



Fall 2025 NHSN Vendor Webinar

November 21, 2025

Agenda

- Introduction
- General NHSN Release Overview
- NHSN Release Updates
- NHSN FHIR Implementation Updates
 - NHSN Glycemic Control Module
 - NHSN Long-term Care Antimicrobial Use Module
- New Claims Data Module
- Inclusion of "Missing" as a Sex Field Reporting Option
- AUR Module Updates
- NHSN Pre-Production Test Site (NPPT)
- Miscellaneous
- Q&A

Introduction

Andrea Benin

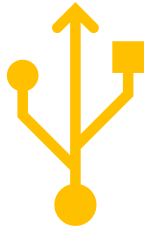
Mission of CDC's Division of Healthcare Quality Promotion (DHQP)

To protect patients; protect healthcare personnel; and promote safety, quality, and value in both national and international healthcare delivery systems.



Image by David Mark from Pixabay

Vision... A Hands-Free Future for Reduced Burden



Current State: Electronic

- Electronic data flows to NHSN via HL7 CDA payloads via APIs or uploads.
- NHSN also allows for manual webform data entry.

Near Future: Fully Automated



- Electronic data flows automatically, hands-free to NHSN via FHIR APIs using USCDI defined data elements and HL7 NHSN FHIR Implementation Guides.
- CDA and webform entry are still supported for certain circumstances.



NHSN Digital Quality Measures (dQMs)

dQMs in Development	
Adult Sepsis Mortality	Patient Level AUR (Antibiotic Use and Resistance)
Hypoglycemia	Hyperglycemia
HOB (Hospital onset bacteremia and fungemia)	HAKI (Hospital Onset Acute Kidney Injury)
RPS (Respiratory Pathogen Surveillance)	ORAE (Opioid-Related Adverse Events)
HT-CDI (Healthcare facility onset, antibiotic treated Clostridioides difficile infection)	LOS/MEN (Late-Onset Sepsis/Meningitis)
VTE/Anticoagulant-related Bleeding	Long-term Care AU
NVHAP (Non-Ventilator Healthcare Associated Pneumonia)	

