the little blank there on the screen, so that we can figure out who's on the call today.

Ashley: Go ahead and select the blue radio dial for your response. We'll give you about 30 more seconds to get that in. Okay, and there are the results.

Milisa: Super. Thanks an awful lot for helping me with that, Ashley. I got tongue tied at the wrong point in the conversation, so thanks so much for that. All right, then. Next slide, Ashley, please. So the learning objective for our presentation today is to first have you understand some results from a recent study that we did here in Michigan that identify some common barriers to the use of aseptic insertion technique. You will be able to describe the 4 Es. I'll be talking about what those are in just a minute, and I'll also be describing some associated strategies to guide practice change, because that's what has to happen in order to get us to practice better. We'll be applying the concept of mindfulness to catheter insertion, and then I'll be turning it over to Stephanie and to Stacy, who will be talking about how one hospital assessed their catheter insertion practices and how they implemented strategies to correct improper techniques. Next slide please.

We did the study, or actually quality improvement project in our ED here at the University of Michigan, and the focus was on urinary catheter insertion. What we wanted to do, was to determine if changes had contributed to improved catheter insertion practices. By changes, I mean two different changes. First of all, in the hospital, we went to an electronic health record, and there are some prompts on there for is this an appropriate indication for a catheter, does the patient really need a catheter, those sorts of things. So those are some changes at the hospital level that may have contributed to catheter insertion practice change. And also nationwide, as you know, that the hospitals now no longer get reimbursed for infections that are caused by catheters that are in too long. So we wanted to see if these changes both at the hospital and at the national level contributed to changes in catheter insertion practices, and we also wanted to explore barriers and facilitators to the adherence of urinary catheter insertion guidelines. Next slide please.

What we did was we sent out two teams of nursing students. Each team consisted of a graduate nursing student and an undergraduate nursing student. What they did was they went into the ED in 4 or 8 hour blocks of time from 6:30 in the morning until about 9 at night, and they observed nurses inserting urinary catheters. This was done early last year for the first 6 months, basically, of 24 teams, and the method that they used involved actually observing the catheter insertions, they used checklists to check off whether there were components of aseptic insertion technique that were used or not, and they also took field notes. Just to be clear, the nurses knew they were being observed, so the students would go to the ED, they'd sit in on the mini report, they would tell the nurses about the study. They'd say, you know if you have a catheter that you think is going to be inserted, let us know please, and we'll come and observe. All of these were done with the nurses’ full support. Next slide please.

In that 6 month period we observed 65 patients who had their catheters inserted. In 81 insertion attempts, because some patients had more than one insertion attempt. They used the buddy system in the vast majority of cases. In fact, in only 11% of cases was no one else present. It too about 6 minutes to insert the catheters, and some more, I don't know, disturbing results I guess is a way to think about it, is that there was no hand hygiene done before 74% of the insertions, and there was no hand hygiene done in 91 of the cases after insertion. Moreover, in 59% of the insertion attempts, there was a major break in sterile technique. These findings were pretty disturbing to us. She's good, Ashley, thanks. So much you got to it before I even asked. So what we were able to do in our analysis was actually determine that there were 3 major categories of breaks in sterility.

The first category we called contamination of the sterile field, and this involved things such as the nurse touching items on the sterile field with her bare, non-sterile hand, or a stethoscope or garment or part of the body of the nurse touching the sterile field. The second category was contamination of the catheter itself, and examples from this category would be like a female patient's labia closing over the catheter during insertion and contaminating the catheter as it was being put in, and the nurse did not get a new one, or the catheter kept touching genitalia or the inside of the patient's leg, or something else before being introduced into the urethra. The nurse being aware of this and sometimes even commenting on it to the students who were doing the observation, but still going ahead and inserting it anyway. The final category involved a breach of the sterile barrier. Many times, what the nurses would do was use their sterile gloved hands to swab the genitalia without using the tongs. You know how in the kit there are those little cotton balls that you soak in antiseptic solution? They would just take that with their sterile hand to clean the swap, and use that same hand without changing sterile gloves, without doing anything else, to insert the catheter. This was a very common practice. I'll be talking more about that in a little bit. The final example in this category would be a nurse inserting the catheter, ripping the sterile gloves, realizing that the gloves were ripped, not getting new ones, and just carrying on with the procedure. Next slide please.

