



CENTERS FOR DISEASE CONTROL AND PREVENTION

NHSN E-Newsletter



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Are you interested in beta testing for the NHSN 9.4 release?

We are currently seeking volunteers for the NHSN annual release of version 9.4. The Beta team is planning for a two-week beta testing period prior to the full production release scheduled for December 7, 2019. Beta testing will provide an opportunity for NHSN users to explore new NHSN features and potentially identify issues that can be resolved prior to the production release.

From October 7, 2019 through October 18, 2019, “dummy data” will be populated in the beta environment for testers to manipulate with the NHSN 9.4 application. During the testing period, all data submitted the previous day during testing will be purged, and new data will be available for testing each morning.

We need volunteers from all NHSN components to participate: Biovigilance, Dialysis, Patient Safety, and the Outpatient Procedure Component. If you are interested in volunteering, please contact us at NHSNBeta@cdc.gov to express your willingness to participate and specify the component for which you are volunteering. We can support a limited number of beta testers, so availability cannot be guaranteed to everyone. More details will be made available in direct communication with volunteers via email prior to the beta testing period.



Patient Safety Component and Outpatient Procedure Component Manual Changes for 2020

Final updates for the Patient Safety Component and the Outpatient Procedure Component manuals are near completion. We anticipate that a summary document of the changes will be available in the next few weeks and will be distributed via email to NHSN Users at that time. Please watch your email for NHSN communications.



PATIENT SAFETY COMPONENT

Healthcare-associated Infection (HAI) and Present on Admission Infection (POA) Worksheet Generator

Are you using the [Healthcare-associated Infection \(HAI\) and Present on Admission Infection \(POA\) Worksheet Generator](#)? If not, we encourage you to do so and if you already are, make sure you are using the tool accurately!

ONCE A USER HAS DETERMINED AN INFECTION DEFINITION IS MET, the Worksheet Generator is a great tool designed to identify the following

- 7-day Infection Window Period (IWP)
- Date of Event and POA or HAI determination
- 14-day Repeat Infection Timeframe (RIT)
- Secondary Bloodstream Infection Attribution Period (SBAP) if applicable

The Generator **DOES NOT** determine if all required elements of an infection definition are present. It is incumbent upon the user to determine if an infection definition was met. Based on the user's data entry of the findings that represent how the infection criterion was met, the Generator **DOES** identify the IWP, date of event, POA or HAI determination, and also the RIT and SBAP.

The Worksheet Generator requires the user to provide:

- 1) Date of admission
- 2) Date of the first diagnostic test which is used to meet the NHSN site-specific infection criterion
- 3) Date(s) of infection elements required to satisfy the NHSN site-specific infection criterion

Accurate determinations are dependent upon accurate data entry by the user. Remember GIGO: Garbage In = Garbage Out!

- 1) Entry of date of admission is used to determine POA or HAI status
- 2) Entry of the diagnostic test date is used to define the 7-day IWP

Admit date: 7/1/2019

Hospital Day/Date	First Diagnostic Test	Infection Window Period (*)	Date of Event	Repeat Infection Timeframe (*)	Secondary BSI Attribution Period (*)
1. - 7/1/2019 - Admit Date			-		
2. - 7/2/2019			-		
3. - 7/3/2019			-		
4. - 7/4/2019	✓	Urine culture > 100,000 CFU E. coli	-		
5. - 7/5/2019			-		
6. - 7/6/2019			-		
7. - 7/7/2019			-		
8. - 7/8/2019			-		
9. - 7/9/2019			-		
10. - 7/10/2019			-		
11. - 7/11/2019			-		
12. - 7/12/2019			-		
13. - 7/13/2019			-		
14. - 7/14/2019			-		
15. - 7/15/2019			-		
16. - 7/16/2019			-		

HAI and POA Worksheet Generator continued on page 4

Healthcare-associated Infection (HAI) and Present on Admission Infection (POA) Worksheet Generator (continued)

- 3) Entry of corresponding dates of additionally required elements is used to determine date of event. For each calendar day within the infection window period where there is at least one element of the NHSN site-specific criterion present, the corresponding box must be checked.

Note the two examples below. Example 1 represents accurate data entry while Example 2 represents inaccurate data entry.

Example 1, Accurate data entry:

The correct determination is POA, date of event 7/1/19, RIT and SBAP 7/1/19 - 7/14/19

★ Correct Date of Event, results in Correct POA determination and Correct RIT

Admit date: 7/1/2019

Hospital Day/Date	First Diagnostic Test	Infection Window Period (*)	Date of Event	Repeat Infection Timeframe (*)	Secondary BSI Attribution Period (**)
1. - 7/1/2019 - Admit Date		<input checked="" type="checkbox"/> Dysuria	- POA		
2. - 7/2/2019		<input checked="" type="checkbox"/> Dysuria	-		
3. - 7/3/2019		<input type="checkbox"/>	-		
4. - 7/4/2019	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Urine culture > 100,000 CFU E. coli	-		
5. - 7/5/2019		<input type="checkbox"/>	-		
6. - 7/6/2019		<input type="checkbox"/>	-		
7. - 7/7/2019		<input type="checkbox"/>	-		
8. - 7/8/2019			-		
9. - 7/9/2019			-		
10. - 7/10/2019			-		
11. - 7/11/2019			-		
12. - 7/12/2019			-		
13. - 7/13/2019			-		
14. - 7/14/2019			-		

Example 2, Inaccurate data entry:

The corresponding boxes for the findings of dysuria were not checked (Garbage IN). This results in a cascade of misinformation (Garbage OUT).

