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NHSN
NATIONAL HEALTHCARE SAFETY NETWORK

NHSN E-Newsletter

CENTERS FOR DISEASE CONTROL AND PREVENTION

CDC

PATIENT SAFETY COMPONENT

New Facility Type Option for NHSN Enrollment

NHSN recently added two new facility type options for enrollment in the Patient Safety Component:

Non-Governmental Acute Care Hospital for Public Health Emergencies	An acute care hospital set up by non-governmental organizations during or in anticipation of a public health emergency.
Governmental Acute Care Hospital for Public Health Emergencies	An acute care hospital set up by governmental agencies during or in anticipation of a public health emergency.

These new facility types can report HAI and AUR data to the Patient Safety Component. HAI and AUR data that is reported to NHSN under these new facility types are not available for SIR, SUR, or SAAR analysis. Other reports such as line listings, frequency tables, and rate tables are available for analysis.

Term Clarification Related to Blood Cultures

Clarification of the term "on separate occasions" and "accession numbers" when referring to blood specimens positive for common commensals:
Users have asked for clarification on the term "on separate occasions" and the addition of the use of "accession numbers" when referring to blood specimens positive for common commensals.
NHSN response:

In most laboratories, an accession number is assigned to a specimen and is used to label and identify different specimens. This labeling and identification process indicates that an individual specimen is separate from other specimens. The use of accession numbers was included in "Blood Specimen Collection" criteria #1 in 2022 to provide an additional method to determine when "two or more blood specimens" should be considered "drawn on separate occasions". Criterion 1c states, when "*the blood cultures are assigned separate accession numbers, processed individually, and are reported separately in the final laboratory report*" the blood cultures are considered drawn on separate occasions. Simply stated, if two or more positive blood cultures have different **laboratory accession numbers**, are processed individually, AND reported separately in the final laboratory report, they meet the "two or more blood specimens drawn on separate occasions" reporting requirement.

The general practice for blood culture collection, include orders for collecting two sets of cultures. A single set includes two blood bottles (one aerobic bottle and one anaerobic bottle) and the laboratory assigns one accession number to the (single) set of two bottles. It should be the expectation of the facility that proper aseptic technique is used for specimen collection. Therefore, if two positive blood specimens have different laboratory accession numbers, the findings are eligible for use to meet LCBI 2/3 criteria (no exclusions).
You can send any additional questions to NHSN@CDC.gov
NHSN recently released two new location types available for mapping in NHSN:

HAI and AUR Reporting Now Available for Overflow Locations

Onsite Overflow Critical Care (ICU)	IN:ACUTE:CC:OF_ONSITE	Area previously used for non-patient care which has been repurposed to care for critically ill or injured patients
Onsite Overflow Ward	IN:ACUTE:WARD:OF_ONSITE	Area previously used for non-patient care which has been repurposed to care for non-critically ill or injured patients

NHSN facilities can now use these locations on the monthly reporting plans and can report HAI and AUR numerator and denominator data for these units **beginning with data for January 2022**. Please refer to page 3 of the March 2022 NHSN Newsletter (https://www.cdc.gov/nhsn/pdfs/newsletters/q1-2022-nl-508.pdf) for more information about these overflow locations and implications for CMS Quality Reporting Programs.

AUR Module Updates

Please Upload February 2022 AU Option Data
NHSN resolved the issue that prevented February 2022 AU Option records from successfully importing without the two new COVID-19 antiviral agents, molnupiravir and nirmatrelvir. Facilities can optionally include the two new drugs in AU files for January and February 2022. AU files for summary months on or after March 2022 will fail to upload into NHSN if they do not include these two drugs. If you were holding your February 2022 AU files because they failed to upload due to this defect, you may now upload them.

