Volume 11, Issue 4

December 2016

The Centers for Disease Control and Prevention (CDC)

NHSN e-News

NHSN
National Healthcare
Safety Network

Inside this Issue:

Reminder! Hold 2017 Data Entry

While the new 2017 NHSN protocols have been posted on our website, the new data entry fields and business rules will not be applied (for all NHSN components) until after the release of the NHSN version 8.6 update, scheduled for January 7, 2017. Please use the 2017 paper data-collection forms which will be posted to the NHSN website on or around January 2, 2017 to collect and hold all 2017 data until after the NHSN update. Any 2017 events or procedures that are entered prior to this date will be marked "incomplete", and will require a secondary review and confirmation or update before they can be completed and included in any final data analysis. **This means that all 2017 Patient Safety Component, Healthcare Personnel Safety Component, Dialysis Component, Biovigilance Component, and LTCF Component reporting plans, surveys, events, summary data and procedures should not be entered into NHSN until after that release.** Facilities can continue to enter 2016 data as well as update user information and locations within their NHSN facility. Note: 2016 facility surveys will not be available for entry until after the NHSN version 8.6 release.

Update on Planned Release of NHSN version 8.6

On January 7, 2017, the 8.6 version of NHSN will be deployed. The development scope for Release 8.6 contains approximately 150 changes across every NHSN component. The following is a summary listing of all changes included with the release. Detailed Release Notes will be made available shortly after the release.

- Clinical Document Architecture (CDA) enhancements and updates for existing CDA functionality
- Enhancements to existing Analysis and Reporting (A&R) functionality
- Updates to the Annual Surveys for all components (Patient Safety, Long Term Care, Dialysis, Bio-vigilance and HPS)
- Specific modifications to the application and Information Data Model (IDM) that synchronize to the 2017 NHSN protocols
- Implementation of the 2015 baseline for HAI SIRs in the Patient Safety Component, as well as analysis updates for the Dialysis Component
- Changes to the user interface of the NHSN application, impacting all components
- Supporting browser neutrality (expanding browser support beyond only Internet Explorer), optimized processing, and work to improve the look of NHSN application screens using the current CDC templates and resolve issues related to compliance with Section 508 of the Rehabilitation Act

Patient Safety Component

2017 NHSN Patient Safety Component Protocols and Data Collection Forms

The 2017 NHSN Patient Safety Component protocols have been posted to the NHSN website. The individual protocols are located on the site of the specific infection type (e.g., BSI protocol found under "Protocols" on the BSI surveillance webpage). On Friday, November 18th, an email was sent to all NHSN Users, along with an accompanying document identifying the major changes to the protocols. This document may be found at: http://www.cdc.gov/nhsn/commup/index.html. The 2017 surveillance protocols should be used beginning on January 1, 2017. Until that time, please follow the 2016 NHSN protocols as written. Please note that the 2017 NHSN organism lists have been posted to the NHSN website so that you may review them before instituting their use in 2017. There are differences between the 2016 and 2017 versions, but the 2016 lists must be used until 2017. Please email NHSN@cdc.gov with any questions.

The 2016 PSC Manual as a whole is available on the left navigation bar on the NHSN website. Please note that the 2016 PSC Manual as a whole will only be available on the NHSN website until May 15, 2017. After that time the manual will be removed to avoid confusion on the part of users. 2016 protocols will be posted to the NHSN validation website in the near future, and will remain for healthcare-associated infection validation.

Data collection forms for 2017 events have been approved by the Office of Management and Budget. They will be posted to the NHSN website on or around January 3, 2017, and should be used for any event, surgical procedure, or summary data in 2017. NHSN PSC users will receive an email when the forms are posted to the website.

The 2015 Rebaseline Webpage has been updated!

The 2015 Rebaseline webpage, http://www.cdc.gov/nhsn/2015rebaseline/index.html, continues to be the source of the most current information regarding the ongoing process to update the baseline data used by NHSN. The *NHSN Rebaseline Webinar, Part 1 – October 2016* is now available on the Rebaseline webpage. This webinar provides important updates on the new risk adjustment models, including the variables used in each model, a list of new measures, and an introduction to the Standardized Utilization Ratio (SUR): https://www.youtube.com/watch?v=aRZUi04goCg. The slides for NHSN Rebaseline Webinar, Part 1 can be found here: https://www.cdc.gov/nhsn/pdfs/rebaseline/rebaseline-webinar-p1.pdf.

