Infectious Disease Epidemiology
LA Office of Public Health
Winter 2013 Edition

In the Know

HEALTHCARE ASSOCIATED INFECTIONS INITIATIVE

A Quarterly Newsletter for Infection Preventionists

Learnlinc On-Demand HAI Training Webinars

- CAUT &CDI
- Conferring Rights
- Missing Data and Alerts
- Analysis and the Standardized Infection Ratio
- Data Entry, Import and Customization
- Surgical Site Infections
- Case Studies
- Workshop
- Understanding the Standardized Infection Ratio
- Ventilator-Associated Events
- CMS Rules
- Quality is Key

NHSN National Healthcare Safety Network

Learn more about this free service, training, and enrollment at www.cdc.gov/nhsn

Public Health CLABSI Validation

Internal and external validation was emphasized at the 2013 Louisiana Statewide National Healthcare Safety Network (NHSN) trainings. Validation is important for data quality and ensures that facilities completing the NHSN protocol adhere to standardized definitions.

In order to ensure data quality and increase educational capacities of infection preventionists, Infectious Disease Epidemiology will initiate Central Line-Associated Bloodstream Infections (CLABSI) Validation in January 2014. The purpose of the validation audit is to assure accountability of hospitals in complete and accurate reporting of CLABSIs according to NHSN methods as well as to assure credible reporting and appropriate outcomes under the Centers for Medicare and Medicaid Services (CMS) Inpatient Quality Reporting (IQR) Program.

18 targeted facilities and 6 selected by a random sample will be contacted requesting voluntary validation of CLABSI data reported to NHSN. A CDC Medical Chart Abstraction Tool (MRAT) will be completed for each selected chart. The full protocol and sampling strategy is accessible at the following URL: http://www.cdc.gov/nhsn/PDFs/CLABSI/toolkit-2012/2012-CLABSI-Validation-toolkit-appendix-3a.pdf).

Infection preventionists at facilities selected for CLABSI validation will be contacted soon requesting a validation visit. The MRAT will be used to evaluate randomly selected charts from blood culture line listings. Please note that any validation efforts conducted by Infectious Disease Epidemiology are not connected with CMS CDAC contractors and are not part of the IQR payment update. Additionally, this validation will not be used for regulatory purposes. Individual results with validation will not be shared with other sections within the Health Department or the public. Our assurance of confidentiality with public health investigations is listed below:

Title 40 Public Health and Safety
Chapter 1. Division of Health and Health Officers
Part 1. State Division of Health

§3.1. Confidentiality of public health investigations; prohibited disclosure and discovery; civil penalties

A. All records of interviews, questionnaires, reports, statements, notes, and memoranda procured by and prepared by employees or agents of the office of public health or by any other person, agency, or organization acting jointly with that office, including public or private colleges and universities, in connection with special morbidity and mortality studies and research investigations to determine any cause or condition of health, and any documents, records, or other information produced or given to the state health officer in response to a court order issued pursuant to R.S. 40:8, hereinafter referred to as "confidential data", are confidential and shall be used solely for statistical, scientific, and medical research purposes relating to the cause or condition of health, or for the purposes of furthering an investigation pursuant to R.S. 40:8, except as otherwise provided in this Section.

The HAI program allows Louisiana to create a collaborative effort to prevent healthcare associated infections. It includes development of a state plan for preventing healthcare associated infections, development of a monitoring system, and implementation of a prevention program. Visit dhh.louisiana.gov/idepi to access the Healthcare-Associated Infections Resource Center.

Updated Procedure Import Template

The 2014 NHSN Procedure Import Template is now available for download at the following URL: http://www.cdc.gov/nhsn/XLS/SampleImport_withHeader_8_1.xlsx.

Please refer to the Procedure Import file specifications as well as the NHSN Manual for complete details on the data field requirements and definitions. These documents are available from: http://www.cdc.gov/nhsn/acute-care-hospital/ssi/index.html

The following changes will be applied to the procedure import process in 2014:

1. Type of HPRO, Type of KPRO: data in these fields will only be required and accepted for HPRO and KPRO procedures with a procedure date on or before 12/31/2013.
2. Wound Class: a value of 'U' (unknown) will not be allowed for records with a procedure date on or after 01/01/2014.
3. Spinal Level and Approach: a value of 'N' (not specified) will not be allowed for FUSN and RFUSN records with a procedure date on or after 01/01/2014.
4. Height, Weight, and Diabetes: NEW!!! A value will be required for these fields for all NHSN operative procedures imported with a procedure date on or after 01/01/2014.
5. Closure Technique: NEW!!! This is a required field for all NHSN operative procedures imported with a procedure date on or after 01/01/2014.
6. Type of Joint Replacement: NEW!!! Four new fields related to type of HPRO and KPRO procedure have been added. Please see NHSN Manual for full requirements and definitions.