2020 AU Percentiles have been added to NHSN
The Standardized Antimicrobial Administration Ratio (SAAR) percentiles displayed in the two "by Location" reports (see below screenshot) were updated to use data from the 2020 AU Option Data Report:
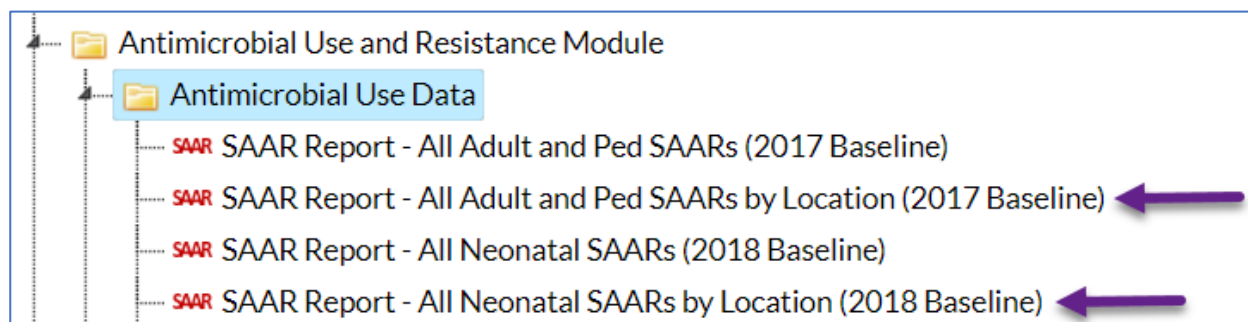
The 2020 AU Data Report and associated data tables summarize national SAAR distributions and percentages of antimicrobial use for adult, pediatric, and neonatal locations. These data can be used to inform stewardship initiatives, compare your facility's SAARs to the national distribution, and see where your prescribing practices can improve. Please see the SAAR by Location quick reference guide for more information on interpreting the SAAR percentile.

Reporting AUR data from Overflow Locations
The AUR Module now accepts data reported from Overflow ICU and Overflow Ward location types beginning with data for January 2022. This means facilities can now include these location types in the AUR Module section of their monthly reporting plans and submit location-specific AU Summary records and AR Events from specimens collected

in these locations. The definitions for these locations can be found in the CDC Locations and Descriptions and Instructions for Mapping Patient Care Locations document.

As a reminder, if facilities are submitting AUR data from these new location types, they should also be included in the FacWideIN counts.

NEW! AU Option SAAR Plots & Quick Reference Guide

The NHSN AUR Team recently rolled out a new type of report, the AU Option Standardized Antimicrobial Administration Ratio (SAAR) Plot. These reports are available for facilities submitting AU data into NHSN from adult, pediatric, and neonatal locations. After generating new data sets within NHSN, you can find the new reports by navigating to Analysis then clicking Reports. On the Analysis Reports page, click on the Antimicrobial Use and Resistance Module folder, then the Antimicrobial Use Data sub-folder to see the new reports:

- SAAR Plot – All Adult and Pediatric SAARs (2017 Baseline)
- SAAR Plot – All Neonatal SAARs (2018 Baseline)
- *(Coming Soon)* SAAR Plot – All Adult and Pediatric SAARs by Location (2017 Baseline)
- *(Coming Soon)* SAAR Plot – All Neonatal SAARs by Location (2018 Baseline)

SAAR Plots, produced as HTML output, allow users to display antimicrobial use data (SAARs) over a period of time using dots plotted on a graph. Please review our AU Option SAAR Plots Quick Reference Guide (QRG) for instructions on how to modify, run, and interpret the new SAAR Plots.

New Documents Posted

The AUR Team has updated the AU FAQ and the AR FAQ pages based on the inquiries received in the NHSN inbox. Check out the updates!

The List of Antimicrobial Agents Eligible for the AUR Module has been updated and posted in the Supporting Materials section of the AUR Module webpage. The team made several updates to the workbook to assist analysts working with AUR data. The AU sheet now lists all the drugs that were ever reported for the AU Option including the first reported and last reported dates. The drugs have also been updated to reflect RxNorm codes per the update made to the AU Drugs beginning in January 2022. The AR sheet underwent significant updates: the drugs are now organized into drug panels per organism or organism group. Additionally, the sheet lists the drugs included in each drug panel since the beginning of AR Option reporting in 2014. For each organism panel, you'll see when the drug was first reported and if applicable, when it was last reported in that panel. The values have also been updated to show LOINC codes, a change effective as of January 1, 2022.

Reminder: Submit Monthly Outpatient Summary Data for AR Option

Beginning last year with January 2021, facilities should report AR Option summary records for their outpatient locations (ED, pediatric ED, and 24-hour observation area) as applicable. These summary records report the total number of patient encounters for each location/month. This feature was rolled out in the summer of 2021, and facilities will notice AR Option Missing Summary Data alerts (see below screenshot for example) for these location types until the summary records have been uploaded.

