Volume 18, Issue 3
September 2023

NHSN
NATIONAL HEALTHCARE SAFETY NETWORK

CENTERS FOR DISEASE CONTROL AND PREVENTION

NHSN E-Newsletter

Inside this Issue:

Patient Safety Component

Attention! New CMS Required Reporting Measure for CY 2024: NHSN AUR Module Submission Required for the CMS Promoting Interoperability Program

In the fall of 2022, CMS published a final rule that moved the AUR Module reporting to a required measure under the Public Health and Clinical Data Exchange objective for calendar year 2024. The AUR Surveillance Reporting measure requires that eligible hospitals and critical access hospitals (CAHs) are in active engagement with CDC to report both AU and AR data and receive a report from NHSN indicating their successful submission of AUR data for the EHR reporting period or claim an applicable exclusion.

Facilities can be in active engagement in two ways:

Option 1 – Pre-production and Validation
Eligible hospitals and CAHs must register intent to submit AUR data within NHSN. According to the CMS measure specifications, the registration should be completed within 60 days after the start of the EHR reporting period. The registered eligible hospital or CAH will then receive an automated email from NHSN inviting it to begin the Testing and Validation step. Following the instructions in the email, hospitals must submit one test file for each file type (AU Summary, AR Event, and AR Summary) for validation by the NHSN AUR Team. **Per the CMS measure specifications, eligible hospitals and CAHs should respond to the request for test files within 30 days. Failure to respond twice within an EHR reporting period will result in that eligible hospital or CAH not meeting the measure.** If the eligible hospital or CAH registers their intent to submit AUR data within NHSN prior to having test files ready, the eligible hospital or CAH should reply to the request for test files with their current status. The eligible hospital or CAH should continue to email a status update at least every 60 days until the hospital has test files to send for validation to complete Option 1.

Option 2 – Validated Data Production
Eligible hospitals and CAHs must register intent to submit AUR data within NHSN if they did not complete Option 1 – Pre-production and Validation. CMS defines production data as data generated through clinical processes involving patient care. This is different from "test data," which is submitted for the purpose of testing and validation. **For CY 2024 the EHR reporting period is a minimum of 180 days, thus eligible hospitals and CAHs must submit 180 continuous days of AUR data.** Those 180 days **must** be the same for all CMS Promoting Interoperability Program measures for your hospital. Keep in mind, too, that you must report the same 180 days of AU and AR data as they are considered a single measure for the CMS PI Program.

For more information and additional resources including FAQs, please see the materials in the Antimicrobial Use and Resistance section of the CMS Reporting Requirements for Acute Care Hospitals page.

HAI Pathogens & Antimicrobial Resistance Surveillance Report

The NHSN Team recently published the 2018-2021 HAI Pathogens & Antimicrobial Resistance Report! This national surveillance report highlights the common pathogen species reported from HAIs in adult and pediatric patients and provides national resistance data for eight antimicrobial-resistant phenotypes. Results are based on data reported to the Patient Safety Component and are stratified by patient age, facility type, infection type, patient care area, SSI type, and procedure category. The report is available directly from the NHSN website: https://www.cdc.gov/nhsn/hai-report/index.html. A highlight of findings can be found in the Executive Summary.

Historically, this surveillance report has been published as a manuscript. Previous versions of this report, based on historical years of data, are available here: https://www.cdc.gov/nhsn/datastat/ar-pathogens.html
Questions about the report can be submitted to the NHSN helpdesk, with subject line: "HAI Pathogens and AR Report".

Analysis Updates and New Features

Coming Soon! New Footnote Feature in NHSN SIR Reports

With the October 2023 NHSN application release, the NHSN Team will test a new feature that allows facility and Group users to display or hide footnotes within the HTML output window for SIR and SUR reports. Initially, the test will only impact the MRSA Bacteremia LabID SIR report for Inpatient Rehabilitation Facilities (IRFs).

The new footnote feature will display as a button at the top of the SIR report's HTML output. All other output formats will display all footnotes by default (no change). With this new footnote feature, a user can click/unclick a button to display or hide the numbered footnotes that appear beneath each table within the SIR report. The NHSN Team plans to implement this new footnote feature within additional SIR and SUR reports in the future.

Testing the new footnote feature is not required. However, if you are a user of an inpatient rehabilitation facility (or unit) that has reported historical MRSA bacteremia LabID data into NHSN and choose to explore this new feature, please send any questions or concerns to the NHSN helpdesk with the subject line "New footnote feature".
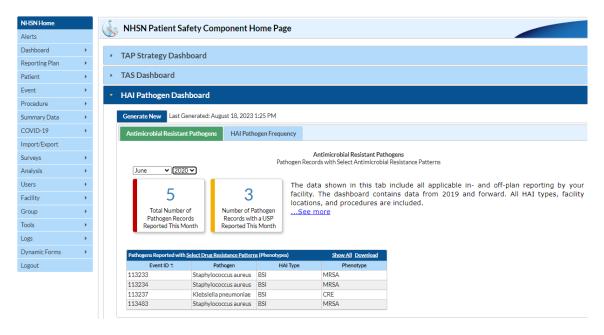
Coming Soon! Changes to NHSN's Patient Safety Analysis Reports Treeview Menu

NHSN will be changing the look and folder organization of the Patient Safety Analysis Reports Treeview menu with the October 2023 update of the NHSN application. This is being done to increase ease of finding desired reports and to improve the organization of the Treeview in preparation for the 2022 Rebaseline. There will be multiple opportunities for training on the updated Analysis Treeview menu. Future announcements will be made from the NHSN Team on this topic.