We also found some barriers to the aseptic insertion technique. We found, for example, that there was inconsistent or inconvenient location for the hand gel. For example, it wasn't located in the same spot outside every patient's cubicle, or sometimes it would be against a wall, and there would be a stack of supplies in front of the wall so you'd have to reach over and up in order to reach the hand gel. In many of those cubicles there was little room to set up the sterile field, the cotton wisps clung to the tongs in the kits, which is why the nurses gave up using the tongs and just used their gloved hands instead. It was common practice to don sterile gloves over the clean gloves. The nurses wear blue gloves all the time in the ED, and it's almost like it becomes a second skin for them. They forget that the gloves are on, and they don't take the gloves off to wash in between procedures. Next slide please.

So thinking about these findings, and thinking about what can we do to overcome them, and I guess is should ... Maybe I'm wrong, but my guess is that our hospital and our experience is not unique. That similar experiences could be found all over the country if we were to look. But maybe I'm wrong about that. If I'm not wrong, we can think of a way, perhaps, to deal with some of the barriers that we saw, and maybe to address some of the barriers by using what is known as the 4 Es. This is a framework that Peter Pronovost from Johns Hopkins came up with, and it's a real elegant way to think about how can we overcome some of these barriers. It includes things like engagement, education, execution, and evaluation. Next slide.

So when you think about engagement, how can we engage our staff better? Unfortunately activities strictly within the nursing domain may not be perceived as being important or of much value, compared to activities that cross disciplinary boundaries. When you think about what nurses do, they often work behind closed curtains. We are of course protecting patient privacy, but then no one else can see what we're doing. Being the modest people that we are, we don't afterwards go out and shout to the world all of the wonderful things that we do. Those activities that we do behind those closed curtains remain hidden, but therefore by being hidden, though, we don't get to share with others what we're achieving.

Also, unfortunately in the hospital there is a hierarchy where physicians are higher on the hierarchy than the nurses, so things that don't necessarily cross those disciplinary boundaries, don't necessarily get as much attention or as emphasis as the ones that do. Another problem with engagement is that catheter insertion can be perceived as one of many tasks that a nurse has to do rather than as a component of evidence-based practice. So if you think of it as a task that just you have to check off my list of things to do, you're not thinking in terms of your nursing practice, or your practice as a health care professional, perhaps. That can cause some disengagement to occur, because you are not fully engaged in all of the activities that have to do with your professional practice. Next slide please.

Some strategies to promote engagement would include things like thinking about aseptic insertion as a component of evidence based practice. No matter what the discipline is. Just as in nursing, medicine too has infection control responsibilities. Medicine, too, has to look out and prevent infection when they do their procedures. For example, putting in central lines. There are evidence-based practice guidelines for those activities, too. The physicians are just as compelled as the nurses to, then, follow evidence-based practice guidelines. It's important, I think, to develop a culture where evidence-based practice is recognized and rewarded. This is a big emphasis in the CUSP program, is this whole evidence of developing a culture. If you think in terms of evidence-based practice, that's a good cultural element to have. Also, if we think about nursing practice components rather than a set of tasks to be completed. If you think of your nursing practice that has different elements and activities within that realm that have to, not necessarily with assessment, but actual interventions, perhaps. If you think of it like that, it might get away from just thinking of it as an individual or a separate task. Next please.

Another one of the 4 Es is education. This is really very big for a catheter insertion as well as for other activities that we do. There are really very few similarities between the controlled environment where we learn to insert catheters and the chaotic work environments in which we practice. This goes for nurses as well as physicians. For those of you in the audience who are nurses, if you think about your early nursing days, when you learned how to insert catheters, it was very controlled. You had an instructor with you, there was lots of time. You inserted the catheter into a dummy or into a patient who was willing, one way or another. Physicians, many times, they insert catheters as medical students in the OR. They're invited into the OR, where the patient is already anesthetized and draped and sterile, and then the medical student can insert a catheter in that controlled environment.