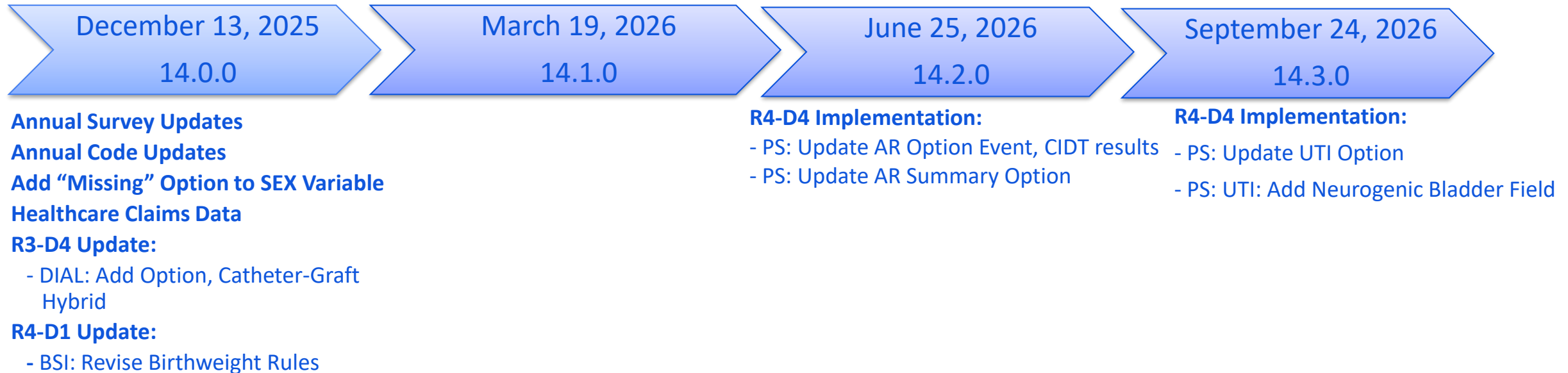
General NHSN Release Overview

Pamela Crayon

NHSN Release Schedule Overview

- **Annual release – major release at the end of the year**
 - Changes included:
 - Protocol changes
 - Transition to new CDA versions due to protocol changes
 - Effective January 1st of each year
- **Quarterly releases**
 - May include:
 - New Component/Module
 - Minor change requests
 - Defect resolutions
 - Infrastructure maintenance and support
 - Users notified via message alert when logging into NHSN
- **Monthly releases**
 - May include:
 - Minor change requests
 - Defect resolutions
 - Infrastructure maintenance and support

NHSN Release Roadmap for Vendors



NHSN will be deploying CDA updates in the NPPT environment with the different releases to give the vendors time to develop and test throughout the year.

NHSN Release Updates

Pamela Crayon

Release Updates

- **13.2.0 – June 21, 2025**
 - MDRO/CDI Summary Business Rules Update: The CDA business rules have been updated for MDRO/CDI Summary to accept MDRO values sent in CDA for number of patient days and admissions.
- **13.3.0 – September 27, 2025**
 - CLIP Measure Retirement: For the Patient Safety and Dialysis components, the CLIP Measure has been retired as of 9/27/2025. Users will no longer be able to add or edit CLIP events via the UI or submit CLIP events via CDA. Users will be able to view previous CLIP events in the NHSN application.
 - R3-D3 Update: Remove Dialyzer Reused Question: The question, “Number of patients for whom dialyzers are reused”, has been removed as a field option for the Dialysis Denominator CDA file. Files imported with summary dates for 1/1/2024 and later with the presence of this field will be rejected and will result in a validation error.

Future Release Updates

- **14.0.0 – Planned for December 13, 2025, Effective January 1, 2026**
 - 'Patients <= 1 year old' Business Rule Update: Currently, the business rule for patients <= 1 year of age will capture age specific events in patients < 2 years of age. This is not the intent of the surveillance definitions for patients <= 1 year of age. The business rule will be changed to patients <= 365 days of age effective 1/1/2026 and forward.
 - Birthweight Rules Update for BSI Events: The business rule to capture BSI events in neonates will be updated to allow neonates with birthweight >= 150 grams and <= 7000 grams to be effective for events dated 1/1/2026 and forward.
 - Add Mycoplasma organisms as Pathogen options for Pneumonia: Mycoplasma organisms will now be available for selection in the Pathogens dropdown list for PNU2 and PNU3 events upon the selection of the Laboratory element "Virus, Bordetella, Legionella, Mycoplasma or Chlamydia identified from respiratory secretions or tissue."
 - 57.502 Dialysis Event Surveillance Form Updates for 2025 – Catheter-Graft Hybrid – CDA Update: The capability to submit the vascular access type, Catheter-Graft Hybrid, via CDA will now be available effective 1/1/2026.

NHSN FHIR Implementation Updates

Sami Petersen

Surveillance and Quality Measurement

Situational Awareness

HL7 balloted
Framework IGs

NHSN
Content
Package IGs

NHSN
Protocols and
metrics

HL7 NHSN dQM Reporting IG

CDC NHSN dQM IG

ACH Monthly
Profiles & CQL

ACH Daily Profiles
& CQL

Glycemic
Control

Adult
Sepsis

Bacteremia
& Fungemia

C. difficile
Infection

RPS

HL7 US SAFR IG

Bed Capacity
IG

Hospital
Respiratory Data IG

Occupancy by
Bed Type

Availability by
Bed Type

COVID/Flu/RSV
Hospitalizations

ICU Patients with
COVID/Flu/RSV

New COVID/Flu/
RSV Admissions

Patient-level Data

Aggregate Data

NHSN FHIR dQM Implementation Guides *Released!*

[HL7 NHSN dQM Reporting Implementation Guide v1.0.0](#)

hl7.org/fhir/us/nhsn-dqm/2024Sep

➤ **Overall framework for dQM-reporting**

[CDC NHSN dQM Content Package IG v1.0.0](#)

