



National Healthcare Safety Network Member's Meeting

APIC 2017

June 15, 2017

5:00-6:30 p.m.

Convention Center, Oregon Ballroom 202-203

Agenda

- Welcome – Dan Pollock
- Beta-testing of NHSN-Kent Lemoine
- NHSN Patient Safety Component Protocol Updates
 - General updates– Kathy Allen-Bridson
 - Central-line Associated Bloodstream Infection Updates-Kathy Allen-Bridson
 - Pneumonia updates- Cindy Gross
 - MDRO/CDI Updates- Denise Leaptrot
 - SSI Updates- Denise Leaptrot
- CDA – Amy Webb
- Patient Safety Component Analysis Updates – Maggie Dudeck
- Long-Term Care Facilities Component Update- Jeneita Bell
- Training update – Kathy Allen-Bridson
- NHSN Reconsent – Maggie Dudeck
- Questions – All

Welcome

Dr. Daniel Pollock

NHSN Beta Testing

Kent Lemoine

NHSN Annual Beta Release for 8.8

- This year we are supporting a 2-week beta testing period prior to full production release.
- Beta testing will be supported from 10/23/2017 until 11/3/2017.
- “Dummy data” will be populated in the beta environment every morning after a purge of all data submitted the previous day.
- More details will be provided in the coming months via newsletters and direct communications with volunteer beta users.
- To participate, please contact us at NHSNBeta@cdc.gov.

Patient Safety Component General Updates

Kathy Allen-Bridson

Anticipated 2018 General Updates for Patient Safety Component Protocols

- “i.e.”-(Latin: id est [that is]) replaced with “specifically”
- “e.g.” -(Latin: exempli gratia [for example]) replaced with “for example”
- New wording: “If the date of specimen collection is on or after the date the signed consent for organ procurement is obtained, an event identified using the specimen culture result or microbiologic non-culture based diagnostic test result should not be reported as an HAI. The patient should, however, still be included in device and patient day denominator data collection.”

Anticipated 2018 General Updates for Patient Safety Component Protocols

- Additional signs/symptoms for IAB criterion 3 to better reflect cholangitis
 - Hypotension
 - Elevated transaminase level(s)

Central Line-associated Bloodstream Event (CLABSI) Update

Kathy Allen-Bridson

Anticipated 2018 CLABSI Protocol Updates

- Additional patient conditions which will not be considered CLABSIs; specific documentation will be required
 - Epidermylosis bullosa
 - Munchhausen by Proxy
- Additional organisms excluded from cause of CLABSI
 - Enterohemorrhagic *E. coli*

Anticipated 2018 CLABSI Protocol Updates

- Updating of Common Commensals list
 - Pathogens Working Group decided to add 130 organisms to the CC list (and 1 organism was removed)
 - 669 organisms will be on the CC list for 2018 (compared to 540 for 2017)
 - Most were Gram-positive rods (diphtheroids / noncorynebacterial coryneforms)
 - List of Genera on the next slide

Genera added to Common Commensals List

- Actinomyces
- Arthrobacter
- Cellulomonas
- Cellulosimicrobium
- Exiguobacterium
- Janibacter
- Kytococcus
- Leifsonia
- Microbacterium (Aureobacterium)
- Oerskovia
- Paenibacillus
- Roseomonas (Teichococcus)
- Rothia
- Turicella
- Virgibacillus

Pneumonia and VAE Update

Cindy Gross

Pneumonia (PNEU) Imaging Test Evidence Determination

- Guidance provided in the March NHSN Newsletter

<https://www.cdc.gov/nhsn/pdfs/newsletters/nhsn-nl-mar-2017.pdf>

Imaging Test Evidence for Pneumonia

NHSN staff understand the challenge in determining if an imaging test result(s) provides the required definitive evidence for meeting the Pneumonia (PNEU) definition. In many cases this is subject to interpretation. To provide some objectivity to a subjective determination, consider the following guidance that should be followed. Simply finding the words: infiltrate, consolidation, opacity or air space disease on an imaging test report is not enough. One must determine if the finding is new or progressive and if it is persistent. Additionally, please note that an imaging test finding of atelectasis alone is not evidence of pneumonia.

For the imaging test evidence to be **definitive** for pneumonia the findings must provide:

- **Evidence suggestive of pneumonia.** For example, this includes but is not limited to a new or worsening infiltrate, consolidation, opacity, or air space disease that is **not attributed** to something other than pneumonia

And

- **Evidence of persistence.** There should not be rapid resolution of the finding or contradictory information on subsequent imaging test. (e.g., resolution of the finding on other condition (e.g., 2 days later)

- Anticipated 2018 PNEU protocol updates

Definitive Imaging Test Evidence of Pneumonia

- Challenging to determine if an imaging test results provide the required definitive evidence for meeting the Pneumonia (PNEU) definition
- Simply finding the words: infiltrate, consolidation, opacity or air space disease on an imaging test report is not enough
- Findings must be new or progressive and persistent.
- Atelectasis, pleural effusion, pulmonary edema are not evidence of pneumonia.

Definitive Imaging Test Evidence of Pneumonia

New or worsening finding

- infiltrate, consolidation, cavitation, pneumatoceles (≤ 1 year) or alternate descriptors “air-space disease”, “focal opacification”, “patchy areas of increased density”
- not attributed to something other than pneumonia

And

Evidence of persistence

- no indication of rapid resolution
- no subsequent indication the finding is attributable to another condition (for example, 2 days later the imaging result indicates the opacification is attributed to pulmonary edema)

What if findings are not definitive?

- Infiltrate vs. atelectasis ????
 - Opacity may represent pneumonia or congestive heart failure ???
 - Look for further delineation that the finding is suggestive of pneumonia and that there is persistence.
 - Subsequent imaging test with more conclusive evidence for pneumonia
- OR**
- Clinical correlation in the medical record such that the physician is indicating his/her interpretation of the non-definitive imaging test is representative of pneumonia and there is treatment for pneumonia

Anticipated 2018 VAE Protocol Updates

- VAE identified in a patient on APRV or related modes of mechanical ventilation
 - Optional requirement to indicate as such on the VAE Form
 - Optional to collect APRV days as a denominator

Event Information

Event Type *: VAE - Ventilator-Associated Event Date of Event *: [12]

Post-procedure: []

MDRO Infection Surveillance *: []

Location *: []

Date Admitted to Facility >: [12]

Risk Factors

Location of Mechanical Ventilation *: [] Date Mechanical Ventilation Initiated *: [12] APRV * []

Event Details

Specific Event >: [P/VAP - Possible Ventilator-Associated Pneumonia]

Specify Criteria Used *

STEP 1: VAC (≥ 1 Required)

Daily min FIO₂ increase ≥ 0.20 (20 points) for ≥ 2 days*
* after 2+ days of stable or decreasing daily minimum values

Daily min PEEP increase ≥ 3 cm H₂O for:

STEP 2: VAC

Temperature > 38°C or < 36°C **OR** White blood cell count ≥ 12,000 or ≤ 4,000

plus

A new antimicrobial agent(s) is started, and is continued for ≥ 4 days

STEP 3: P/VAP

Criterion #1: Positive culture of one of the following specimens, meeting quantitative or semi-quantitative thresholds as outlined in the protocol, without requirement for purulent respiratory secretions: †

Endotracheal aspirate Lung tissue

Report No Events

Total Patient Days *	685	CLABSI: <input type="checkbox"/>
Central Line Days *	125	CAUTI: <input type="checkbox"/>
Urinary Catheter Days *	151	
Ventilator Days *	51	
APRV Days *	25	
Episodes of Mechanical Ventilation:	10	PedVAP: <input type="checkbox"/>

Optional to provide * will be removed

PedVAE

- Available in NHSN January 2019
- PedVAE field testing currently being conducted

SSI Update

Denise Leaptrot

GI - GIT 1 Anticipated 2018 Protocol Update

GIT-Gastrointestinal tract infection (esophagus, stomach, small and large bowel, and rectum) excluding gastroenteritis, appendicitis, and C. difficile infection

Anticipated update: GIT criterion 1 to allow blood as an element when there is evidence of gastrointestinal tract infection.

