Janet Lilleberg: Hi, this is Janet Lilleberg and I’m here to talk to you about this third webinar for reporting CAUTI in NHSN. We'll start talking about submitting data in NHSN and this is the website you will be submitting to. In the last webinar I gave a little homework about registering for the digital certificate or choosing to wait for the SANS process. I received an email from NHSN who stated that at this time they still do not have the enrollment process through SANS finalized and if you wish to wait a little longer, hopefully they'll have it by the end of the year. Sorry for the delay.

That's the most recent information received earlier this month. I hope you have had a chance to think about which staff will be responsible for collecting and entering the data. Today we'll talk about:

- How to access the patient safety modules and training resources for that module.
- We'll also talk about how to setup the patient safety module
- Understanding NHSN surveillance and the key terms in the patient safety module.

I want to provide you with a couple websites, the first because NHSN has a lot on it so sometimes you aren’t sure where you are with it. To find the information that is most relevant for submitting CAUTI data, I suggest that you do this quick tutorial about navigating the NHSN website because it gets you to the point of finding all the protocols, training materials and everything you will need to submit the CAUTI data. It walks you through getting that information.

There is also a patient safety module that CDC requires you to complete in order to report CAUTI in NHSN.

Right now we'll get started on talking about the patient safety component. Within the patient safety component there are several topics and the one we're talking about is CAUTI. Within the patient safety the structure of NHSN is organized so there’s a device associated module and CAUTI is within the device associated module within patient safety.

I'd like to go through the how-to setup of the patient safety module or the steps you'll need to take.

First, only the facility administrator can activate the patient safety module in order to collect and submit the data. It can only be done after going through the enrollment process that was mentioned in the previous module. If you decide to activate the patient safety component this year and then next year you want to add the personnel safety component, just remember that only the facility administrator can do that.

That was tricky for some of the PPS hospitals that activated the personal safety module this year, because you don’t even see the screen to do that unless you’re the facility administrator.
After you get your challenge phrase or password upon receiving the digital certificate or going through the SANS process, you’ll enter that password and go to the home page of NHSN. This will be the NHSN reporting link on that page. When you click on that link there will be a blue bar on the left side which is for setting up the patient safety component. You’ll find all the links on the blue bar for setting it up.

The facility administrator when logging into NHSN, there will be an add/edit component and when you select that you’ll have to enter the primary contact information. You’ll need at least to add one user for this component. So, when you’re adding the user that would also be on the blue bar and the facility administrator, when you add the users, you’ll also determine their rights and that’s based on whether they’ll be entering data or analyzing. It will ask you about their rights. Also, you should enter the primary contact information.

If you give them administrator rights then they can add other users also and we would like you to have at least two users or two people with access to NHSN. After choosing the user rights the screen opens up and this is where you would confer the rights to the user based on the tests they’re performing.

Basically, for the users you’ve assigned to NHSN, I want to make sure you realize that they also have to go through the training and registration to get their own digital certificate. I want you to know you can’t share your digital certificates.

The next step in getting setup for submitting data would be mapping your hospital locations. Before entering the data into NHSN you need to map all the locations or units in your hospital. Mapping locations should be done in the planning stage before you’re actually submitting the data. When you’re mapping it’s the same across all components, whether it’s personnel safety or patient safety.

The next step is the monthly reporting plan and that’s also a link on the blue bar. In the monthly reporting plan you’ll inform the CDC which modules a facility is following during a given month. A facility must enter a plan for every month of the year, even those in which no modules are followed. A facility may only enter data for the month in which the plans are on file and this is required. It’s a simple thing to do once you’ve had your locations identified.

You’ll first identify which locations you’ll be entering the data for. The second step would be to say that you’ll be doing the device associated module and you’ll be doing it for CAUTI.

Now that you know the steps to submitting the data into NHSN I want to provide you with some background information for understanding how to do it. That’s what’s in the patient safety training on the NHSN website. Let’s take a few minutes to talk about the methodology and some of the key terms for submitting patient safety.