When you think of that and you think of the real work environments in which we do the work, there's a huge disconnect. When we don't teach our health care providers to insert catheters in the same environment in which they will practice, they don't really have the skills because they can't maintain that aseptic technique, given the work environment constraints. In addition, unfortunately, we learn by watching what others do, and people may observe peers inserting catheters and notice that aseptic technique is not used and think well, maybe I don't have to do it. Maybe that's just one of those things that I learned in school but gee, in practice, nobody seems to be doing it that way, so maybe I don't have to do it like that either. Next slide please.

Some education strategies that you can use include developing competencies and considering maybe even an annual competency test for catheter insertion technique. This could be something as simple as peer-to-peer eval tool. I'll watch you insert a catheter if you watch me insert a catheter. Putting it at a competency level raises it up, again, out of that task realm to the professional practice realm, which is desired. In some places, catheters are inserted by techs and not licensed providers, so we can always require that there be oversight for catheter insertion by a licensed provider if a tech is the level who is doing the insertion. Using a buddy system is recommended. Especially at first, but I think obviously you need to make sure that they person that is doing the insertion, then, is doing it appropriately and following the evidence guidelines. It can be important, too, to develop a policy on catheter insertion techniques if none is in place. These policies, then, can serve as a guide or a step-by-step procedure that especially newer or novice personnel can refer to before they actually do the process so that they can think through the steps involved. Next slide please.

Before we even talk about inserting catheters, though, we really should be educating our staff about alternatives. Alternatives to indwelling urinary catheters should be considered first, and all staff should be educated on this. For example, using bladder scanners to assess the volume of urine that is in the bladder. Think about perhaps using a straight cath for one time or intermittent needs, and offering condom catheters to men who do not have urinary retention or obstruction. By providing our people with the education that they need to consider alternatives, the chance of inserting a catheter, then, may be less likely. Next slide.

This brings us to thinking about educating our staff, or reeducating our staff about appropriate indications. I know HRAT has spent a lot of time and energy on this, but it's always worth repeating, I think, to remind our people about the need to insert catheters only for appropriate indications. They're listed here on this slide. There was a study that was done that showed in 50% of the cases, when catheters were inserted for inappropriate reasons, those patients were more likely to develop a catheter associated urinary tract infection. So it's a very good reason to insist that our catheters are inserted only for appropriate indications. Next slide please.

What are those components of aseptic insertion? I think this is something that can be also very difficult to understand, or can be maybe made more complicated than it really is. We can educate all staff that the components of the aseptic insertion are really pretty simple. You need a sterile field, you need to do hand hygiene before and after insertion, you need to use those sterile gloves, drapes, and sponges, use an appropriate antiseptic or sterile solution, and if the catheter's accidentally contaminated, it is discarded and a new sterile catheter is obtained. So there's really only 5 things that you need. When you say it like that, gee there's only 5 components to aseptic insertion, sometimes that simplifies it and makes it easier for people to think about hmmm, I could do this, then. Next slide please.

The ANA has come up with a sample insertion checklist. It's actually a 2 page tool. I've got the link to it there at the bottom of the slide, and what you see in front of you is the second page, where it's actually the checklist itself. The first page of the tool is really very cool, because it provides an algorithm starting with the CDC criteria for indwelling urinary catheter insertion, and walking you through the different components of the algorithm to determine whether or not the patient should have a catheter inserted. I think this is another important part of educating our staff, and if you haven't used the ANA tool yet, you might want to think about including it in your tool kit for your staff. Next slide please.