1. Patient has one of the following:

- a. an abscess or other evidence of gastrointestinal tract infection on gross anatomic or histopathologic exam.
- b. abscess or other evidence of gastrointestinal tract infection on gross anatomic or histopathologic exam

AND

organism(s) identified from blood by a culture or non-culture based microbiologic testing method, which is performed for purposes of clinical diagnosis or treatment (for example, not Active Surveillance Culture/Testing (ASC/AST). The organism(s) identified in the blood must contain at least one MBI organism. See Appendix A of the BSI protocol.

Gender of patients who undergo abdominal hysterectomy (HYST) procedures

- Change to protocol and business rules are forthcoming that will remove business rules limiting the gender of patients for specific operative procedures, e.g. HYST
- At this time, gender “female” or “other” are available gender options.
- Anticipate this change will be in NHSN release scheduled for December 2017 - will go into effect January 1, 2018.

Operative Procedure Code Update

A list of the operative procedure code corrections was sent via email.

Summary includes

- type of code
- code category
- procedure code
- specific correction



Code Type	Code Category	Code	Correction
ICD-10	BILI	0FN60ZZ	Code Status added as "No change"
CPT	CARD	0052R	CHANGE to 0052T
ICD-10	CBGB	02100AF	ADD to CBGB
ICD-10	CBGB	02100JF	ADD to CBGB
ICD-10	CBGC	0210098	MOVE code from CBGC to CBGB
ICD-10	COLO	0DB80ZX	REMOVE from COLO & ADD to SB
ICD-10	COLO	0DTQ0ZZ	REMOVE from COLO
ICD-10	COLO	0W3P0ZZ	REMOVE from COLO & ADD to XLAP
ICD-10	CRAN	008M0ZZ	REMOVE from CRAN
ICD-10	CRAN	008M3ZZ	REMOVE from CRAN
ICD-10	CRAN	008M4ZZ	REMOVE from CRAN

ICD-10	CRAN	008S4	REMOVE from CRAN
ICD-10	CRAN	0NB50ZZ	REMOVE from CRAN
ICD-10	CRAN	0NB60ZZ	REMOVE from CRAN
ICD-10	CRAN	0NP00SZ	REMOVE from CRAN
ICD-10	CRAN	009030Z	Code category updated to VSHN
ICD-10	CRAN	009130Z	Code category updated to VSHN
ICD-10	CRAN	009140Z	Code category updated to VSHN
ICD-10	CRAN	009230Z	Code category updated to VSHN
ICD-10	CRAN	009240Z	Code category updated to VSHN
ICD-10	CRAN	009330Z	Code category updated to VSHN

The list is titled
"2017 Compendium of Code Corrections"
and posted in the Supporting Materials
section of the SSI webpage.

Operative Procedure Code Update, cont.

Examples of code corrections and the necessary corrections users should make:

Code Type	Code Category	Code	Correction	Necessary Corrections to be made by the user
ICD-10	BILI	0FN60ZZ	Code Status added as "No change"	No action necessary
CPT	CARD	0052R	CHANGE to 0052T	If your facility has procedures coded with CARD CPT code 0052T and CARD is included in your Monthly Reporting Plan. Your facility will need to ENTER these procedures into NHSN.
ICD-10	COLO	0DB80ZX	REMOVE from COLO & ADD to SB	If your facility entered procedures coded with ICD-10-PCS code 0DB80ZX into NHSN as COLOs, REMOVE these procedure records. This code has been reassigned to the SB procedure category. If SB is included in your Monthly Reporting Plan these procedure records should be EDITED and the procedure category changed to SB and SAVED.
ICD-10	COLO	0DTQ0ZZ	REMOVE from COLO	If your facility entered procedures coded with ICD-10-PCS code 0DTQ0ZZ into NHSN as COLOs, REMOVE these procedure records. This code has been removed from the COLO procedure category.
CPT	HYST	58570	ADD to HYST	If your facility has procedures coded with HYST CPT code 58570 and these procedures are not included in your HYST data starting Jan 1, 2017 your facility will need to ENTER these procedures into NHSN. This code has been added to the HYST.

Operative Procedure Code Update, cont.

Corrected procedure code documents will be posted on the NSHN SSI webpage.

Corrected documents
can be readily identified
by a 06-2017 date

The image shows a screenshot of a webpage and an Excel spreadsheet. The webpage header is titled "Updated NHSN Operative Procedure Code Mappings (corrected 06/2017)" with a purple arrow pointing to the date. The text below explains that the document replaces prior documents listing operative procedure codes associated with the NHSN Surgical Site Infection (SSI) Procedure-associated Protocol. It states that codes have been validated using current procedure code references in consultation with a trained coding professional and are accurate at the time of posting. A valid ICD-10-PCS procedure code may be entered instead of (or in addition to) the NHSN Procedure Category name. Procedure codes may be entered in the following manner:

- If the ICD-10-PCS procedure code is entered first, the NHSN Procedure Category name will be filled but

The screenshot also shows a navigation bar with tabs: "Instructions (corrected 6-2017)", "ALL ICD-10-PCS Codes Combined", "Index", "AAA (ICD-10)", "AMP (ICD-10)", and "APPY (ICD-10)". A purple arrow points to the "Instructions (corrected 6-2017)" tab. Below the navigation bar is a screenshot of an Excel spreadsheet titled "2016 Current Procedural Terminology (CPT) Code Mapping to NHSN [Read-Only] - Excel". The Excel ribbon is visible, and the "Find & Select" button in the Editing group is circled in orange. A purple arrow points to the "Find & Select" button.

MDRO/CDI Update

Denise Leaptrot

Should users submit all positive specimens that may qualify as LabID events to NHSN?