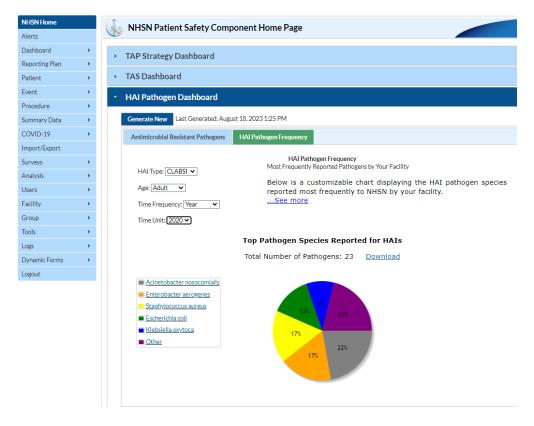## New NHSN Feature: HAI Pathogen Dashboard

The NHSN Team has launched a new dashboard for facility users within the NHSN Patient Safety Component in September 2023. The HAI Pathogen Dashboard gives NHSN users a new tool on their NHSN home screen to quickly assess which HAI-associated pathogens and antimicrobial-resistant phenotypes have been reported from the facility since 2019. This dashboard is intended to be accommodating to all levels of familiarity with NHSN, thus allowing easier and faster access to critical data.

The dashboard features two separate tabs. The Antimicrobial Resistant Pathogens Tab provides users with a variety of information about the antimicrobial-resistant phenotypes reported in a selected month/year combination. Users will find a table containing information about up to ten recently reported HAI events associated with one or more antimicrobial-resistant phenotypes. The table contains links to the events' data entry screens, the pathogens associated with the events, the HAI types, and the antimicrobial-resistant phenotypes.

The Antimicrobial Resistant Pathogens Tab of the HAI Pathogen Dashboard

The HAI Pathogen Frequency tab shows users a pie chart depicting which pathogen species were most frequently reported at their facility in a selected timeframe. Users are provided four filters to narrow their search: HAI Type, Age, Time Frequency, and Time Unit.

The HAI Pathogen Frequency Tab of the HAI Pathogen Dashboard

The data on both tabs of the dashboard can be exported into PDF format for record keeping and sharing.

Additional instructions for using this dashboard can be found in this [Quick Reference Guide](). Any questions regarding the HAI Pathogen Dashboard can be sent to the NHSN helpdesk with the subject line "HAI Pathogen Dashboard".
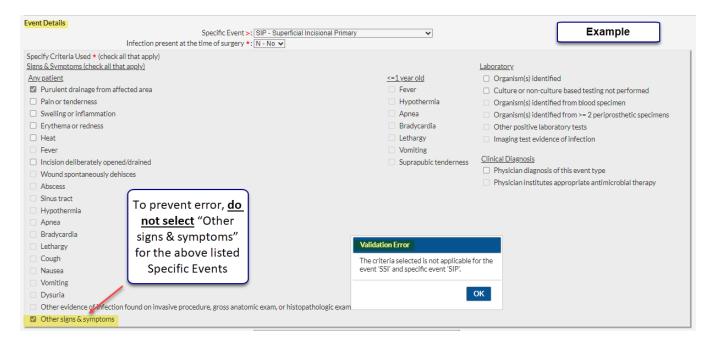
Protocol Updates

Defect Related to SSI Event Entry for Specific SSI Event Types

We are investigating a defect related to SSI event entry within the NHSN application. On the SSI event entry screen under **'Event Details'** the application is incorrectly allowing selection of the field '**Other signs and symptoms**' for (SSI) **Specific Events** where this field is **not** part of the SSI criteria (see listed below, **Specific Events included in the defect**). When the **'Other signs and symptoms'** field is selected for any of these **Specific Events** a validation error message occurs (see example validation error message below). Please do not select the field '**Other signs and symptoms**' for the **Specific Events** listed to prevent the validation error message (and to allow SSI event entry). Only select applicable SSI criteria for the specific event type reported.

List of SSI **Specific Events** where '**Other signs and symptoms**' is **incorrectly** allowed for selection prompting the validation error message:

- SIP – Superficial Incisional Primary
- SIS – Superficial Incisional Secondary
- DIP – Deep Incisional Primary
- DIS – Deep Incisional Secondary
- OREP – Deep pelvic tissue infection or other infection of the male or female reproductive tract
- USI – Urinary System Infection
- LUNG – Other infection of the lower respiratory tract and pleural cavity
- VASC – Arterial or venous infection
- PJI – Periprosthetic Joint Infection
- VCUF – Vaginal cuff infection
- EMET – Endometritis
- DISC – Disc space infection

Example Validation Error Message seen within the application:

ICD-10 Corrections 09-2023

After the 2023 "*ICD-10-PCS Procedure Code Mapping to NHSN Operative Procedure Codes – January 2023 (updated 05-2023)*" document was posted the following mismatches, between this document and the procedure codes available in the NHSN application, were identified.

Note: If prior to this notification procedures were reported you are not required to remove these procedures from the NHSN application. This will ease reporting burden related to this notification.

