CAUTI Office Hours Series

Good afternoon, everyone. We're so pleased that you can join us for this afternoon's Catheter Associated Urinary Tract Infection Office Hours Call. This is the second in a series of five calls, and I'm hopeful that some of you on the line with us today were on last week's call and hopeful also that some of you may be new.

I just want to give a brief overview of the purpose and the goals of these sessions. They're really designed to build upon the in-person education sessions that Dr. Sanjay Saint delivered back in September focused both on the technical aspects of CAUTI reduction and also the socio-adaptive, the social, behavioral, institutional, cultural elements of infection prevention and specifically CAUTI reduction.

I hope that you all have had a chance to review some of the material presented at those sessions if you were unable to be there in person. And if you were on the call last week, we also spent a lot of the time focused on reviewing those socio-adaptive elements to CAUTI reduction. And I think you'll find that those themes will be woven throughout all of the topics that we've structured these Office Hours Calls around.

The focus of this call is on alternatives to Foley catheters. Dr. Saint is going to give a brief overview of some key points and considerations when thinking about alternatives to indwelling urinary catheter evasion. After that Kathryn Ralph, one of the Project Managers from New York State Partnership for Patients, will present a case which I'm sure is going to resemble circumstances that many of you have encountered in your own institutions. Hopefully you've seen this case and one other sent out to you by your Project Manager in advance of this call. We'll spend some time talking about the first case and then probably move on to the second case.

I just want to let you know that in addition to all of your NYSPFP staff on the line, we have Dr. Saint with us from University of Michigan Medical School in the Ann Arbor VA Medical Center; two local physician faculty, Dr. David Calfee from Weill Cornell Medical College and Ghinwa Dumyati from the University of Rochester Medical School. We're also joined today by a nursing leader, Barbara Smith, from St. Luke's-Roosevelt Hospital Center. So lots of different perspectives to bring to the conversation.

And more than anything, we're excited to hear from all of you – your successes, your challenges, your questions. So as Joan said at the top of the call, don't hesitate to type your
question into the Q&A box or raise your hand to be unmuted and ask your question out loud at any time. We’re hoping for a really interactive session.

With that, I will turn things back over to Dr. Saint to give some background.

Thank you, Sara.

Good afternoon, everyone. It’s a pleasure to be with you again. Today our focus will be on considering alternatives to the indwelling urethral catheter, which is also known as the Foley catheter. I’m not going to dwell on the use of urinals or commodes or bedpans. I think most of us would agree if a patient can use those alternatives, those would be preferable to the Foley and to what I’m going to describe. I’m going to discuss some of the other devices that have been used to avoid using the Foley catheter, and I’m going to take these one at a time: suprapubic catheterization, intermittent catheterization, and coupling it with the bladder ultrasound scanner, and then finally the condom catheter in men.

I’m going to talk about suprapubic and intermittent catheterization together because there was a systematic review of trials published in the Cochrane Database eight years ago on this topic, and what they concluded was the following. First, looking at Foleys versus suprapubic, there were 14 trials that have looked at this. We brought this up actually at our last call. The data is actually pretty robust in that patients with a Foley had significantly more bacteriuria, 2.5-fold more bacteriuria, and more discomfort than those with a suprapubic catheter. Therefore, suprapubic in appropriate patients would be better than a Foley. The main drawback of a suprapubic is that it requires a urologist to insert, and there are some mechanical complications that can occur.

We tend to only think about suprapubic catheters in patients who need long-term urinary drainage and have some type of a bladder outlet obstruction or some other process in which they need indwelling drainage, but we would want to avoid the Foley catheter in those folks. For short-term patients though, we tend not to put in a suprapubic catheter.

Short term, though, we use both intermittent straight catheterization and condom catheters, as I’ll discuss. In this same meta-analysis published in Cochrane, they found three trials comparing Foleys with intermittent straight catheterization. And they found that there was significantly more bacteriuria in the Foley group, about 3-fold greater. And these were just the trials. There’s a large literature of observational studies, especially in patients with spinal cord injury, that have found that intermittent straight catheterization is much safer in the long-term patient than the Foley catheter. And that’s why patients with spinal cord injuries, patients with multiple sclerosis or neurogenic bladder tend to self-manage with using intermittent straight catheterization rather than Foleys.
So I think here's pretty good evidence that either suprapubic or intermittent straight catheters in the right patient population will be safer for the patient than a Foley.

We often use intermittent straight catheterization in conjunction with bladder scanners. So I'm going to talk about the use of bladder scanners next. While the data are not as robust because they tend to be primarily observational or before and after, there was a systematic review done about nine years ago that concluded regardless of the model of bladder scanner used, who was using it – the patient/physician, the diagnosis or the health care setting, the scanners did appear to accurately assess bladder volume. And bladder scanners appeared to be effective in diagnosing urinary retention without the use of catheterization, whether it's intermittent catheterization or indwelling catheterization, and therefore reduce the number of catheterizations. However, only one study has demonstrated a reduction in UTI rate using a bladder scanner. But based on pathophysiologic principle, this does make sense.