Incomplete Events	Missing Events	Incomplete Summary Data	Missing Summary Data	Incomplete Procedures	Missing Procedures	Missing Procedure-associated Events	Unusual Susceptibility Profile	Confirm CDI Test Type

In-plan locations with no associated summary data.

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Module	Location	CDC Location	Month/Year	Alert Type	Event Type
AUR	24HROBS	OUT:ACUTE:WARD	12/2021	No summary data entered Add Summary	AR Event
AUR	EMER	OUT:ACUTE:ED	12/2021	No summary data entered Add Summary	AR Event
AUR	ER	OUT:ACUTE:ED	12/2021	No summary data entered Add Summary	AR Event
AUR	FACWIDEIN	FACWIDEIN	12/2021	No summary data entered Add Summary	AR Event

Please reach out to your vendor to determine:
1. If these files are available for 2021 and 2022 (some vendors are not yet supporting submission of AR Summary data for outpatient locations) and
2. If available, where these files can be found.

If your vendor confirms that these files are not currently available, please edit your Monthly Reporting Plans to remove the check box in the AR Option column on those rows. If these files are available, please upload them to clear the alerts.

You can also refer to question 11 of the AR Option FAQs for more information.

Antimicrobial Resistance Option Synthetic Data Set

The Antimicrobial Resistance Option Synthetic Data Set (AR SDS) is now available on the newly updated NHSN AUR Synthetic Data Set Validation webpage. The AR SDS is test data that implementers will use to validate their AR complication and aggregation methods comply with the NHSN AR Option protocol. NHSN will require validation of all AR CDA vendor software beginning in 2023. Beginning with records for January 2023, the NHSN application will reject AR CDA files generated by vendor software that has not passed AR SDS validation.

It's important for facilities to be aware of the AR SDS Validation requirements and the validation status of their vendor.
- Facilities <u>using an AR CDA vendor</u> for AR CDA file creation, do not need to take direct action. NHSN encourages facilities to ask their AR CDA vendor about their SDS Validation timeline to ensure it meets the 2023 requirement.
- Facilities <u>creating their own</u> AR CDA files in-house using their own "homegrown" IT or informatics resources must complete the AR SDS Validation process. Please refer to the CDA Corner section below for additional information related to AR SDS Validation.

Analysis Updates: SIR and SUR Guides

We've recently updated the NHSN SIR and SUR Guides, and the updated guides are posted on the NHSN webpage. Please see below the list of changes made to each guide.

NHSN's Guide to the SIR: https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf

- An explanation of 'Derived Variables' has been added.

- Additional details were added about the type of locations and denominator data included in the NICU CLABSI SIR calculation.

- Full model details were added for MBI-LCBI SIR for Acute Care Hospitals (ACHs).

- The SIR guide was updated to indicate that locations not specifically listed in the model tables are excluded from SIR calculations. Data from facilities enrolled in NHSN as Public Health Emergency (PHE) facilities will also be excluded from SIRs.

- Additional edits to the SIR Guide are listed on page 2 of the document.

NHSN's Guide to the SUR: https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sur-guide-508.pdf

- The SUR Guide was updated to specify that locations not specifically listed in the model tables are excluded from SUR calculations. Data from facilities enrolled in NHSN as Public Health Emergency (PHE) facilities are also excluded from the SURs.

Analysis Updates: MRSA TAP Report

Reference guides for the MRSA bacteremia LabID Targeted Assessment for Prevention (TAP) Reports are now available as a resource for NHSN facility and group users. These guides describe and provide an example of how to create, modify, and interpret the data displayed in facility and group-level MRSA TAP Reports.

MRSA TAP Report Guide for a Facility User within NHSN: https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/ref-guide/MRSA-TAP-Report-Facility-508.pdf

MRSA TAP Report Guide for Group Users within NHSN: https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/ref-guide/MRSA-TAP-Report-Group-508.pdf

Reminder! Data for CMS Quality Reporting Programs Due Soon!

The following data must be entered into NHSN by **August 15, 2022,** for facilities that participate in certain CMS quality reporting programs.