Wow. Here's another type of checklist. This is actually the checklist that we used in our study. It's a compilation of 3 different evidence-based guidelines that we came across, and we did it this way for the purpose of the study so that the student who was doing the observation would actually be able to walk through the procedure step by step by step and check off whether or not that component was met or not. I didn't mention it earlier, so now is a good time to say that the way we did these observations with the two students was the one would fill out this checklist like you have in front of you and the other student would be taking notes, focusing more on the context of what was going on, focusing on, was it a rushed insertion, was it chaotic, was it a chaotic environment, were the supplies readily available, was the room an absolute mess, a disaster, was there family screaming, yelling, all of those kinds of things, the other person was making note of, while the first student was watching the actual observation and using the checklist.

I wanted to point out something, though about perhaps a downside of this type of a checklist if you're thinking of using it. That is, I want to draw your attention to the one highlighted yellow line there. This comes from an evidence-based practice guideline, that tells us to cover the patient's abdomen and superior pubic region with a fenestrated drape. Many, many, times that was checked off, no. Then the question is, well, because it's checked off, no, does that mean that the procedure was not aseptic? Of course, the answer is no. Of course not. Just because you don't use that drape does not mean that aseptic technique was broken. However, this just raises another issue about this whole area of what actually is ... What are components of aseptic insertion and what are the minimum that you would need to do to have an aseptic insertion? Again, I think sometimes we make it more complex than it needs to be, and we're not paying close enough attention to or to putting enough emphasis on just those 5 crucial elements of aseptic insertion. The ANA tool that I already discussed does a much better job I think, than what we used in our study. Next slide please.

Moving on, then. How do we improve things like execution? Execution, then, has many components. We need to execute a strategy. When you execute an activity, one is lack of awareness. Those who insert catheters may not be aware of the consequences when aseptic insertion technique is violated. Because patients move from the ED to other units and there is no systematic process to let the ED staff know of the patient outcomes. You insert your catheter, you may not even be aware yourself that aseptic technique was violated, and off the patient goes and you never know what happens or what comes back. This can be ... This lack of awareness can really hamper proper execution of that activity. Next slide please.

What can we do, then, to raise awareness? There's several strategies that you can do, both at the unit level as well as at the organizational level. At the unit level, you can report your monthly CAUTI rates at staff meetings, or you can post monthly CAUTI rates in a prominent location. This lets everybody know at the unit level what's going on in terms of CAUTI rates.

At the organizational level, you can post CAUTI rates for all of the units, so that comparisons can be seen. Now, I understand that many times nurse managers, nurse leaders, they'll report on these CAUTI rates for all units, they have the data but they don't actually share the data with their nursing staff or physician staff. It's reported at the meeting, and sometimes just seeing those graphs with one’s own eyes can be really eye opening. For the ED, what you might want to think about doing is figuring out which of the 2 or 3 units are the top units that receive your patients from the ED, getting their data on CAUTI rates and then sharing that back with your ED staff. Next slide please.

Poor execution can also be due to lack of resources. Time is a resource, of course, money is a resource, space is a resource, equipment. All of these are resources, and constraints on these resources can contribute to situations where aseptic insertion technique is not used. Of course, human resources are also another resource, and when we have variation in human resources, this can also contribute to poor execution. Things like high turnover, under-staffing, even having enough infection preventionists to do the work. I know that there are many infection preventionists on the call today. Of course, when there's not enough of you, you can't attend to all the myriad activities that you have, in the detail, and with the dedication that the item deserves, and that you are all capable of doing. Next slide please.

Execution strategies, then, need to focus on improving, or reallocating resources, making sure that you have adequate supplies, such as enough over the bed tables or hand sanitizer or sterile gloves, or thinking about the best type of kit to stock for your patient population. You might have to think about would individual supplies be better than a kit? For example, in our ED, 30% of the catheters that were inserted were temp sensing Foleys. Temp sensing Foleys don't come, at least in our hospital, in a kit. So what would happen, is that the catheter that was in the kit would have to be discarded, have to get a temp sensing Foley, which would be separate, and it might be better perhaps, not to stock so many of those regular Foley kits. Again, kits that sit in the stock and are not used is also a lost opportunity to save some resources. It's money there that's not being spent, not being used. Think about putting in adequate facilities for hand hygiene. For most cases, the use of the alcohol hand gel is appropriate, but we all know that with C. Diff being on the rise, we need to use soap and water. For hand hygiene, are there enough sinks, are they in convenient locations where staff can be prompted to use the soap and water if needed? Finally, location, thinking about where the kits are located in relation to where the procedure is to take place, if the kits are far away from where the actual procedure is being done, a care provider will perhaps not be as likely to think about, "oh gosh I really should get another catheter but it's so far away, oh my goodness." This is just human beings. It's not intentional by any stretch of the imagination. These are all system types of issues that come up that prevent us from doing the best that we can. Next slide please.