And avoiding the catheterization, whether it's an intermittent catheter or an indwelling catheter, would also be important just in terms of patient comfort and convenience, as well as preventing some non-infectious complications of the urinary catheter as we've discussed in the past.

The final device I'd like to discuss is the use of condom catheters, which are pretty controversial, in part because of the design of the condom catheter is such that unless it sits well, it comes off frequently and can be problematic for the nurse taking care of the patient and of course for the patients themselves.

I'm going to focus my conversation really only on external catheters for men. While there is an external catheter for women, the one that's been published in the peer review literature requires shaving of the mons pubis and putting patients into lithotomy position, which can be actually problematic given the age of the patient. So there really isn't one that I'm familiar with for females that's kind of ready for prime time. So maybe during the Q&A period, people out in the field have actually tested one that they think will work reasonably well and we can discuss that.

But I'm going to focus my comments on condom catheters in male patients. Observational studies that have looked at this have really found an unclear benefit of condom catheters compared with urethral catheters. In the earliest studies, Joseph Ouslander in nursing home studies found that patients managed with a condom catheter were significantly less likely to develop infection compared to those who were managed with a Foley catheter. And that makes sense because a condom catheter was less invasive.
However, Zimakoff in a cross-sectional study of a large number of nursing home patients found just the opposite – that condom catheter users were actually more likely to develop infection compared to Foley catheter users.

So how do we kind of explain these disparate findings? Well, the way I explain it is that compliance with a condom catheter matters. I mentioned that one of the big drawbacks of the condom catheter is that it frequently falls off if it's the wrong size or doesn't have the right type of adhesive. And in fact in the study by Hirsh and colleagues published in JAMA, they followed 94 condom catheter wearers for three weeks. They found among the cooperative men – men who did not remove their condom catheter – that none developed urinary tract infection. However, among the uncooperative men – men who removed their condom catheter frequently, perhaps because of delirium or dementia – half developed UTIs after these three weeks.

So based upon this, it really depends on if the patient is likely to be compliant with the condom catheter. And the reason this is important is because every time the condom catheter falls off, then the nurse has to apply rigorous and vigorous meatal cleaning and then reapply the condom catheter. And we know from previous studies in the ’80s that vigorous and rigorous meatal cleaning actually does not prevent bacteriuria; in fact, it likely increases bacteriuria because of disruption of the skin and other types of reasons.

So based on those observational studies, we designed a randomized control trial. This was done in Seattle. And we included 75 men who required urinary collection at the Seattle VA. The outcomes were a composite of bacteriuria, symptomatic UTI and death. But the vast majority of these outcomes were bacteriuria. And we A-priority decided to stratify based on dementia status, realizing that patients who were confused may not keep their condom catheters on. And what we found was – and I'm showing you adjusted survival curves based on dementia status – in men who were not demented, so who were cognitively intact, we found that patients randomized to the condom catheter arm were significantly less likely to develop bacteriuria, symptomatic UTI and death over the period of the study compared to those who were randomized to Foleys – so completely consistent with the observational data I showed you.

And then in the group that actually had dementia and presumably removed their condom catheter frequently, there was no significant difference between condom catheter and indwelling catheter presumably because they were removing their catheter. And then in order to replace the condom catheter, vigorous meatal cleaning was required.

And then finally we also asked men what they thought about either the condom catheter or the indwelling catheter – and remember, they were randomized to these two groups. And we found that condom catheter users were significantly more likely to say that their device was comfortable compared to the Foley user, 90% to 60%; and condom catheter users were
significantly less likely to say that it was painful compared to the Foley users, 5% versus 36%, and both were statistically significant.

So I think based on both outcomes as well as on patient preference, in appropriate patients, the condom catheter is a better device to use than a Foley catheter. And the key aspect is making sure though that you use a condom catheter that ideally is silicone so you can see through it. And that comes in multiple sizes -- we prefer at least four difference sizes – and that has a self-adhesive that will remain on, even as the patient kind of moves around.

So that's all I wanted to kind of begin our conversation with, and I'll see if Ghinwa or David or Barbara want to add anything to those opening remarks.

Thanks, Sanjay, I thought that was great.

I would just point out for a lot of the people on the call that thinking about using condom catheters versus indwelling catheters is often a decision I think that's easier made on the unit by the nursing staff, whereas things such as suprapubic catheters really probably do require more of an involvement with the medical staff and getting a medical champion involved in making that decision, which would cause more invasive intervention.

Thank you.

