National Healthcare Safety Network Members’ Meeting

APIC 2018

June 14, 2018
5:00-6:30 p.m.
Minneapolis Convention Center, Auditorium 3
NHSN Presentations during APIC 2018

- NHSN Analysis: The Ins and Outs of Risk Adjustment
  - Margaret Dudeck
  - Wednesday 1:30-2:30 p.m.
- NHSN Case Studies: Applied Surveillance
  - Katherine Allen-Bridson
  - Wednesday 3-4 p.m.
- NHSN Device-Associated Analysis: What Can SIRs and SURs Do for You?
  - Prachi Patel
  - Thursday 2:15-3:25 p.m.
- NHSN Options for MDRO/CDI Surveillance and LabID Event Reporting
  - Parneet Ghuman and Denise Leaptrot
  - Thursday 2:15-4:45 p.m.
- Analytical Methods for Assessing Intervention Effectiveness
  - Jonathan Edwards
  - Friday 8:00-10:30 a.m.
- Lessons from a National Nursing Home CDI Surveillance Partnership
  - Elisabeth Mungai
  - Friday 9:30-10:30 a.m.
- Analyzing SSI Data in NHSN
  - Irene Khan
  - Friday 9:30-10:30 a.m.
- Implementation of the TAP Strategy to Enhance Prevention of HAIs: A Practical Approach
  - Rashad Arcement
  - Friday 1:15-3:45
- Preview of the New Outpatient Procedure Component
  - Henrietta Smith
  - Friday 1:30-2:30 p.m.
Agenda

- **Welcome** – Dan Pollock
- **Beta Release Testing NHSN V9.2** - Kent Lemoine
- **Patient Safety Components Surveillance Definitions/Protocols**- Kathy Allen-Bridson, Denise Leaptrot, Parneet Ghuman
- **Patient Safety Component Training** - Kathy Allen-Bridson
- **Patient Safety Components Analysis**- Maggie Dudeck
- **Long-term Care Component**- Jeneita Bell
- **Clinical Document Architecture**- Ahmed Tahir
- **Antimicrobial Use and Resistance**- Casey Thompson
- **Dialysis Component Updates**- Maggie Dudeck
- **Questions** – All
Welcome

Dr. Daniel Pollock
Recap of the 2017 NHSN 8.8 Beta Release

- Beta testing for release 8.8 took place from 10/23/2017 to 11/3/2017.
- Approximately 85 volunteer testers from all facility types participated in the beta testing.
- A few minor issues were reported and fixed prior to the production release of NHSN 8.8.
- This provided an opportunity for a “sneak peak” of 8.8 features as well as a forum to provide suggestions for future enhancements.
- The insertion of a beta testing period in the project schedule provides stability of the production release schedule.
NHSN 9.2 Beta Release

- The 2018 beta release is scheduled from 10/22/2018 to 11/2/2018.
- We need volunteers again! If you are interested, please email NHSNBeta@cdc.gov. We will begin monitoring this mailbox starting tomorrow.
- A flyer with more information will be sent in July and more on what to expect in September.
- A list of changed functionality will be provided at the start of the testing period so that you can focus on the changes to be found in NHSN 9.2
- Thank you!
CLABSI, PedVAE, SSI, Upcoming Components

Kathy Allen-Bridson
ECMO and VAD and CLABSI 2018- Oh My

- Extracorporeal Life Support, (ECMO) and Ventricular Assist Device (VAD)
- Optional fields 2018; Required 2019 (not 2020 as listed in BSI protocol)
- If in place > 2 days on DOE and still in place or discontinued day before
  - Mark “Central line” field as “No”- regardless of central line presence
  - Healthcare-associated BSI but NOT CLABSI
- 30+ events incorrectly entered into NHSN since 2018
- See pages 4-10 and 4-11 of BSI protocol for details
  [https://www.cdc.gov/nhsn/pdfs/pscmanual/4psc_clabscurrent.pdf](https://www.cdc.gov/nhsn/pdfs/pscmanual/4psc_clabscurrent.pdf)