Other strategies that can help improve execution is a non-punitive culture, as I mentioned before. Visible and supportive leadership, which is also part of a culture. By visible and supportive leadership, I mean having leadership who's actually there with the staff, seeing what's going on, seeing how things are going on, supporting the staff. How's it going? Where are the challenges that you are experiencing? Let's talk about some strategies, perhaps, together. This sort of thing is so important to help improve execution and to helping overall morale of the staff. It's been shown time and time again. It's a great strategy to implement if you haven't already.

We also need to, perhaps, do a better job of identifying those system wide barriers to aseptic insertion such as lack of supplies, lack of space for sterile field set up, as well as lack of manpower. In our study, where there was very little space to set up a sterile field, sterile fields were set up on dirty linen hampers, on garbage cans, which were not empty by the way, on patient abdomens, between patient legs. All kinds of places which perhaps would not be the best place to set up a sterile field. Finally, trying to allocate resources to overcome as many barriers as possible, it takes a wider view, it takes more of a strategic view that would be needed, but it would be worth considering, if you're running into issues and still having high CAUTI rates. Next slide please.

Evaluation. What are we evaluating then? The CAUTI rates as I just mentioned, catheter days, the cost of UTIs. If you think about the cost of UTIs at your facility compared to the cost of having more supplies or supplies in a different location, etc., you may be able to see a cost-benefit ratio there, that could tip the scales to reallocating resources more. We have to evaluate compliance with catheter insertion guidelines. We have to evaluate compliance with catheter maintenance and care, which of course is not the topic of this discussion, but still should be considered in the overall big picture scheme. Also, those hand hygiene rates have to be evaluated, not only for CAUTI prevention but for all kinds of heath care associated infection prevention strategies. Other resources for you include the website catheteroug.org where there are many, many ... There's references there, there's nurse engagement strategies, physician engagement strategies. I'm sure you've seen it before, but there is a link to that, again. Also, Shae came up with a great update just last year, and I've provided the link for you there. Next slide please.

I'm going to change the topic a little bit now and link this to something to mindful practice. Mindful practice is really a very ... Mindful practice, sorry. Catheter insertion is really a very complex task. It consists of multiple steps. Something can go wrong at any point. And even when something goes wrong, it really doesn't evoke a visceral response, but the harms to patients are very real. What I mean by that is, when you think about inserting an IV, or when physicians insert a central line, bad things can happen and it's very obvious. The blood starts spurting, it starts pulsing, there's blood all over the place, and oh, the sight of all of this blood where it shouldn't be really evokes the visceral response that person who is doing the insertion says whoops, I made a mistake, I won't be doing that again, because I don't like how my heart started racing when I saw all of that blood. Right?

Unfortunately catheter insertion isn't like that. It's a tube going into a natural orifice, usually there isn't the blood, the spurting all of that sort of thing, so one doesn't think of it as something that has that level of potential harm, and yet it does. Trying to think of catheter insertion as part of mindful practice could really go a long way to changing some behaviors and some attitudes towards it. Next slide please.

Mindfulness is actually used both at the individual level because we think about ... It's a type of thinking that it's based on sorting and prioritizing cognitive tasks. But it also can be used to achieve organization goals. The big thing about mindfulness is to think of it as a really a flexible state of mind, where you can engage in the present but you're also acutely aware of the external events or of those events that are happening around you. You're present in the moment, you're doing what is needed in the moment, but you are also aware of the broader environment. It's almost kind of like a dual activity at the same time, but that mindful approach can be very helpful. Next slide please.