NHSN SAMS Migration

Secure Access Management System (SAMS) will replace NHSN's use of the Secure Data Network (SDN) and digital certificates will no longer be required to access NHSN. General migration to SAMS is currently in place and will take a couple of years to complete.

NHSN users may expect a gradual migration wherein you will receive an email invitation to register for SAMS instead of renewing your digital certificate. Users who have not received SAMS invitations are to continue annual digital certificate renewal until invited to SAMS.

What you can expect once you have received your invitation and have registered with the SAMS Partner Portal:

1. CDC will email you a form to be completed and returned
2. You must print the form and take it, along with your Photo ID, to a Proofing Agent.
3. Return the completed form and legible photocopies of your ID to CDC

Migrating users should expect two-step identify verification: (1) verification for access to SAMS and (2) verification for access to NHSN via the SAMS portal with a password and grid card. Identity verification will need to be verified by a proofing agent at each of the aforementioned steps.

It is important to initiate the SAMS process immediately once you receive the email invitation as receipt of the NHSN grid card can take approximately two weeks. Timely submission of your invitation avoids lapses in data submission to NHSN.

Online NHSN Training Opportunities

The NHSN website now includes interactive trainings. These trainings include self-paced slides with detailed graphics, screen shots of step-by-step examples of form completion for instructional purposes, practice questions, and case study examples. Trainings are available for Device and Procedure-associated Modules and MDRO/CDI LabID.

Archived web streaming trainings are available for Device and Procedure-associated Modules, MDRO/CDI LabID, Analysis, Validation, and Location Mapping.

Update and Comment on the National Healthcare Safety Network (NHSN) Surgical Site Infection (SSI) 2014 Changes

CDC has rigorously reviewed NHSN SSI methodology in partnership with external surgical, infection prevention, and perioperative nursing experts. The consensus input is a call for NHSN to collect and analyze additional SSI data that will enable improved risk adjustment and procedure-specific analyses. CDC concurs with these recommendations and will introduce several important additions and modifications to the NHSN SSI protocol data requirements in 2014, including: height and weight; diabetes status; incisional closure type (primary vs. non-primary); and a modified definition of procedure duration.

In planning for modifications to existing NHSN data requirements, CDC considers the implications for NHSN users in terms of added burden and availability of data in electronic health records systems. Some NHSN users have expressed concerns that some important SSI risk factors are not consistently available in the perioperative record systems used in their hospitals, and they may not have sufficient time or resources to capture these elements in existing records systems in time to meet 2014 reporting requirements. CDC acknowledges these concerns and is taking immediate steps to address them. Although all SSI data fields are built into the NHSN application scheduled for release in 2014, CDC has decided to provide interim guidance for reporting diabetes and incisional closure type, which may be particularly burdensome for some NHSN users. **NHSN users are strongly encouraged to work with their operating room (OR) liaisons, information technology (IT) departments, or other groups within their facility as needed, to ensure that diabetes and incisional closure type are readily available for mandatory reporting to NHSN beginning 2015.**

Instructions for entering diabetes and incisional closure data into the NHSN SSI Denominator for Procedure Form, including interim methods for data entries for NHSN users who may not have sufficient time or resources to establish electronic data capture in 2014.

Diabetes (Y/N):

The diabetes data field calls for a Yes/No data entry depending on whether the patient is a diagnosed diabetic on the basis of documentation in the medical record regarding diabetes management, either insulin or oral anti-diabetic agent(s). Indicate Y if the patient has a diagnosis of diabetes requiring management with insulin or a non-insulin anti-diabetic agent. This includes patients with "insulin resistance" who are on management with an anti-diabetic agent. This also includes patients with a diagnosis of diabetes requiring management with an anti-diabetic agent, but who are noted to be non-compliant with their prescribed medications. Indicate N if the patient has no known diagnosis of diabetes, or a diagnosis of diabetes that is controlled by diet alone. Also indicate N if the patient receives insulin for perioperative control of hyperglycemia but has no diagnosis of diabetes.