Slides for *NHSN Rebaseline Webinar Part 2 – November 2016* are now posted on the Rebaseline webpage as well. This webinar previews changes to the NHSN interface that will take effect when NHSN v8.6 is implemented in January 2017. It also provides pertinent information about performing SIR analyses that span different baseline periods and details about upcoming trainings and educational materials. The slides are available here: https://www.cdc.gov/nhsn/pdfs/rebaseline/rebaseline-webinar-p2.pdf.

Additionally, the Rebaseline webpage now includes a "CMS Related Resources" section. This new section contains examples and recommendations for reviewing SIRs on Hospital Compare/Quality Net that are calculated using the new baseline. In addition, a reference guide is available that lists the changes to the SIRs under the new baseline as they apply to CMS Quality Reporting Programs.

> List of 2015 Rebaseline SIR Changes Applicable to CMS Quality Reporting Programs
>
> http://www.cdc.gov/nhsn/pdfs/rebaseline/2015-rebaseline-sir-changes-applicable-to-cms-grp.pdf
>
> Verification of Hospital Compare/Quality Net Data: CLABSI Example
>
> http://www.cdc.gov/nhsn/pdfs/rebaseline/hospital-compare-verification-clabsi.pdf
>
> Verification of Hospital Compare/Quality Net Data: SSI Example
>
> http://www.cdc.gov/nhsn/pdfs/rebaseline/hospital-compare-verification-ssi.pdf

Please continue to check the Rebaseline webpage for additional updates in the coming months. New Rebaseline guidance and documentation will be posted soon.

ENDO (endocarditis) Surveillance Definition Updates for 2017 and Implications for Laboratory Confirmed Bloodstream Infection Surveillance

In response to input received from NHSN users, the surveillance definition for endocarditis (ENDO) will be modified for 2017. Because the testing and clinical diagnosis required for endocarditis can routinely exceed the 7 days included in the NHSN infection window period (IWP), the IWP will be extended to 21 days for ENDO only. This 21-day period will include the day of the diagnostic test, the 10 days before and the 10 days after. Additionally, because the disease can be protracted, even in the face of treatment, the repeat infection timeframe (RIT) will be extended to include the remainder of the facility admission. This means that no more than a single ENDO event should be reported during a single patient admission. Finally, because organisms can be identified in blood specimens for extended time periods with endocarditis, the secondary BSI attribution period (SBAP) will also be extended for the remainder of the facility admission for the organism associated with the ENDO infection. Note: This SBAP extension applies only for **organism(s) in the originally identified ENDO event**. **All other organisms (even if accompanied by the original ENDO organism[s]), will be eligible as primary BSIs, and potentially CLABSIs.** Hospitalized endocarditis patients are at risk for healthcare-associated infections, and a change in organisms may suggest a healthcare-associated infection. All of these changes go into effect for ENDO events with date of <u>diagnostic test</u> on or after January 1, 2017.

Updates to CDI Test Type and Reminders for LabID Event Reporting

The January update to NHSN will introduce a new option for *C.difficile* (CDI) test type, as reported on both the annual facility survey and the facility-wide inpatient (FacWideIN) monthly summary record. The new option is for a two-step algorithm: NAAT plus EIA, if NAAT positive. The addition of this reporting option does not change reporting rules for Laboratory confirmed CDI events (see Reminders about LabID Event Reporting, below). Note that CDI test type is used in the calculation of the *C.difficile* LabID event SIR, and if this new option for "NAAT plus EIA" is selected, data from this quarter will be given the same level of risk adjustment as the "NAAT" (PCR) category. See screen shot below for location of the new CDI test type option on the FacWideIN summary record:

For this quarter, what is the primary testing method for *C. difficile* used most often by your facility's laboratory or the outside laboratory where your facility's testing is performed? *

    EIA - Enzyme immunoassay (EIA) for toxin
    Cyto - Cell cytotoxicity neutralization assay
    NAAT - Nucleic acid amplification test (NAAT)
    NAATEIA - NAAT plus EIA, if NAAT positive (2-step algorithm)
    GDH - Glutamate dehydrogenase (GDH) antigen plus EIA for toxin
    GDHNAAT - GDH plus NAAT
    GDHEIA - GDH plus EIA for toxin, followed by NAAT for discrepant results
    ToxiCul - Toxigenic culture
    OTH - Other (specify)

If your facility's laboratory is using this algorithm for CDI testing, you can begin to select this option with first quarter 2017. It is not required to edit previously-saved records to select the new CDI test type.