The big thing about mindfulness is that it tailors evidence-based practice recommendations to the individual patient, because when you're mindful, you're considering both the patient, what's happening in the moment, as well as the contextual factors. Being mindful includes maintaining a big picture view, and you're helped to stay in the moment. I've got a link down there to an article on mindful practice as it relates to catheter insertion that was written by some colleagues of mine here in Michigan. It's a great little article. Not very long, just 4 or 5 pages or so, and it really helps show how you can incorporate mindful practice into catheter insertion practices. Next slide please.

In conclusion, urinary catheters should only be inserted if there is an appropriate indication. I wanted to be clear that that's the first step. But, if you do have an appropriate indication, aseptic insertion technique is strongly recommended, but unfortunately multiple barriers can arise. I just want to make the point that these multiple barriers have to do with the way that our system is set up, which doesn't allow us to succeed. All of those nurses who we observed in our ED study wanted to do the best that they could for their patients. They really wanted to practice at the top of their level, but there was a system level, whether a unit or organization, peer group who had gotten into bad habits or bad ideas or just were not aware of the harms that could be caused.

All of these, unfortunately, set up an environment where we're not at our best. It's important to realize that nobody intentionally wants to do badly, and nobody intends or starts out to cause harm, but harms do occur because of barriers to doing the right thing at the right time. So what I hope that I was able to share with you today is that this approach that I talked about blends the 4 Es with mindfulness. If you use the 4 Es and mindfulness together, it may help you to be more successful at overcoming barriers. If you have any questions or comments for me later, I'd be happy to talk more about that, but that's all I want to say right now, and now I'm going to turn it over to my colleagues in Tampa, Florida, Stacy and Stephanie. It's all yours now, thanks so much.

Stacy: Thank you, Dr. Manojlovich, this is Stacy Martin. I'm going to start off and then I'll turn it over to Stephanie to give a little bit more of an overview of the project that we did. First of all, I know that there's a picture of Moffitt up there, and as you described, there, you said that you didn't think that the observations that you had in your emergency department were all that different than what you would expect other places. I think most facilities like to call out their differences and why they're special, but I think overall we are all sharing the same issues and same problems. Moffitt Cancer Center, as it says, a specialty cancer center. It's a not-for-profit that opened in 1986. We have 206 in-patient beds with a blood and marrow transplant operating room and 17 outpatient clinics. We are the only NCI designated cancer center that's based in Florida.

After plugging that, I will go on to say that as we go through what our cancer center's journey is on our reduction of CAUTI rates, you can see that we are not all that different than other general hospitals that are out there. Our overall journey began in October of 2011. At that time, as a result of the introduction of the national patient safety goals and reporting and more focus from the Joint Commission, we expanded our CAUTI surveillance house wide. Prior to that, it had only been in our intensive care unit. In order to be sure that we addressed the overall issue of CAUTI, we established a multidisciplinary committee, and the focus with that committee was to promote best practice regarding indwelling catheter use and management.

Our outcomes were that we wanted to reduce utilization by 20% and reduce CAUTI rates by 10%. I think the committee aimed a little low in setting those goals, as I said, we were able to reach those goals. I think that we were a little pessimistic, too, to begin with, on where we could go with that. The first thing that the CAUTI committee did was begin an analysis of the data, and again, it showed some high utilization, we thought. There was very little comparative data specific for cancer centers. In order to start to address that, we had most historical data in our ICU, so we chose them as the pilot unit and trialed a daily needs assessment program. I will say that this was not a success for us.

At about that time, the industry rep that we purchased our Foley catheters from was introducing a Foley management point prevalence study. We decided to partner with them, and do this prevalence study and see what the results were. We were quite surprised when the results came back in, and basically, to say it in a short statement, is that we had definite issues with indwelling catheter management. We spent a lot of time going back to the basics. When I mean indwelling catheter management, I'm talking about things like was the Foley bag on the floor, was it overfilled, was there dependent loops? Those things, and we actually ... Were the tamper evidence seal, was that intact? We had issues with all of those.