Dr. Sanjay, it's Barbara. I have to agree with David because I think most of the clinicians here are feeling like that's something just related to a urological event, having a suprapubic tube. So it's absolutely the exception, and I think it's hard to change that mindset of people.

Yeah, I think that the only way – I mean, what we do with suprapubics at our place is in patients who have certain conditions that require long-term indwelling urethral catheterization and they have frequent UTIs and they're not able to do ISC for whatever reason – they don't feel comfortable doing it or they don't have the manual dexterity to do it and they don't have a caregiver who can help them – that's when we refer them to urology for consideration for an FC tube. But you're absolutely right that we would not make that decision without having a urologist discuss that with the patient. And in some patients, it actually is much better than a long-term Foley in terms of patient convenience, also because it's in their lower abdomen rather than in their perineum and it's able to stay cleaner. And so I would agree.

But I think that the real point isn't so much to focus on the suprapubic catheter. I think that that's something I wanted to bring up because it's something that's often overlooked. But thinking about intermittent straight catheterization, which is what we use a lot in the state of Michigan, in part because our former Chair of Urology, Jack Lapides, popularized intermittent straight
catheter. And then having hospitals think about condom catheters, even though some of them may be a little bit more expensive than the other one that they're used to using, we have to arm frontline clinicians with the right type of device. Otherwise, if they put on a device that just doesn't work, then the default will unfortunately often be keeping the Foley in.

Thanks, everyone, for that great background. I think with that, we'll turn things over to Kathryn Ralph who will present the first case presentation and then open things up for all of your reactions, questions, thoughts on how you might respond and any other questions you have about the material that Dr. Saint just presented.

Kathy?

Hi, everyone, good afternoon. Our first case is an 88-year-old woman with CHF who was admitted to the hospital with chest pain. The physician ordered furosemide, 60 mg IV push, once every morning for three days along with daily weights, I&Os and an indwelling catheter. After Day 3, the patient was transitioned to PO furosemide and also had an order for PT evaluation.

Next slide, please.

During morning care team rounds, the infection preventionist addresses the continued need for the Foley catheter. The mid-level provider does not discontinue the catheter saying that, "The patient is not moving well, and we need to monitor I&Os more closely." What are the key issues here, and are there any alternatives that could have been used? Would any of you have managed this patient differently at your hospital?

Hi, all, this is Maria Sacco. We'd like to get some comments from the attendees. You can use the little hand icon, and we'll call on you out loud; or type into the Q&A area, and I will read them out loud. In the meantime, Dr. Saint and panel – other doctors and Ms. Smith -- we do have a question already entered; so I will read that to you.

"Do we have a direct correlation of frequency of penis manipulation in UTI rates?"

In terms of condom catheters or intermittent straight catheters?

I believe it's either.

Well, first intermittent straight catheterization – and this would be true for men or women – that there is a risk of introducing infection every time someone does ISC. That's why we tend to recommend ISC'ing somewhere between every four and eight hours, usually it's about every six
hours, rather than every one hour because of the concern that every time you insert the catheter there is this risk of infection; and it's roughly 1%. But again, the vast majority will be asymptomatic; and patients will kind of clear the bacteriuria themselves without antimicrobial.

In terms of condom catheters, the studies compared just normal perineal hygiene – which is cleaning once a day – versus more rigorous and vigorous up to three times a day. So in those patients, while I can't say there's a direct correlation every time you clean the penis and maybe disrupt the skin, that it would increase it. We do know that it's better to do it just once a day rather than, let's say, three times a day. And that's important because when condom catheters are not fitting correctly and the patient then has a condom catheter fall off, that happens several times a day. So you may end up doing rigorous meatal cleaning three, four, five times a day – which then is perhaps why the risk of bacteriuria will be much higher than if the condom catheter was able to stay on for the full 24 or 48 hours.

I'd like to encourage attendees to address the case and how you would handle that in your facility. And at this time, we don't have anybody wanting to speak up that I can see. If you'd rather not speak, feel free to type into the Chat.

Okay, we do have someone saying: "This scenario seems to be one that is frequently identified in our facility. While we have a physician champion, the mid-level providers seem not to be ambitious about cath removal. Suggestions?" They're asking the panel for suggestions.

Would you mind repeating the question?

The response is about the case scenario. And it says: "This case scenario seems to be one that is frequently identified in our facility. While we have physician champions, the mid-level providers seem not to be as ambitious about catheter removal. Are there any suggestions?"

I guess the answer is -- I'll take this one. Probably you have to have the same champion as your mid-level provider. It looks like in that hospital that's not the case. To get them onboard, I'd explain to them why it's important to remove that catheter. And once you have the champion on board that can be the one that everyone looks up to, it might be easier to implement a change in a process like this one.

Sanjay or David, any other comments?