Reminders about LabID Event Reporting:

NHSN protocol defines a *C.difficile* LabID event as: **A positive laboratory test result for *C. difficile* toxin A and/or B, (includes molecular assays [PCR] and/or toxin assays) tested on an unformed stool specimen (must conform to the container) OR A toxin-producing *C. difficile* organism detected by culture or other laboratory means performed on an unformed stool sample (must conform to the container).**

Updates to CDI Test Type and Reminders for LabID Event Reporting (continued)

Thus, if a specimen tests positive for *C.difficile* toxin at <u>any</u> step in the testing algorithm, a CDI LabID event should be reported to NHSN. The selection for CDI test type on the March, June, September, and December FacWideIN summary record should be based on the testing method used most often by the laboratory during that reporting quarter.

The pre-populated options for CDI test type, as shown in the screen shot above, contain the most common testing methods used. Most methods can be categorized accurately using the pre-populated test types in the drop-down menu. "Other" should <u>not</u> be selected if a more appropriate option is available. Furthermore, "Other" should not be used to specify the name of the laboratory or the brand name of a CDI test. If "Other" is selected when a more appropriate response is available on the form, your facility's CDI data will not be accurately risk adjusted.

 If you have any questions about which CDI test type applies to your facility, please contact us at NHSN@cdc.gov.

Reminder: Release of New 2016 Patient Safety Annual Facility Survey

NHSN will release the annual patient safety facility survey in early 2017. This mandatory survey is completed by all enrolled facilities participating in the NHSN Patient Safety Component to provide updated information on hospital characteristics and practices. As in years past, users will not be able to submit surveys until NHSN makes them available in a release of the application. Please wait to enter the 2016 Patient Safety Annual Survey until you receive notification that NHSN version 8.6 is available (expected January 7, 2017); failing to wait until after the next release of NHSN will result in the loss of any 2016 survey information submitted into NHSN. We will provide copies of the surveys and instructions on how to complete them at the start of the new year.

 Please remember, surveys must be completed and submitted in NHSN by March 1, 2017.

Facilities that do not meet this deadline will be unable to complete monthly reporting plans. There are very few changes to this year's surveys, and we hope the enhancements and additions will aid users in completing the form. For guidance and support, contact our support team at nhsn@cdc.gov. Use the words "PS Annual Survey" in the subject line to expedite the response time.

NHSN Locations Definition Clarification- Chronic Care Units

One of the few updates to the CDC Locations chapter in the most recent release of the NHSN protocol included a change in the definition for chronic care units (page 15-27). In the past we've advised facilities to only map units as a chronic care unit if they share the same CCN as the acute care hospital it resides in. This piece of the definition has been removed in the updated locations guidelines found in the NHSN Protocol. We now advise users, regardless of CCN, chronic care units should be mapped to the same location code if the units are physically located within the walls of the hospital. Please consult the locations chapter in the updated NHSN Protocol to see the documented change: http://www.cdc.gov/nhsn/pdfs/pscmanual/15locationsdescriptions_current.pdf

Thank you for participating in the NHSN Education and Training Needs Assessment!

The NHSN team would like to thank you for your participation in the NHSN Education and Training Needs Assessment!

1,069 NHSN Patient Safety Component users provided feedback on their training needs and current knowledge and use of the available training and education resources. Results of the needs assessment survey will help the NHSN team determine where the available training resources meet the needs of NHSN users, identify the modules or topics for which additional training resources are needed, and inform development of future training and educational materials and activities.

We value your input as an NHSN user and appreciate you sharing your experience using the NHSN training and education resources. Look for information in the coming months regarding how NHSN plans to use the survey results to improve and expand training and education support available to you!

2017 Updates to the AU Option SAARs

In the upcoming NHSN 8.6 update, facilities submitting data into the Antimicrobial Use (AU) Option will be able to view their Standardized Antimicrobial Administration Ratios (SAARs) in two new ways!

1. SAARs by Month

    The current "SAAR Report – All SAARs" will be shown by month by default. Users will still have the ability to see SAARs by quarter, half year, or year by modifying the report.