1. The THOR--Thoracic surgery category procedure codes in the table below were included in the Mapping Document. These codes will be removed from the Mapping Document. **These codes are not in the NHSN application and cannot be reported as THOR procedures for 2023 procedure reporting.** No action is required related to reporting.

0KDH0ZZ	0KRH4KZ	0LDC0ZZ	0MRF4KZ
0KDJ0ZZ	0KRJ07Z	0LDD0ZZ	0MRG07Z
0KRH07Z	0KRJ0JZ	0MRF07Z	0MRG0JZ
0KRH0JZ	0KRJ0KZ	0MRF0JZ	0MRG0KZ
0KRH0KZ	0KRJ47Z	0MRF0KZ	0MRG47Z
0KRH47Z	0KRJ4JZ	0MRF47Z	0MRG4JZ
0KRH4JZ	0KRJ4KZ	0MRF4JZ	0MRG4KZ

2. The following codes are in the NHSN application but are not listed in the 2023 ICD-10-PCS Mapping Document. These codes will be added to the Mapping Document and starting October 1, 2023, these procedure codes should be reported as listed below.

FUSN	XRGB092
PVBY	041F4KH
PVBY	041F4KJ

PVBY	041F4KK
PVBY	041F4KQ
THOR	07D84ZX
THOR	07D94ZX

3. The following codes are listed in the 2023 ICD-10-PCS Mapping Document under different procedure categories but are in the NHSN application as listed below. Starting October 1, 2023, these procedure codes should be reported as listed below.

00164KB	VSHN
00160KB	CRAN

If you have downloaded the 2023 "*ICD-10-PCS Procedure Code Mapping to NHSN Operative Procedure Codes – January 2023* (updated 05-2023)", replace it with the document "*ICD-10-PCS Procedure Code Mapping to NHSN Operative Procedure Codes – (updated 09-2023)*". The 09-2023 document will be posted by September 30, 2023.

PITAS Reminder

The below announcement is affiliated with the Thomas Jefferson and Rutgers Universities and their researchers and is not endorsed or sponsored by CDC/NHSN. If your facility is interested in participating, please contact the study team directly at PITAS-Study@Jefferson.edu.

Take the PITAS Survey – Don't Miss Out on Your Opportunity to Shape the Future of Infection Prevention and Control Department Staffing

Dear Colleague:

A few weeks ago, you received an invitation to participate in the national study entitled, "Prevention of Infections Through Appropriate Staffing (PITAS)" to determine the impact of the COVID-19 pandemic on infection prevention and control departments.

If you completed survey, thank you! If you haven't yet, please consider participating!

Why You Should Participate:

- ✓ Your valuable insights will help shape the future of infection prevention and control.

- ✓ Your responses will be used to make recommendations and develop strategies to improve infection prevention and control department staffing and resource allocation.

- ✓ You will be helping to advance infection prevention and control research.

- ✓ You will have a chance to win $100 Amazon electronic gift cards in a weekly lottery. Ten prizes will be given out each week. The earlier you submit the survey, the more opportunities you will have to win!

We are asking that the Infection Control Director or person in charge of IPC at each NHSN hospital completes these two steps:

Step 1: Complete the online PITAS Survey

- The survey takes about 30 to 40 minutes to complete. The information that you enter will be saved and you can complete the survey at a later time.

- To enter the survey, click here!

Step 2: Join the PITAS NHSN Group

- Share select data that you already contribute to NHSN by joining our PITAS NHSN Group (Group #93688). This process takes 5-10 minutes.

- Once you complete the survey, we will send you an invitation to join the PITAS NHSN group.

- We are not asking for any patient identifiers and all data will be kept confidential and analyzed in aggregate.

If you would like more information about this study, please contact us at PITAS-Study@jefferson.edu or 1-888-IP-STUDY (888-477-8839). Please also feel free to visit our study website for more information.

Thank you for helping to advance the science and practice of infection prevention and control!

Sincerely,

Dr. Monika Pogorzelska-Maziarz, PhD, MPH, CIC, FAPIC

PITAS Study, Principal Investigator

Thomas Jefferson University, College of Nursing

215-503-5613

monika.pogorzelska-maziarz@jefferson.edu

NHSN Nurse Staffing Hours Indicator

Description: The NHSN has developed an indicator to provide facilities with a tool to assess the value nursing staff provides around patient safety and care quality. The data elements for the NHSN Nurse Staffing Hours Indicator are similar to those reported to National Database of Nursing Quality Indicators (NDNQI) and are based on measures stewarded by the American Nurses Association, which are endorsed by a consensus-based entity.

Audience: Facilities enrolled in NHSN Patient Safety Component may collect and report the nursing staff hours in all critical care units/locations that are mapped to a corresponding NHSN CDC location per the guidance outlined in the Patient Safety Component Ch 15.

Metric: Nursing Hours per Patient Day (NHPPD) will include the number of hours worked by a Registered Nurse (RN), Licensed Practical Nurse (LPN), Licensed Vocational Nurse (LVN), and Unlicensed Assistive Personnel (UAP) who provide direct patient care (> 50% of direct patient care per shift) to patients in critical care units/locations.

Data collection: For each calendar month, facilities electing to report will collect nurse staffing hours and patient days for each eligible critical care unit in the Monthly Survey webform within the NHSN application. Facilities will have the opportunity to enter these data manually, or to upload using the comma-separated values (.CSV) option.