➤ **Measure-specific information**

The screenshot shows the top of the HL7 NHSN dQM Reporting Implementation Guide v1.0.0 page. The header includes the HL7 International logo, the title 'National Healthcare Safety Network (NHSN) Digital Quality Measure (dQM) Reporting Implementation Guide', and the version '1.0.0-ballot - STU1 Ballot'. A navigation bar contains links: IG Home, Table of Contents, Actors and Use Cases, Specification, Security, Artifact Index, Downloads, and Support. Below the navigation bar, the page title is 'Table of Contents > NHSN dQM Reporting Home'. A yellow banner states: 'This page is part of the National Healthcare Safety Network (NHSN) Digital Quality Measure (dQM) Reporting Implementation Guide (v1.0.0-ballot: STU1 Ballot 1) based on FHIR (HL7® FHIR® Standard) R4. The current version which supersedes this version is 1.0.0. For a full list of available versions, see the Directory of published versions'. The main heading is '1 NHSN dQM Reporting Home'. Below this is a table with implementation details.

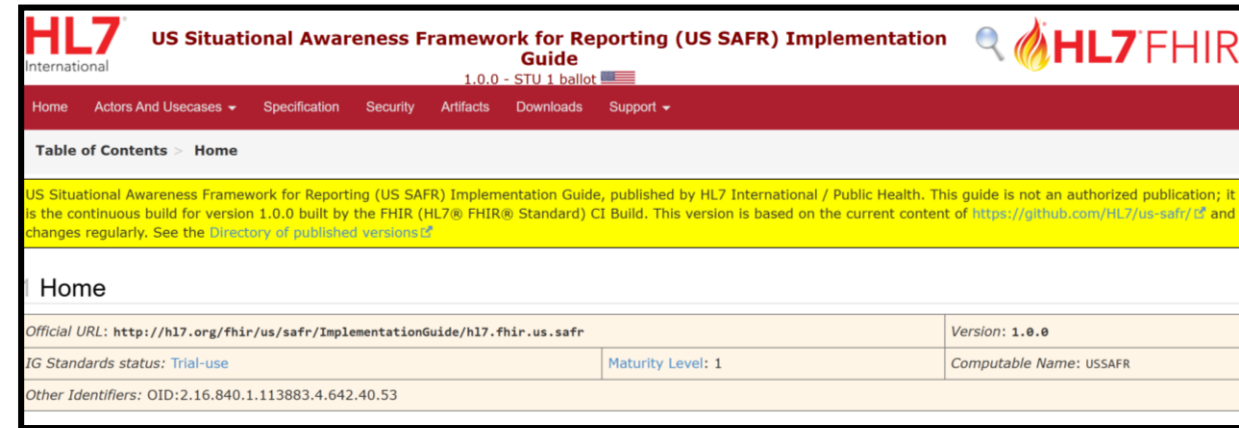
Official URL: http://hl7.org/fhir/us/nhsn-dqm/ImplementationGuide/hl7.fhir.us.nhsn-dqm		Version: 1.0.0-ballot
IG Standards status: Trial-use	Maturity Level: 1	Computable Name: NHSNdQM
Other Identifiers: OID:2.25.316204395913842452684237438142819890580		

The screenshot shows the top of the CDC NHSN dQM Content Package IG v1.0.0 page. The header includes the title 'CDC National Healthcare Safety Network (NHSN) Digital Quality Measures (dQM) Content Package IG' and the version '1.0.0 - Release 1'. A navigation bar contains links: IG Home, Table of Contents, Actors and Use Cases, Validation and Pre-Qualification, Specification, Artifact Index, Downloads, License, and Support. Below the navigation bar, the page title is 'Table of Contents > NHSN Measures Home'. A yellow banner states: 'This page is part of the CDC National Healthcare Safety Network (NHSN) Digital Quality Measures (dQM) Content Package IG (v1.0.0: Release) based on FHIR (HL7® FHIR® Standard) R4. This is the current published version. For a full list of available versions, see the Directory of published versions'. The main heading is 'NHSN Measures Home'. Below this is a table with implementation details.