- The only box that is checked is the diagnostic test date and as a result the Generator delivers an inaccurate date of event: 7/4/19. The date of the diagnostic test, in this example, is not the date the first element used to meet the SUTI definition occurs for the first time in the IWP

⊘ Incorrect Date of Event, results in Incorrect HAI determination and Incorrect RIT

- Based on entry of 7/1/19 as the admission date, the Generator determines the date of event (7/4/19) to be hospital day 4 and an inaccurate determination of HAI is delivered.
- Date of event is day 1 of the 14-day RIT. The inaccurate date of event leads to an inaccurate determination of the RIT: 7/4/19 – 7/17/19

Admit date: 7/1/2019

Hospital Day/Date	First Diagnostic Test	Infection Window Period (*)	Date of Event	Repeat Infection Timeframe (*)	Secondary BSI Attribution Period (**)
1. - 7/1/2019 - Admit Date		<input type="checkbox"/> Dysuria			
2. - 7/2/2019		<input type="checkbox"/> Dysuria			
3. - 7/3/2019		<input type="checkbox"/>			
4. - 7/4/2019	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Urine culture > 100,000 CFU E. coli	- HAI		
5. - 7/5/2019		<input type="checkbox"/>			
6. - 7/6/2019		<input type="checkbox"/>			
7. - 7/7/2019		<input type="checkbox"/>			
8. - 7/8/2019					
9. - 7/9/2019					
10. - 7/10/2019					
11. - 7/11/2019					
12. - 7/12/2019					
13. - 7/13/2019					
14. - 7/14/2019					
15. - 7/15/2019					
16. - 7/16/2019					
17. - 7/17/2019					

Healthcare-associated Infection (HAI) and Present on Admission Infection (POA) Worksheet Generator (continued)

In addition to the Generator, NHSN provides several tools to assist with NHSN surveillance determinations. We encourage use of all of these tools, but please note, it is imperative that the instructions provided for each tool be followed.

[MDRO & CDI LabID Event Calculator](#)

[VAE Calculator](#)

[PedVAE Calculator](#)

[Healthcare-associated Infection \(HAI\) and Present on Admission Infection \(POA\) Worksheet Generator](#)

CLABSI Event Data Cleaning

NHSN recently contacted a small number of facilities that incorrectly entered a 2019 Central Line-associated Bloodstream Infection (CLABSI) event that met at least one of the CLABSI exclusions below:

- Epidermolysis Bullosa (EB)
- Munchausen’s syndrome by proxy (MSBP)
- Patient self-injection
- Pus at the vascular site

For 2019, events for whom the patient meets one of the exclusions above should have the “Central Line” data field, marked “No”, even if a central line was in place. In this way, the BSI is considered a healthcare-associated BSI, but not a CLABSI. (Note this will change in 2020, and more information will be forthcoming with the 2020 Patient Safety Component Summary of Changes to be released soon.)

To ensure that your hospital’s CLABSI data is accurately submitted for 2019 reporting, we ask that you review the event identified in the email received and edit the event to correct it. Please follow the steps below to correct the event.

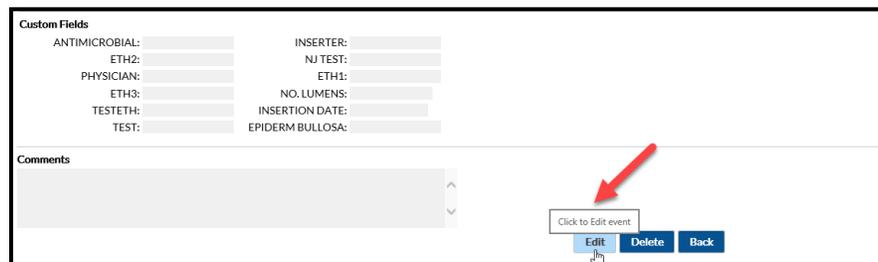
- 1) Log in to NHSN and navigate to **Event** → **Find**.
- 2) Enter the Event ID in the Event # field. Scroll to the bottom of the page and select **Find**.

A screenshot of the 'Find Event' search form. The form includes instructions: 'Enter search criteria and click Find', 'Fewer criteria will return a broader result set', and 'More criteria will return a narrower result set'. Under 'Event Information', there are fields for Facility ID (a dropdown menu showing 'DHQPM Memorial Hospital (ID 10000)'), Event # (a text input field with a red arrow pointing to it), Event Type (a dropdown menu showing 'All Event Types'), Location (a dropdown menu), and Date of Event (two date pickers for year and month).

Optional CLABSI Field Data Cleaning continued on page 6

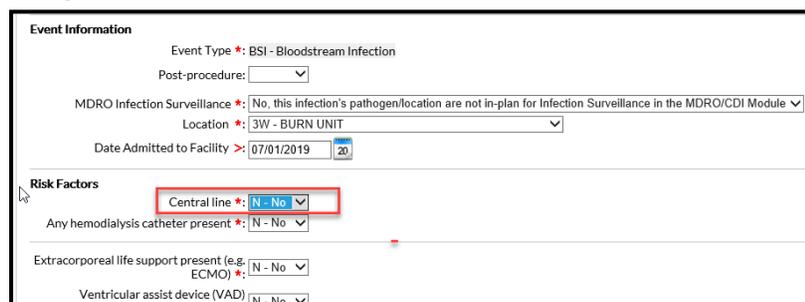
CLABSI Event Data Cleaning (continued)

3) Scroll to the bottom of the “Edit Event” page and click “Edit”.