Don’t overinflate your CLABSI SIR!
Device Day and Central Line Day Counts

- **Device Day** – The count of central lines on an inpatient unit that will be recorded in the monthly denominator summary data.
  - **ALL** central lines present on an inpatient unit should be included **regardless of access**.
  - Guidance: Table of Instructions for Denominators for NICU’s, SCA’s and ICU’s

- **Central Line Day** - The days of access on an inpatient unit for central line-associated bloodstream infection (CLABSI) determinations.
  - If the central line is inserted during the current admission:
    - CL Day 1 = date of line placement
  - For central lines present on admission
    - CL Day 1 = date of 1st access on inpatient unit
  - Guidance: Table 3, page 4-16 of LCBI protocol
We Want to Hear From You

- CLABSI Surveillance Definitions Pre and Post 2015
  - Watch email for short survey from APIC
  - 1-2 weeks after APIC 2018
  - Let us know what you think
Pediatric Ventilator-Associated Event (PedVAE)

- Location based surveillance available for selection in monthly reporting plan in Pediatric and NICU locations only with planned release in January 2019
- Patient must be ventilated > 2 days to be eligible for PedVAE surveillance
- Detection of a PedVAE is determined by identification of deterioration in respiratory status after a period of stability or improvement on the ventilator using two key parameters:
  - Daily minimum FiO₂
  - Daily minimum Mean Airway Pressure (MAP)
- Secondary BSIs are not reported or attributable to a PedVAE
- Single tiered algorithm
Pediatric Ventilator-Associated Event (PedVAE) Surveillance Algorithm

Patient has a baseline period of stability or improvement on the ventilator, defined by ≥ 2 calendar days of stable or decreasing daily minimum* FiO₂ or MAP values. The baseline period is defined as the 2 calendar days immediately preceding the first day of increased daily minimum MAP or FiO₂.

*Daily minimum FiO₂ is defined as the lowest value of FiO₂ documented during a calendar day that is maintained for > 1 hour.
Daily minimum MAP is the lowest value documented during the calendar day.
For patients <30 days old, daily minimum MAP values 0-8 cm H₂O are considered equal to 8 cmH₂O for the purposes of surveillance.
For patients ≥30 days old, daily minimum MAP values 0-10 cmH₂O are considered equal to 10 cmH₂O for the purposes of surveillance.

After a period of stability or improvement on the ventilator, the patient has at least one of the following indicators of worsening oxygenation:
1) Increase in daily minimum FiO₂ of ≥ 0.25 (25 points) over the daily minimum FiO₂ of the first day in the baseline period, sustained for ≥ 2 calendar days.
2) Increase in daily minimum MAP values of ≥ 4 cmH₂O over the daily minimum MAP of the first day in the baseline period, sustained for ≥ 2 calendar days.
Additional Optional PedVAE Data Collection

• Clinical findings associated with a PedVAE may assist in better understanding the etiology and focusing efforts to prevent PedVAEs

• Optional data fields to report the following will be available:
  • Clinical diagnoses or events that were associated with the PedVAE
  • Antimicrobial agents that are administered on the date of event or within the 2 days before or 2 days after the event
  • Pathogens detected by culture or non-culture-based microbiological testing of upper or lower respiratory specimens or in blood during defined timeframes specified in the protocol
News Related to NHSN Operative Procedure Codes

- Operative Procedure Codes included in the v8.9 release should be applied retrospectively to procedures performed on or after 1/1/18

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<thead>
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Updates Related to the Continued Transition to ICD-10 Coding System

- Harmonizing the NHSN operative procedure code category descriptions with the ICD-10-PCS coding system

- Scope guidance for CBGB operative procedures is based on the 5th character of the chest
  - Value of zero (0) = an open approach
  - Value of four (4) = percutaneous endoscopic approach
  - Value of F = via natural or artificial opening with endoscopic assistance approach
Upcoming NHSN Modules and Components

- **September 2018**
  - Outpatient Procedure Component
  - See *Preview of the New Outpatient Procedure Component*- Friday 1:30-2:30

- **January 2019**
  - Pediatric Ventilator-associated Events (PedVAE)

- **January 2020**
  - Neonatal Component
    - Level II/III and III NICUs
    - Late-Onset Sepsis
    - Meningitis
Poll Everywhere

- A real time audience response tool
  - Participate by texting the message **NHSN** to **22333** once to join
  - OR
  - On cellphone or computer visit the web address **PollEv.com/nhsn** via any web browser

We noticed it’s your first time participating! FYI: Your phone number is private, and we’ll never spam you. You’ve joined Cheryl Williams’ session (NHSN). When you’re done, reply LEAVE.
True or False: Following the identification surgical site infections, I have observed addendums to operative procedure reports to note infection present at the time of surgery.
No change to MDRO/CDI reporting guidance or definitions

- Clarification note added for CDI multistep testing, pg. 12-21
- Multistep testing occurs on same unformed stool specimen.