National Healthcare Safety Network
SAARs Table - All Standardized Antimicrobial Administration Ratios (SAARs) High-Level Indicators and High-Value Targets
As of: December 9, 2016 at 3:12 PM
Date Range: AU_SAAR summaryYM After and Including 2015M01

Antimicrobials used for hospital-onset/multi-drug resistant infections in adult ICUs

orgID	summaryYM	SAARType	antimicrobialDays	numAUDaysPredicted	numDaysPresent	SAAR	SAAR_pval	SAAR95CI
13860	2016M09	TAR-Adult-1	323	239.045	805	1.351	0.0000	1.210, 1.505
13860	2016M10	TAR-Adult-1	303	288.621	975	1.050	0.4120	0.937, 1.173

2. SAARs by Individual Location

    A new report will be added: "SAAR Report – All SAARs by Location". The default report will show each SAAR table and the location-specific SAARs calculated for the month/year. Users will have the ability to modify the report to see the location-specific SAARs by quarter, half year, or year.

National Healthcare Safety Network
SAARs Table - All SAARs by Location
As of: December 9, 2016 at 3:17 PM
Date Range: AU_SAAR summaryYM After and Including 2015M01

Antimicrobials used for hospital-onset/multi-drug resistant infections in adult ICUs

orgID	SAARType	location	summaryYM	locCDC	antimicrobialDays	numAUDaysPredicted	numDaysPresent	SAAR	SAAR_pval	SAAR95CI
13860	TAR-Adult-1	MICU	2016M09	IN:ACUTE:CC:M	126	124.330	403	1.013	0.9047	0.848, 1.202
13860	TAR-Adult-1	MICU	2016M10	IN:ACUTE:CC:M	109	138.521	449	0.787	0.0109	0.649, 0.945
13860	TAR-Adult-1	MSICU	2016M09	IN:ACUTE:CC:MS	197	114.715	402	1.717	0.0000	1.490, 1.970
13860	TAR-Adult-1	MSICU	2016M10	IN:ACUTE:CC:MS	194	150.100	526	1.292	0.0007	1.120, 1.484

In addition to the new SAAR report functionality, the calculation for the "Anti-MRSA Antibacterial Agents" SAAR will be updated to include only Vancomycin IV administrations. All other administrations (e.g., IM, digestive, & respiratory) of Vancomycin will be excluded. Similarly, the calculation for the "Antibacterial Agents Predominantly Used for Surgical Site Infection Prophylaxis" SAAR will be updated to include IV administrations only.

Reminder! Data for CMS Quality Reporting Programs due Soon!

The following data must be entered into NHSN by **February 15, 2017** for facilities that participate in certain CMS quality reporting programs.

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

2016 Quarter 3 (July 1 – September 30) CLABSI and CAUTI data
- All ICU locations
- All NICU locations (CLABSI only)
- Adult and pediatric medical, surgical, and medical/surgical wards

2016 Quarter 3 (July 1 – September 30) Inpatient COLO and HYST SSI data

2016 Quarter 3 (July 1 – September 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:

2016 Quarter 3 (July 1 – September 30) CLABSI and CAUTI data (all bedded inpatient care locations)

2016 Quarter 3 (July 1 – September 30) Inpatient COLO and HYST SSI data

2016 Quarter 3 (July 1 – September 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:

2016 Quarter 3 (July 1 – September 30) CAUTI data (all bedded inpatient locations)

2016 Quarter 3 (July 1 – September 30) MRSA Bacteremia and *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:

2016 Quarter 3 (July 1 – September 30) CLABSI and CAUTI data (all bedded inpatient locations)

2016 Quarter 3 (July 1 – September 30) MRSA Bacteremia and *C. difficile* LabID Events (FacWideIN, all healthcare onset and community onset)

2016 Quarter 3 (July 1 – September 30) VAE data (all bedded inpatient locations)

Please make sure at least one individual at your facility can access NHSN via SAMS and has been assigned appropriate user rights in NHSN so they may enter and view the facility's data. To ensure your data have been correctly entered into NHSN, please make sure to 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.

Long-term Care Facility Component

LTCF Updates

January 2017 NHSN Long-Term Care Facility (LTCF) Component Protocols and Data Collection Forms will be posted to the NHSN website on or before January 2, 2017, and should be used beginning on January 1, 2017. The individual protocols may be accessed by clicking on the specific surveillance module (i.e., MDRO/*C. difficile*, Prevention Process Measures, or UTI) and then clicking "*Protocol*". A list of significant changes to the protocols will be also posted on the website under the "*Protocol*" heading for each module. Access to LTCF trainings, protocols, data collection forms, and supporting materials can be found on the following website: http://www.cdc.gov/nhsn/ltc/index.html