In NHSN surveillance there are a couple things that have been determined as important. You’ll be using active versus passive. In other words, you’ll have trained personnel collecting the data and they’ll be using standard NHSN definitions and you’ll be trained for consistency. The next thing is it will be patient-based instead of based on laboratory results. It will be based on chart review and actually visiting patients and that kind of thing.

It’s prospective instead of retrospective, so you won’t be looking back at old charts but at current patients. It’s priority directed versus comprehensive, so in other words we’re looking at specific targeted things and not just overall surveillance. The measures are risk adjusted, which means it’s controlled so we can compare it from one facility to another, instead of crude rates. You’ll also be training to collect data that’s based on incidents not prevalence, new cases.
There is a little difference between clinical surveillance definitions and clinical diagnosis. The surveillance is population-based. They aren’t using as much clinical judgment it’s more for identifying trends and establishing baselines and comparing one facility to another. So there may be some disagreement with the clinical definitions and you’re encouraged to submit any questions about that to NHSN.

The key terms we’ll talk about today are, the healthcare associated infections and some of the concepts used in the locations. We’ll also talk about attributing HAI to a location and this is where I’m talking about once you’ve mapped the locations then you’ll use that in attributing cases to different locations.

A **healthcare associated infection (HAI)** is a localized or systemic condition resulting from an adverse reaction to the presence of an infectious agent or its toxins, that was not present on admission to the acute care facility. This is the definition in the protocol and I’ve provided the link for the protocol for this. Infection is considered an HAI if all the elements of the NHSN site specific infection criteria were first present together on or after the third calendar day of admission to the facility. In other words, the day of hospital admission is considered day one.

So an element of the infection criteria may be present during the first two calendar days of admission as long as it’s also present on or after the third calendar day. All elements used to meet the infection criteria must occur within a timeframe that does not exceed a gap of one calendar day between two adjacent elements. So many of the HAI definitions are based on timing, which you’ll look at very closely when determining if it’s a CAUTI or not.

A couple examples here…

In the first example the patient is admitted on day one and on the third day they have all the elements of the infection. If they’re all there on the third day then that would be considered an HAI for that facility.

In the next example, all the elements are present on the third day, even though one of the elements was also present on day two. Therefore, it would be considered an HAI because they’re all present on the fourth day.

In the next example, all the elements were present on or after the third day with no more than one day gap in between them, so they’re also considered HAI.

Another term you’ll hear is the **Device Associated HAI**, which has to do with the device being in place for more than two calendar days and when all elements of the CDC NHSN site-specific infection criteria were first present together. So HAIs occurring on the day of the device discontinuation or the following calendar day are considered device associated HAIs, if the device had been in place already for more than two calendar days.

If the elements or infections are present before then it’s called **present on admission**. If all the elements of an infection definition are present during the first two calendar days or before the day of admission, the first day of admission and/or the day after admission, and are documented in the medical record then the infection would be considered present on admission.

Infections that are present on admission should not be reported as HAIs and with that in mind, remember it has to be documented in the chart. So symptoms must be documented by healthcare professionals and physician diagnosis can be accepted as evidence of an infection that is present on admission only when the physician diagnosis is an element of the specific infection definition.
Another term you’ll hear is the **date of the event**, which is the date when the last element used to meet the criteria occurs. So another synonym would be **infection date/date of infection**.

Because the infection is associated with particular locations within your facility, it’s important to think about how you’re going to map your locations. These are some of the definitions and rules that are used in mapping the locations. There is a guide which I mentioned earlier that you can use to do that.

The location is used to stratify your infection rates and the device utilization ratios and standardized infection ratios. You will want to identify the locations based on the type of patients you have. Again the locations are shared across different components in NHSN, so you’ll only do this once if you’re reporting on different measures.

The **location** is the area where a patient was assigned while receiving the care in the healthcare facility. An inpatient location is an area is where patients are housed overnight. Only inpatient locations where the denominator data can be collected are eligible for monitoring. So, an example of a location that’s not eligible would be an operating room, radiology or ER.