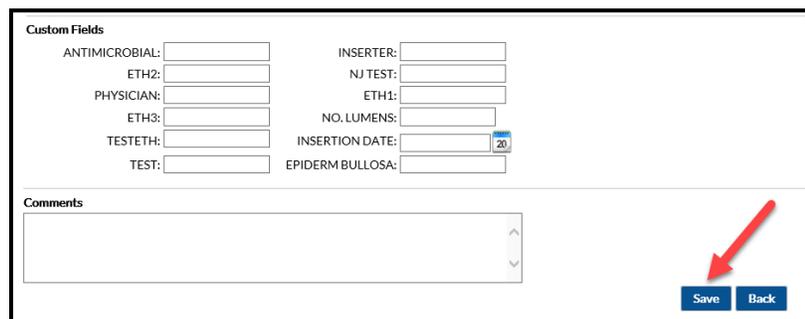
The screenshot shows the 'Edit Event' page. At the bottom, there is a 'Click to Edit event' button with a red arrow pointing to it. Below this button are three buttons: 'Edit', 'Delete', and 'Back'.

4) Change the “Central line” field from “Yes” to “No”.



The screenshot shows the 'Event Information' page. In the 'Risk Factors' section, the 'Central line' field is highlighted with a red box and set to 'No'. Other fields include 'Any hemodialysis catheter present' and 'Extracorporeal life support present'.

5) After making the appropriate update, scroll to the bottom and click Save.



The screenshot shows the 'Edit Event' page. At the bottom, there is a 'Save' button with a red arrow pointing to it. Next to it is a 'Back' button.

Please Note:

- The event must be corrected **as soon as possible** as this may affect your data submission to CMS.
- Inform NHSN when the event has been corrected at NHSN@cdc.gov using the following in the subject line: **CLABSI Data Quality for 2019 Events**.
- Review your emails received from “NHSN (CDC)” to ensure no emails were overlooked. **The subject line for the outreach email is “2019 NHSN Data Quality - Incorrect Data Entry for BSI Event Form”.**

Please see page 4-13 of the NHSN Bloodstream Infection protocol for more guidance on reporting CLABSI events in these types of scenarios. https://www.cdc.gov/nhsn/pdfs/pscmanual/4psc_clabscurrent.pdf

Note: If your facility has not received an email, no incorrect CLABSI events were identified related to this issue.

Pathogen Code Updates

Effective with the 9.4 NHSN release which will be available for use in January 2020, the NHSN Organism List has been updated based on SNOMED CT content changes. **Inability to find an organism on the list is not to be interpreted as not meeting an NHSN surveillance definition. Users should continue to contact NHSN on how to report organisms not found on the updated list.**

The most prominent change for 2020 is that 520 terms (primarily bacteria) will be inactivated as part of our ongoing effort to remove terms not relevant to NHSN surveillance definitions. Most terms to be inactivated in the NHSN list are synonyms that are duplicate and obsolete names that are maintained in SNOMED CT for historical purposes. Also targeted for inactivation are terms below the species level (for example, biotype, biogroup, biovar, serotype, serogroup, type, group, subgroup, and some subspecies). A total of 55 terms were added, and 47 terms will be updated. Examples of changes include:

- Terms inactivated
 - Arginine positive *Pseudomonas stutzeri*-like
 - *Edwardsiella tarda*, biogroup 1
 - CDC group TM-1
 - *Leptospira interrogans*, serogroup Icterohemorrhagiae
- Taxonomic names changes
 - *Clostridium difficile* > *Clostridioides difficile*
 - *Propionibacterium acnes* > *Cutibacterium acnes*
 - *Enterobacter aerogenes* > *Klebsiella aerogenes*
- Reduction of 2 or more synonyms to a single term
 - “*Streptococcus pyogenes*” + “*Streptococcus*, group A” are now blended for display as “*Streptococcus pyogenes* (group A streptococci)”
- 12 terms added to Common Commensals:

<i>Brevibacterium ravensturnense</i>	<i>Streptococcus intestinalis</i>
<i>Cutibacterium</i>	<i>Streptococcus hyovaginalis</i>
<i>Cutibacterium acnes</i>	<i>Streptococcus macacae</i>
<i>Paenibacillus provencensis</i>	<i>Streptococcus oligofermentans</i>
<i>Rothia aeria</i>	<i>Streptococcus pseudopneumoniae</i>
<i>Streptococcus alactolyticus</i>	<i>Streptococcus sinensis</i>

Pathogen Code Updates continued on page 8

Pathogen Code Updates (continued)

- 28 terms added to Mucosal Barrier Injury:

Bacteroides suis	Streptococcus intestinalis
Clostridioides	Streptococcus hyovaginalis
Clostridium beijerinckii	Streptococcus macacae
Eggerthia	Streptococcus oligofermentans
Leptotrichia goodfellowii	Streptococcus pseudopneumoniae
Leptotrichia wadei	Streptococcus sinensis
Peptoniphilus	Anaerobic Gram-negative bacillus
Peptoniphilus asaccharolyticus	Candida bracarensis
Peptoniphilus harei	Candida duobushaemulonii
Peptoniphilus ivorii	Candida metapsilosis
Peptoniphilus lacrimalis	Candida orthopsilosis
Pluralibacter pyrinus	Candida parapsilosis complex
Rothia aeria	Candida stellimalicola
Streptococcus alactolyticus	Pichia kudriavzevii

Also noteworthy, the Top Pathogen list (a subset of the All Organisms list) will be updated. It is a pick list in the NHSN web application of the most frequently reported pathogens intended to be a shortcut for data entry. This updated list will include 59 terms.