- Polled users during 2016 as to whether they were in favor of submitting all positive specimens for LabID events and letting NHSN determine which qualify as LabID events.
- Poll conducted during annual training, APIC spring update and APIC national conference.
- Results:
 - In Favor = 54%
 - Not In Favor = 46%

Clinical Document Architecture (CDA) Update

Amy Webb

Overview of CDA

- Stands for Clinical Document Architecture
- Standard format developed by HL7 (Health Level 7)
- Used for electronic reporting of data into NHSN
- XML programming language

```
<recordTarget>
  <patientRole>
    <id root="2.16.840.1.113883.3.117.1.1.5.1.1.1" extension="123456"/>
    <id root="2.16.840.1.113883.3.117.1.1.5.1.1.1" extension="2ND ID"/>
    <id root="2.16.840.1.113883.4.1" extension="546465465"/>
    <id root="2.16.840.1.113883.4.338" extension="465465465T"/>
    <patient>
      <name>
        <family>last</family>
        <given>first</given>
        <given>mid</given>
      </name>
      <administrativeGenderCode codeSystem="2.16.840.1.113883.5.1" code="F"/>
      <birthTime value="19951209"/>
    </patient>
  </patientRole>
</recordTarget>
```

Using CDA

- Many infection control/EHR software systems can create CDAs for NHSN import
 - NHSN does not rank, evaluate, or endorse any software vendor!
 - APIC maintained list of [HAI CDA Vendors](#)
 - SIDP maintained list of [AU CDA Vendors](#)
- Can also use “Homegrown” solutions to develop CDAs

NHSN Data Currently Accepted via CDA

- DA Module
 - CLABSI
 - CAUTI
 - CLIP
 - ICU/Other Denom
 - SCA/ONC Denom
 - NICU Denom
- PA Module
 - SSI
 - Procedures
- MDRO Module
 - LabID
 - MDRO Denom
- AUR Module
 - AU
 - AR Event
 - AR Denom
- Dialysis
 - Dialysis Event
 - Dialysis Denom
- **NEW!** Hemovigilance
 - HV Denom

Future CDAs

- Planned for January 2018
 - Update for Dialysis numerator
 - Update for Hemovigilance denominator
- Planned for January 2019
 - (new!) Ventilator Associated Event (VAE)
 - (new!) Healthcare Personnel Influenza Vaccination Summary
 - Update for BSI numerator
- Planned for January 2020
 - Update for Summary's: ICU, NICU, SCA, MDRO, Dialysis (Add Report No Event)
 - Update for Dialysis numerator

CDA Imports as a Percentage of All Reports Submitted to NHSN, Jun 30, 2016 - Feb 28, 2017

NHSN Numerator Data

Bloodstream Infections (BSIs)	36%
Urinary Tract Infections (UTIs)	35%
Surgical Site Infections (SSIs)	27%
Laboratory Identified Events (LabID Events)	50%
Dialysis Events (DEs)	51%

NHSN Denominator Data

ICU/Other Summary	20%
SCA/ONC Summary	22%
NICU Summary	20%
Surgical Procedure	19%
MDRO Summary	6%
Dialysis Denominator	40%

DIRECT CDA Automation

- Over 5,150 facilities from 13 vendors using DIRECT
- “Automated” sending of CDA files from vendor/homegrown solution to NHSN
 - Facility must already be able to send CDAs to NHSN
 - Data sent securely using Health Information Services Provider (HISP)
 - Advantages:
 - Not required to log into each facility
 - Send data for multiple facilities at once
 - Notification of submission success/failure sent via email
- Learn more here: [DIRECT information](#)

Manually Importing CDAs

- For importing all CDA file types (except AU & AR), user must have Administrator rights!

Edit User Rights

User ID: **MDQ1 (ID 5939)**

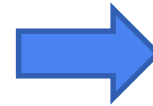
Fac: CDA-XYZ_qa_Test Facility

Facility List:

Rights	Patient Safety	Healthcare Personnel Safety
Administrator	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
All Rights	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Analyze Data	<input type="checkbox"/>	<input type="checkbox"/>
Add, Edit, Delete	<input type="checkbox"/>	<input type="checkbox"/>
View Data	<input type="checkbox"/>	<input type="checkbox"/>
Customize Rights	<input type="checkbox"/>	<input type="checkbox"/>

[Advanced](#)

[Effective Rights](#) [Save](#) [Back](#)



Import/Export Data

Select import/export type

Select import/export type

- Patients
- Procedures
- Surgeons
- Events, Summary Data, Procedure Denominators
- SSI events (requires link to procedure)

Updating/Replacing Data via CDA

- Data uploaded via CDA can be easily updated or replaced
- Re-export from vendor software then re-upload into NHSN
 - (in most cases) Automatically updates version number in CDA file so NHSN knows which record to update

CDA Submission Support Portal










- [Direct link](#)
- Vendors & facilities
- New & experienced




NHSN CDA Submission Support Portal (CSSP)

CDC > NHSN

Clinical Document Architecture (CDA) is a Health Level 7 (HL7) standard that provides a framework for the encoding, formatting and semantics of electronic documents. CDC's National Healthcare Safety Network (NHSN) supports CDA import of certain healthcare-associated infection (HAI) data. To assist programmers in creating standards for reporting via CDA import, NHSN offers an Implementation Guide and associated materials based fully on HL7-balloted CDA document specifications. Types of data that can be reported include event reports, denominator data, and process-of-care measures.

 ABOUT CDA What is Clinical Document Architecture?	 GETTING STARTED How to implement CDA for HAI reporting.	 FAQS Common questions asked by CDA implementers.
 IMPLEMENTATION TOOLKITS & RESOURCES NHSN HAI Implementation Guides, IDMs and toolkits.	 DATA VALIDATION & TESTING Tools to validate and test your CDA data as per NHSN specifications.	 WEBINARS & TRAINING VIDEOS Webinars on NHSN releases and CDA training.
 IMPORTING DATA How to import your data into NHSN using CDA, CSV or Direct.	 INNOVATION TOOLS Data sets and algorithmic web services.	 MEANINGFUL USE Overview of Meaningful Use Stage 3 for NHSN reporting.

<h3>Quick Links</h3> <ul style="list-style-type: none">• CDA Toolkit Release 8.5• Guide to CDA Versions• DIRECT Protocol• CMS Requirements• VAE Synthetic Data Set	<h3>Top FAQs</h3> <ul style="list-style-type: none">• What import/export type to select for a CDA or CSV file import?• I don't see the option available to import my CDA files on the Import/Export screen in NHSN.• Could not find NHSN organization by OID in the CDA error report.• CDA is not accepted for event dates greater than or less than a specific year.• What are the requirements for CDA files?• I am not able to import CDAs or see any error reports in Internet Explorer.
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CMS
NHSN
Requirements
Click here for more information

NHSN & Meaningful Use Stage 3

- NHSN AUR Module option for public health registry reporting in MU 3
- Monthly data for both AU and AR Option required
- AUR data can be submitted via CDA only

- **Important note:** AUR Module is only part of NHSN that qualifies for MU 3

- NHSN facility guidance: <https://www.cdc.gov/nhsn/pdfs/cda/MU3-Facility-Guidance.pdf>

PS Analysis Updates

Maggie Dudeck

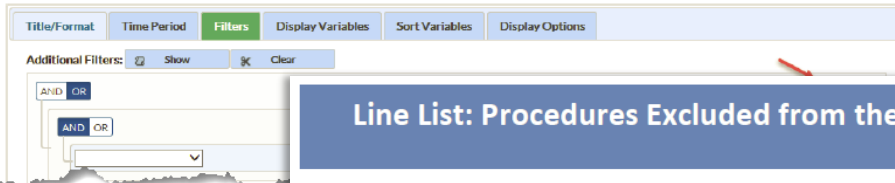
New and Updated Analysis Resources

- Updated Quick Reference Guides

<https://www.cdc.gov/nhsn/ps-analysis-resources/reference-guides.html>

How to Modify a Report

- Each addition of “group” and “rule” will allow you to specify values. After selecting a variable to filter, click in the empty box with the drop down arrow to select the operator (i.e., “equal”) then specify desired values of that variable that should be included in the report. Various operators can be selected to modify the report:



The screenshot shows a web-based interface for modifying a report. At the top, there are several tabs: 'Title/Format', 'Time Period', 'Filters' (which is currently selected and highlighted in green), 'Display Variables', 'Sort Variables', and 'Display Options'. Below the tabs, there is a section for 'Additional Filters' with a 'Show' button and a 'Clear' button. Underneath, there are two filter rules. Each rule starts with a dropdown menu containing 'AND' and 'OR' options. The first rule has a dropdown menu with a downward arrow, and the second rule has a similar dropdown menu. A red arrow points to the 'Clear' button.