I guess something that I think a lot of people run into regarding some of these issues where we need to get education out to a large number of health care providers is that that's really difficult in hospitals; and the bigger the hospital, perhaps even the harder that gets. But even if you have an engaged champion, how does what that champion wants people to know and wants them to
do — how does that get out to all of the other providers? And so that's going to be one thing to look at, is what educational activities and what engagement has gone on to try to get other clinicians onboard with what the program and the champion are trying to get done.

So I know that's really easy to say and hard to do, but I think that is something we all have to look at, is how much are we getting this information out to all of our health care providers.

We do have a comment from an attendee saying that I&O would not be a specific enough reason in their facility to continue the catheter.

This is Sanjay. This is a very important case scenario, and I appreciate this case because it is very common. It's common in the hospitals that I have visited and also where I take care of patients. They're both technical approaches to this, as well as socio-adaptive; and I'll take those one at a time.

First, in terms of the technical aspect of this, just because a patient needs IV Lasix or even oral Lasix or comes in with CHF exacerbation, that in and of itself is not an appropriate indication for a Foley. So I would agree with the person who wrote in that said that that was from kind of at their hospital, the I&O would not be specific enough to warrant a Foley; and it would not be in our hospital either. And in fact, the CDC HPAC Guidelines from 2009 would say that this patient would need to be critically ill, specifically in an ICU, and would need closed ins and outs monitored in order to be justified to put in a Foley in this patient.

My approach to this from, again, a technical aspect -- and this is true on the floor or step down or even in the ICU — is answering the question, "Does hourly assessment of urine output – is that needed?" Because then we are going to actually change management based on that because we're going to change the dose of pressors that we give the patient. We're changing the amount of IV fluid that we give the patient. We're deciding whether or not we're going to be dialyzing the patient – those types of things.

In this particular patient, that's unlikely the case because it doesn't say that the patient was admitted to the ICU. And in fact with someone who gets admitted to the ICU with CHF exacerbation, usually they're intubated. This patient was not. And 60 mg IV push once every day for three days, you know, the patient is going to be on the floor or step down — because of the chest pain, probably on telemetry.

I would say in this particular patient, they should be able to urinate without any type of device at all using either a bedpan or a commode or maybe a female urinal or something like that if possible. And if you're not able to do that, then my advice would be — and most clinicians I think would likely agree with this — is if I'm given two pieces of data after admission, one would have
I's and O's – that even though you write for strict I's and O's, they often are unreliable because there will be bowel movements, and it will say, "We're not really sure how much the patient took in." So either strict I's and O's or, on the other hand, accurate daily weights -- my strong preference is an accurate daily weight. And in fact when they are in conflict, when the I's and O's show that the patient is a liter up but the daily weight shows that actually they're a kilogram down and I couple that with other findings on my physical, such as a decreased amount of crackles, lower peripheral extremity edema has gone down, patient feels much better, the oxygen saturation has improved, I'm going to rely upon the accurate daily weight.

So some hospitals have actually gone to making sure that there are accurate daily weights. Nurses like that because then they're told, "Make sure that you get the patient up and out of bed in the morning. Put them on a scale; at the same time, use the same scale." And if we do that, then we don't have to do strict I's and O's, which is pretty time consuming. So I think that is how I would approach that.

This is a patient who, in my opinion, did not need to be catheterized initially. And then by the time Day 3 comes around and they're getting a PT evaluation, the patient is – they're thinking about sending them home – they absolutely should be removing the catheter right now. And the fact that the mid-level provider does not agree with that, this gets to what Ghinwa and David were commenting on in terms of education and how do we deal with this.

70% or more of U.S. hospitals have hospitalist groups. One thing that we could do is we could target a few to affect many. And so by targeting the small number of hospitalists that are usually in each hospital, we can then make some dramatic changes – especially if we link their payment. Often they have a salary that will be paid for by the hospital to performance measures. And one performance measure could be percent of patients with appropriate catheters because by the time Day 3 rolls around, this is a patient that no longer meets appropriateness criteria, if they ever did.

And then the mid-levels often will work under the guidance of the hospitalist; so that that's where I would kind of target my intervention on the socio-adaptive side, Is the chief of that service – whether it's a hospitalist or it's a medicine service or a cardiology service – to talk about the technical aspects where the patient doesn't need it and then the socio-adaptive in saying, "You know, we're paying you to provide good quality; and this is a way of preventing urinary tract infection and in elderly patients like this, we want them to be mobile. And we know that the indwelling catheter serves is a one-point restraint, which will then increase the risk of deconditioning, pressure sores and DVT.

Dr. Saint, I'm happy to say that we did have a few comments while you were just speaking that agree with everything you said completely, that I&Os can be monitored at the bedside using a
bedside commode or bedpans. And if the patient is improving, especially when the furosemide was switched to PO, there isn't any reason to continue the cayh.