There’s a rule called the **80% rule** and when you’re looking at your patients you’ll determine the type of patient receiving care. If 80% of the patients are of a consistent type you’ll classify the location as that type. So you’ll refer to the patient mix over the last full calendar year to determine that and you’ll use the guide I mentioned earlier to determine what your options are for that.

There’s an exception to the rule and that is with the med-surge units. If med-surge patients are more than 60% than you’ll create a location that’s mapped the majority type, either medical or surgical. If the patient mix is 50/50 or 60/40 then you’ll create a location that’s called Med-Surge, which is a mix and one of the options of that protocol.

Another group of patients are **observation patients**, which are in observation locations are considered outpatient and therefore, do not contribute to any inpatient counts. However, if the observation patient is in an inpatient location then they should be included in your counts for all patients counts and device day counts. This might be a little tricky, but NHSN instructions for recording the number of patients in an inpatient location, states that for each day of the month selected at the same time each day, the number of patients in the unit should be recorded.

This procedure should be followed regardless of the patient status as an observation patient or an inpatient. If an observation patient is transferred from observation location and admitted to the inpatient location, then you would begin counting the days and the device day, starting at the date of admission in the inpatient location. So, if an observation patient is sent to an inpatient location for monitoring, the patient would be included for all patient and device day counts. You would count the patient as inpatient since the patient is housed, monitored and cared for in the inpatient location.

When you’re assigning locations and mapping them, another option is to choose mixed acuity. For locations with a mixture of patient populations that don’t meet the 80% rule, the locations may be mapped to the mixed acuity location. These patients have a variety of levels of acuity so their risk varies and for this reason CDC does not publish rates and the information isn’t comparable from one facility to another. So when you choose mixed acuity the rates won’t be published, and would not be calculated.

You might want to know about the state requirements that are coming up. To meet the state requirements, all inpatient locations must be included in the surveillance. This includes swing bed patients and observation bed patients that are located in the inpatient unit. This is for the Minnesota State requirements.
Talking a little now about attributing healthcare associated infections to a location. When you’re investigating an infection you’ll ask yourself if this is an HAI and if not you should stop. If it is an HAI which site specific criteria are met? Is this a device associated HAI? If yes, you want to decide which location it should be attributed to and that’s what we’re going to talk about next.

The location is the location where the patient was assigned on the date of the urinary tract infection event. It’s the date when the last element used to meet the criteria is met. At the facility level, once an HAI is identified the next step then is to determine the level of attribution. For example, if a patient is discharged from hospital A and comes back 15 hours later with an HAI, this would be an HAI for hospital A. However, if that patient is admitted to hospital B with an infection, which has been attributed to hospital A, it would also be an infection for hospital A and not B. That’s talking about it at the facility level.

Attribution of HAI is also done within your facility at the location level, where we talked about mapping locations. This is where HAI is attributed to the inpatient location where the patient was assigned on the date that HAI was identified. For example, if a patient has a catheter inserted in unit A and they’re transferred to unit B on the second day, and on the fifth day the patient meets all the criteria for a CAUTI then the CAUTI would be attributed to unit B because the patient is staying in that unit.

Of course there’s an exception to every rule, which is called the transfer rule. If a device associated HAI develops within 48 hours of transfer from one inpatient location to another within the same facility then the HAI is attributed to the transferring location. So, in the previous example, the patient with the catheter is transferred from surgical ICU to an orthopedic ward and now they develop the CAUTI within that 48 hour period, then the CAUTI would be attributed to the original unit that inserted the catheter or the ICU. It’s all based on the time period.

A couple examples…

In the first one the device is placed on day one and on day three all the elements are determined for an HAI being present. So the HAI would be attributed to the ICU because it’s within 48 hours.

- In the second example they’re transferred to the third floor and it’s longer than 48 hours that the HAI is present, so in that case the HAI is attributed to 3 West.

- The next time we’ll talk about reporting CAUTI and getting into some of the timelines, definitions and details for collecting the data and how to report it, as well as some of the output files.

We’ll also review some case studies on CAUTI where there will be an opportunity to tell you how to join the NHSN user group and get on the HAI distribution list.