Line List: Procedures Excluded from the SIRs (2015 Baseline)

Description

For the surgical site infections (SSI) module, there are inclusion and exclusion criteria that are applied to procedures and associated events. The line list of procedures excluded from the standardized infection ratio (SIR) is an NHSN analysis report that is intended to assist users in reviewing the procedures that are excluded from the SIRs and the reasons for the exclusion. This list of exclusion criteria is often called the universal exclusion criteria and applies to procedures, regardless of the SSI model. Often, the reason for procedure exclusion from the SIRs is due to data quality issues, which can be addressed, if applicable. The list of universal exclusion criteria have been updated, under the new 2015 NHSN baseline, from the previous baseline. For a list of exclusion criteria, please see page 25 of the NHSN Guide to the SIR": <https://www.cdc.gov/nhsn/pdfs/ps->

THE NHSN STANDARDIZED INFECTION RATIO (SIR)

A Guide to the SIR

Updated June 2017. Please see [Page 2](#)



New and Updated Analysis Resources

- NEW! Quick Learn: Basic Statistics for NHSN Analysis

<https://www.cdc.gov/nhsn/training/analysis/index.html>

National Center for Emerging and Zoonotic Infectious Diseases

Basic Statistics for NHSN Analysis
2017 NHSN Quick Learn Series

Basic Statistics for NHSN Analysis - April 2017

Centers for Disease Control and Prevention (CDC)

271 views

12 likes

0 comments

The image shows a YouTube video player interface. At the top, there is an orange banner with the text 'National Center for Emerging and Zoonotic Infectious Diseases' and the CDC logo. Below the banner, the video title is 'Basic Statistics for NHSN Analysis' with a subtitle '2017 NHSN Quick Learn Series'. The video player shows a progress bar at 0:12 / 10:42. Below the player, the video title is repeated, followed by the channel name 'Centers for Disease Control and Prevention (CDC)' and a 'Subscribe' button with '50K' subscribers. The video has 271 views, 12 likes, and 0 comments. There are also buttons for 'Add to', 'Share', and 'More'.

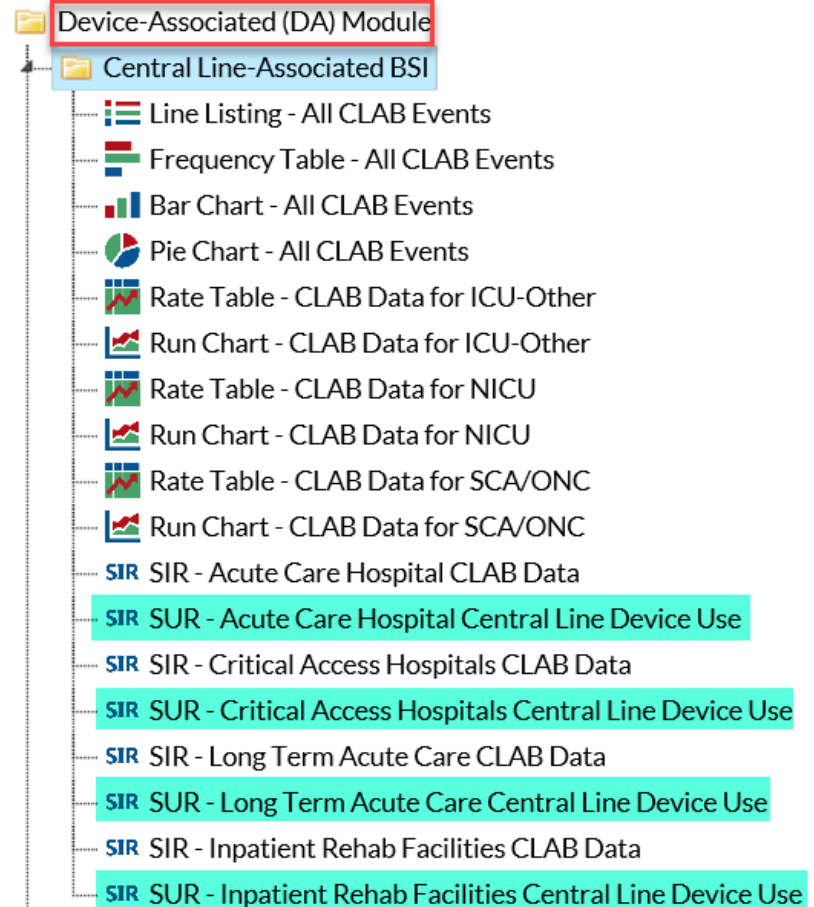
95% Confidence Intervals - Examples

Facility	SIR	95% CI	Significant?	Precise?
A	2.43	0.87, 6.72	N	N
B	1.15	0.72, 1.45	N	Y
C	0.37	0.06, 0.80	Y	N
D	0.65	0.41, 0.75	Y	Y

The image shows a YouTube video player interface. At the top, there is a title '95% Confidence Intervals - Examples'. Below the title is a table with 5 columns: Facility, SIR, 95% CI, Significant?, and Precise?. The table contains 4 rows of data for facilities A, B, C, and D. The video player shows a progress bar at 6:30 / 10:42. There are also buttons for 'Add to', 'Share', and 'More'.

NEW!

- Similar to the SIR – a scalable, risk-adjusted measure
- SUR Reports will be found in the Device-Associated Module
 - There are SURs for central line, urinary catheter, and ventilator utilization
 - Each facility type SUR report is found under the same facility type's SIR report



National Healthcare Safety Network

SUR for Central Line Device Use for Acute Care Hospitals (2015 baseline) - By OrgID

As of: June 7, 2017 at 2:41 PM

Date Range: BS2_CLAB_RATESALL summaryYM 2016M01 to 2016M03

orgID=10018 CCN=12345 medType=M

orgID	summaryYQ	numCLDays	numPredDDays	SUR	SUR_pval	SUR95CI
10018	2016Q1	315	100.483	3.135	0.0000	2.803, 3.496

1. This report includes central line utilization data from acute care hospitals for 2015 and forward.
2. The SUR is only calculated if number of predicted device days (numPredDDays) is ≥ 1 . Lower bound of 95% Confidence Interval only calculated when number of observed device days > 0 .
3. The predicted device utilization days is calculated based on national aggregate NHSN data from 2015. It is risk adjusted for CDC location, hospital beds, medical school affiliation type, and facility type.