We also have comments about the catheter itself – may be a contributing factor to the lack of mobility.

And I think you did just speak to another question about we can get the physicians educated. We have a question asking: "How do we educate the physicians placing the order to reinforce their understanding?" And I think you did just speak to that about the hospitalists, and I would assume you agree the same thing can be done with all physicians.

Yes, I do; I think that's true. I think even in an ICU setting where, in some hospitals the theory is if someone is sick enough for an ICU, they're sick enough for a Foley. And that may be true for the first 48 hours when a patient is unstable, and they're going to go one direction or another. After they've become stabilized, an hourly assessment of urine output is no longer needed; then the Foley is no longer needed either. And so I think getting the intensivists then also engaged will be important. So it really depends on kind of where the patient is admitted.

We know surgeons now are pretty proactive because of SCIP measures – getting the Foley out after one or two days, and in some places not even putting the Foley in for certain elective orthopedic procedures like total hips and knees.

Maria, this is Hilary from the Partnership. I'm with Maimonides, and they have a question.

Go ahead.

Hi, this is Mary. It seems that the term "monitor I&O" is somewhat vague. And in this particular scenario, I'm just wondering if it would have been appropriate for the practitioner to say, "Well, what kind of output are you expecting? What is our goal or what are we moving towards, just so I can have an idea of what your expectation would be before you would feel comfortable discontinuing the Foley?" Is that reasonable?

I think it is reasonable. It's always good to actually clarify goals. Depending on the severity and how the patient is, usually the goal is to be 500 cc up to 2 liters net negative in a 24-hour period and you kind of titrate it based upon that. We tend to like to keep it about a liter negative a day. I guess the question is, do we need I's and O's for that reason, or would we feel comfortable using weight? If it's an accurate, reliable weight, I'd feel more comfortable with the weight. And the other reason I'd feel more comfortable with the weight is because what we try to do, especially in our veteran population, is we send them home with a scale. And they get that before they get discharged, and so then they get used to monitoring their own weight at home.
And if their weight goes up by a certain amount, they call the Care Manager who then will ask them to take an extra dose of oral Lasix.

Because they're not going to be monitoring strict I's and O's at home either, so this is another way for them to get used to kind of the whole idea of using weights rather than output to kind of manage their own CHF exacerbation.

Then the second issue is if the initial stage – if the patient really is quite ill, and there's a borderline admitting them to the ICU because they're frail and you're worried about their blood pressure, and they may be hypoxemic and you're not sure if you can intubate because they may be DNR or something like that, I can understand their putting in a Foley for a 24-hour period because you want to make sure that they actually respond to the 60 mg of IV Lasix because if they don't respond after a certain period, you want to be pretty quick with doubling that dose and giving it to them.

Again, this was especially the case is if they go into pulmonary edema and you cannot intubate. So there I can understand that, and that's where that conversation would be very helpful to have. I think though for most patients who get admitted and are actually doing reasonably well and we just have to get rid of some fluid, not putting in the Foley at all and using just daily weight probably will suffice. But in that small percentage of patients that are not in the ICU, then it makes sense to do it initially.

Thank you.

Barbara, did you have a comment?

Well, the one thing – the second part of this scenario is what strikes me, Dr. Sanjay; and see if the other nurses agree. I think we're using the I&O as an excuse here, but the real reason is the patient is not moving well. So, one of the alternatives that we've looked at, not with too much success, is a larger incontinent pad that supposedly is more absorbent and drier than a regular incontinence pad. Do you have any comments about that?

I think that using an incontinence pad is better than keeping the Foley in for sure. And this whole idea of the patient is not moving well, and again, we're thinking about sending this patient home at some point. Presumably they came from home and they're going to go back home. And by not moving so well, does that mean that they're not moving so well that they cannot even use a bedpan? They can't get up and use a commode with assistance? I guess I always kind of wonder about that because when physical therapy sees a patient and presumably clears a patient for either home or going to a SNF, the patient is going to have to do some of this stuff on their own; and we're clearly not going to send them home with a Foley.
So the sooner – by the time Day 3 comes around, I think the sooner we get this person up and mobilized, the better. In fact, I would have argued – I think one of the people wrote in – but if one of the reasons perhaps they're so deconditioned now is that they had the Foley for the first two or three days. If they would have actually gotten up and used a commode or used even a bedpan, or could they have gone to the actual toilet themselves – then they may not be in this situation by Day 3 that they're not being able to move around so well.

Dr. Saint, I have another question: "The ICU step down transition often results in a missed opportunity for Foley removal. How have other facilities addressed this before transfer occurs at the nursing level?"