Schedule: This reporting option is available to facilities interested in participating.

NSHI website: Nurse Staffing Hours Indicator | NHSN | CDC

Protocol: Nurse Staffing Hours Indicator Protocol (cdc.gov)

Table of Instructions: Instructions for Completing the Monthly Survey Form for Patient Day & Nurse Staffing Hours Indicator (CD 57.408) (cdc.gov)

Webinar slides: https://www.cdc.gov/nhsn/psc/nshi/Nurse-Staffing-Hours-Informational-Webinar_508c.pdf

For more information, please send an email to NHSN@CDC.gov with 'Nurse Staffing Hours' in the subject line.

AUR Module Updates

New Resources for fulling the AUR Surveillance Measure of the CMS PI Program

As highlighted earlier in the Newsletter Attention! New CMS Required Reporting Measure for CY 2024: NHSN AUR Module Submission Required for the CMS Promoting Interoperability Program, CMS published a final rule in the fall of 2022 that moved the AUR Module reporting to a required measure under the Public Health and Clinical Data Exchange objective for calendar year 2024. This measure requires submission of both AU and AR data.

We've recently posted many new resources in the Antimicrobial Use and Resistance section at the bottom of this page: CMS - ACH Requirements | NHSN | CDC.

Antimicrobial Use and Resistance

Operational Guidance for reporting AUR data – August 2023 [PDF – 239 KB]

AUR Module Reporting for the CMS Promoting Interoperability Program – March 2023

YouTube

Slide set [PDF – 3 MB]

FAQs: AUR Reporting for the CMS Promoting Interoperability Program – June 2023

Promoting Interoperability – Guidance for Facilities – March 2023 [PDF – 250 KB]

Please reach out to NHSN@cdc.gov with questions.

FAQs: AUR Reporting for the CMS Promoting Interoperability Program

Here are two common questions we receive about the CMS PI Program.

1. **When do I need to register and send test files to NHSN to attest to "Option 1 – Pre-production and validation" for CY 2024?**

   According to the CMS measure specifications, at the latest, the registration should be completed within 60 days after the start of the EHR reporting period. However, hospitals can complete the registration of intent earlier if the AUR software is set up to produce test and/or production AU and AR files. Once the hospital completes registration, it will receive an automated email from NHSN to send test files for validation. **According to the CMS measure specifications, hospitals should respond to the request for test files within 30 days following the request for test files. Failure to respond twice within an EHR reporting period would result in that eligible hospital or CAH not meeting the measure.** If the eligible hospital or CAH registers intent to submit AUR data within NHSN prior to having test files ready, the eligible hospital or CAH should reply to the request for test files with their current status. The eligible hospital or CAH should continue to email a status update at least every 60 days until the hospital has test files to send for validation to complete Option 1.

   Please allow up to 8 weeks from receipt of test files for the NHSN Team to complete the validation of your test files. Additionally, if your hospital wants a letter from NHSN denoting the validation stage is complete, you must have three passing test files: AU Summary, AR Event (numerator) and AR Summary (denominator). We ask hospitals to register and submit test files no later than November 1, 2024, to allow the NSHN AUR Team time to process the test files.

2. **Does the eligible hospital or CAH need to complete Pre-production and Validation (Option 1) and Validated Data Production (Option 2) to get credit? Do they need to have proof (official letter from CDC/NHSN) of completion of each step?**

   If a hospital is already reporting AUR data to CDC, it does not need to complete the validation process of sending test files to the NHSN Team. However, all hospitals must complete the registration step within NHSN to kick off the automated monthly AUR submission status report emails regardless of where they are in the submission process. If the hospital is sending production AU and AR data to NHSN, they will be able to attest to being in active engagement and report their level of engagement as "Option 2 – Validated Data Production" in CY 2024. Hospitals attesting to "Option 2 – Validated Data Production" do not need official proof from NHSN of completing the validation process.

   Hospitals submit their attestations directly to CMS. CDC has no role in the attestation process for the AUR measure.

Note: For hospitals who are currently submitting AUR data but have not completed the AUR PI Program registration, please visit Q1 under the Logistics section for instructions on how to register: [FAQs: AUR Reporting for the CMS Promoting Interoperability Program | NHSN | CDC](#)

U.S. Antibiotics Awareness Week (USAAW) and 2022 AU Option Data Report Announcement

USAAW is an annual observance that raises awareness of the threat of antibiotic resistance and the importance of appropriate antibiotic use. This year, USAAW will be November 18-24, 2023. To celebrate, the AUR Team will release the 2022 AU Option Data Report and associated data tables in the weeks leading up to USAAW. The [AU Option Data Reports](#) summarize Standardized Antimicrobial Administration Ratio (SAAR) distributions and percentages of antimicrobial use for adult, pediatric, and neonatal locations. These reports provide actionable data to hospitals and health departments, informing stewardship by allowing SAAR comparisons to national and state distributions. The percentage of antimicrobial use by class and drug within SAAR antimicrobial agent categories included in the reports can also provide insight into prescribing practices across different patient care locations. The 2022 SAAR distributions will also be added to [CDC's Antibiotic Resistance & Patient Safety Portal](#), which highlights national AU Option data including national and state level SAAR distributions.

Thank you to everyone who corrected 2022 AU Option data in response to our data quality outreach for helping make the 2022 AU Option Data Report the best it can be!