Acute Care Hospitals that participate in the Hospital Value-Based Purchasing (VBP) and Hospital-Acquired Conditions (HAC) Reduction Programs:

2022 Quarter 1 (January 1 - March 31) CLABSI and CAUTI data
- All ICU locations
- Adult and pediatric medical, surgical, and medical/surgical wards
- Includes Veterans Affairs and Department of Defense (DoD) acute care hospitals

2022 Quarter 1 (January 1 - March 31) Inpatient COLO and HYST SSI data

2022 Quarter 1 (January 1 - March 31) MRSA Bacteremia and *C. difficile* LabID Events (all healthcare-onset and community-onset)
- FacWideIN
- ED and 24-hour observation locations
- Includes DoD acute care hospitals

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

2022 Quarter 1 (January 1 - March 31) CLABSI and CAUTI data (all bedded inpatient care locations)

2022 Quarter 1 (January 1 - March 31) Inpatient COLO and HYST SSI data

2022 Quarter 1 (January 1 - March 31) MRSA Bacteremia and *C. difficile* LabID Events (FacWideIN, all healthcare-onset and community-onset)

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

2022 Quarter 1 (January 1 - March 31) CAUTI data (all bedded inpatient locations)

2022 Quarter 1 (January 1 - March 31) *C. difficile* LabID Events (all healthcare-onset and community-onset)
- Freestanding IRFs: Reporting by FacWideIN
- IRF units within other settings (for example, acute care or critical access hospitals): Reporting by each CMS IRF unit

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

2022 Quarter 1 (January 1 - March 31) CLABSI and CAUTI data (all bedded inpatient locations)

2022 Quarter 1 (January 1 - March 31) *C. difficile* LabID Events (FacWideIN, all healthcare-onset, and community-onset)

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

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

Data Quality Corner (DQ): Webinar coming soon

Data quality webinar coming soon! The NHSN team will present a semi-annual webinar focused on data quality-related items and resources available for NHSN users of the Patient Safety Component. The first webinar will occur in Summer 2022. Please stay tuned for updates.

NEONATAL COMPONENT

LOS/MEN Reference Guide

A reference guide is now available for Rate Tables for LOS/MEN Events:
https://www.cdc.gov/nhsn/pdfs/neonatal/analysis/losmen-rate-tables-508.pdf

This guide is a useful resource for running, analyzing and interpreting the Crude Monthly Risk (CMR) and Cumulative Admission Risk (CAR) rate tables for LOS and MEN events in the Neonatal Component

LONG-TERM CARE FACILITY COMPONENT

LTCF Updates

Updates can be found in the LTCF newsletters, available here:
https://www.cdc.gov/nhsn/ltc/newsletters/index.html

HEALTHCARE PERSONNEL SAFETY COMPONENT

Updates to Weekly COVID-19 Vaccination Modules

NHSN has developed guidance for facilities on how to enroll and report data for physically separate facilities and units. This guidance applies to data reporting across NHSN programs. Facilities can review the document, which also contains several examples of how to implement this guidance for various facility types, using this link: Guidance on Enrollment and Reporting for Physically Separate Facilities/Units* in NHSN (cdc.gov).

DIALYSIS COMPONENT

Mark Your Calendars – Q1 2022 QIP Deadline

The 2022 Quarter 1 deadline (payment year 2024) 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 Thursday, June 30, 2022 **at 11:59 PM PT**. Facilities reporting to NHSN should report all three months (January, February, March 2022) of data no later than June 30, 2022, in order to receive full credit for Q1 2022 reporting and meet requirements for the CMS ESRD QIP.

Quarterly Data Quality Checks for NHSN Dialysis Event (DE) Surveillance Reporting

For an organization to deliver data with good quality, it is recommended that facilities perform NHSN Dialysis Event (DE) Surveillance Data Quality Checks (DQC) prior to submission deadline. Facilities are responsible for reporting complete and accurate data. Facilities should log into NHSN regularly to review data and ensure the facility and staff information are up to date. Facilities are encouraged to follow up on all hospitalizations to determine if a positive blood culture was collected within one calendar day of admission.

Below are three categories of data checks your organization can follow to enhance the integrity of reported data:

1) Have Monthly DE Reporting Requirements Been Met? **Useful Reports:** Run Line Listing – CMS ESRD QIP Rule Report
   a. DE Reporting Plan submitted?
   b. Event Numerator Reported?
   c. Event Denominator/Summary Data Reported?