Yeah, this is actually a really important issue; and I think we're going to talk about this during trigger points at a future Office Hours. I think at the very least prior to transfer out of the ICU, that it just becomes kind of a checklist during daily rounds. The same way making sure that the chest tube is out, the (inaudible) is out, the patient is no longer intubated, they don't have a central venous catheter and that now the Foley is on that kind of checklist of things to make sure that that's also removed – so that's usually done the day of transfer.

Again, I would argue though that it should be done even before then, after hourly assessment of urine output is no longer required. And the reason I would argue for that is because for a couple of those days, the patient is in an ICU and they probably don't need a Foley. All they're getting is the rest without the benefit. Second, if that Foley is removed just prior to transfer out of the ICU, the documentation of exactly when it was removed may not be so good.

The floor nurses are dealing with all kinds of things, and their usual patient to nurse ratio is much higher than in an ICU – 4 to 1, 7 to 1, 8 to 1, depending on if there are nurse aides or other people around. And so if a patient now doesn't urinate for a certain period of time, the patient now may complain of suprapubic pain or lower abdominal pain; and the accepting nurse may not know when that Foley was removed. So it won't trigger in their mind, "Oh, I've got to do bladder ultrasound scanning, and I may have to do ISC." So ideally, the toileting issues will have been dealt with in the ICU a day or two days prior to transfer. That's what many ICUs have decided to do, and it's just part of their daily checklist on rounds when the nurse rounds with the ICU team, to see do the patients need these devices.

Thank you, Dr. Saint.

We have another question: "In ICU setting, we've had patients on CRRT with scant urine output. When Foley catheters are present, sometimes it's difficult to get the house staff to discontinue. Are you familiar with the use of bladder scanners in this patient population?"
I personally am not. I guess the question would be – so the Foley is in. Why do they have the Foley in -- to see if the patient is going to decide to kind of urinate on their own? Presumably that's what it is; but usually in this situation, we would remove the Foley. And even though the systematic review may not have included patients with renal replacement therapy, there's no reason why that wouldn't be an appropriate patient population in terms of using a (inaudible) portable bladder ultrasound scanner. And if there's any doubt about the validity of the urine volume with the bladder scanner, then I would use ISC rather than keeping a Foley in these patients that whole time because they're potentially at risk of developing infection – perhaps even higher risk, at least in some studies, showing that chronic renal failure actually does increase the risk of urinary tract infection compared to those who have normal renal function.

Ghinwa or David, do you guys want to comment on this?

Yeah, I fully agree with you. I was thinking actually to say that. There's really no reason to keep that Foley, but it's also going back to education to the physicians, house staff, talking to the nephrologists, having all the nephrologists buy in and be your champions as well. Have you worked with them on people like this – the nephrologists, to help you kind of change what we have done in the past?

Are you asking me that, Ghinwa?

Yeah.

Nephrologists usually are part of our conversation about indications because the time that we often will get pushback from the nephrologists is not in this particular case, but rather in someone who comes in with oliguric acute kidney injury and before dialysis and we're just waiting for them to start urinating again. Often there the nephrologists feel pretty strongly about putting in a Foley rather than just seeing if they can urinate without a Foley because they're just keeping track and seeing when they need to dialyze a patient.

Some hospitals have included that as an appropriate indication in their policy. As you know, the HPAC CDC Guideline does not include that as an appropriate indication; but I can understand that in some places that that would be reasonable.

Thanks.

Thank you.

I'd like to just read a couple of comments that have come in from our attendees:
"I think education about appropriate capture of I&O would be good."

"I think for mid-level education, make it personal – see what they'd like if it was their parents."

I think that we are done at this point with comments and questions about this first case. Oops – just as I say that, we do have a hand raised.

Erica from Unity?

Hello, thanks, Maria.

I think that I'd like to just ask a question I think is kind of obvious, but no one's rally verbalized it. It's easier to care for a patient with an indwelling Foley catheter. As an infection preventionist, of course I know the safety hazards; and I teach those, we follow IHI, we follow certain criteria. But it's easier to care for a patient with an indwelling Foley, and that's where I get buy in from everyone that hears about the IHI criteria, and we have decision support systems for ordering providers and automatic renewal reminders or discontinuation reminders. We have a nurse discontinuation protocol as well. But until we can make something easier for the nurses or the folks caring for them, I think we're still going to struggle with some of these inappropriate utilization of the indwelling Foleys.

Erica, this is Sanjay. Let me first have Barbara perhaps address that because when you say it's easier, you're talking about nursing convenience; you're not talking about easier for the patient.

No, no, definitely not easier for the patient – nursing convenience – and that's where I think a little bit of everyone hears what we're saying here, and they agree with it until you've got five patients who need to go to the bathroom. And so I'm just trying to put the white elephant out here that we've avoided – we really haven't said.