We, back to the 4 Es that were spoken about before, at that point we engaged the unit managers, did a lot of education, and then evaluation through the method of audits for what we were looking for. We didn't want to be the only one that was auditing and saying that back, so there was also an expanded function that was distributed out to the unit managers and many of the unit managers had designees so that they would do periodic rounds, if you will, on the Foley management and do corrections at the time. Following that, we found that our compliance with this management issues did increase. I keep pushing the wrong button to advance the slide, sorry. So, here we wanted to keep our eyes on the goal and our journey continues. This is about May of 2012.

Our state, Florida Hospital Association introduced their hen project, which adopted the on the CUSP stop CAUTI program. Moffitt as an organization, we decided to join that and began to submit our house wide data for that. It helped a bit in that we began to ... We were also seeking magnet designation, so we began to report our CAUTI rates to each of the nursing units. It helped with engagement, sending that out to each one of the units to add on to their dashboard so that the staff were more engaged and more aware of what their overall unit rates for ... In addition, in each unit, was sent, when a case was identified it was sent to them to review, and we involved the nurses that were involved in the care of that patient and as well, the unit audit regarding the management continued. This is an idea of what our rates looked like. Our overall CAUTI rates and then our utilization rates were decreasing somewhat. I'm going to, now at this point, turn it over to Stephanie to talk about the next section of what we did on refocusing our efforts.

Stephanie: As you can see from the previous slides, our CAUTI rates had plateaued. We decided it was time to refocus our efforts. We paired with the local industry rep, as they had a program to assess insertion technique as well. We paired with them, and what we did was, we selected 10 people from our various units from OR all the way down to our ICU unit, our regular surgical floors. We had experienced and novice nurses. We had nurses that were fresh out of school, we also had some of our ONC techs, which is our oncology technicians. So our nurses aids, doing the insertion technique as well. What we watched was insertion from start to finish. What we found was very surprising. We were actually quite surprised at the results. But overall, the nurses and the techs were very receptive to doing this assessment. They felt as if sometimes they didn't insert Foleys all the time. The ONC techs had less of a grasp of what aseptic technique was. We found that during this assessment.

We just wanted to reach out to you and see who places your Foley catheters at your hospital? Do you allow your nurse techs and nurse aids to insert indwelling catheters? Just go ahead and check the box. Just want to see what everyone's results are. Okay. So far I'm seeing about 26% do. Here at Moffitt, we did at the time. We found that some of our RNs were actually not comfortable with inserting the Foley catheters, and they were delegating the task to the ONC techs or nurses aids. So following our insertion technique assessment, we decided that we were to discontinue allowing techs to place the Foleys. I just wanted to mention that only 1 out of the 10 people that we assessed did the insertion correctly. That was a little disturbing from our standpoint.

Again, I wanted to focus on what Dr. Manojlovich had spoken on before, putting the 4 Es into action. We as well, put the 4 Es into action, starting with engagement, we presented these results back to the managers and staff. We wanted them to have feedback on the insertion technique and how they did. Like I said, we only had 1 out of 10 who did the insertion technique correct from start to finish. That was one of our ICU nurses. They were actually very receptive to the results, and they were willing to start changing. We wanted to focus on education. What we did was utilize the train the trainer model. We would have supervisors come down from each of our units and train the other staff members on their floor.

As far as execution, we combined the new product rollout with a competency demonstration. We did bring in a new product. It was a new tray that they had designed. The redesign was more user-friendly, and the packaging actually promoted compliance. It helped with the rollout of the competency. Surprisingly, the nurses were excited to start doing this competency. Again, some felt like they hadn't placed a Foley in a very long time on some of our regular floors that don't have a lot of surgical patients. Our evaluation is currently pending. We're about to go back and reassess the technique and insertion from start to finish again.

This is just our overall CAUTI rate hospital wide. As you can see in the beginning in about May 2012, we had a large increase in CAUTI over all our units. You can see we did have a large decrease coming down to March of 2015 this year. We are trending downward in utilization and our CAUTI rates. Overall, we are doing very well after both of our maintenance assessments and our insertion assessments. Now, I'm going to turn it back over to Stacy.