Long-term Care Facility Component Annual Facility Survey: After January 7, 2017, facilities should enter their NHSN Annual Facility Survey using facility data from the prior calendar year. The data collected on the survey covers January 1, 2016 through December 31, 2016. We encourage users to print a copy of the completed 2015 annual survey for use when completing the new survey, as most of the information will be the same. Additionally, users are encouraged to complete the paper version of the survey form (http://www.cdc.gov/nhsn/forms/57.137_ltcfsurv_blank.pdf) prior to entering the data into the web application since the survey must be completed in its entirety before NHSN will save the information. Instructions for completing the survey are located in the *Table of Instructions* document under *Data Collection Forms* on the LTCF website (http://www.cdc.gov/nhsn/forms/instr/57.137-toi-annual-facility-survey.pdf). To avoid interruption in NHSN reporting, facilities must complete the 2016 NHSN Annual Facility Survey by March 1, 2017. For questions, please e-mail the NHSN helpdesk at nhsn@cdc.gov with 'LTCF' in the subject line.

As shown in the below screen shot, the NHSN Annual Survey is accessible under the *Surveys* tab on the left navigation bar in the NHSN application. Users can access completed surveys (to view, edit, or print) by clicking "*Find*" and add a new survey by clicking "*Add*"

CDC-NHSN National Healthcare Safety Network's (NHSN) 2017 Annual Training is scheduled to take place March 20-24, 2017 in Atlanta, GA at the CDC. Monday, March 20 is dedicated to **NHSN training for Long-term Care Facilities**. Speakers will discuss a variety of topics including: UTI surveillance and reporting, surveillance and reporting for *C. difficile* and MDRO LabID Events, data analysis, and more. Keep a look out for a registration e-mail from NHSN, which will launch soon. While there is no registration fee, participants will be responsible for all travel expenses to include transportation, lodging, and the cost of food and beverages. Capacity for the training is approximately 300 participants, and invitations to attend in-person will be issued based on a randomized lottery system. For those unable to attend in-person, all presentations during the 5 days of the training will be available via live web stream. Stay posted for future updates! Continuing Education credits are pending for this activity. Please email NHSNtrain@cdc.gov with training-related questions.

Happy Holidays from the LTCF Team!

Dialysis Component

NHSN System Update and Dialysis Aggregate Data Update

NHSN System Update on January 7, 2017

All Dialysis Component forms (Reporting Plan, Dialysis Event form, Denominators for Dialysis Event form) **for 2017** should not be entered into NHSN until after January 7 (**This includes CDA via manual import and DIRECT CDA Automation**). Instead, please keep a paper or electronic copy of the January events/census and wait to enter these data until NHSN announces the system update has completed.

For a description of the new features and changes occurring in the Dialysis Component with the January system update, see the Dialysis Newsblast Archive website: http://www.cdc.gov/nhsn/dialysis/newsblasts/index.html

Contact the NHSN helpdesk (nhsn@cdc.gov) with 'Dialysis' in the subject line, if you have any questions or concerns.

Dialysis Aggregate Data Update

On July 23, 2016, the NHSN pooled mean rates were updated in each of the Dialysis Component rate tables to reflect the 2014 national aggregate rate data. The national aggregate data appear in each rate table in the column labeled, "NHSN Pooled Mean Rate/100 patient-months," as shown in the Rate Table – Bloodstream Infection report (image below).

Bloodstream Infection Rate/100 patient-months	NHSN Bloodstream Infection Pooled Mean Rate/100 patient-months	Incidence Density p-value
0.00	0.64	0.7579
0.00	0.26	0.9843
0.00	0.39	0.9538
	0.51	

The 2014 national data are aggregated from all in-center hemodialysis facilities reporting Dialysis Event data to NHSN. The definition of IV antimicrobial start, IV vancomycin start, bloodstream infection, access related bloodstream infection, local access site infection, and vascular access infection can be found in the Dialysis Event Protocol: http://www.cdc.gov/nhsn/pdfs/pscmanual/8pscdialysiseventcurrent.pdf.

For instructions on how to run and interpret the Dialysis Event rate tables, see the "Analysis Resources to Create Reports" section of the Dialysis Event homepage (http://www.cdc.gov/nhsn/dialysis/event/index.html) or contact the NHSN helpdesk (nhsn@cdc.gov) and include "Dialysis" in the subject line of your email.