- **SUR** = # observed device days / # of predicted device days
- The # of predicted device days is calculated using a logistic regression model

*Disclaimer: The SUR report pictured above is based on fictitious data

Targeted Assessment for Prevention (TAP) Dashboard

- New feature in NHSN launching June 2017
- Facilities will see TAP report data on their NHSN home screen
 - Data auto-populated after signing into NHSN
 - Users can generate new analysis datasets directly from the TAP dashboard

NHSN Home

Alerts

Dashboard

Reporting Plan ▶

Patient ▶

Event ▶

Procedure ▶

Summary Data ▶

Import/Export

Surveys ▶

Analysis ▶

Users ▶

Facility ▶

Group ▶

Tools ▶

Logout



NHSN Patient Safety Component Home Page

▶ TAP Strategy Dashboard

▼ Action Items

COMPLETE THESE ITEMS

Confer Rights

Not
Accepted

ALERTS

132

Incomplete Events

292

Missing Events

71

Incomplete Summary
Items

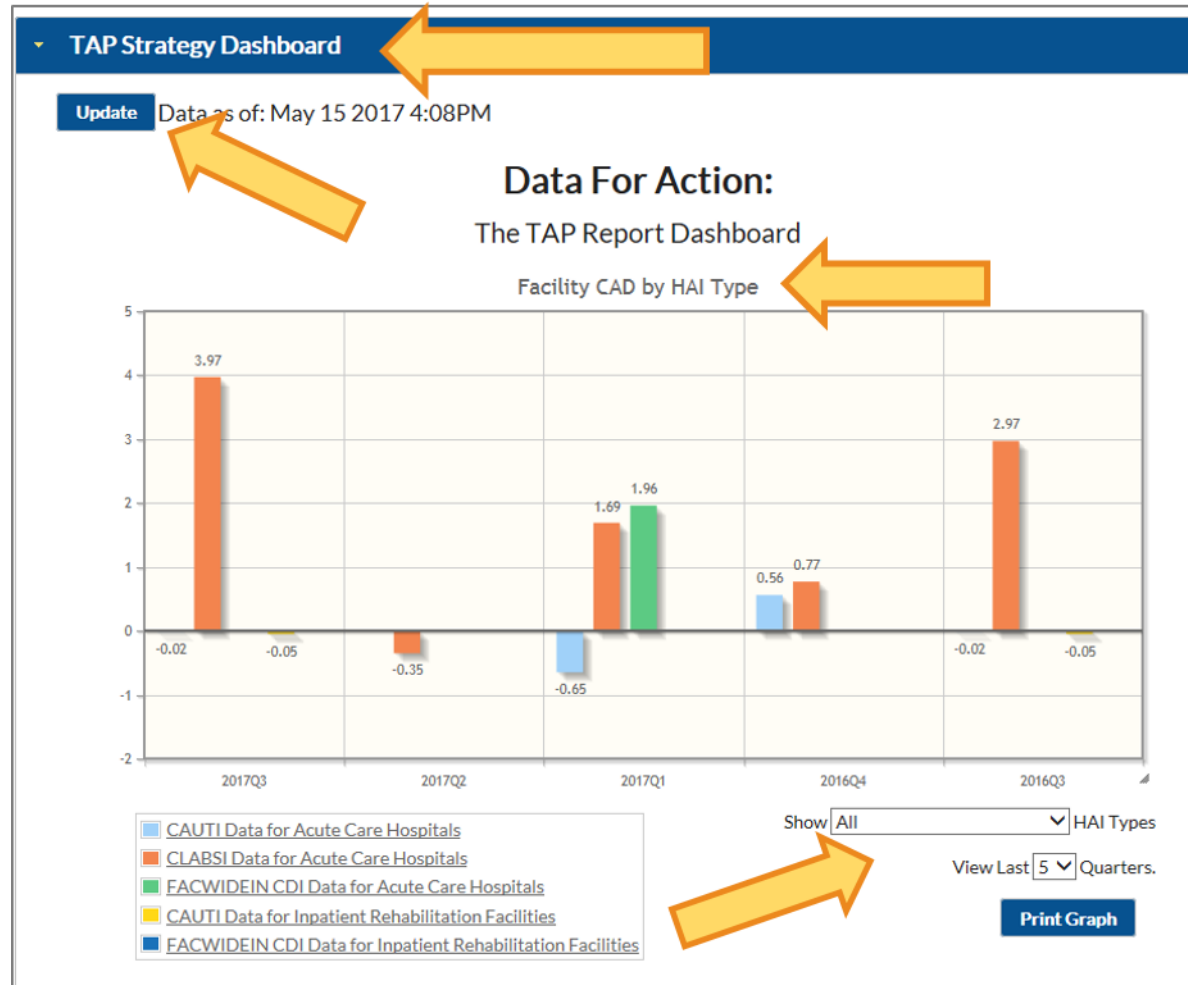
486

Missing Summary
Items

Dashboard

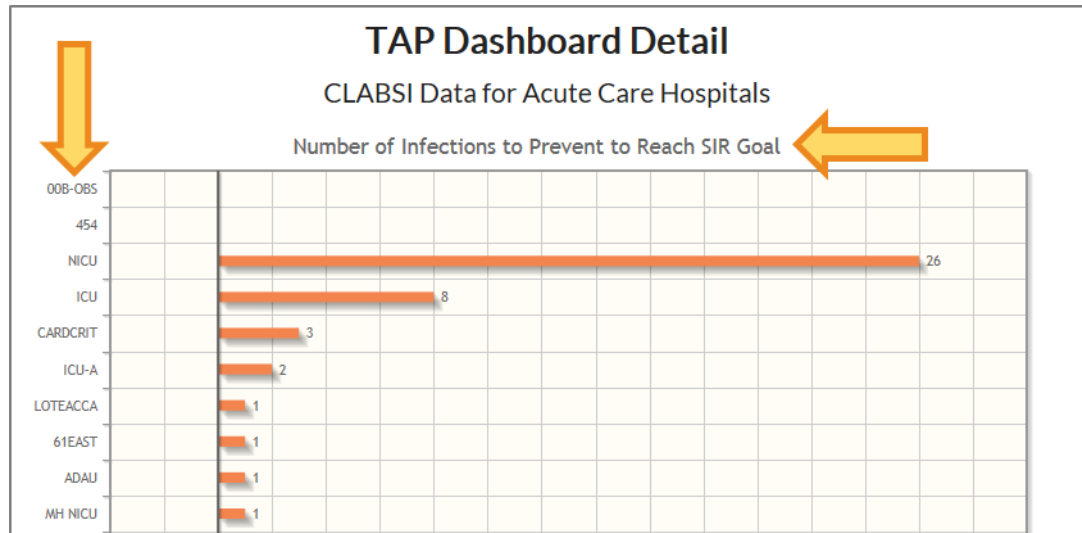
- Dataset generation
- Bar graph showing facility-level CADs for each HAI type
 - CADs use 2020 HHS Action Plan Goals
- Display and print options
- Detail view by selecting HAI Type

2020 HHS Action Plan:
<https://health.gov/hcq/prevent-hai-measures.asp>



TAP Dashboard Detail View

- Clicking on an HAI-specific bar will take user to a location-specific CAD graph
 - CAD rounded to the next whole number