Information about a patient's diabetes status should be routinely available in the admission H&P, preoperative patient evaluation, and other hospital records. However, we are aware that in many facilities the diabetes status may not be a standard element in the perioperative record. The interim method for data entry by NHSN users who lack time or resources to capture this information in 2014 is as follows: default to "N" value for all patients until a system is in place to identify and report this information. The diabetes field, with "Y" or "N" data entries in accordance with the NHSN protocol, will be required for all NHSN users beginning in 2015.

Incisional Closure Type:

Primary Closure is defined as closure of all tissue levels during the original surgery, regardless of the presence of wires, wicks, drains, or other devices or objects extruding through the incision. This category includes surgeries where the skin is closed by some means, including incisions that are described as being "loosely closed" at the skin level. Thus, if any portion of the incision is closed at the skin level, by any manner, a designation of primary closure should be assigned to the surgery.

Non-primary Closure is defined as closure that is other than primary and includes surgeries in which the superficial layers are left completely open during the original surgery and therefore cannot be classified as having

primary closure. For surgeries with non-primary closure, the deep tissue layers may be closed by some means (with the superficial layers left open), or the deep and superficial layers may both be left completely open. *The NHSN protocol includes numerous examples; but in short, anything not meeting the definition of primary closure is by default non-primary closure.*

Information about a patient's incisional closure type should be available in the operative report. However, we are aware that in many facilities the incisional closure type may not be a standard element in the perioperative record. The interim method for data entry by NHSN users who lack time or resources to capture this information in 2014 is as follows: continue to report the procedure denominators exactly as you were doing for 2013. Further, we ask that for each SSI identified, a thorough evaluation be conducted to determine if the linked procedure was a primary closure or non-primary closure and update the procedure record (as non-primary closure) if necessary. From feedback we have gathered, this is likely the method most similar to the current practice, which has not been accurately removing all non-primarily closed procedures, but will at least allow NHSN to identify the SSIs linked to primarily closed procedures. We anticipate that this will not cause any large shift in the 2014 data used for inter-facility comparison.

Note: We are aware that some clinicians disagree with the NHSN definition of primary closure, as relates to loosely or partially closed incisions in unusual scenarios (e.g., the skin is only approximated at a single point or several points in an otherwise open incision). We contemplated such scenarios when crafting the definition and it was not feasible to write a surveillance definition that could be standardly applied that would account for the potentially limitless variety of closure techniques under actual use in clinical practice. In essence, NHSN is not going to attempt to define "how closed is closed." NHSN has closely adapted the American College of Surgeons, NSQIP definition of primary closure. Please keep in mind that for risk adjustment purposes, the emergency status of the procedure, wound classification, and other patient factors will still be taken into account, as appropriate.

Instructions for entering height, weight, and procedure duration into the NHSN SSI Denominator for Procedure Form; no interim methods accepted.

NHSN duration of an operative procedure: The interval in hours and minutes between the Procedure/Surgery Start Time, and the Procedure/Surgery Finish Time, as defined by the Association of Anesthesia Clinical Directors (AACD): Procedure/Surgery Start Time (PST): Time when the procedure is begun (*e.g.*, incision for a surgical procedure). Procedure/Surgery Finish (PF): Time when all instrument and sponge counts are completed and verified as correct, all postoperative radiologic studies to be done in the OR are completed, all dressings and drains are secured, and the physicians/surgeons have completed all procedure-related activities on the patient.

The modified definition of duration is needed because the requirement for primary incisional closure is being removed from the NHSN definition of an operative procedure in 2014; the previous definition included a procedure stop time that was defined by the time of incisional closure. The data elements for the new definition should be routinely available in the operative record. If you are not sure how to access them, please first consult with your OR liaison or a member of the perioperative team who is responsible for recording operative times. Please also note that the PST is, essentially, the incision time for a surgical procedure, so only the PF is a new part of the definition.

Height: The patient's most recent height documented in the medical record in inches (in) or centimeters (cm)
Weight: The patient's most recent weight documented in the medical record in pounds (lbs) or kilograms (kg) prior to or otherwise closest to the procedure

Previously, height and weight were collected for Cesarean procedures only; these data will now be required for all NHSN operative procedures under SSI surveillance beginning 2014. NHSN does not anticipate difficulty capturing height or weight, and these fields should be collected as instructed.