The current NHSN Organism List (All Organisms, Common Commensals, MBI Organisms and UTI Bacteria) is available in a spreadsheet under the Supporting Materials tab on the various NHSN module website pages:

<https://www.cdc.gov/nhsn/acute-care-hospital/index.html>. The updated list will replace the currently available list and be effective with the 9.4 NHSN release for use starting in January 2020.

NHSN 2019 Tool Kit and Guidance for External Validation

The NHSN 2019 Tool Kit and Guidance for External Validation developed by the National Healthcare Safety Network (NHSN) subject matter experts (SMEs) is now available on NHSN’s webpage at

<https://www.cdc.gov/nhsn/validation/2019.html>. Click the “**2019 External Validation Guidance and Toolkit**” link below the “For Auditors” tab.

The toolkit provides guidance for NHSN data validation. Like 2018, CDC provides guidance and tools for validation of six healthcare-associated infection (HAI) metrics: Central-Line Associated Blood Stream Infection (CLABSI), Catheter-Associated Urinary Tract Infection (CAUTI), selected Surgical Site Infections (following colon (COLO) and abdominal hysterectomy (HYST) procedures), Methicillin-Resistant *Staphylococcus aureus* (MRSA) Bacteremia LabID Event and *Clostridium difficile* infection (CDI) LabID Event for 2019 HAI validation. The guidance and tools for CLABSI and CAUTI were designed to work in settings including and beyond acute care hospitals; validation of CLABSI is applicable for long-term acute care hospitals (LTACs), and validation of CAUTI is applicable for LTACs and inpatient rehabilitation facilities (IRFs).

The purpose of validation is to assure high-quality surveillance data through accountability and by identifying, understanding, and correcting reporting problems. The focus of this document is external validation of facility-reported NHSN surveillance data conducted by state health departments or other oversight agencies. Please send any questions to nhsn@cdc.gov.

Procedure duration and your surgical site infection (SSI) standardized infection ratio (SIR)

The SSI SIR is impacted by the duration of the procedure. One of the universal exclusion criteria that is used to guide the SSI SIR is the exclusion of procedures with durations of less than 5 minutes or greater than the interquartile 5 (IQR5) procedure duration. The IQR5, also called the procedure duration cutoff point, is used as an indicator of an extreme outlier for procedure durations when calculating the SSI SIRs. The IQR5 is calculated as five times the interquartile range (Q1-Q3) above the 75th percentile. For example, if the interquartile range is 30 minutes, and the 75th percentile is 100 minutes, the IQR5 would be calculated as: $100 + (30 \times 5) = 250$ minutes. Procedures with a duration greater than the IQR5 were excluded from the baseline data and will be excluded from all SSI SIR calculations for your facility. Below is the list of the IQR5 values under the 2015 baseline.

Table 1. 2015 Baseline IQR5 Values for inpatient NHSN Operative Procedures, Adult and Pediatric Patients

NHSN Operative Procedure	IQR5 (in minutes)	IQR5 (in hours and minutes)	
	Minutes	Hours	Minutes
AAA	1116	18	36
AMP	300	5	0
APPY	210	3	30
AVSD	471.5	7	51.5
BILI	1295	21	35
BRST	777	12	57
CARD	1001	16	41
CBGB	847	14	7
CBGC	847	14	7
CEA	376	6	16
CHOL	346	5	46
COLO	697	11	37
CRAN	904	15	4
CSEC	170	2	50
FUSN	874	14	34
FX	532	8	52
GAST	489	8	9
HER	521	8	41
HPRO	349	5	49
HTP	1355	22	35
HYST	547	9	7
KPRO	316	5	16
KTP	670	11	10
LAM	687	11	27
LTP	1243	20	43
NECK	1796	29	56
NEPH	774	12	54
OVRY	594	9	56
PACE	311	5	11

Procedure duration and your surgical site infection (SSI) standardized infection ratio (SIR) continued on page 10

Procedure duration and your surgical site infection (SSI) standardized infection ratio (SIR) (continued)

NHSN Operative Procedure	IQR5 (in minutes)	IQR5 (in hours and minutes)	
	Minutes	Hours	Minutes
PRST	737	12	17
PVBY	850	14	10
REC	1136	18	56
RFUSN	1129	18	49
SB	856	14	16
SPLE	1073	17	53
THOR	721	12	1
THYR	506	8	26
VHYS	506	8	26
VSHN	378	6	18
XLAP	724	12	4

Knowledge Check: How to apply the procedure duration exclusions to the SSI SIR reports.

QUESTION: Which of the inpatient procedures in the following scenarios will be excluded from the SSI SIR reports?