AR Option Event Issue has been Resolved

Recently, there was an issue with the author section of the AR Option Event files which prevented some users from being able to successfully upload their AR Event files from May 2023 onward. This issue has since been corrected and users should retroactively upload their AR Event files for May 2023 to present. If the AR Event files are still being rejected, please verify that your vendor has passed SDS validation by checking the list of approved vendors found here [AR SDS Vendors | NHSN | CDC](#). All AR SDS validation should have been completed by May 2023, so please reach out to your vendor if they are not listed on the SDS Vendors page. If you vendor is listed and you are still receiving an error message, please email NHSNCDA@cdc.gov for additional assistance.

Antimicrobial Resistance Synthetic Data Set (AR SDS)

The AR SDS validation process is well underway with vendors already successfully validating their software. As a reminder, your vendor (or the software system that creates the AR Event and AR Summary files for you) must complete the AR SDS validation process prior to you being able to upload AR Option data for May 2023. Specifically, AR Event and AR Summary files for May 1, 2023, and forward that do not contain credentials for a validated vendor software solution will fail to upload into NHSN. If your vendor is not on the list of vendors that have passed AR SDS, we encourage you to reach out to them to determine their timeline.

Planned AUR Module updates for 2024

We plan to make the below updates for 2024 AUR Module reporting. Please stay tuned in the next few months for an updated AUR Module protocol and additional materials detailing these changes.

Note: This list is subject to change based on NHSN priorities.

AU Option

- Addition of two newly FDA-approved drugs: rezafungin, sulbactam/durlobactam
- Removal of two drugs: gemifloxacin, quinupristin/dalfopristin

AR Option

- Pathogen updates:
  - Addition of Citrobacter freundii complex, Citrobacter braakii , and Citrobacter youngae
  - Removal of *Lelliottia amnigena* (formally *Enterobacter amnigenus*)
- AR drug panels:
  - Add LOINC terms for high potency gentamicin and streptomycin for *Enterococcus* (AntiP 23)

Rebaseline Corner

Charting the Course: 2022 HAI Rebaseline Updates

The NHSN Team has begun the Rebaseline process using 2022 national data as previously announced in the June 2023 NHSN newsletter https://www.cdc.gov/nhsn/pdfs/rebaseline/22-Rebaseline-June-Newsletter-Final.pdf. We are continuing the modeling work to create over 250 updated risk models for the various healthcare-associated infections (HAI), devices, and facility types in the Patient Safety Component.

Over the past few months, the Statistics and Analytics Teams have encountered data quality (DQ) issues during this process and are simultaneously working to resolve the same while continuing the modeling work. Facility outreach is being performed related to certain types of DQ issues; the NHSN team greatly appreciates your prompt attention and resolution of any DQ issue. Examples of the DQ issues identified by the Rebaseline team that are impacting progress on modeling work include:

- The total number of patient days and admissions, on the annual facility survey, that result in an unusually high average length of stay
- The number of beds equals the number ICU beds on the annual facility survey

- Facilities that reported zero ICU beds on the annual facility survey, but also reported HAI data for an ICU location
- Annual survey data that are significantly different from previous year's survey data

Future updates will be shared through various communication portals including newsletter articles, email blasts and webinars. The Rebaseline website will also continue to be updated with training materials and resources as they become available. Questions can be submitted to the NHSN helpdesk with subject line 2022 HAI Rebaseline.

Note: All current SIRs and SURs available in NHSN, under the existing 2015 national baseline, will remain in NHSN for use.

Helpful links:

Charting the Course: 2022 NHSN HAI Rebaseline https://www.cdc.gov/nhsn/2022rebaseline/index.html

Excerpt from the June 2023 NHSN Newsletter announcing the 2022 HAI Rebaseline:
https://www.cdc.gov/nhsn/pdfs/rebaseline/22-Rebaseline-June-Newsletter-Final.pdf

Rebaseline FAQs: https://www.cdc.gov/nhsn/2015rebaseline/index.html#faqs

Understanding the SIR and SUR

As the NHSN Patient Safety Team prepares for an updated national baseline to be used for future standardized infection ratios (SIRs) and standardized utilization ratios (SURs), we would like to offer the following guidance and resources to any NHSN user who may not be familiar with these metrics.

What is the SIR?

The Standardized Infection Ratio, or SIR, is the primary summary measure used by the National Healthcare Safety Network (NHSN) to track healthcare-associated infections (HAIs) at a national, state, or local level over time. The method of calculating an SIR is like the method used to calculate the Standardized Mortality Ratio (SMR), a summary statistic widely used in public health to analyze mortality data. The SIR compares the actual number of HAIs reported to the number that would be predicted, given the standard population (i.e., NHSN baseline). An SIR greater than 1.0 indicates that more HAIs were observed than predicted; conversely, an SIR less than 1.0 indicates that fewer HAIs were observed than predicted.

The SIR is calculated by dividing the number of observed infections by the number of predicted infections.

$$SIR = \frac{Observed\ (O)\ Infections}{Predicted\ (P)\ Infections}$$

You can read more about the SIR here.

What is the SUR?

The Standardized Utilization Ratio, or SUR, is the primary summary measure used by the National Healthcare Safety Network (NHSN) to track device utilization at the national, state, or facility level, and is available for central line, urinary catheter, and ventilator use. The method of calculating a SUR is like the method used to calculate the SIR. The SUR compares the actual number of device days reported to what would be predicted, given the standard population (specifically, the NHSN baseline). A SUR greater than 1.0 indicates that more device days were observed than predicted; conversely, a SUR less than 1.0 indicates that fewer device days were observed than predicted.