The other thing – Erica, I agree with you on that. That's what I was saying, "She's not moving," was the nurse lingo for, "I'm going to have to get her out of bed." But the other thing that I realized fairly recently after eavesdropping on two nurses talking to their residents about the orders, I think we also need to learn how to teach the nurses how to approach this. Because it was easier for both of them just to get a Foley order renewal than to explain why I think it's better for this patient not to have the Foley in. It was just easier for both of these nurses on two different units to call the resident and say, "Can you just renew the Foley order," instead of just saying, "I think it's time we should try her without the Foley," – so more like a coaching technique for the staff nurse.
I think nobody, when put on the spot, would say, "I wish my patient harm." But unfortunately when they make decisions like that, that's in essence what is being said. And I just wanted to put that out there because I feel like that's where I am right now with – they've been taught, we've been educating, we've done everything that we can. And now it comes down to ease – what's going to be easier.

Regardless of this, did you try to bring it up to the nursing leadership? Maybe more staffing is needed on some of those units where the nurses really don't have time? Is that kind of hospitalwide, or is it a specific step down unit?

It's not necessarily hospitalwide. I think that we can have as much staff as we'd all wish for in a perfect world and that still wouldn't get – the optimization of that Foley would not be utilized as the correct mindset or engagement maybe. The level isn't there.

The level of your senior or your staff on the floor?

I'm sorry?

You said the level of – so you're struggling with the floor nurses, right? What's the attitude of the nursing leadership regarding specifically that question?

You know, to be honest with you, I don't think I've ever posed that to nursing leadership. But like I said, I specifically like that. But I think that it's the white elephant. I think we all kind of know it.

Right, so I don't know, but my advice is to take it to another level. You could just say to your nursing staff, we have educated, we have done this and that, but you still are faced with the issue of additional work that nurses are not able to handle. Is there any other way we could have this done? What we talked last week about is having a cost effectiveness kind of analysis – like if you have more techs on the floor that can take care of those people with no Foley that need to go to the bathroom, would that be considered at all – you know, trying to sell this in a different way is my advice.

I don't know – Sanjay or David?

Yeah, Sanjay here. Erica, thank you so much for raising this. And in fact, Erica, are you also the person who typed in last time about is there a study that shows that replacing the catheter once you have a CAUTI is actually beneficial? Or maybe you're muted again.

We're going to send that out. But getting back to this whole issue of nursing convenience, we found that in 2008, and we published on this; and it was a pretty controversial finding at that
time. But you're absolutely right. It is the elephant in the room. I think people know this. I would go about this in many different ways. And in fact, we'll send out the 2008 article because we did visit some hospitals where they were able to overcome nursing resistance. And it really has nothing to do with workload and all that kind of stuff. In a lot of cases, that's a subterfuge. It's an excuse made. It's just in terms of is this a priority or not.

And I would go at this in a couple of different ways. In one way, you look for the positive deviant in your hospital, especially another med-surg floor where there is a nursing champion. Ideally it would be the nurse manager or a charge nurse or a bedside nurse who decides, "You know what? I'm going to treat every patient as if they're my family. And I'm not going to keep Foleys in for my convenience. I'm going to make sure that if I don't want my mother or my father to have a Foley, I'm going to remove it in this patient." And use that unit then as your exemplar unit to then kind of spread the message throughout the hospital that it can actually make a difference.

And the type of units where that could be done would be geriatric units, rehab units, where mobilization and dignity are considered very important. And so that really becomes something that the nurses on those units kind of believe in, and that's why they remain on those types of units. I think that's the first thing.

I think the second thing, this issue that Ghinwa brought up in terms of getting nursing leadership involved, is an important issue. I think docs can say as much as we want – no, we want the Foley out – but this is really a nursing issue. And Foleys usually are not put in for physicians' convenience because as long as, as we discussed the I's and O's are done without using a Foley, it really doesn't matter that much to most physicians.

But nursing leaders, I suspect that if they knew that there were a certain percentage of patients who had inappropriate catheters and that when you looked at this and you kind of talked to people, you realized that maybe the sotto voce reason is nursing convenience, then through the unit managers, that's where that can drive change. But it really would be kind of nurses talking to other nurses.

And I think the final thing that I would highlight, and this could be done in conjunction with the business case that Ghinwa talked about as well, but the very real non-infectious harms of the Foleys. I know we're talking about CAUTI here, but the very real harm of pain and discomfort of having a Foley in, of the fact that this is going to decrease their activities of daily living, that this may be a fall hazard. Patients may think they have to urinate because of the irritation of their bladder, get up and trip over the tubing. And the DVT that may occur and the pressure sores – it does come down to kind of a dignity issue.
And I know one of the comments about the mid-level – if this were your family member, would you really want a Foley in Day 3? In some hospitals that have a culture of clinical excellence, that's what they focus on – that we're going to be the safest hospital in the country or we're going to treat everyone as if they are a family member; and they walk the talk and they deal with these types of issues.