**CDI-positive laboratory assay:**
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).

**Note:**
- When using a multi-testing methodology for CD identification, the final result of the last test finding which is placed onto the patient medical record will determine if the CDI positive laboratory assay definition is met.

January 2018 | 12 - 21
Updates to FacWideIn MDRO/CDI Denominator Form

Parneet Ghuman
Updates to FacWideIN MDRO/CDI Denominator Form

- Our goal is to minimize data quality issues with LabID denominator data entry

- We want to ensure that complete and accurate data are being used for CMS/internal purposes

- Updates are anticipated to go into effect in early 2019
Current FacWideIN MDRO/CDI Denominator Form

- **Changes include:**
  - Simplified title and revised language for clarity
  - Encounters field will display conditionally for outpatient units
  - Row 2 and Row 3
    - Added formulas for counts
    - No mention of MDRO and CDI
Sneak Peek!

- Example of inpatient FacWideIN MDRO/CDI denominator form

<table>
<thead>
<tr>
<th>Setting: Inpatient Total Patient Days</th>
<th>Total Admissions</th>
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</thead>
<tbody>
<tr>
<td>* 203</td>
<td>* 151</td>
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</table>

1. If your facility has a CMS-certified rehab unit (IRF) or CMS-certified psych unit (IPF), please subtract these counts from "Total Facility Patient Days" and "Total Admissions" (Line 1). If you do not have these units, enter the same values you entered on Line 1.

Counts = [Total Facility - (IRF + IPF)]
Patient Days * 140  Admissions * 85

2. If your facility has a CMS-certified IRF, CMS-certified IPF, NICU, or Well Baby Unit, please subtract those counts from "Total Facility Patient Days" and "Total Admissions" (Line 1). If you do not have these units, enter the same values you entered on Line 1.

Counts = [Total Facility - (IRF + IPF + NICU + Well Baby Unit)]
Patient Days * 88  Admissions * 67
NHSN Patient Safety Component Training Updates

Kathy Allen-Bridson
NHSN Available Training – Overview

- **2018 NHSN Training Archived Webstream Videos - available now!**
  - CLABSI, CAUTI, VAE, LabID Events, SSI, Analysis, and AUR sessions

- **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 Events, Dialysis Event, and Biovigilance
  - Coming July 2018 – Ventilator-associated Events!

- **In-Person Training – March 25 - 29, 2019**
  - The training course will provide information on CMS reporting, definition and protocol clarification, interactive case studies, analysis, validation, and any updates in reporting for 2019.
  - Webstreaming will be available for those not attending in-person
NHSN Training Website: New Look!

http://www.cdc.gov/nhsn/training/
NHSN Continuing Education

http://www.cdc.gov/nhsn/training/continuing-edu.html

- Continuing Education is available for Self-paced Interactive Training and Archived Webstreaming Training

- CE available: CNE, CEU, CME, CPH
2018 NHSN Live Training: Slidesets and Webstream Videos

National Healthcare Safety Network (NHSN) Training

Continuing Education

National Healthcare Safety Network provides online access to complete the continuing education (CE) certificate process. This process includes registration for a course on the CDC Training and Continuing Education Online system, completing the course posttest and assessment, 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 to receive continuing education credit. Please check each course for expiration dates.

Obtaining Continuing Education for NHSN Training Events

1. Once you have 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.
2018 Quick Learns

As of January 2018, the NHSN Quick Learns are no longer located on a separate page on the NHSN Training site. Instead, Quick Learns are posted under the dropdown for the specific module they pertain to, see example below:

Quick Learns Coming Soon...