The SUR is calculated by dividing the number of observed device days by the number of predicted device days.

$$SUR = \frac{Observed\ (O)\ Device\ Days}{Predicted\ (P)\ Device\ Days}$$

You can read more about the SUR here.

How does NHSN calculate the number of predicted infections and predicted device days?

The denominators of the SIR and SUR are calculated using multivariable regression models generated from the nationally aggregated data during the baseline year. Currently, NHSN uses the 2015 national baseline data to calculate SIRs and SURs.

You can learn more about the regression models used for SIR and SUR denominators in the "Analyzing HAI Data", "LabID Analysis and Reporting Refresher", "Analyzing SSI Data", and "Analyzing Device-associated SURs" trainings found here.

What else do I need to know about the SIRs and SURs?

The SIR and SUR provide a comparison of a facility or group's HAI data to the national data from a baseline time period, adjusted for several facility characteristics and other factors that were found to be significant predictors of HAIs and device use. These metrics can be used to measure progress in HAI prevention from a single point in time.

You can learn more about the use of SIR and SUR in the "Analyzing HAI Data", "LabID Analysis and Reporting Refresher", "Analyzing SSI Data", and "Analyzing Device-associated SURs" trainings found here. More details about specific inclusion and exclusion rules for these metrics, and the variables included in the regression models, is available in the SIR and SUR Guides.

How do I run SIR and SUR reports in the NHSN application?

There are several quick reference guides available here to help you understand, modify, and interpret your data using NHSN. General Tips and Tools for NHSN Analysis, and guidance for Generating Data Sets, are helpful documents for any new user looking to get started with NHSN analysis.

NHSN Education and Training

Patient Safety Component - Ask the Expert Monthly Webinar Series

The NHSN Protocol and Training Team (PaTT) is hosting a 60-minute, monthly education webinar series, "Ask the Experts".

The "Ask the Experts" education sessions are a great opportunity to have your questions answered by NHSN subject matter experts. Each session provides you with clarity on NHSN Patient Safety Component (PSC) protocols and resources only. The sessions will not include case study.

Audience: All PSC Users are invited; however, the conversation will be geared towards newer NHSN users, 3 years or less from the from the following facility-types.

- Acute care or other short-term stay hospitals (for instance, general hospitals, critical access hospitals, oncology hospitals, military/VA hospitals)
- Long-term Acute Care Hospitals (LTACH)
- Inpatient Rehabilitation Facilities (IRF)
- Inpatient Psychiatric Facilities (IPF)

These education events will be conducted on the 2nd or 3rd Wednesday of the month at 2:00 pm eastern standard time and will address a different topic each month.

Registration information will also be emailed two weeks prior to each session.

Upcoming dates and registration links:

October 25th - Surgical Site Infection (SSI)

https://cdc.zoomgov.com/webinar/register/WN_l9R4pXgFRsGFwm3vsfLcLw

November 15th - Chapter 17 - Surveillance Definitions for Specific Types of Infections

https://cdc.zoomgov.com/webinar/register/WN_nggyBGvHTmaQWk7pT3AXIw

December 13th – Urinary Tract Infection (UTI)/Pneumonia (PNEU)

https://cdc.zoomgov.com/webinar/register/WN_zFLrBWqZRrunohm4j_uRIA

We look forward to "speaking" to you soon!

 NHSN PaTT and Health Education Teams

HEALTHCARE PERSONNEL SAFETY COMPONENT

Preparing to Report Annual Healthcare Personnel Influenza Vaccination Data: 2023-2024 Influenza Season

We would like to provide a friendly reminder that annual influenza vaccination data reporting among healthcare personnel (HCP) is required of CMS-certified free-standing acute care facilities, inpatient rehabilitation facilities (IRFs), critical access hospitals, long-term acute care facilities, prospective payment system (PPS)-exempt cancer hospitals, and skilled nursing facilities (SNFs).

Additionally, IRF units located within acute care facilities, long-term acute care facilities, critical access hospitals, and inpatient psychiatric facilities are required to report annual HCP influenza vaccination data through NHSN.

Facilities are required to submit **one report** at the end of the influenza season that covers the **entire season from October 1, 2023 - March 31, 2024. The deadline for reporting is May 15, 2024.**

These data are reported in the Healthcare Personnel Safety (HPS) Component of NHSN. To report these data, the NHSN facility administrator (FA) will need to activate the HPS Component. To activate the component, the NHSN FA must log into SAMS: (https://nhsn2.cdc.gov/nhsn/) and Click "NHSN Reporting." From the Home Page, click "Facility" then "Add/Edit Component."

Next, the NHSN FA must check box next to Healthcare Personnel Safety and then add the HPS Component Primary Contact. For resources on how to report these data, please see the following webpage: HCP Flu Vaccination | HPS | NHSN | CDC.

If you have specific questions, please send an e-mail to nhsn@cdc.gov with "HPS Flu Summary" in the e-mail subject line, along with your facility type.

Thank you for your efforts to report annual HCP influenza vaccination summary data through NHSN.

Sincerely,

NHSN Vaccination Team

DIALYSIS COMPONENT

Mark Your Calendars – Q2 2023 QIP Deadline Coming Soon!