For next time we’d like you to complete the patient safety training modules and activate your patient safety component as well as assign the rights to the users. If you can map your locations to your facility and prepare your monthly reporting plan then you’ll be ready to submit the CAUTI data next time around.

Now we can open for questions. Also know that you’re welcome to contact me at Stratis Health or contact NHSN from the link provided.

**Vicki Olson:** I think the only question in is from Rebecca who didn’t seem to get the slides. We sent them out to the HAI distribution list as well as MHA. I’ll have Mary send you the slides and to add you to the HAI distribution list if you’re not on it.
In terms of the slides being available after the presentation, they will be. They are being recorded and will be placed on the website. We will also have a transcript to go with it and all this is in process right now.

**Do we have to wait for SANS to go through the training?**

**Janet Lilleberg:** If you're going for your digital certificate you would have access to NHSN if you don’t want to wait for SANS. If you choose to wait then you can’t activate the patient safety component until you have access to NHSN through the SANS process or the digital certificate.

**Vicki Olson:** The training is on the website so you can complete before signing up for either system.

The only thing you would need to wait for SANS is to actually do the steps that we discussed today related to the monthly reporting plan and activating the module, as well as mapping the locations and everything. You need to have access to NHSN before you’re able to complete that piece of it.

**Janet Lilleberg:** But you can do the trainings, those are not part of the secure website. All the webinars and everything aren’t within the secure website. The mapping you would wait for until you have access to the secure website. You can learn about doing it and you can think about how you would do it. I think if you read the manual on how to do the protocol then you would be able to do the mapping.

Think about how you would do it in your unit, it’s actually a simple thing to do within the secure website once you’ve determined how you want to do it. That way you can be prepared and totally ready to do it once you get the access.

**Vicki Olson:** Michelle raised a question about mapping... I think mapping is individual to the organization. I think the question that was outstanding was related to observation beds and we are including those as part of the definition, denominator and numerator.

**How do you actually name your units and divide them for mapping them?**

That’s up to you. The determination of what type of unit they are is where you would use the NHSN definitions to be consistent with what they’re looking for nationally.

**When is the next webinar?**

The next webinar will be January 9th.

Michelle, you had a question about mixed acuity units, would that be comparable per NHSN. Are you talking about, in terms of comparing results?

**Michelle:** If we’re including newborns, observations and others, I don’t see how we could have anything besides a mixed unit.

**Vicki Olson:** If you were putting those all into one unit that would be true. I think we’re anticipating that most people will have.

**Michelle:** So then we won’t be compared to anyone? When you have your mapping and you’re looking at your critical care areas or how you’re going to map your ICU population, it depends on how you manage your ICU patients. If you don’t have your 80/20, 60/40 or 50/50, it’s a mixed acuity unit and NHSN does not plan to publish those rates. I’m concerned that with critical access hospitals that’s the units in particular that will be swinging these patients from a critical care status to a med-surge status or surgical.

That’s the questions I have about how critical access hospitals will be used in its CMS comparisons or for process improvement through the QIOs and such. That’s my
questions, how Minnesota is going to manage those, differences of population in a critical access hospital.

**Janet Lilleberg:** You bring up a good point Michelle, which is when we’re looking at data it’s always important to understand the data in terms of when you’re comparing yourself to another organization. For CMS purposes this information wouldn’t have any relevance to their requirements, so this is a state requirement and we’ll be internally reporting this from updates and focus.

I think we can put some disclaimers on the information. I think overall we have to recognize as a point of doing and focusing on these areas, particularly when we made the change with CAUTI was because we realize that we have a problem with CAUTI in Minnesota and we really need to work hard on improvements. Therefore, the major focus here is an improvement and obviously you’re trying to compare yourself to yourself to show improvement over time.

Ideally, as we look at data and see hospitals that are funding themselves than the idea is to be able to use those hospitals as best practices and be able to share that information, so we can all benefit from those earnings.

**Marilyn Grafstrom:** At MHA we will be asking the PPS hospitals that are a part of NHSN have conferred MHA rights to your NHSN data so we can provide comparisons within our state against critical access hospitals and we really are leading edge in this work. I’m not sure any other states are asking critical access hospitals to participate in NHSN or submitting their data in this way. So, I feel we’re ahead of the game and I’m proud of the work we’re doing. Hopefully, we’ll be able to show some great results in Minnesota with CAUTI prevention in our critical access hospitals and then share this work nationwide.