Biovigilance Component

Hemovigilance Module Updates

NHSN Hemovigilance Module Update to be released January 7, 2017

The NHSN Hemovigilance Module update is scheduled to be released on January 7, 2017. **Do not enter data into NHSN between January 1-7, 2017. Any data entered into NHSN during this time will be deleted and will need to be reentered after January 7, 2017.** On January 7, 2017 users will see a new NHSN layout and updates to the adverse reaction reporting screen. Additionally, at that time, NHSN HV will include the options to enroll as a non-acute care facility and to enter denominator data using Clinical Documentation Architecture (CDA). Updated documentation, including protocol, forms, and trainings, will be available on the NHSN Blood Safety website by late December. A webinar to discuss updates will take place mid-January.

Updated NHSN Layout

The NHSN user interface will be updated with a new modern look to improve user experience and to simplify data entry. This update will be seen by all NHSN components.

Adverse Reaction Form updates

The Hemovigilance Adverse Reaction screen will be updated to allow for more accurate and complete data collection. Updates include a medical and transfusion history section, as well as a section to document treatment for the adverse reaction. The component detail and outcome sections have also been modified. The adverse reaction paper form will be reaction-specific, with reaction-specific signs, symptoms, and lab results under the reaction details section.

Clinical Documentation Architecture

In response to user requests and feedback, CDC has developed electronic reporting for Hemovigilance Module denominator data through Clinical Documentation Architecture (CDA). CDA allows denominator data to be electronically reported to the Hemovigilance Module, which would replace the current method of manual data entry. CDA will decrease the reporting burden, improve data quality and increase data granularity allowing for rate calculations by product type and combinations of collection method or modification. To participate in electronic reporting via CDA, facilities need to build the corresponding software component to enable communication with CDC's CDA component. For more information, please refer to the NHSN Blood Safety Surveillance website and the NHSN CDA website.

Addition of Annual Facility Survey for non-acute care facilities

Non-acute care facilities can now participate in the Hemovigilance Module. Long-term care facilities and ambulatory facilities, including hemodialysis and outpatient surgery centers, can enroll or activate the Hemovigilance Module to begin reporting data.

Hemovigilance Module Updates (continued)

NHSN Blood Safety Website Update

Training Updates

Coming in December, there will be a number of new and updated trainings available on the NHSN Blood Safety Surveillance website. Among these is a self-paced, on-demand interactive HV 101 training (Lectora), with available CEU credit, and five 5-10 minute audiovisual presentations to review specific forms and topics. New guidance for the Denominator Form regarding discarded blood units will also be available, as well as annotated forms with variables names for each question.

Upcoming Webinar

The changes outlined above will be described in detail in a webinar in mid-January, including a chance for questions and answers. Registration will be available on the NHSN Blood Safety Surveillance website in early January.

Closing out data

As 2016 comes to an end, CDC reminds facilities to begin addressing any missing data for the year. Check the alerts on the Biovigilance Component home screen to see what data is missing. Please send questions and feedback to nhsn@cdc.gov and include 'Biovigilance' in the subject line for the fastest response.

General NHSN

NHSN Career Opportunities

Have you ever wondered how you can stay updated on positions that are available on the NHSN team? Team positions intermittently become available, and interested individuals should check the APIC Career Center at http://apic.org/Resources/Career-Center. Use the keyword NHSN in your search on the site.

NHSN Training Updates

2017 In-person NHSN Training Course

The National Healthcare Safety Network's 2017 Patient Safety Component annual training is scheduled to take place March 20-24, 2017 in Atlanta, GA at the Centers for Disease Control and Prevention.

The training will feature presentations on the new national baseline, define general changes to 2017 NHSN reporting, and describe new analysis tools. Speakers will discuss how to identify and report Ventilator-associated Events, Catheter-associated Urinary Tract Infections (CAUTI), Central Line-associated Blood Stream Infections (CLABSI), Secondary Bloodstream Infection (BSI) and Site-Specific Infections, Surgical Site Infections (SSI), and MRSA Bacteremia and *C. difficile* LabID events. Validation of healthcare-associated infection data and antibiotic stewardship surveillance practices will additionally be reviewed. The first day of the training will feature a special track on reporting for Long-term Care Facilities.

Registration for the training course is expected to launch in January 2017. While there is no registration fee, participants will be responsible for all travel expenses to include transportation, lodging, and the cost of food and beverages. Capacity for the training is approximately 300 participants, and invitations to attend in-person will be issued based on a randomized lottery system. For those unable to attend in-person, all presentations during the 5 days of the training will be available via live web stream.

Stay posted for future updates! Continuing Education credits are pending for this activity.

Please email NHSNtrain@cdc.gov with training-related questions.