- Introduction to Analysis Basics: PSC Data Set Generation
- Introduction to Analysis Basics: PSC Analysis Output
- Introduction to Analysis Basics: Basic Example
- Introduction to Analysis Basics: Advanced Example
- Updates to the 2018 Patient Safety Annual Survey
NHSN Educational Roadmaps - Available Now!

http://www.cdc.gov/nhsn/training/roadmap

- We have recently completed the NHSN Educational Roadmaps for each NHSN component
- Tools to improve your comprehension of NHSN surveillance definitions, reporting, and analysis.
- Guided tour of the NHSN training materials and information – from the basics to more advanced training for each individual component and protocol
Patient Safety Component Analysis and Survey Updates

Maggie Dudeck
TAP Strategy Update: MRSA TAP Reports

- MRSA TAP Reports for ACHs were added to NHSN in April 2018

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<td>33.27</td>
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1. This report includes facility-wide inpatient data from acute care hospitals for 2015 and forward.
2. Facility Rank = Priority ranking for Targeted Assessment of Prevention by CAD in descending order
3. CAD = Observed - Predicted * SIR Goal
4. SIR is set to ‘!’ when predicted number of events is <1.0. SIR TEST = ‘SIG’ means SIR > SIR Goal significantly

Source of aggregate data: 2015 NHSN MRSA Blood LabID Data
Data contained in this report were last generated on June 4, 2018 at 6:45 AM.

- MRSA data included in the ACH TAP Dashboard
MRSA added to TAP Dashboard

- MRSA has been added to TAP Dashboard reports
  - Summary of MRSA data by recent five quarters
  - Number of MRSA infections to prevent to reach SIR Goal
A Guide to the SUR

- The SUR Guide is live as of January 2018!
- Mirrors the style of the SIR Guide
- Includes definition, calculation steps, and models for each device and facility type

THE NHSN STANDARDIZED UTILIZATION RATIO (SUR)

Device-Associated Denominator Data Quality Checks

- One potential issue affecting device-associated HAIs is having patient days equal to device days.
  - While possible in certain critical care units, such as NICU locations, patient days should rarely be equal to device days.

- A “soft” alert will be added to device-associated denominator pages when users try to save summary records with any device days (CL, UC, V) that are equal to the patient days in that location and month.
  - A pop-up will appear that will prompt users to review their patient and device day counts and revise if necessary. It will not prevent users from entering patient days equal to device days.
Coming Soon: Analysis Reports Using Frozen Data

- Facilities will soon be able to run CMS-related SIRs based on data frozen as of each CMS prescribed deadline
  - Will aide in facilities comparing data in NHSN to CMS preview reports for Hospital Compare, HVBP, etc.
  - Datasets will be available going back to 2015Q1 deadline, using the 2015 NHSN baseline calculations
- SIRs will still be available in the traditional manner (e.g., based on current data)
- More information will be provided when this feature becomes available
Coming Soon: SIRs for Outpatient Procedures

- The new risk adjustment calculations (using the 2015 NHSN baseline) and SIR reports for outpatient procedures will soon be available.
- Risk models developed for outpatient procedures in ASCs separate from hospitals (HOPD).
- The outpatient procedure SIR reports use the All SSI Data SIR Model only.
  - For the Patient Safety Component, outpatient procedure SIR reports will be separate from the inpatient procedure SIR report.
  - For ASCs, the new SIRs will become available in the new Outpatient Procedure Component.
- The anticipated release date for the NEW reports: Fall 2018.
Coming Soon: 2016 National and State HAI Progress Report

- The 2016 report uses the 2015 baseline and risk adjustment calculations
  - Also compares 2016 data to 2015 SIRs as measure of progress
- The report consists of standardized infection ratio (SIR) and standardized utilization ratio (SUR) data and is produced by facility type:
  - Acute Care Hospitals (ACHs)
  - Critical Access Hospitals (CAHs)
  - Inpatient Rehabilitation Facilities (IRFs)
  - Long Term Acute Care Hospitals (LTACHs)
- The report consists of
  - Detailed technical tables
  - National and State factsheets that will be published in the Patient Safety Atlas
- Previous reports accessible from: https://www.cdc.gov/hai/surveillance/data-reports/index.html
Accessing other HAI Reports