So I do think that – I appreciate, Erica, your bringing this up, but there is some guidance about this.

The final thing I'll mention is that there are some hospitals – and we found this recently in our study in Michigan – where the nurse wants to remove the Foley, but the patient or their family member says, "No, they're too frail; and we should keep the Foley in." And this doesn't happen very often, but it does happen. And we actually have scripts on www.catheterout.org that people can use that can be helpful in overcoming this.

And the real issue will be not only talking about the potential harm, but eventually the Foley is going to have to come out. Unless this is a patient who's end of life where they're going to go to hospice with a Foley – again, but that's going to be a small sliver of patients. Foleys eventually need to come out. We might as well do it now to limit the problems associated with bladder acne and bladder deconditioning. And so usually discussing it in that context can help turn around a patient or their family in allowing the Foley to be removed.

Thank you, Dr. Saint.

Nancy Lander, you have your hand up?

Oh, I forgot to put it down; but I want to make two comments about that because I think that's the greatest question that Erica brought up. And most of what I was going to say, Dr. Saint already just said. But the way to address that frequently is to look at the hospitals or the units that are doing it; figure out why they're doing it and what's doing it. And Dr. Saint just articulated all the reasons that are really important. But it really does go back to some of those issues around the culture of excellence and a culture of safety and nurses really being committed when they come to work about doing the right thing to keep the patients independent and prepare them for discharge.

But from a very technical end, I also want to say sometimes it's not a question of even the business case as much as it is the workload and how to organize the workload. So after the attitude and the approach and the culture, you might want to consider are you doing hourly rounding at your hospital? And how can you get mutual support in task assistance between the team on the floor to go around and do the hourly rounding as well as get those patients up for
toileting because you might be able to, for lack of a better term, kill two birds with one stone and really organize it so the nurses aren't as or don't feel as inconvenienced.

Thank you.

We have a couple of comments I'd like to read. One is that we should take it about this patient on an individual basis, bringing it up as a mass policy change in comparison with talking with the nurses about a specific patient and why it is more work. You then can continue to discuss infection risk, calculating how many days that patient is at risk and what barriers and what has to be different to get the catheter out about this patient has often worked.

Also, "Reinforce that this could be something that is discussed in leadership rounds or daily rounding to reinforce the clinical practices daily."

We've had some great questions. It looks like we have nothing much coming in at this point, and we are close to our close. I'd like to thank everyone and hand it over to Sara.

Thank you, Maria.

Thanks everyone for your participation on today's call. We had over 120 people from around the state joining us. I just want to reiterate that fact because I think it's sometimes hard to tell on a webinar, but you really have, in addition to our tremendous faculty, a wealth of resources in your own peers and colleagues around the state who can share their approaches to these very common challenges you all are facing.

I also want to mention that although we didn't get to the second case scenario that we had for today because there was so much discussion about the first, it really does address some of the concerns that Erica raised about how to operationalize this idea of nobody wanting to harm their patient and what Dr. Saint brought up in response about the non-infectious harm associated with Foley catheterization.

And I would encourage you, if you haven't already, to take a look at that case and think about it when you go back to your units and to your teams and that focuses on an elderly gentleman whose indwelling urethral catheter led to a CAUTI which led to a course of antibiotics which led to a C.diff infection, a longer length of stay in a hospital, a move to a rehab facility and isolation within that facility, which really affected him in terms of his mental status, his depression, his ability to interact with others and participate in his recovery. So these are very real issues that are at a personal level that can be reinforced with both resistant patients and resistant staff.
So these are all things to go back and think about at your own organizations and to bring with you to the next Office Hours Call as well, which will be held on Tuesday, November 12th, from 11:00 a.m. to 12:00 noon. You'll get case scenarios sent to you in advance by your Project Managers, just like you did for this one; and the topic of that call is Hard and Soft Stops and Discontinuation of Catheters at Trigger Points. So another issue that was touched upon here – making sure you don't miss those opportunities to discontinue a catheter before a patient leaves the critical care setting or the operating room or other opportunities of that nature.

And the last thing I'll mention is that as you think about your policies, your protocols, the supplies you have in place at your hospitals, take a look at the New York State Partnership for Patients Reassessment of Current Practices for CAUTI that's up on our website now. Once we have a robust response from all the hospitals, we'll be able to compare them across the state, as well as to the responses you submitted, to a very similar assessment that we conducted at the start of this initiative. And I think it's also a great opportunity to guide your own internal strategizing about how to continue to make strides forward in reducing catheter associated urinary tract infections.

So with that, I will thank everyone once again for joining us and look forward to speaking again on the 12th. Have a great afternoon.

Thanks.

Thanks, Sara.