2) Is facility information current and updated? **Useful Reports:** Run Line Listing – CMS ESRD QIP Rule Report
   a. Verify the facility's CCN is present and correct
   b. Verify facility name and locations are correct

3) Is Data Submitted Correct and Complete? **Useful Reports:** Run Line Listing – Dialysis Events (detailed) AND Line Listing – ALL Denominators
   a. Run Line Listing Report to check all dialysis events have been reported correctly.
   b. Run Line Listing Report to review denominator data across months for each vascular access type.

To assist facilities with the Data Quality Checks (DQC), NHSN Dialysis team will perform internal checks on data that have been submitted. During this process, we may reach out to your facility with preliminary findings and recommendations to review your data and make necessary corrections.

Users can obtain resources for the Dialysis Component and Data Quality Checks by visiting the Dialysis home page
https://www.cdc.gov/nhsn/dialysis/index.html
Additional information on implementing data quality checks and evaluations can be obtained at:
https://www.cdc.gov/nhsn/pdfs/dialysis/Network-Data-Quality-Checklist.pdf
Users can obtain resources for the Dialysis Component and Data Quality Checks by visiting the Dialysis home page
https://www.cdc.gov/nhsn/dialysis/index.html

Additional information on implementing data quality checks and evaluations can be obtained at:
https://www.cdc.gov/nhsn/pdfs/dialysis/Network-Data-Quality-Checklist.pdf

Changes to Dialysis COVID-19 Reporting

As we move forward, given the changing nature of the COVID-19 pandemic in dialysis facilities, the NHSN Dialysis team will be making modifications to the COVID-19 data reporting form. These changes include the removal of various sections and retaining data reporting fields most essential to national public health surveillance efforts. These changes are anticipated to be included in the July 30th release for NHSN (10.1.4). The Dialysis team will be conducting webinars on these changes in the coming weeks.

GENERAL NHSN INFORMATION

CDA Corner

Next NHSN CDA Vendor Webinar Planned for June
We're planning to schedule the next NHSN CDA Vendor Webinar in mid to late June. Please keep an eye out for the webinar details sent to your email.

Questions for the NHSN CDA Team? New Folks on your Team?
Do you have questions or concerns for the NHSN CDA Team? We'd like to hear from you! We're happy to schedule a call to connect your team and ours. Please reach out to NHSNCDA@cdc.gov to schedule.
Also, do you currently receive CDA-related emails from NHSN@cdc.gov? Do you have new folks on your team? Please send NHSNCDA@cdc.gov any updates to your team so we can be sure to have the correct team members on our NHSN CDA listserv.

Reminder: Upload February 2022 AU Option Data
NHSN has resolved the issue that prevented February 2022 AU Option records from successfully importing. Please upload these files and reach out to the NHSN CDA Helpdesk with errors: NHSNCDA@cdc.gov.

Reporting for AUR data from Overflow Locations

The AUR Module now accepts data from Overflow ICU and Overflow Ward location types. NHSN will accept location-specific AU Option summary files along with AR Events with specimens collected in these two location types. Of note, if facilities are including these types of locations in their AUR reporting, these locations should also be included in the FacWideIN counts for both AU and AR.

CDC Location Label	CDC Location Type	NHSN Healthcare Service Location code	CDC Location Code
Onsite Overflow Ward	WARD	1271-6	IN:ACUTE:WARD:OF_ONSITE
Onsite Overflow Critical Care	CC	1272-4	IN:ACUTE:CC:OF_ONSITE

Reporting AR Option Summary Data from Outpatient Location Types

Beginning last year with January 2021, facilities should report AR Option summary records for their outpatient locations (ED, pediatric ED, and 24-hour observation area) as applicable. These summary records report the total number of patient encounters for each location/month. This feature was rolled out in the summer of 2021, and facilities will notice AR Option Missing Summary Data alerts (see below screenshot for example) for these location types until the summary records have been uploaded.