- a) A heart transplant procedure performed on a 45 year old female that lasted 1277 minutes
- b) A small bowel procedure performed on a 52 year old male that lasted 856 minutes
- c) An open reduction of fracture performed on a 17 year old male that lasted 564 minutes
- d) A cesarean procedure performed on a 25 year old female that lasted 3 minutes
- e) A thoracic surgery performed on a 38 year old male that lasted 712 minutes
- f) C and D

ANSWER: F

Rationale: The procedure in response option A is greater than 5 minutes but less than the IQR5 value so it will be included in the SSI SIR reports. The procedure in response option B is greater than 5 minutes and exactly at the IQR5 value, and therefore will be included in the SSI SIR reports. Procedure C is one minute above the IQR5 value and procedure D is less than 5 minutes so **both C and D** will be excluded from all SSI SIR Reports. Procedure E will be included in the SSI SIR reports because the duration is greater than 5 minutes but less than the IQR5 value.

Antimicrobial Use & Resistance Module Updates

Antimicrobial Use Quick Learns Now Available!

We have a new two-part Quick Learn series that explores the AU Option Standardized Antimicrobial Administration Ratio (SAAR). Please see the NHSN Training Updates section of the Newsletter for details.

AUR Module Updates continued on page 11

Antimicrobial Use & Resistance Module Updates (continued)

Important Reminders for SAAR Reports

The NHSN AUR Team identified an issue related to the AU Option 2017 baseline Standardized Antimicrobial Administration Ratios (SAARs). This issue caused the 2017 baseline SAARs to be calculated using facility characteristics from the most recent year's Patient Safety Component (PSC) Annual Hospital Survey instead of the survey corresponding to the year AU data were reported. This issue impacted 2017 SAARs only and was corrected during the NHSN 9.3.1 release in July. In order to view accurate 2017 SAARs, please generate new data sets.

The AU Option uses data from the Patient Safety Component Annual Hospital Survey for risk adjustment in the SAAR. Without access to data from the survey, users will not be able to view SAAR reports. While many AU Users have been assigned custom user rights within NHSN, at a minimum, those custom rights must contain "View" access to the Annual Hospital Survey in order to view SAAR reports. If you are not able to generate SAAR reports but have submitted AU data from an applicable SAAR location type, please have your NHSN Facility Administrator check your user rights. Once your users rights have been updated, generate new data sets to apply the change. More information on AU User Rights here: <https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-au-user-rights.pdf>.

Reporting Penicillin Susceptibility Results for AR Events

Based on recent validation findings we want to highlight a few rules found in the AUR Module protocol (<https://www.cdc.gov/nhsn/pdfs/pscmanual/11pscaurcurrent.pdf>). Appendix F, List of Eligible Organisms for the NHSN AR Option, provides a list of eligible organisms along with the specimen type and lists the relevant antimicrobials to be reported. Additionally, the footnotes provide useful information about what to do if your facility does not have susceptibility test values for a particular drug listed in this table. Of note, **it's important that Penicillin G and Penicillin V are reported separately for specific organisms. If a facility's laboratory information system (LIS) does not differentiate between Penicillin G and Penicillin V, list susceptibility results under Penicillin G and indicate that Penicillin V was not tested (N).**

Reminders: AUR Module Educational Resources

The NHSN AUR Team has created many resources to help users submit, review and conduct analysis of their AUR Module data. Resources available here: <https://www.cdc.gov/nhsn/training/roadmap/psc/aur.html> can help users familiarize themselves with the module and learn how to get the most out of their data. Based on recent user questions, one resource we want to highlight are our AUR Module FAQs:

AU FAQs: <https://www.cdc.gov/nhsn/faqs/faq-au.html>

AR FAQs: <https://www.cdc.gov/nhsn/faqs/faq-ar.html>

These FAQs cover a variety of topics from general submission and monthly reporting to data analysis. A few of the more commonly asked questions are excerpted below:

- **We noticed a mistake in our AR Summary record. Can I just resubmit the file?**

There are two options:

- Manually delete and re-upload a new file
- Use Succession Management within vendor software

Antimicrobial Use & Resistance Module Updates (continued)

Manual Deletion: To manually delete the record, log into NHSN, select 'Summary Data' from the navigation menu on the left side and then select 'Delete AUR Data'. Use the Summary Data Type drop down menu to select 'Antimicrobial Resistance Data.' Select the default Location Code of FACWIDEIN, and use the Month and Year drop down menus to select the month/year you'd like to delete from NHSN. Then click the 'Delete' button to delete the record.

Succession Management: The AR Summary record can be automatically updated in NHSN using succession management from within your vendor software. Many vendors have implemented this feature by allowing users to simply export a new version of the file but be sure to work with your vendor to determine if this approach is appropriate for you.

- **I logged into my facility and can see that I have alerts for missing AU data. How do I get rid of them?**

You can clear the missing summary data alerts by:

- Submitting the data for that location/month
OR
- Removing those locations from the monthly reporting plan(s).

The alerts don't affect your AU data in any way. Instead, the NHSN alerts are reminding you that you listed something in your reporting plan for a given month for which you have not yet submitted to NHSN.

If the answer to your question cannot be found in our FAQs, we're always available at the NHSN mailbox (NHSN@cdc.gov).