Stacy: The last we just wanted to mention the experience at Moffitt for learning and sustaining. Some of the lessons learned is that the basics do need to be assessed and addressed. As was mentioned before, most of the nurses have learned and performed this skill in a very controlled environment. When they get out, their immediate practice begins to be in a little bit of an ... I should say not a little bit, but a very uncontrolled environment where they are not always directly supervised. Going back to the basics and stressing the importance of making this more an evidence-based practice as opposed to a task, like Dr. Manojlovich mentioned before.

In addition, ongoing competency and audits are necessary. So far, we have updated this ... CAUTI insertion is going to be an annual competency. We have not turned it back over to the nurse techs at this point. It's remained in with the licensed staff, because we realized how important and how many steps and how many things can actually go wrong. Also, a lesson learned for us is that in both instances, the industry was very helpful in improving the patient care that was offered here. At first, they offered the opportunity to assist us with some of the point prevalence, and then after that they assisted us with the insertion technique and also with the training of the train the trainer, so that they were very helpful in this improvement initiative.

Our plans for the future and for sustainability, like I said, we want to perform a follow up evaluation to see how the nurses perform in doing a demonstration of insertion, again. Over this next time, we just received our magnet designation, so we were a little bit sidetracked in working towards that, but we do want to perform the follow-up evaluation. Our next plan, the next step that we're going to work on, is implementing a nurse driven removal protocol. Because, all of these, as was said before, everything that deals with the Foley, insertion and management, really, is a nurse-driven evidence-based practice, and I think we could be very helpful in also looking at a removal protocol here. I think that is all that we have to say. I guess I'll turn it back over to Ashley.

Speaker 7: Okay, great. This is Jeanine Ryan with HRAT. I'd like to go ahead and open everything up for questions. Thank you very much to our presenters. If you would please, operator, give instructions on questions, we'll begin the question and answer process.

Speaker 2: Thank you. At this time we will open the floor for questions. If you would like to ask a question, please press the star key followed by the 1 key on your touchtone phone now. Questions will be taken in the order in which they are received. If at any time you would like to remove yourself from the question queue, just press star, 2. Again, to ask a question, please press star 1 at this time.

Ashley: This is Ashley. While we are waiting, we did have a question earlier in the chat in the discussion area, and this is for Dr. Manojlovich. Someone was asking if they could either get a reference or have you speak a little bit more about the-

Milisa: Should I forward it to you, Ashley?

Ashley: Yeah, that would be great

Milisa: For distribution to the group, yeah. I'm sorry I didn't think to have that ready ahead of time, but yeah I will definitely share that with you.

Ashley: I'll just post that on the project website.

Milisa: Yep.

Ashley: The PowerPoint and the recording.

Milisa: Yep. Great.

Speaker 2: Okay. And again if you would like to ask a question you can press star 1 at this time. Okay Ms. Hoffman we have no questions in the queue at this time.

Milisa: Okay. Thank you. If you do have a question, feel free to type it in to the discussion area and we can have our speakers address the questions after the fact and then post a Q&A document on our website as well. So, Ashley if you could go to the next slide, please. We'd like to please remind you to fill out a survey on today's webinar. We really appreciate your feedback and use your input and comments on shaping future webinars, so please take a moment and fill out the evaluation on survey monkey. The link can be found in the discussion area as well as the slide here. Ashley, please go to the next slide.

Thank you. Here is a quick reminder for our next upcoming national content webinar. The next webinar will be on June 9th, and we're going to be highlighting Kathy Alan Bridson, who will be returning for part two of changes to the NHSN CAUTI surveillance definition in 2015. We did have Kathy join us a few months ago to present on the changes of the definition, but there have been further developments since that original webinar, and we are bringing her back to discuss those recent additions and changes, but then also work on some case studies with everyone on applying the definition to their daily work. We look forward to you all joining us there on June 9th. I believe that's it for today's call. Thank you so much for your time and your attention and we will speak with you again soon. Thanks.

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