NHSN Pathogen Code Update

The NHSN organism codes list was last updated in 2013 and will undergo a major revision with the v8.6 release effective January 2017. SNOMED CT codes have been updated based on the U.S. Edition 20150901 version; organisms without an active SNOMED CT code will no longer be available in the NHSN pick list as of the NHSN update on January 7, 2017. Display names of NHSN organisms will match more closely the descriptions for Preferred Terms and Synonyms in SNOMED CT. Words such as 'unspecified' and 'NOS' (not otherwise specified) will be eliminated. Abbreviations for species (spp.) and subspecies (ss., ssp., and subsp.) will be deleted, as well as the word 'genus'. The two terms '*Bacillus* genus - BAC' and '*Bacillus* spp. - BSP' will be reduced to one term '*Bacillus* - BAC'; this rule will apply for all genus level organisms.

The Mucosal Barrier Injury (MBI) organism and Common Commensal (CC) lists will also be updated. Rationale used to update the MBI list was as follows: if biologically plausible for an organism under consideration to translocate across the GI mucosal barrier due to an underlying condition (without having known environmental sources), it will be added to the MBI list. Missing members of viridans group streptococci and Family *Enterobacteriaceae* will be added to the MBI list. Additionally, rules were adjusted on how to manage organisms with taxonomic name changes to streamline maintenance of the MBI and CC lists. The previous protocol was to make decisions at the species-level, not for the genus as a whole. For example, *Campylobacter gracilis* was on the MBI list because it was formerly named *Bacteroides gracilis*; no other member of the genus *Campylobacter* was on the MBI list. The new rule is that decisions will be made for the genus as a whole. Rather than removing *Campylobacter gracilis* from the MBI list, all members of genus *Campylobacter* will be on the MBI list for 2017. Similar rules will be applied to ubiquitous normal flora on the skin for the CC list.

NHSN Pathogen Code Update (continued)

In short these changes will result in:

- The global list (All Organisms) of active terms will grow from 1,956 to 3,458.
- The MBI organism list will expand from 498 organisms (32 genera) to 1,003 organisms (89 genera)
- The CC list will expand from 431 organisms (7 genera) to 540 organisms (13 genera)

Please see the 2017 updated lists which have replaced the 2016 lists under Supporting Materials on the various NHSN module website pages so that you can anticipate the changes. If you have questions regarding current categorizations of organisms for the remainder of 2016, please contact NHSN@cdc.gov

CDA Corner

Attention all CDA Users!!

Reminder - the naming convention rules for individual CDA and zip files have been enforced. This means that the names of an individual CDA file as well as the zip file containing the individual CDAs may only contain alphanumeric, hyphens and underscores. Special characters in the CDA or zip file name will cause the upload to NHSN to fail.

Update for DIRECT CDA Automation

After the January 8.6 deployment, a facility using different CDA vendor systems will have the option to send via DIRECT CDA Automation for each vendor system. Ask your CDA vendor(s) about DIRECT capability.

At this time, over 2900 facilities from 8 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

New Implementation Guide Version for 2017 Dialysis Reporting

For 2017 data, the below Dialysis Summary and Event CDAs will be required to be based on the R3-D1 Implementation Guide. CDAs using the R3-D1 format may be imported into NHSN after the January 8.6 deployment.

Summary Reports:

Denominators for dialysis event surveillance - census form

Dialysis Event

New CDA denominator for the Hemovigilance Module is coming!!

The Monthly Reporting Denominator will be a valid CDA import for 2017 data. This CDA will be based on the R3-D1 Implementation Guide. The CDA will include data as seen in the user interface, plus detailed data using ISBT Product codes. CDAs may be imported after the January 8.6 release.

CDA Version Guide Always Available!

The Guide to CDA versions on the NHSN CDA Submission Support Portal is always available to verify you are submitting CDAs based on the correct Implementation Guide: http://www.cdc.gov/nhsn/cdaportal/toolkits/guidetocdaversions.html

CDA Impact Notes: Preview of NHSN Release 8.6

- Addition of ~ 1000 pathogens, updates to pathogen names, updates to business rules, and updates to MDRO definition and unusual susceptibility alerts.
- Salmonella species is no longer reported for LCBI nor MBI-LCBI events.
- The following fungi will not be allowed to be reported for events in the Patient Safety and LTCF Components: Blastomyces, Histoplasma, Coccidioides, Paracoccidioides, Cryptococcus and Pneumocystis.
- Antimicrobial Resistance (AR) Option specimen and pathogen lists expanded.
- Ability to submit data to the (AR) Option for specimens collected in three select outpatient locations: Emergency Department, Pediatric Emergency Department, 24-hour Observation Area.