Many facilities have expressed confusion over where to find these new files within their vendor system. We would greatly appreciate you sharing the following information with your client facilities:

1. Does your software currently generate 2022 AR Option Summary files for ED, pediatric ED, and 24-hour observation locations? If yes, where are they located?
2. Is your software able to retrospectively generate 2021 AR Option Summary files for ED, pediatric ED, and 24-hour observation locations? If yes, where are they located?
3. If your software is not currently able to generate AR Option Summary files, is this planned for a future update of your software? If so, when can your client facilities expect to see these new files?

If these files are not available within your vendor system, please instruct your client facilities to edit their Monthly Reporting Plans to remove the check box in the AR Option column on the rows for the outpatient locations.

Antimicrobial Resistance Option Synthetic Data Set Validation Now Available!

The AR Synthetic Data Set has now been posted on the updated SDS Validation website (note the updated URL). AR Synthetic Data Set validation is required of all vendors prior to submission of January 2023 AR CDA files. This means that beginning in January 2023, 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.

Of note, the Vendor (Application) OID is specific to the vendor. All AR CDAs produced by your software will include the same Vendor (Application) OID used for submission of your AU CDA files.

Please also see the new AR SDS FAQs.
If you have questions about the AR SDS or would like to set up a call to discuss the details, please email NSHNCDA@cdc.gov.

Notes on the NHSN Release Schedule

- Release 10.1.4 is tentatively scheduled to be deployed in late July
- Release 10.1.3 was deployed on May 26
    - Defects were effective post deployment
- Release 10.1.2 was deployed on March 24
    - Defects were effective post deployment
- The NPPT site is currently on **v10.1.3**
    - Please send any issues found to NHSNCDA@CDC.GOV

HAI Antibiogram Issue Resolved

Within Release 10.1.3, CDC resolved a defect impacting the antibiograms for pathogens following ANTIB2B_PS for the drug CEFEP for events with event dates in 2022. Previously, the susceptibilities for CEFEP were displaying in the NHSN application as S I R N for 2022 Events. This has been corrected to show as S I/S-DD R N, which aligns with what is already documented in the Release 10.1 IDM for vendors available on the CDA Portal Implementation Toolkits & Resources Website.

COVID-19 Data Uploads

- Please visit the NHSN COVID-19 Information webpage for more details:
  https://www.cdc.gov/nhsn/covid19/index.html
- Direct CSV Submission is available for the Long-Term Care and Dialysis pathways, Point of Care (POC) reporting, and vaccination uploads - specifically in the long-term care, dialysis, and healthcare personnel safety components. The accepted file formats are either CSV or HL7 2.5.1.
- Instructions on how to sign up for Direct and use this method is available on the NHSN website:
  https://www.cdc.gov/nhsn/cdaportal/importingdata.html#DIRECTProtocol
- COVID-19 Module is available for Long Term Care and Dialysis facilities

CDA and CSV Import Metrics Update

Percentage of data per specific event or summary that is imported via CDA and CSV for the following date ranges:								
Query Date Range	January, 2019 - December, 2019	April, 2019 - March, 2020	July, 2019 - June, 2020	October, 2019 - September, 2020	January 2020- December 2020	April, 2020 - March, 2021	June, 2020 - July, 2021	May, 2021 - April, 2022
Blood Stream Infection	44%	47%	49%	51%	56%	53%	55%	60%
Urinary Tract Infection	46%	47%	47%	48%	45%	49%	50%	51%
Surgical Site Infection	45%	47%	49%	51%	42%	53%	54%	57%
Laboratory Identified Event	67%	68%	69%	70%	64%	72%	73%	75%
Dialysis Event	77%	77%	77%	76%	74%	74%	74%	73%
Central Line Insertion Practices (CLIP)	25%	26%	28%	30%	23%	32%	34%	38%
Dialysis Central Line Insertion Practices (CLIP)	0%	0%	0%	0%	0%	0%	0%	0%
Ventilator-Associated Events (VAE)	8%	12%	16%	22%	0%	37%	44%	56%
Antimicrobial Resistance Event	100%	100%	100%	100%	100%	100%	100%	100%
Antimicrobial Use	100%	100%	100%	100%	100%	100%	100%	100%
Antimicrobial Resistance Summary	100%	100%	100%	100%	100%	100%	100%	100%
ICU /Other Summary	30%	30%	30%	30%	27%	32%	34%	39%
SCA/ONC Summary	37%	38%	38%	39%	33%	41%	41%	47%
NICU Summary	32%	32%	32%	32%	28%	35%	36%	43%
Surgical Procedure - via CDA	42%	45%	47%	50%	34%	54%	55%	60%
MDRO Summary	9%	10%	10%	11%	8%	12%	13%	18%
Dialysis Summary	62%	62%	63%	66%	56%	66%	68%	67%
Hemovigilance Summary	0%	0%	0%	0%	0%	0%	0%	0%
Surgical Procedure - via CSV	50%	47%	46%	43%	56%	40%	39%	35%