Official URL: http://www.cdc.gov/nhsn/fhirportal/dqm/ig/ImplementationGuide/gov.cdc.nhsn.measures		Version: 1.0.0
Standards status: Trial-use	Maturity Level: 1	Computable Name: NHSNMeasures

US Situational Awareness Framework for Reporting (US SAFR IG)

- Unified, FHIR-based framework for standardized, automated reporting of healthcare capacity & situational awareness data across United States
- Connectathons
 - January 2025 HL7 FHIR: Successfully exchanged FHIR MeasureReports for Bed Capacity and Hospital Respiratory Data use cases.
 - June 2025 Helios: Successfully tested in Aidbox (v2504.0) \$validate and POST/create operations performed as expected
- Currently undergoing HL7 ballot reconciliation



NHSN FHIR dQM Readiness Web Page *Live!*

- [NHSN FHIR dQM Readiness](#)
 - Links to ***NHSN FHIR dQM IGs***
 - Requested ***FHIR APIs***
 - ***Key Action Items*** for Reporting FHIR dQMs to NHSN
 - ***Key Data Elements*** and ***Terminology*** Standardizations for NHSN dQMs

[NHSN Digital Quality Measures | NHSN | CDC](#)

NHSN FHIR Implementation Updates

NHSN Glycemic Control Module

Ana Mendoza

NHSN Medication Safety Component (MSC)

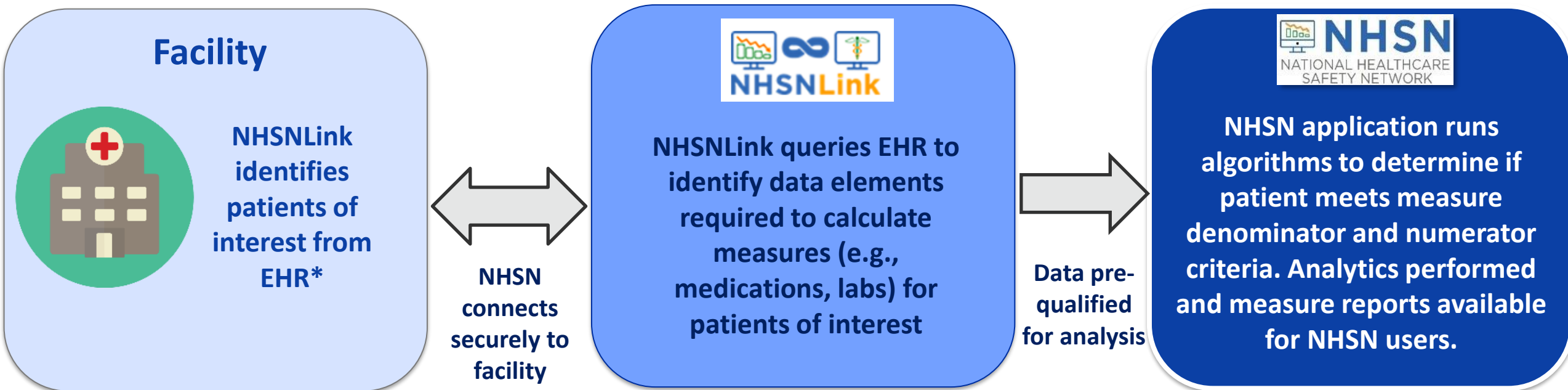
NHSN Glycemic Control Module (Hypoglycemia)

- **Purpose:** Establish a vendor-neutral, FHIR digital measure standard for reporting patient-level, linked medication and blood glucose data electronically to CDC's NHSN.
- **Definitions:**
 - Primary metric: Rate of severe medication-related hypoglycemia events (blood glucose <40 mg/dL) in hospitalized* patients receiving hypoglycemic medications
- **Key Data Elements: Laboratory, Medications**