TAP Dashboard Detail View

- Location ranking table under the graph (CAUTI and CLABSI)

Year	Location Rank	Location	Location Type	Infection Count	Location CAD	Organisms
2016		00B-OBS	WARD+	0		
2016		454	WARD+	0		
2016	1	NICU	NICU	27	25.97	27 (0, 0, 0, 0, 0, 0)
2016	2	ICU	ICU	8	7.96	17 (0, 2, 1, 0, 0, 0)
2016	3	CARDCRIT	ICU	3	2.96	4 (0, 0, 0, 2, 0, 0)
2016	4	ICU A	ICU	2	1.95	2 (0, 0, 1, 0, 0, 0)

- Direct link TAP Reports in the Analysis Reports section of NHSN

2016	13	CTIC	ICU	0	-0.1	
2016	14	5G	ICU	0	-0.13	
2016	14	71ICU	ICU	0	-0.13	
2016	16	3E	WARD+	0	-0.14	
2016	17	MICU2	ICU	0	-0.45	

Page 1 of 1

19 record(s) found

* This table and visualization are a summary year depiction of the available data. For further analysis, use the [Analysis TAP Reports](#).

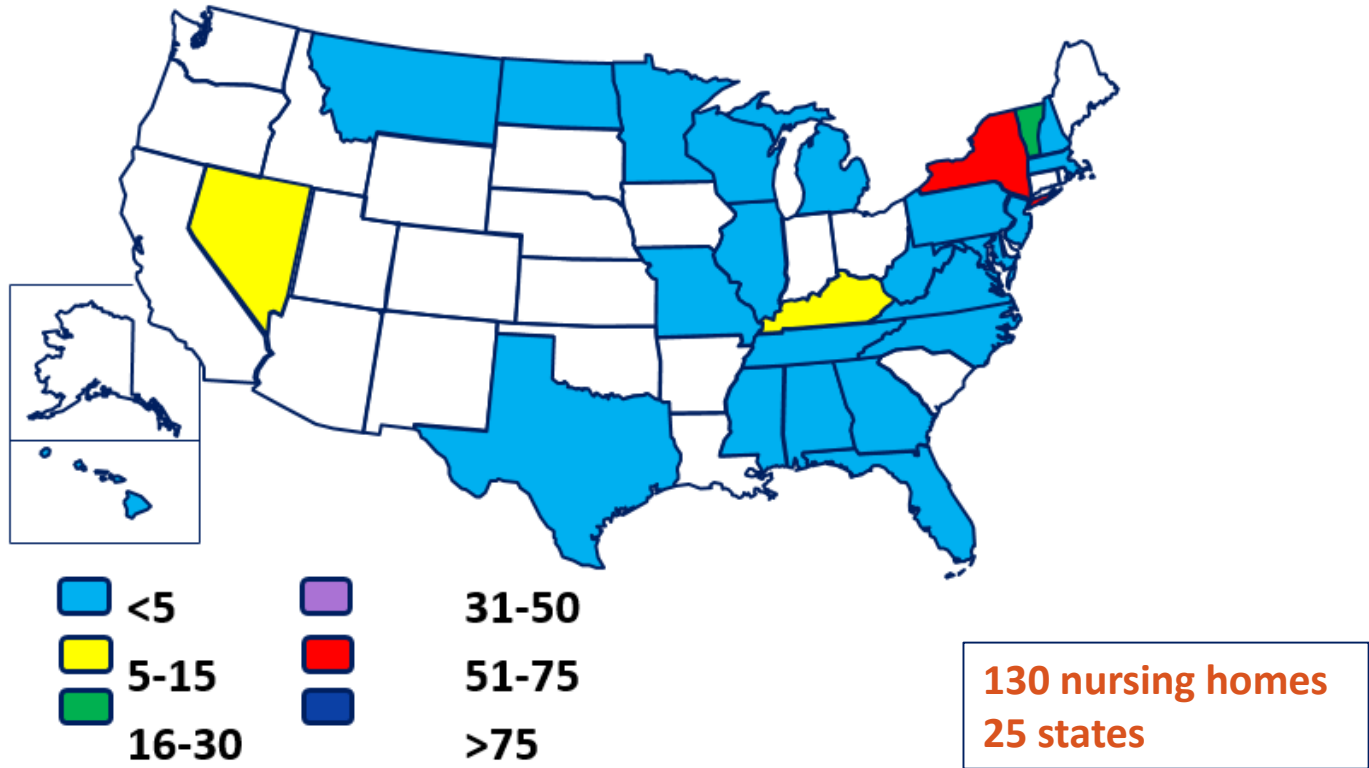
A Few Reminders About TAP Reports in NHSN

- Acute care hospital TAP reports include data from critical access hospitals
 - Use the “Modify Report” option to select facility type
- TAP reports will show CLABSI + CAUTI data from all locations
- Groups will see three tables in their TAP Reports:
 - 1. Overall cumulative CAD for the Group
 - 2. Facility rankings within the Group
 - 3. Location rankings within each facility (CLABSI + CAUTI)
- Group TAP Report guidance documents are included in resource packet
- *Make sure your Group has requested access to annual survey data on the Define Rights template*