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

- Release 10.1 IDM for vendors is available on the CDA Portal Implementation Toolkits & Resources Website: https://www.cdc.gov/nhsn/cdaportal/toolkits.html

Guide to CDA Versions

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

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

Download the corresponding CDA Toolkits for the corresponding year.

Events or Denominators	2022	2021	2020	2019
CDA Toolkit Release	10.1	9.5 & 10.0	9.4	9.2 & 9.3
DIALYSIS				
Dialysis Event	R3-D4	R3-D4	R3-D1.1	R3-D1.1
Dialysis Denominator	R3-D3	R3-D3	R3-D3	R3-D1 or R3-D3
EVENTS				
Primary Bloodstream Infection (BSI)	R4-D1	R3-D3	R3-D3	R3-D2
Central Line Insertion Practices Adherence (CLIP) Monitoring	R2-D2.1	R2-D2.1	R2-D2.1	R2-D2.1

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
- CDA vendor webinars & training videos: https://www.cdc.gov/nhsn/cdaportal/webinars.html

Update for CDA Direct Automation

At this time, over 8,600 facilities from 59 separate vendors have signed up for DIRECT CDA Automation. If your facility is sending data via CDA and you are interested in learning more about DIRECT CDA Automation, ask your CDA vendor or check out the information on the CSSP site:
http://www.cdc.gov/nhsn/cdaportal/importingdata.html#DIRECTProtocol

New Publications from the NHSN Team

The NHSN team has recently published the following surveillance reports:

1. **Continued increases in HAI incidence during the second year of the COVID-19 pandemic**
   Presents a comparison between 2019 and 2021 national standardized infection ratios (SIRs) for CLABSI, CAUTI, VAE, SSI, MRSA bacteremia LabID, and CDI LabID from acute care hospitals. For most HAIs, national SIRs in 2021 remain significantly higher than SIRs from the pre-pandemic time period. *Infect Control Hosp Epidemiol 2022.* Available at: https://doi.org/10.1017/ice.2022.116

2. **Effectiveness of a COVID-19 Additional Primary or Booster Vaccine Dose in Preventing SARS-CoV-2 Infection Among Nursing Home Residents During Widespread Circulation of the Omicron Variant – February 14 – March 27, 2022**
   Analysis of COVID-19 surveillance and vaccination data from approximately 15,000 skilled nursing facilities found that, compared with primary series vaccination only, an additional or booster dose provided greater protection against SARS-CoV-2 infection during Omicron variant predominance. *MMWR Morb Mortal Wkly Rep 2022.* Available at: http://dx.doi.org/10.15585/mmwr.mm7118a4

3. **Trimethoprim-sulfamethoxazole resistance patterns among *Staphylococcus aureus* in the United States, 2012–2018**
   Highlights increases in the percentage of methicillin-resistant *Staphylococcus aureus* pathogens that were not susceptible to trimethoprim-sulfamethoxazole, using data from 3 national databases. *Infect Control Hosp Epidemiol 2022.* Available at: https://doi.org/10.1017/ice.2022.9

NHSN Help Desk Activity Update

Quarter 2, 2022

(Averages)

329 facilities enrolled in NHSN this quarter

- 15,060 – iSupport Tickets this quarter
  - 167 – iSupport Tickets per day
- 1,171 – iSupport Tickets per week

NHSN Enrollment Update

NHSN Enrollment Update (as of June 09, 2022):

8,766 Hospitals (this includes 619 Long-term Acute Care Hospitals and 496 Free-standing Inpatient Rehabilitation Facilities)

8,577 Outpatient Hemodialysis Facilities

5,963 Ambulatory Surgery Centers (ASCs)

18,611 Long-term Care Facilities

41,917 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.