CDC

Healthcare-associated Infections

Data and Statistics

HAI Data Reports

Data Summary: Assessing Progress 2006-2016

2015 HAI Data Report

2015 SIRs Using Historical Baselines

2014 HAI Progress Report

FAQs, 2014 HAI Progress Report

Previous HAI Progress Reports

Antibiotic Resistance Patient Safety Atlas

Healthcare-Associated Infection Data Reports

A major part of quality healthcare includes protecting patients from infections while they get medical care in hospitals, nursing homes, clinics, home, and other settings. Without this protection, infections themselves can become deadly, and strides made in modern medicine are greatly undermined. The United States has made significant progress toward our collective goal of eliminating healthcare-associated infections (HAIs), and as a result, healthcare in the U.S. is safer now than it was even 10 years ago. Building upon this success and continuing towards the elimination of HAIs is critical.

In 2009, the U.S. Department of Health and Human Services published the National Action Plan to Prevent Health Care-Associated Infections: Road Map to Elimination (HAI Action Plan), which set specific five-year goals for HAI prevention. CDC plays an important role in this plan by producing data that prompts action, leading the country in tracking, preventing and ultimately eliminating HAIs. This data also helps pinpoint areas of further improvement that allows for the continued progress.
Coming Soon: 2018 Patient Safety Annual Survey Updates

- Numerous changes to all three of the PSC surveys, to be completed by facilities in 2019
- 9 New, required questions added to the Hospital Survey, 4 questions added to LTAC and IRF surveys
  - 5 new required questions on the Hospital survey about neonatal antimicrobial use to assist in the creation of a neonatal specific benchmark metric
  - 3 previous survey questions removed due to being outdated and/or not producing useful information for prevention and response activities
- Updated wording and response options for several questions in the facility microbiology lab practices section
The antibiotic stewardship section will have the most noticeable changes

- The previously required 11 questions will transition to a total of 20 questions (10 required and 10 optional)
- The reason for this change is to add more granularity and context to facilities stewardship practices
- All questions will continue to align with the CDC’s Core Elements of Hospital Antibiotic Stewardship Program

Full explanation of these changes and updates will be provided prior to the release of the 2018 Annual survey

- Information will be provided in several different formats (newsletters, tables of instructions, and quick learn videos)
Long-term Care Facility Component Updates

Jeneita Bell
Outline

- Long-term Care Facility (LTCF) Component enrollment
- Clostridium *difficile* Infection (CDI) Reporting and Reduction Project
- APIC presentation
- CDI validation
- LTCF annual training
NURSING HOMES ENROLLED IN NHSN — August 2013

Total Number of NH: 171
~ 1.1% of all 15600 US NH
NURSING HOMES ENROLLED IN NHSN — March 2018

[Map of the United States showing the number of nursing homes enrolled in NHSN by state.]

Total Number of Nursing Homes: 3310
~21% of 15,600 US NH
**Clostridium difficile (CDI) Reporting and Reduction Project**

- Collaboration between CDC, CMS, QIN-QIOs
- Objectives:
  - Increase NHSN reporting; establish CDI baseline; improve outcomes
- Project timeline: May 23, 2016 – December 28, 2018
- Recruitment and NHSN enrollment:
  - May 23, 2016 – April 7, 2017
  - National Target: 2,330
- Nursing Home CDI data submission for baseline:
  - March 1, 2017 – December 31, 2017
  - National Target submitting data: 1,864 (min. 80%)
CDI Project Accomplishments

- 2,594 facilities recruited and enrolled
  - 72% privately owned
  - 97% dually Medicare and Medicaid certified
  - 85% 50 to 199 beds

- 2,511 NHs reporting CDI data
  - 99% reported at least one month of complete data

- Exceeded recruitment and data submission target
- Reporting and evaluation on-going
APIC Presentation

- Lessons from a National Nursing Home CDI Surveillance Partnership
  Friday, June 15, 2018
  9:30 AM - 10:30 AM

- Speakers:
  - Elisabeth Mungai (CDC, NHSN)
  - Kathie Nichols (Stratis Health, QIN-QIO)
  - Katie Pelofske (Masonic Home Care Center)
CDI Data Validation