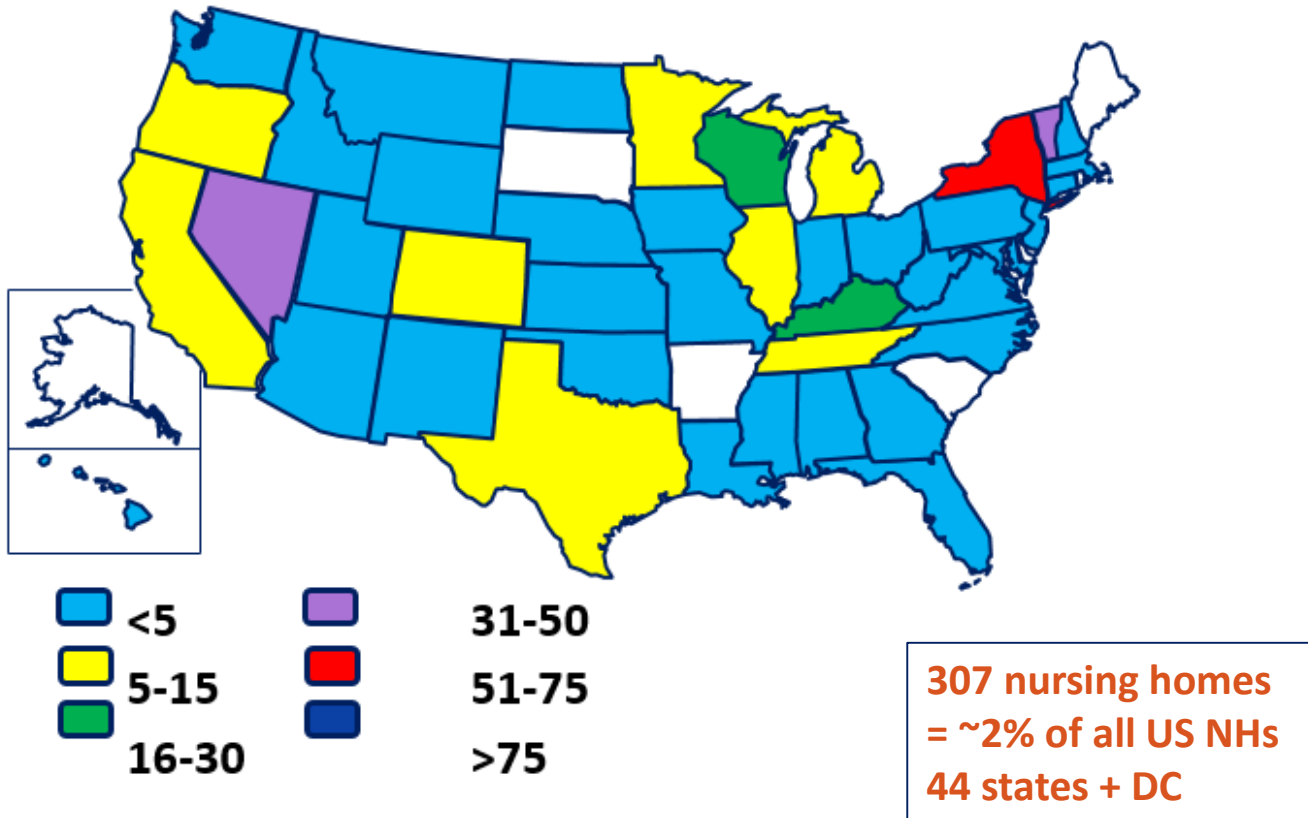
Long-Term Care Update

Angela Anttila

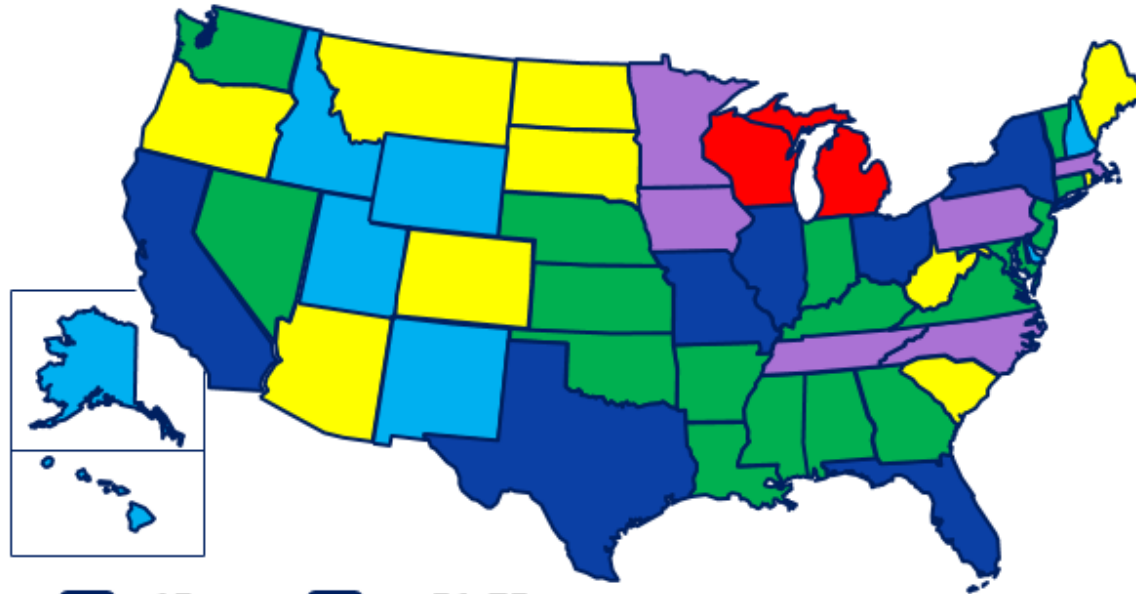
NHSN Enrolled Nursing Homes by State, August 2013



NHSN Enrolled Nursing Homes by State, June 2016



NHSN Enrolled Nursing Homes by State, April 2017



***Scale has changed**

**2,709 nursing homes =
18% of all US NHs
50 states + DC and PR**

CMS *C. difficile* Reporting and Reduction Project, 2016-2018

- New project for CMS-funded QIN-QIO programs working with nursing homes – launched at end of May 2016
- Primary driver for increase in Long Term Care Facility Component participation
- Goal to recruit 15% (~2300 NHs) to enroll and report into the NHSN
 - 2,999 nursing homes expressed interest in participation
 - ~2,300 enrolled between June 2016 and April 2017
- CDC in collaboration with CMS and the national project team have developed a portfolio of training resources to support NHSN enrollment efforts

Nursing Home Prevalence Survey: Assessment of Infections & Use of Antibiotics

- Project begin April 2017, goal to recruit up to 200 NH/SNFs in 10 EIP sites
- EIP staff to collect data from resident charts and other facility records on
 - Healthcare associated infections – revised McGeer definitions
 - Antibiotics administered
 - Assess how antibiotics are used
- Project information will be used to
 - Develop HAI and antibiotic use interventions in LTC
 - Inform infection tracking efforts: NHSN LTCF Component
 - Identify how best to support antibiotic stewardship in LTC

For more project information go to: www.cdc.gov/hai/eip/antibiotic-use.html

Training Update

Katherine Allen-Bridson

Available Training – Overview

- ❑ **Quick Learns**
 - 5 – 10 minute videos addressing specific NHSN topics
- ❑ **Self-paced Interactive Trainings - CBTs**
 - 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.
 - Available for: Device and Procedure-associated Modules, MDRO/CDI LabID, Dialysis Event, and Biovigilance
 - More coming soon! (e.g., LTCF, Analysis)
- ❑ **2017 NHSN Training Archived Webstream Videos - available now!**
 - ❑ LTCF, CLABSI, CAUTI, VAE, LabID Events, SSI, Analysis, and AUR sessions
- ❑ **In-Person Training – February 26-March 2, 2018**
 - The training course will provide information on CMS reporting, definition and protocol clarification, interactive case studies, analysis, validation, and any updates in reporting for 2018.
 - Webstreaming will be available for those not attending in-person

NHSN Training Website: <http://www.cdc.gov/nhsn/training/>

National Healthcare Safety Network (NHSN) Training

[f](#) [t](#) [+](#)

Our mission is to offer learning opportunities in a variety of formats that enhance the knowledge and skills of NHSN facility- and group-level participants and their partners in order that they may effectively use the data obtained from the surveillance system to improve patient and healthcare personnel safety.

Objectives

- Convey NHSN data collection methods, submission requirements, and analysis options to participants so that they may acquire, submit, and disseminate high quality, actionable data.
- Prepare participants to use the NHSN reporting application accurately and efficiently.
- Enhance participants' and their partners' understanding of data quality and the value of adverse event monitoring.
- Encourage collaboration among participants and partners to improve the patient and healthcare personnel safety across the spectrum of care.

COURSE CATALOG
Course descriptions for NHSN components, modules and events.

ENROLLMENT AND SETUP TRAINING
Self-paced training for new NHSN enrollment and existing facility set-up.

DATA ENTRY AND ANALYSIS
Self-paced training for data entry, import, customization and analysis.

REQUEST CDC LED TRAINING
Webinar / In-person training policy and request.

CONTINUING EDUCATION
CE available free of charge for all NHSN education course work.

PATIENT SAFETY COMPONENT TRAINING
Self-paced training for specific module and events.