NHSN Glycemic Control Module, Hypoglycemia

- Release to selected U.S. hospitals participating in the NHSNCoLab September 27, 2025 and to early adopters in 2026 (anticipated) within the new Medication Safety Component (MSC)
- Requires EHR vendors to enable reporting via FHIR APIs:
 - FHIR R4 (or later)
 - Conformance to US Core IG v3.1.1 (moving to US Core 6.1.0 and QI Core 6.0.0 in 2026)
 - No option for CDA or manual reporting
- Supported by two Implementation Guides (IG)
 - CDC NHSN dQM Content Package IG
 - HL7 NHSN dQM Reporting IG

NHSN FHIR dQMs: Process Flow from EHR to NHSN



*Patients in emergency department, observation, or inpatient *location* or *status* during the measurement period

NHSN Glycemic Control Module: Requested FHIR Resources

- Data will be collected for all inpatients with an **inpatient/ED/Observation encounter status or location** during the measurement period.
- The facility's FHIR endpoint can expose only selected, pre-specified FHIR resources that are invoked upon permission from the facility's server and data access can be controlled on a FHIR resource-by-resource basis.
- "All" indicates that all the data elements within that FHIR resource will be initially retrieved by NHSNLink from the EHR. "Selected" indicates that only selected data elements within that FHIR resource will be initially retrieved by NHSNLink from the EHR. Further filtering of data elements occurs during execution of the dQM logic.

FHIR Resource (Present in US Core Profile?)*	Data Elements
Condition (US Core)	All
Coverage	All
Encounter (US Core)	All
Location (US Core)	All
Medication (US Core)	All
MedicationAdministration	All
MedicationRequest (US Core)	All
Observation, Laboratory result (US Core)	Selected
Patient (US Core)	Selected
ServiceRequest	All
Specimen	All

NHSN FHIR dQMs: Vendor Action Items

01

Enable FHIR R4 APIs required for reporting NHSN dQMs

Review hospital license to ensure all APIs are available and complete for public health-reporting

02

Expose MedicationAdministration Resource

This resource must be present for reporting dQMs to NHSN

03

Ensure compliance of all FHIR data elements with standardized terminology; especially:

- Encounter
- Medications*
- Observation
- Specimen

NHSN Digital Measure Reporting Plans

CDCCenters for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

NHSNNATIONAL HEALTHCARE SAFETY NETWORK

NHSN - National Healthcare Safety Network

NHSN Home
Reporting Plan
Surveys
Analysis
Users
Facility
Cheat Sheets
Logout

Add Digital Measure Reporting Plan

Mandatory fields marked with *

Print Form

Facility

Facility ID *: DHQP Memorial Hospital (ID 10000)

Glycemic Control Module

Data are collected from and include all inpatient locations, ED locations, 24H Observation Unit locations, and IRF/IPF locations.

Measure	Following	Start Month *	Start Year *
Hypoglycemia Measure Reporting	<input type="checkbox"/>	<div></div>	<div></div>

Add Row

During the specified reporting period, the facility authorizes NHSN to query your facility's FHIR server to collect the specified data elements as per the NHSN Glycemic Control protocol. Based on these data, your facility will be provided with measure results reflecting glycemic event rates, as well as additional analytic and reporting options (e.g., line-level lists).

To participate in the NHSN Glycemic Control Module, a Medication Safety Glycemic Control Annual Survey must be completed and submitted. The survey must be completed annually and submitted by the end of February. This will allow addition of reporting plans for the current year. Data will only be pulled when there is a completed annual survey.

Completion of the reporting plan indicates that data transmitted by your facility conforms to the NHSN Glycemic Control module protocol and instructions for reporting FHIR dQMs to NHSN. This includes adherence to technical specifications for value sets (i.e., local or non-standardized codes are mapped to established value sets such as RxNorm, LOINC, and HSLOC).