- Improve data quality
  - Check accuracy of reported data
  - Understand users’ protocol comprehension
  - Identify education and support needs

- Can be done internally and externally
  - Long-term care facility (LTCF)
  - State health department
  - QIN-QIO

- Interested or need help?
  - Contact NHSN@cdc.gov
NHSN Long-term Care Facility Annual Training

- Centers for Disease Control and Prevention
  Atlanta, GA
  July 16 – 19, 2018

- Highlights:
  - NHSN Healthcare-associated infection protocols
  - Using data for prevention
  - Introduction to conducting analyses
  - Guest speakers describe the benefits of NHSN in their LTCF
Clinical Document Architecture (CDA) Update

Ahmed Tahir
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
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

- **Hemovigilance**
  - HV Denom
Future CDAs

- Planned for January 2019
  - Ventilator Associated Event (VAE)
  - Healthcare Personnel Influenza Vaccination Summary (FLU)
  - Update for BSI event

- Planned for January 2020
  - Update for Summaries: ICU/Other, NICU, SCA, MDRO, & Dialysis
    - “Report No Event” will be added to CDA
    - Updates for BSI event

- Planned for Summer 2020
  - Neonatal Component
    - Late Onset Sepsis – event and summary
CDA Imports as a Percentage of All Reports Submitted to NHSN, Jan 1, 2017 - Dec 31, 2017

<table>
<thead>
<tr>
<th>NHSN Numerator Data</th>
<th>NHSN Denominator Data</th>
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<tbody>
<tr>
<td>Bloodstream Infections (BSIs)</td>
<td>ICU/Other Summary 22%</td>
</tr>
<tr>
<td>Urinary Tract Infections (UTIs)</td>
<td>SCA/ONC Summary 25%</td>
</tr>
<tr>
<td>Surgical Site Infections (SSIs)</td>
<td>NICU Summary 22%</td>
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<tr>
<td>Laboratory Identified Events (LabID Events)</td>
<td>Surgical Procedure 35%</td>
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<td>Dialysis Events (DEs)</td>
<td>MDRO Summary 6%</td>
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<td>Dialysis Denominator 56%</td>
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Manually Importing CDAs

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

- Over 5,900 facilities from 15 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
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
  - Automatically updates version number in CDA file so NHSN knows which record to update
CDA Submission Support Portal

CSSP
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](https://www.cdc.gov/nhsn/pdfs/cda/MU3-Facility-Guidance.pdf)
Antimicrobial Use and Resistance (AUR) Updates

Casey Thompson
Submission Metrics

- 805 facilities submitted at least one month of data
  - From 49 states (+AE & DC)
  - Bed size
    - Average = 215
    - Median = 168
    - Min/Max = 6, 1455
  - Teaching status
    - Teaching: 65%
    - (of all Teaching) Major teaching: 47%
- 326 facilities submitted at least one month of AR Option data

*As of May 1, 2018*
Yearly Submission into the AU Option*

No. of Facilities Reporting or that have Reported AU Data

*As of May 1, 2018
Percentage of facilities ever-reporting into NHSN’s AU Option, May 2018

*Denominator is all NHSN-enrolled acute care hospitals
Percentage of facilities ever-reporting into NHSN’s AR Option, May 2018

*Denominator is all NHSN-enrolled acute care hospitals
Plans for the SAAR

- Current SAARs are based on 2014 AU data
- Plan to update adult and pediatric SAARs using 2017 data
  - Reassess all variables potentially associated with AU
  - If sample sizes are sufficient and data are clean, we can investigate new factors and location types not previously assessed:
    - Adult step down, Oncology units, other ICU types
New Resources posted to NHSN AUR Website

AU Option and AR Option FAQs
- Reflect common questions including general reporting, troubleshooting CDA file upload errors, interpreting analysis reports and more

AU Option Annual Data Validation Guidance
- Use on annual basis or in the event of extreme high or low SAAR values
- Focus validation efforts on key AU Option protocol definitions and common data errors
New Resources posted to NHSN AUR Website