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/proc collection dates (as applicable) for each year.

Download the corresponding CDA Toolkits for the corresponding year.

Events or Denominators	2017	2016	2015
CDA Toolkit Release	8.6	8.5	8.4 & 8.3
DIALYSIS			
Dialysis Event	R3-D1	R2-D2.1	R2-D1.1
Dialysis Denominator	R3-D1	R7	R7
EVENTS			
Primary Bloodstream Infection (BSI)	R9	R9	R9
Central Line Insertion Practices Adherence (CLIP) Monitoring	R2-D2.1	R2-D2.1	R9
Urinary Tract Infection	R2-D1.1	R2-D1.1	R2-D1.1
Laboratory-identified (LabID) MDRO or CDI Event	R2-D2.1	R2-D2.1	R5
SURGICAL SITE INFECTIONS AND DENOMINATOR FOR PROCEDURES			
Surgical Site Infection (SSI)	R2-D1.1	R2-D1.1	R2-D1.1
Denominator for Procedure	R2-D1.1	R2-D1.1	R2-D1.1

- Addition of *C. difficile* test method associated with the MDRO Monthly denominator: "NAAT plus EIA, if NAAT positive (2-step algorithm)".

For more information on CDA Impact for NHSN Release 8.6, view the "Preview of NHSN release 8.6" webinar: http://www.cdc.gov/nhsn/cdaportal/webinars.html.

New IG for AU Option & Reporting for Meaningful Use Stage 3

As of July 2016, the R1 Normative Antimicrobial Use (AU) CDA is now a valid CDA import! The R6 AU CDA version will continue to be a valid CDA import. However, a facility will be required to use the R1 Normative AU CDA import if they wish to satisfy the requirements for MU3.

For 2018, NHSN Antimicrobial Use (AU) and Antimicrobial Resistance (AR) (AUR) reporting have been identified as a new option for public health registry reporting under Meaningful Use Stage 3 (MU3).

See: https://www.federalregister.gov/articles/2015/10/16/2015-25595/medicare-and-medicaid-programs-electronic-health-record-incentive-program-stage-3-and-modifications.

After the January 8.6 deployment, a facility enrolled in NHSN will be able to register their intent to satisfy the AUR-MU3 objective. With the upcoming NHSN 8.6 Release, an MU3 signup page will be added to NHSN. The NHSN Facility Administrator will be able to register the facility's intent to satisfy the AUR-MU3 objective. Active engagement for this MU3 objective includes monthly reporting for a full calendar year of R1 Normative Antimicrobial Use Summary, Antimicrobial Resistance Event, and Antimicrobial Resistance Summary data to NHSN.

Detailed information may be found on the NHSN CDA Submission Support Portal (CSSP): http://www.cdc.gov/nhsn/cdaportal/meaningfuluse.html.

Attention CDA Users!

It has been brought to our attention that some facilities uploading data via Clinical Document Architecture (CDA) have been submitting HAI event records with an **incorrect facility admission date**. We recommend facilities take this time to confirm that their software vendor is using the correct facility admission date on all HAI event records; for NHSN purposes, the facility admission date is the first calendar date when the patient is physically placed into an inpatient location. Accurate admission dates are important for data quality and are used in several algorithms throughout NHSN. For example, incorrect facility admission dates can affect the number of events counted in a facility's standardized infection ratio (SIR). Laboratory-identified events, in particular, are categorized as either community-onset (CO) or healthcare facility-onset (HO) based on the patient's facility admission date and date of specimen collection. Incorrect admission dates can lead to incorrect categorizations of LabID events, thus impacting the number of events counted in the LabID Event SIRs and incidence/prevalence rates. If you notice that your vendor is using an incorrect value for facility admission date, or any other required data element, please work with your vendor to resolve the issue.

Questions about CDA reporting can be directed to: NHSNCDA@cdc.gov

NHSN Help Desk: Activity Update

Quarter 4, 2016
(Averages)
1,091 Email Inquiries per Week
90 Facilities Enrolled per Week

NHSN Enrollment Update

NHSN Enrollment Update (as of December 15, 2016):

6,750 Hospitals (this includes 531 Long-term Acute Care Hospitals and 338 Free-standing Inpatient Rehabilitation Facilities)

6,870 Outpatient Hemodialysis Facilities

4,803 Ambulatory Surgery Centers (ASCs)

1,867 Long-term Care Facilities

20,290 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.