Save

Back

CDCCenters for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

NHSNNATIONAL HEALTHCARE SAFETY NETWORK

NHSN - National Healthcare Safety Network

NHSN Home
Alerts
Dashboard
Reporting Plan
Patient
Event
Procedure
Summary Data
Hospital Respiratory Data
Import/Export
Surveys
Analysis
Users
Facility
Group
Cheat Sheets
Logout

Add Digital Measure Reporting Plan

Mandatory fields marked with *

Print Form

Facility

Facility ID *: DHQP Memorial Hospital (ID 10000)

Healthcare facility-onset, antibiotic-Treated CDI (HT-CDI)

HT-CDI data are collected from and include all applicable inpatient locations, emergency departments and 24-hour observation locations.

Measure	Following	Start Month	Start Year
HT - CDI	<input type="checkbox"/>	<div></div>	<div></div>

Hospital-Onset Bacteremia and Fungemia (HOB)

HOB data are collected from and include all applicable inpatient locations, emergency departments and 24-hour observation locations.

Measure	Following	Start Month	Start Year
HOB	<input type="checkbox"/>	<div></div>	<div></div>

Respiratory Pathogens Surveillance (RPS)

Measure	Following	CSV	FHIR	Start Month	Start Year
RPS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<div></div>	<div></div>

Save

Back

Digital Measure Reporting Plan (DMRP)

- Digital Measure Reporting Plan (DMRP)
 - Form in NHSN application where facility selects the digital measures for which data will be pulled/measure reports generated
 - Located in Medication Safety and Patient Safety components
 - Will be completed by NHSNCoLab facilities during pilot phases and by early adopters as part of their onboarding process
 - (Proposed) DMRP data will be used by:
 - NHSNLink to verify enrollment in the digital measure prior to generating the FHIR bundles for the facility
 - NHSN data pipeline to filter data and provide analysis reports for the followed measures

NHSN FHIR Implementation Updates

NHSN LTC Antimicrobial Use Module

Molly Stillions Prosper

Long Term Care (LTC) Antimicrobial Use (AU) Module

- **Purpose:** Establish a vendor-neutral, FHIR digital measure standard for reporting resident-level, antimicrobial use data to CDC's NHSN
- **Goals:**
 - Support LTC antimicrobial stewardship efforts
 - Minimize burden on LTC staff and facilities of collecting and reporting AU data
 - Provide accurate, actionable and targeted data to improve resident care
 - Track and report LTC AU rates nationally
 - Establish risk-adjusted LTC AU benchmarks

Long Term Care (LTC) Antimicrobial Use (AU) Module (cont.)

- **Overview**

- FHIR dQM: direct reporting from the EHR FHIR endpoint via FHIR APIs
- Requires FHIR R4 (or later), conformance with US Core 6.1.0
- Monthly data pull for resident-level data for medication orders and/or administrations and supporting data elements

- **Status**

- Undergoing pilot with 2 NHSNCoLab LTC sites to establish feasibility and proof-of-concept
- Planned go-live for “FHIR-ready” LTC sites: 2027 (tentative and pending NHSN development timelines)

New Claims Data Module

Henrietta Smith/ Kristina Betz

New Claims Data Module



- **WHY:** Claims Data supports event determination, event exclusions and patient-level risk-adjustment for new digital measures



- **WHAT:** UB-04 standardized medical billing claims form used by healthcare providers/facilities to submit health care claims. Required by insurance providers (Medicare, Medicaid, and other insurance companies)



- **WHO:** Multiple categories of staff at a hospital may need to be involved in reporting. Consenting Admin (e.g., CEO), Implementers (e.g., IT), Submitters (e.g., IP), and Facility-Vendor Liaison (e.g., Hospital Admin)



- **WHEN:** Beginning early 2026, all hospitals will have the option to voluntarily report claims data



- **HOW:** Data will be reported via CSV

Add "Missing" as a Sex Field Reporting Option

Jennifer Watkins

Background

NHSN changed data collection across all components to comply with Executive Order 14168, “Defending Women from Gender Ideology Extremism and Restoring Biological Truth to the Federal Government”:

- Implemented “Sex” as a data collection field
 - Implemented “Female (F)” and “Male (M)” as the only response options for the “Sex” field
- Removed all fields labeled as any other sex categories and all fields related to gender/gender identity

Upcoming Change – Add “Not Available/Missing” as a Sex Field Reporting Option

NHSN received feedback from customers and vendors that for some patients a value of "Female" or "Male" is not available in the EHR, so they are unable to provide a response for the "Sex" field.