Analysis Quick Reference Guide: AU Bar Chart – Selected Drugs

- How to modify report to view specific drugs

2018 Annual NHSN Training Antimicrobial Use & Resistance Module video

- [https://www.youtube.com/watch?v=sVpz7eNAQ2s](https://www.youtube.com/watch?v=sVpz7eNAQ2s)

NHSN Helpdesk (protocol & submission questions): [NHSN@cdc.gov](mailto:NHSN@cdc.gov)
NHSN Dialysis Component
Release 8.9 Updates
Release Date: April 28, 2018
User Interface Improvement – Edit Group User Rights

- Improvement to facility selection menu on Edit Group User Rights screen
  - Easier for users to sort, filter, and select multiple facilities
Analysis Updates – Aggregate Data

- NHSN Dialysis Event rate tables and run charts updated with 2016 national aggregate data for benchmarking
  - Includes: IV antimicrobial starts, IV vancomycin starts, local access site infections, bloodstream infections, access-related bloodstream infections, vascular access infections

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**National Healthcare Safety Network Rate Table for Bloodstream Infection**

<table>
<thead>
<tr>
<th>Facility Org ID</th>
<th>CMS Certification Number</th>
<th>State</th>
<th>Location</th>
<th>Access Type</th>
<th>Summary Yr/Qtr</th>
<th>Months</th>
<th>Number Bloodstream Infections</th>
<th>Patient-months</th>
<th>Bloodstream Infection Rate/100 patient-months</th>
<th>Incidence Density p-value</th>
<th>Incidence Density Percentile</th>
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</thead>
<tbody>
<tr>
<td>10055</td>
<td>888888</td>
<td>DC</td>
<td>All</td>
<td>All</td>
<td>2017Q1</td>
<td>2</td>
<td>1</td>
<td>46</td>
<td>2.17</td>
<td>0.56</td>
<td></td>
</tr>
<tr>
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<td>888888</td>
<td>DC</td>
<td>Fistula</td>
<td>Fistula</td>
<td>2017Q1</td>
<td>2</td>
<td>0</td>
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<td>0.22</td>
<td>0.9713</td>
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<td>888888</td>
<td>DC</td>
<td>Graft</td>
<td>Graft</td>
<td>2017Q1</td>
<td>2</td>
<td>0</td>
<td>10</td>
<td>0.00</td>
<td>0.37</td>
<td>0.9636</td>
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<tr>
<td>10055</td>
<td>888888</td>
<td>DC</td>
<td>Other Access</td>
<td>Other Access</td>
<td>2017Q1</td>
<td>2</td>
<td>0</td>
<td>6</td>
<td>0.00</td>
<td>0.065</td>
<td>0.9618</td>
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<tr>
<td>10055</td>
<td>888888</td>
<td>DC</td>
<td>Tunneled Central Line</td>
<td>Tunneled Central Line</td>
<td>2017Q1</td>
<td>2</td>
<td>1</td>
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<td>10.00</td>
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<td>0.1841</td>
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<td>Nontunneled Central Line</td>
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<td>0.8608</td>
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<tr>
<td>10055</td>
<td>888888</td>
<td>DC</td>
<td>Any CVC</td>
<td>Any CVC</td>
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<td>2</td>
<td>1</td>
<td>17</td>
<td>5.88</td>
<td>1.86</td>
<td>0.3113</td>
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</tbody>
</table>

Source of aggregate data: 2016 NHSN Dialysis Event Data
Data contained in this report were last generated on April 18, 2018 at 11:48 AM.
"Incidence Density Percentile" values were suppressed for "All" stratum and strata with insufficient data.
Analysis Updates – Excess Infections Report

- Group-level ‘TAP’ Report has been renamed to ‘Excess Infections – Bloodstream (BSI) Data’ report
- Can group by calendar quarter and calendar half-year by modifying the ‘Group by’ variable under the ‘Display Options’ tab
Analysis Updates – Creating Custom Lists

- Create custom lists for use as filters in all analysis reports at the group level
- Create and modify custom lists by going to Analysis > Preferences
  - When adding a custom list, select facilities to include in the custom list, name the custom list, and click ‘Save’
  - Select the custom list on the ‘Filters’ tab on the Modify screen of any report to view data only for the facilities in the list
For more information, contact CDC
1-800-CDC-INFO (232-4636)

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.