The 2023 Quarter 2 deadline (payment year 2025) for the Centers for Medicare and Medicaid (CMS) End Stage Renal Disease (ESRD) Quality Incentive Program (QIP) is right around the corner! The deadline for reporting is Monday, October 2, 2023 **at 11:59 PM PT**. Facilities reporting to NHSN should report all three months (April, May, and June 2023) of data no later than October 2, 2023, in order to receive full credit for Q2 2023 reporting and meet requirements for the CMS ESRD QIP.

GENERAL NHSN INFORMATION

Data Fields for Sex at Birth and Gender

Starting in 2024, NHSN will be adding two optional fields to the Patient Safety, Outpatient Procedure, Dialysis, and Biovigilance Components – 'Sex at Birth' and 'Gender Identity'.

Collection of data related to demographic characteristics such as gender identity is a critical component of healthcare surveillance. These data elements are helpful for identifying and understanding health disparities and are important factors to consider when developing strategies to address and improve the health and well-being of gender diverse populations.

The current NHSN 'Gender' field does not provide clear information on sex at birth and gender identity. The field may represent either of these concepts based on interpretation, which may lead to inaccuracy or mismeasurement in the data among individuals for whom sex at birth and gender identity differ. 'Sex at Birth' is intended to capture the patient's sex assigned at birth. 'Gender Identity' is intended to capture the patient's self-reported gender identity. Adding 'Sex at Birth' and 'Gender Identity' fields will enable more accurate identification of transgender and other gender minorities.

For 2024, the current NHSN 'Gender' field will continue to be required, and the 'Sex at Birth' and 'Gender Identity' fields will be available as optional reporting for manual entry and common-separated values (CSV) import. Beginning 2025, the current 'Gender' field will no longer be available, and the 'Sex at Birth' and 'Gender Identity' fields will become required reporting for manual entry, CSV import, and Clinical Document Architecture (CDA) upload.

Volunteers Needed

We are currently seeking volunteers for the NHSN annual release of version 12.0. The Beta team is planning for a one-week beta testing period prior to the full production release scheduled for December 9, 2023. Beta testing will provide an opportunity for NHSN users to explore new NHSN features and potentially identify issues that can be resolved prior to the production release.

From November 13, 2023, through November 17, 2023, test data will be populated in the beta environment for beta users to test with the NHSN 12.0 application. During the testing period, all data submitted the previous day during testing will be purged, and new data will be available for testing each morning.

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

NHSN Vendor Corner

Notes on the NHSN Release Schedule
- Release 11.4.1 was deployed to production on 6/24
- Release 11.5.0 was deployed to production on 9/9
- Release 11.6.0 is scheduled to be deployed on 10/21
- Release 12.0.0 is scheduled to be deployed on 12/09
- The NPPT site is currently on v11.5.0.4. It's scheduled to be updated to v11.6.0 late-October.
  - Please send any issues found to NHSNCDA@cdc.gov.

Release 11.5 – CDA Impact
The list below includes changes with impact to vendors in release 11.5 which was deployed on September 9th.

Long Term Care Component

- NHSN is implementing the ability to accept CDAs for Denominator for LTCF LabID Reporting with support for both Manual Import and Direct Automation using R1-D1.1 IG version.
- Documentation will be posted on the Toolkits Webpage.

Release 11.6 – CDA Impact
The list below includes changes with impact to vendors currently slated for 11.6 which is planned for October 2023.

Long Term Care Component

- NHSN is implementing the ability to accept CDAs for LabID Events for Direct Automation using R1-D1.1 IG version.

- NHSN is implementing the new R4-D2 IG – Patient Safety: MDRO Summary. This version includes new observation sections to provide responses to Inpatient Psychiatric Facility (IPF)/Inpatient Rehabilitation Facility (IRF) questions required for CMS reporting.
- This implementation will be effective January 1, 2024.
- Documentation will be posted on the Toolkits Webpage.

Release 12.0 – CDA Impact

The list below includes the changes with impact to vendors currently slated for 12.0 which is planned for December 2023.

All Components

- 2024 Pathogen Code Updates
- Adding Gender Identity and Sex at Birth fields as optional, effective January 1, 2024.

Patient Safety Component

- AU Option: Adding rezafungin, sulbactam/durlobactam and removing gemifloxacin, quinupristin/dalfopristin
- AR Option:
  - Pathogen updates:
    - Addition of Citrobacter freundii complex, Citrobacter braakii , and Citrobacter youngae
    - Removal of *Lelliottia amnigena* (formally *Enterobacter amnigenus*)
  - Drug Panel updates:
    - Add LOINC terms for high potency gentamicin and streptomycin for *Enterococcus* (AntiP 23)

AU Option SDS Update

We plan to update to the AU SDS from dates in 2019 to dates in 2023 with AU SDS Version 5.0. This update will reflect current 2023 required drugs and drug codes. We will also update the admissions counting logic to match AR SDS and the AUR Module protocol. Vendors will be expected to revalidate their AU SDS prior to January, 2025. More information to come.

AR Option SDS Reminder

Friendly reminder that the AR SDS validation process is well underway with many vendors successfully validating their software. As a reminder, vendors must complete validation prior to being able to submit data for May 2023. Specifically, all production AR Event and AR Summary CDA files must contain the SDS Validation ID (provided by the NHSN Team after confirmation of successful validation) and a Vendor (application) OID. AR CDA files that do not contain this information will be rejected.