**Jane Hurst:** Hi from Life Care. I’m still on this same thing and comparing the PPS hospitals and critical access. We won’t be comparing the same things we all know, so I’m assuming there will be more definition on this. That’s where I’m sitting. We’ve been reporting to NHSN for over a year and just wondering, because we don’t really have anything to compare to now, so when they show our facility’s statistics to the med staff and they say you can’t compare to that, and of course you really can’t but that’s all we have right now.

**Vicki Olson:** Right and the PPS hospitals for the CMS requirements, the measurement is by third rate and that’s difficult to get with critical access hospitals which gives us low volume. The measurements will actually be different and hopefully we get into that a little more in the January presentation. It will not be apples to apples in terms of the PPS measurements that are currently happening through CMS requirements.

Patients of multiple units like patient type, even though all the patients may be in one physical location 44:54. That’s a queue, as you look at the different definitions of units, it’s probably the most helpful in terms of how you would share that data within your organization and how you look at patient populations within your organization or how you want to divide your unit.

You can certainly make that determination of when they group together or if you just want to do one. I would say that multi-critical access hospitals only have one/two locations, but that’s certainly a determination you can make and what will happen with the reporting for Minnesota is that all those will be grouped together so you’ll only have one hospital number externally for the public reporting card.

**Janelle Shearer:** With a component module, what is a long-term facility?

**Vicki Olson:** I believe that’s a whole different module that wouldn’t be part of this? This is just acute care hospitals, whereas that would be more like nursing homes but that isn’t part of the patient safety module.
Janet Lilleberg: Is there a way to revise the mapping if we find we haven’t mapped properly?

Marilyn Grafstrom: The guide itself explains how to change your mapping. If you do make a change then your ability to trend or follow your statistics over time is limited, because it’s following is based on the name of the unit. You can read the guide on that it’s in the back. It would affect your ability to trend.

Vicki Olson: So the answer is yes, you can do it but preferably you put some time into it initially so you feel you have a good direction for where you want to go with it.

Jill: For our homework, the review and complete the patient safety training module, is there some way to confirm that it’s been done? I’m looking through it and not sure I’m on the right part. Please navigate me through that if you don’t mind.

Janet Lilleberg: On the fifth slide it describes the patient safety training module website and on that site there’s a webinar that you listen to and take a little test. They’re tracking that.

Jill: What is that name, because I’m seeing overview of the patient safety component but I haven’t gotten to…?

Janet Lilleberg: Yes, I think it’s a slide and there’s a little quiz at the end.

Vicki Olson: Would it be helpful for us to send the link out to everyone so you know exactly what’s being referred to?

Jill: The link is on the slide but it goes to just that page that says patient safety component training. If there’s something more specific or which component of that page we’re to be on that would be helpful. Thank you.

Vicki Olson: Okay.

Guest: We’re wondering where the guidebook or manual is.

Janet Lilleberg: Which one are you speaking of? On slide five, navigating the NHSN website within that they’re showing you how to navigate inside the website and at the end it shows you how to find the page for all the information on CAUTI reporting. It would include the protocol and manuals, as well as data submission forms you could use to collect data and there’s also webinars or links to different ones for CAUTI reporting.

I suggest that this slide, (5), if you review that quickly it will show you where to go to get that information.

Vicki Olson: Maybe we can come up with a cheat sheet of what our tentative key information pieces are that we encourage you to be familiar with on the NHSN website and where you would find them. We’ll do an invitation. We’re thinking of adding more information on our Stratis Health website and tools. Maybe we can do that before the next meeting to make sure when we’re talking about things that we’re all talking about the same things.

Guest: How will we know when the SANS is up and ready?

Vicki Olson: Janet is in constant communication with them, so when we know we’ll make sure you know. If there are no more questions we’ll wrap up this presentation and we’ll talk to you next time. Thanks everyone.

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