AU Option Synthetic Data Set Initiative

The Antimicrobial Use Synthetic Data Set (AU SDS) is test data that NHSN Antimicrobial Use (AU) Option implementers can use to validate that their AU data aggregation methods comply with the NHSN AU Option protocol's requirements. The AU SDS is intended for use in testing numerator and denominator data aggregation within vendor software, not conformance to AU CDA format.

As a reminder, NHSN will require validation of all AU CDA vendor software beginning in 2021. Beginning in 2020, we plan to post vendor software that has passed AU Synthetic Data Set validation on a public NHSN webpage. This will allow current and future customers to be aware of vendor services and successes with respect to the NHSN AU Option validation. Beginning in 2021, we plan to reject AU CDA files generated by vendor software that has not passed AU SDS validation.

For additional information, please see AU Synthetic Data Set section on the [Innovation Tools](#) website. If you have any questions please email nhsncda@cdc.gov.

Reminder! Data for CMS Quality Reporting Programs due Soon!

The following data must be entered into NHSN by **November 18, 2019**, for facilities that participate in certain CMS quality reporting programs.

Acute Care Hospitals that participate in the Hospital Inpatient Quality Reporting (IQR) Program:

2019 Quarter 2 (April 1 – June 30) CLABSI and CAUTI data

- All ICU locations
- Adult and pediatric medical, surgical, and medical/surgical wards

2019 Quarter 2 (April 1 – June 30) Inpatient COLO and HYST SSI data

2019 Quarter 2 (April 1 – June 30) MRSA Bacteremia and *C. difficile* LabID Events (all healthcare-onset and community-onset)

- FacWideIN
- ED and 24-hour observation locations

Cancer Hospitals that participate in the PPS-Exempt Cancer Hospital Quality Reporting Program:

2019 Quarter 2 (April 1 – June 30) CLABSI and CAUTI data (all bedded inpatient care locations)

2019 Quarter 2 (April 1 – June 30) Inpatient COLO and HYST SSI data

2019 Quarter 2 (April 1 – June 30) MRSA Bacteremia and *C. difficile* LabID Events (all healthcare-onset and community-onset)

Inpatient Rehabilitation Facilities (IRFs) that participate in the Inpatient Rehabilitation Facility Quality Reporting Program:

2019 Quarter 2 (April 1 – June 30) CAUTI data (all bedded inpatient locations)

2019 Quarter 2 (April 1 – June 30) *C. difficile* LabID Events (all healthcare-onset and community-onset)

- Freestanding IRFs: Reporting by FacWideIN
- IRF units within acute care or critical access hospitals: Reporting by each CMS IRF unit

Long-Term Acute Care Facilities (LTACs/LTCHs) that participate in the Long-Term Care Hospital Quality Reporting Program:

2019 Quarter 2 (April 1 – June 30) CLABSI and CAUTI data (all bedded inpatient locations)

2019 Quarter 2 (April 1 – June 30) *C. difficile* LabID Events (FacWideIN, all healthcare-onset, and community-onset)

Please ensure that at least one individual at your facility can access NHSN via their Secure Access Management Services (SAMS) account and has been assigned appropriate user rights in NHSN to enter and view your facility's data. To guarantee that your data is accurately entered into NHSN, verify that; 1) your monthly reporting plans are complete; 2) you've entered appropriate summary and event data or checked the appropriate no events boxes; and 3) you've cleared all alerts from your NHSN facility homepage. For additional guidance on ensuring your data are accurately sent to CMS for Quality Reporting purposes, please visit our website and navigate to the appropriate section(s) for your facility type: <https://www.cdc.gov/nhsn/cms/index.html>

If you have any questions, please contact the NHSN Helpdesk: NHSN@cdc.gov. The NHSN Helpdesk is staffed Mondays thru Fridays, 7 am ET – 5 pm ET, excluding Federal Holidays.

LONG-TERM CARE FACILITY COMPONENT

LTCF Updates

Updates can be found in the LTCF newsletters, available here:

<https://www.cdc.gov/nhsn/ltc/newsletters/index.html>

Newsletters and Archived Communications

2019 2018 2017 2016

September

• [September 2019 LTCF Newsletter](#)

Inside this Issue – RECAP: 2019 NHSN LTCF Component Training, Low-Resolution NHSN LTCF Training Presentations, Facilitated NHSN Enrollment Opportunity for Long-term Care Users, The LTCF Dashboard is Now Available to Our NHSN Users!, Upcoming Webinars, and more.

GENERAL NHSN INFORMATION

NHSN Pilot of Federal Register to Solicit Input on Surveillance Definitions, Protocols and Components

NHSN receives input from users regarding surveillance definitions, protocols and components through the NHSN user email system at NHSN@cdc.gov. Through this email system, communication with stakeholders during annual trainings, networking at national meetings, and multiple other ways, NHSN staff has received many comments and suggestions over the years. In an effort to answer the question: “Is there a better way?”, NHSN piloted two Requests for Information (RFI) via the Federal Register and Regulations.gov beginning in February of this year. The table below highlights the topics, number of comments submitted and submission time periods. In addition to requesting comments on existing NHSN documents, we solicited input from stakeholders regarding a proposed surveillance for Healthcare-onset Bacteremia and a proposal to require submission of International Classification of Diseases-10th Revision (ICD-10) procedure codes for Surgical Site Infection reporting to NHSN.