If you have any questions about the AR SDS or would like to set up a call to discuss the details, please email NHSNCDA@cdc.gov.

September 2023 Vendor Webinar

The Fall Vendor Webinar was September 11, 2023. This webinar contained a review of the upcoming NHSN releases, including the end of year release, that will impact vendors along with a preview of new measures that will be implemented in NHSN. The slides and recording will be posted in the coming weeks.

Support Requests for the NHSN CDA Team

We encourage facilities and vendors to reach out to the NHSN CDA Team with questions, comments, and concerns via NHSNCDA@cdc.gov. We aim to reply to your email within 5 business days, but that timeline may vary depending on the complexity of the issue and the amount of investigation needed. If you don't hear from us within 5 business days, please send another email.

If your email involves messages sent via Direct CDA Automation not receiving a response, please first ensure it's been more than 24 hours since the messages were originally sent to NHSN via Direct. During specific times of the month, NHSN experiences a high volume of Direct submissions, and it can take a while for the NHSN servers to clear the queue. If it has been more than 24 hours since you sent the message via Direct, please help us in our investigation by providing the following details for your submissions (see example information below). We aim to reply to emails regarding missing Direct message responses within 1 business day but failure to provide information below will extend the turnaround time.

Facility Name	NHSN Facility ID#	Submitted Date/Time	Zip file Name	Message ID
Best Hospital Ever	12345	01/27/2023 13:15	AU23_JAN_2023	1230589110.20827.1543342802378. JavaMail.tomcat@vendor-hisp02

CDA Direct Automation

Currently, over 9,600 facilities 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 NHSN CSSP Importing Data.

Guide to CDA Versions

• The Guide to CDA versions on the NHSN CDA Submission Support Portal is always available to verify valid CDA imports based on the correct Implementation Guide.

• In addition, implementers can use the GitHub site to get all the latest xml (Schema, Schematron, and sample) files.

> ➢ XML and Related files (Schematron, sample, html, stylesheet) are housed on the HL7 GitHub site:
> https://github.com/HL7/cda-hai
> ➢ The latest CDA Schema is located on the HL7 GitHub site: https://github.com/HL7/cda-core-2.0/tree/master/schema/extensions

• The Guide to CDA Versions is available on the CDA Portal Implementation Toolkits & Resources Website:
https://www.cdc.gov/nhsn/cdaportal/toolkits.html

Guide to CDA Versions

Print

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

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

Download the corresponding CDA Toolkits for the corresponding year.

Events or Denominators	2023	2022	2021	2020
CDA Toolkit Release	11.1	10.1	9.5 & 10.0	9.4
DIALYSIS				
Dialysis Event	R3-D4	R3-D4	R3-D4	R3-D1.1
Dialysis Denominator	R3-D3	R3-D3	R3-D3	R3-D3
EVENTS				
Primary Bloodstream Infection (BSI)	R4-D1	R4-D1	R3-D3	R3-D3
Central Line Insertion Practices Adherence (CLIP) Monitoring	R2-D2.1	R2-D2.1	R2-D2.1	R2-D2.1
Urinary Tract Infection	R4-D1	R4-D1	R2-D1.1	R2-D1.1
Laboratory-identified (LabID) MDRO or CDI Event	R2-D2.1	R2-D2.1	R2-D2.1	R2-D2.1
Ventilator-associated Event (VAE)	R4-D1	R4-D1	R3-D2	R3-D2

As an Important Reminder…

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

- Archived Newsletters: https://www.cdc.gov/nhsn/newsletters/index.html
- Archived NHSN email communication: https://www.cdc.gov/nhsn/commup/index.html
    - Includes release notes and summary of updates for specific components
- Vendor webinars & training videos: https://www.cdc.gov/nhsn/cdaportal/webinars.html

NHSN Helpdesk Transitioning to a New Tool

Help us help you, faster!

NHSN is rolling out a new and improved customer service tool called ServiceNow. You can submit your questions to NHSN using the ServiceNow self-service portal. The portal can be accessed by logging into CDC's Secure Access Management Services (SAMS) application and selecting the ServiceNow link.

Why should you use ServiceNow?

- ServiceNow has a form that guides you to provide NHSN with the right information so we can answer your questions faster.
- The information you provide in ServiceNow helps route your questions directly to the right subject matter expert, shortening response time.
- You can easily track the progress of your question and response using the ServiceNow Customer Service Portal.

Users that do not have SAMS access can continue to contact the Help Desk at nhsn@cdc.gov.

NHSN iSupport Update

Quarter 3, 2023

(Averages)

- 172 new facilities enrolled in NHSN this quarter
- 89 - Ambulatory Surgery Centers (ASCs) enrolled this quarter
- 29,021 – iSupport Tickets this quarter
- 484 – iSupport Tickets per day
- 2,418 – iSupport Tickets per week

NHSN Enrollment Update

NHSN Enrollment Update (as of September 20, 2023):

8,818 Hospitals (this includes 632 Long-term Acute Care Hospitals and 556 Free-standing Inpatient Rehabilitation Facilities)

8,680 Outpatient Hemodialysis Facilities

6,828 Ambulatory Surgery Centers (ASCs)

18,705 Long-term Care Facilities

43,031 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.