DIALYSIS COMPONENT TRAINING
Self-paced training for outpatient dialysis module and events.

HEALTHCARE PERSONNEL SAFETY COMPONENT TRAINING
Self-paced training for specific module and events.

BIOVIGILANCE COMPONENT TRAINING
Self-paced training for specific module and events.

LONG-TERM CARE FACILITY COMPONENT TRAINING
Self-paced training for long-term care facilities enrollment and set-up.

Quick Learn Videos

NHSN Home

- NHSN Training
- NHSN Demo +
- Course Catalog
- Long-term Care Facility Component
- Enrollment and Setup Training
- Data Entry and Analysis
- Patient Safety Component**
- Dialysis Component +
- Healthcare Personnel Safety Component

CDC > [NHSN Home](#)

Patient Safety Component Training

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Training Resources

- > **Overview of the Patient Safety Component**
- > **Device-associated Module**
- > **Procedure-associated Module**
- > **Multidrug-resistant Organism and Clostridium difficile Infection (MDRO/CDI) Module**
- > **Vaccination Module**

- Home Training Page
- Archived Webstreaming Events
- Quick Learns
- Self-paced Interactive Trainings

2017 Quick Learns



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NHSN Training
National Healthcare
Safety Network

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Self-paced training for outpatient dialysis facilities.

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BIOVIGILANCE COMPONENT TRAINING
Self-paced training for specific module and events.

Request a Demo

Access NHSN Demo

Quick Learn Videos

Quick Learns Coming Soon...

- ❑ NHSN Definition and Rules Changes
- ❑ SSI Event Form for PATOS
- ❑ Significant Changes to the NHSN Patient Safety Component for 2017

Quick Learns in the Works...

- ❑ Introductions to Analysis: Data Set
- ❑ Introductions to Analysis: Analysis Output
- ❑ Introductions to Analysis: CMS Reports
- ❑ Procedure Exclusion Criteria

2017 NHSN Live Training: Slidesets and Webstream Videos

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LONG-TERM CARE FACILITY COMPONENT TRAINING
Self-paced training for long-term care facilities enrollment and set-up.

Obtaining Continuing Education for NHSN Training Events

- Once you completed viewing the courses, go to CDC [Training and Continuing Education On](#)
 - If you have not registered as a participant, click on **New Participant** to create a user ID login.
 - If you have registered in this system before, please use the same login name and password and enter the course number. You can only register and enter one course at a time.
- Click on the course title (at the bottom of the page). The course information page will come that you would like to receive and then **Submit**. Three demographic questions will come up.
- From **Participant Services**, click on **Evaluations and Tests**.
- Complete the course evaluation and **Submit**. Once you hit submit, it will give you the option course is very brief.
- Upon achieving a passing posttest score (of 80% or higher), you will be able to immediately personal transcript. If you do not post a passing score, you may retake the test.
 - A record of your completion will be located in the transcript and certificate section of your account.
- If you have any questions or problems contact CDC Training and Continuing Education On

Continuing Education Resources

➤ **NHSN Web streaming / Webinar Events** 

➤ **Self-Paced Interactive Training**

➤ **Continuing Education**



➤ **Disclaimer and Disclosure**

e-LEARNING





▼ NHSN Web streaming / Webinar Events

Overview

- General NHSN Definitions for 2017
 - [YouTube Link \[Video - 54 min\]](#)
 - [Slideset](#)  [PDF - 2M]
- Centers for Medicare and Medicaid Services (CMS)
 - [YouTube Link \[Video - 61 min\]](#)
 - [Slideset](#)  [PDF - 1 MB]
- Data Validation
 - [YouTube Link \[Video - 49 min\]](#)
 - [Slideset](#)  [PDF - 2 MB]

Bloodstream Infection (BSI)

- CLABSI Definition and Case Studies
 - [YouTube Link \[Video - 67 min\]](#)
 - [Slideset](#)  [PDF - 4 MB]
- Secondary BSI, Site-Specific Infection Definitions
 - [YouTube Link \[Video - 72 min\]](#)
 - [Slideset](#)  [PDF - 3 MB]

NHSN Continuing Education

- ❑ Continuing Education is available for Self-paced Interactive Training and Archived Webstreaming Training
- ❑ CE available: CNE, CEU, CME, CPH
- ❑ <http://www.cdc.gov/nhsn/training/continuing-edu.html>

Continuing Education

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National Healthcare Safety Network provides online access to complete the continuing education process. The process includes registration for a course on the CDC Training and Continuing Education Online system, completion of the course, and printing of the CE certificate. To receive CE, participants must complete this process online.

Expiration

You must submit your answers online before the stated expiration date to be eligible for CE credit. Each course for continuing education has an expiration date.

Obtaining Continuing Education for NHSN Training Events

1. Once you completed viewing the courses, go to [CDC Training and Continuing Education Online](#).
 - a. If you have not registered as a participant, click on **New Participant** to create a user ID and password; otherwise click on **Participant Login** and login.
 - b. If you have registered in this system before, please use the same login name and password. This will ensure an accurate transcript.
2. Once you have logged in, you will be on the Participant Services page. Click on **Search and Register**. Then click on the second option **keyword search** and enter the course number. You can only register and enter one course at a time.
3. Click on the course title (at the bottom of the page). The course information page will come up. Scroll down to **Register Here**. Click on the type of CE that you would like to receive and then **Submit**. Three demographic questions will come up. Complete the questions and then **Submit**.
4. From **Participant Services**, click on **Evaluations and Tests**.
5. Complete the course evaluation and **Submit**. Once you hit submit, it will give you the option of completing the posttest. The posttest for each training course is very brief.
6. Upon achieving a passing posttest score (of 80% or higher), you will be able to immediately print your continuing education certificate from your personal transcript. If you do not post a passing score, you may retake the test.
 - A record of your completion will be located in the transcript and certificate section of your record.
7. If you have any questions or problems contact CDC Training and Continuing Education Online at: 1-800-41TRAIN or 404-639-1292 or ce@cdc.gov.

Continuing Education Resources

- > **NHSN Web streaming / Webinar Events**
- > **Self-Paced Interactive Training**
- > **Continuing Education**
- > **Disclaimer and Disclosure**

THANK YOU!

- The NHSN team would like to thank you again for the valuable feedback provided in the NHSN Education and Training Needs Assessment!
- 1,069 NHSN Patient Safety Component users provided feedback
- Next Steps:
 - Incorporation of questions from those participating remotely via webstream during the 2017 NHSN Training
 - Website updates for increased navigability and user access to training activities and materials
 - Accessibility of in-person training



The NHSN Re-Consent is Coming!

All Primary Contacts will need to accept the updated Agreement to Participate and Consent form for each component by February 24th

The NHSN Re-consent Process

- Primary Contacts for each component will be able to review and accept the new consent form in the NHSN application in **December** when the annual NHSN update is released.
- All NHSN user facilities will need to accept the new Agreement to Participate and Consent (or “re-consent”) by **February 24th**.
- If a component fails to re-consent by the deadline, its NHSN functionality will be suspended until the consent form is accepted by the primary contact.
- CDC will make every effort to communicate with users before and during the re-consent process to minimize any disruption to reporting.

Questions? Contact NHSN@cdc.gov



For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.