Docket Number/Topics	Open Comment Period	Number of Comment Submissions
CDC-2019-0007 <ul style="list-style-type: none"> Central line-Associated Bloodstream Infection (CLABSI) Outpatient Procedure Component (OPC) Proposed Healthcare-onset Bacteremia (HOB) 	February 14, 2019-April 15, 2019	Total: 166 CLABSI 119 OPC: 11 HOB: 81
CDC-2019-0012 <ul style="list-style-type: none"> Proposed Requirement to Report ICD-10 Procedure Code Data as a Part of NHSN Surgical Site Infection (SSI) Surveillance 	April 15, 2019-May 31, 2019	44

NHSN Pilot of Federal Register to Solicit Input on Surveillance Definitions, Protocols and Components (continued)

The most comments were received regarding CLABSI, and amongst those comments, the most common topics submitted included: Mucosal Barrier Injury-Laboratory Confirmed Bloodstream (33); exclusion requests (31) and pediatric-related issues.

Follow-up on comments from any source entails consideration for scientific merit, feasibility for use in surveillance definitions, and benefit of making a modification to the definition versus increased labor and/or complexity of the definitions which may occur. When necessary and according to topic, literature searches, and consultation with subject matter experts, either internal to CDC or external, are used in decision-making. Issues related to pediatrics are being handled through a current neonatal/pediatric working group which was convened in Spring of 2019 to review and to improve the NHSN healthcare-associated infection definitions for use in neonatal and pediatric populations.

Modifications to NHSN definitions will be incorporated at the earliest annual release, depending on the implications of the modification for the system. Modifications requiring software updates may take longer to employ. The first change will occur with the 2020 Patient Safety Component Manual update and information will be highlighted in the summary of changes that is distributed to NHSN Users and posted to the NHSN website.

A summary document highlighting all resulting changes initiated or slated for future NHSN releases will be shared with NHSN users upon completion of the review tentatively by the end of 2019. The use of the Federal Register for this purpose will be evaluated upon completion of the process.

NHSN Training Updates

Important Information – 2020 NHSN Training

Due to the Decennial 2020 – Charting the Future of Prevention, there will be no 2020 NHSN Patient Safety Annual Training.

The 6th International Conference on Healthcare Associated Infections, cohosted by SHEA and CDC, will take place March 26-30, 2019 at the Marriott Marquis, Atlanta, GA. More information to be shared in the coming months.



New NHSN Quick Learns Now Available!

The National Healthcare Safety Network (NHSN) provides you the opportunity to receive *Just In Time* training with Quick Learns. Quick Learns are resources that define a specific part of a protocol or deliver approaches for data analysis and reporting within the NHSN application. Quick Learns are short, 7-15 minute educational modules, provided by NHSN's Protocol & Validation and Methods & Analytics Teams.

NHSN Training Updates continued on page 16

NHSN Training Updates (continued)

We have a new two-part Quick Learn series that explores the AU Option Standardized Antimicrobial Administration Ratio (SAAR).

- SAAR Part One focuses on understanding the SAAR, introduces updates to the 2017 baseline SAAR model, compares the 2017 baseline SAAR to the original 2014 baseline SAAR and describes where to find SAAR reports in NHSN.
- SAAR Part Two describes how to run, modify, and interpret the 2017 baseline SAAR reports and generate default and modified SAAR reports.

Click [here](#) to view our short videos, and learn more about what the SAAR is, how it is useful and where to locate additional SAAR resources. You will find the videos in the “Training” section of the webpage.

Are you new to NHSN? The NHSN Educational Roadmaps are a great place to start!

If you are new to NHSN or need a guide through the NHSN training materials, the Education Roadmap website is the place for you! On the NHSN Educational Roadmaps website, you are provided a guided tour of the training materials and information needed to provide a solid foundation of NHSN component protocols – start with the basics and move on to more advanced training.

Check it out! In each component, a selection of educational materials and tools to improve your comprehension of NHSN surveillance definitions, reporting, and analysis (while supporting your work as an NHSN user) are listed. To begin this learning experience, click the link <https://www.cdc.gov/nhsn/training/roadmap/index.html> and select the component of your choice.

CDA Corner

CDA files moving to R3-D3 IG version for Release 9.4 (January 2020)

- Events: If event date \geq 2020, MUST use the R3-D3 version of the IG for the following:
 - Bloodstream Infection (BSI)
- Summaries: If Summary month is \geq 2020, MUST use the R3-D3 version of the IG for the following:
 - Denominators for LabID: ‘MDRO and CDI Prevention Process and Outcome Measures Monthly Monitoring’ (LabID Denominator or POM)
 - Denominators for Intensive Care Unit (ICU)/Other Locations
 - Denominators for Neonatal Intensive Care Unit (NICU)
 - Denominators for Specialty Care Area (SCA)
- The R3-D3 Dialysis Summary CDA is now a valid CDA import for 2019 and forward. The CDA contains the option to include “Report No Events”.
 - Both Dialysis summary versions (R3-D3 and R3-D1) will be accepted for 2019 Dialysis summary data.
 - Dialysis Summary with dates \geq 2020 MUST use the R3-D3 version.

CDA Corner continued on page 17

CDA Corner (continued)

CDA Toolkit Update

- The 9.4 CDA Toolkit has been added to the CSSP webpage. It includes the 9.4 vendor IDM, CDA impact notes and supplemental documents. The toolkit is located here:
<https://www.cdc.gov/nhsn/cdaportal/toolkits.html>.

CDA Toolkits

Release 9.4 - January 2020

- CDA 9.4 Guides. 📄 [ZIP - 24 MB] (Print only content)
- IDM 9.4 for Vendors. 📄 [XLS - 2 MB]
- CDA 9.3 & 9.4 Impact Notes. 📄 [XLS - 100 KB]
- Supplemental Documents 9.4. 📄 [ZIP - 1 MB] (Print only content)

Release 9.2 - January 2019

Guide to CDA Versions

- The Guide to CDA versions on the NHSN CDA Submission Support Portal is always available to verify valid CDA imports based on the correct Implementation Guide: <http://www.cdc.gov/nhsn/cdaportal/toolkits/guidetocdaversions.html>.
- Guidance for 2020 has been added.

Guide to CDA Versions

For creating CDA files, please see the specific Implementation Guide (IG) and its associated reference materials.

The table below describes the specific Implementation Guide (IG) to be used for each component based on the event/insertion/procedure/specimen collection dates (as applicable) for each year.

Download the corresponding CDA Toolkits for the corresponding year.

Events or Denominators	2020	2019	2018	2017
CDA Toolkit Release	9.4	9.2 & 9.3	8.9 & 8.8	8.6
DIALYSIS				
Dialysis Event	R3-D1.1	R3-D1.1	R3-D1.1	R3-D1
Dialysis Denominator	R3-D3	R3-D1 or R3-D3	R3-D1	R3-D1
EVENTS				
Primary Bloodstream Infection (BSI)	R3-D3	R3-D2	R9	R9
Central Line Insertion Practices Adherence (CLIP) Monitoring	R2-D2.1	R2-D2.1	R2-D2.1	R2-D2.1

Update for CDA Direct Automation

- At this time, 6484 facilities from 16 separate vendors have signed up for DIRECT CDA Automation. If your facility is sending data via CDA and you are interested in learning more about DIRECT CDA Automation, ask your CDA vendor or check out the information on the CSSP site:
<http://www.cdc.gov/nhsn/cdaportal/importingdata.html#DIRECTProtocol>.

As an Important Reminder...

Not all NHSN changes are documented in the IDM so be sure to reference the updated protocols. Other helpful links are the following:

- Archived Newsletters: <https://www.cdc.gov/nhsn/newsletters/index.html>
- Archived NHSN email communication: <https://www.cdc.gov/nhsn/commup/index.html>

CDA Corner continued on page 18

CDA Corner (continued)

CDA and CSV Import Metrics Update:

Percentage of data per specific event or summary that is imported via CDA and CSV for the following date ranges:					
Query Date Range	April 1, 2017 - March 31, 2018	July 1, 2017 - June 30, 2018	Oct. 1, 2017 - Sept. 30, 2018	Jan. 1, 2018 - Dec. 31, 2019	April, 2018 - March, 2019
Blood Stream Infection	43%	45%	46%	47%	44%
Urinary Tract Infection	40%	42%	43%	44%	45%
Surgical Site Infection	33%	36%	38%	40%	42%
Laboratory Identified Event	58%	60%	61%	62%	64%
Central Line Insertion Practices (CLIP)	20%	20%	21%	22%	23%
Dialysis Central Line Insertion Practices (CLIP)	0%	0%	0%	0%	0%
Dialysis Event	73%	73%	73%	73%	74%
Ventilator-Associated Events (VAE)	-	-	-	-	0.3%
Antimicrobial Resistance Event	100%	100%	100%	100%	100%
Surgical Procedure - via CDA	32%	32%	32%	33%	34%
Surgical Procedure - via CSV	56%	58%	58%	57%	57%
ICU /Other Summary	23%	24%	25%	25%	27%
SCA/ONC Summary	25%	27%	29%	30%	33%
NICU Summary	23%	24%	25%	26%	28%
MDRO Summary	7%	7%	7%	7%	8%
Dialysis Summary	55%	55%	54%	54%	57%
Antimicrobial Use	100%	100%	100%	100%	100%
Antimicrobial Resistance Summary	100%	100%	100%	100%	100%
Hemovigilance Summary	0%	0%	0%	0%	0%

NHSN Help Desk Activity Update

Quarter 3, 2019

(Averages)

740 Email Inquiries per Week

10 Facilities Enrolled per Week

NHSN Enrollment Update

NHSN Enrollment Update (as of September 23, 2019):

6,834 Hospitals (this includes 468 Long-term Acute Care Hospitals
and 366 Free-standing Inpatient Rehabilitation Facilities)

7,565 Outpatient Hemodialysis Facilities

4,646 Ambulatory Surgery Centers (ASCs)

3,033 Long-term Care Facilities

22,078 Total Healthcare Facilities Enrolled

The National Healthcare Safety Network (NHSN) is a voluntary, secure, Internet-based surveillance system that integrates patient and healthcare personnel safety surveillance systems managed by the Division of Healthcare Quality Promotion (DHQP) at CDC.

During 2008, enrollment in NHSN was opened to all types of healthcare facilities in the United States, including acute care hospitals, long-term acute care hospitals, psychiatric hospitals, rehabilitation hospitals, outpatient dialysis centers, ambulatory surgery centers, and long term care facilities.



The Centers for Disease Control and Prevention (CDC)
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