NHSN will be adding “Not Available/Missing” as a reporting option for the "Sex" field for patients that do not have data that represents "Female" or "Male" available in the EHR.

NHSN Application Changes Moving Forward

- **User Interface – Add Patient/Event/Procedure**
 - Dropdown values are “F – Female” , “M – Male”, “N – Not Available/Missing”
 - “N – Not Available/Missing” represents that a value of "Female" or "Male" is not available in the medical record
- **User Interface – View Patient/Event/Procedure**
 - Sex field will only display values of “Female” or “Male” or “Not Available/Missing”
- **User Interface – Edit Patient/Event/Procedure**
 - When editing a previously saved record, a user can choose from the valid values: "F - Female" or "M – Male” or “N – Not Available/Missing”
- **CSV Import**
 - Valid values for Sex are “F” or “M” or “N”
 - Error message will be displayed if “Sex” is not entered on import
 - Error message will be displayed if “Sex” is not entered as “F” or “M” or “N”
- **CSV Export**
 - Existing, historical data in CSV Export will display "Sex" as “Female”, “Male”, or “Not Available/Missing”

Data Analysis and Reports: Changes and Impacts

- What changed?
 - Updated variable “Sex”
 - Valid values are “Female”, “Male”, or “Not Available/Missing”
- Analysis Reports will display Sex as "Female", "Male", or "Not Available/Missing"
 - The universal exclusion criteria due to sex will be set to "Yes" if "Not Available/Missing" is selected as the "Sex" field option.

CDA File Submission

****Continue to submit CDA files as usual per the current IG version****

- Required data field currently labeled as “Gender” will be relabeled in the NHSN application as “Sex”
- Any nullFlavor values sent for the “Sex” field will be set to “N – Not Available/Missing”

CDA Implementation Guide (IG) Changes

- Include Sex Observation - Female, Male
- Removed Gender Identity and Birth Sex from the social history section
- Administrative Gender is not required

****Submit CDA specific questions via the NHSN ServiceNow portal and select Assignment group as “CDA” or submit via email to nhsncda@cdc.gov****

AUR Module Updates

Stephanie Sutton & Amy Webb

Fixes for 2025 AUR Reporting

Stephanie Sutton

Bug: AR Event Upload Error - Specimen Source De-duplication Logic (13.1.2 – May)

- Application was applying the 14-day de-duplication rule for new specimen category (skin, soft tissue, wound, musculoskeletal) instead of the 1-per month rule for non-invasive specimens
- **Mitigation:**
 - A monthly script is used to remove duplicates and was updated to ensure the 14-day and 1 month business rules were applied appropriately
- **Expected Results:**
 - Vendors/facilities may have noticed additional AR Events failing to upload after application was updated

Bug: *S. aureus* files not being accepted unless PBP2a test is listed before PCR mec test

- The AR Event file containing *Staph aureus* did not import unless the PBP2a test was listed before the PCR mec gene test in the file structure. These tests should be accepted in any order.
- **Expected Results:**
 - The files should upload no matter what order the PBP2a and PCR mec tests are in.

Bug: CDA files within a zip that are submitted via Direct are not receiving a response

- **AR CDA files (AR Summary and AR events) submitted via Direct did not receive a response/were not included in the PDF submission report. This also affected other data sent via Direct.**
- **Mitigation:**
 - Developers investigated why files were not included in the PDF submission report.
- **Expected Results:**
 - Fixed in August release. If files do not receive a response and were not successfully submitted into NHSN, resubmitting the files a second time should resolve the issue.

Bug: Intermittent Upload Error: AR Event Files

- **AR Event uploads (manual or Direct) intermittently fail with the following error:**
 - “Error in Data registration: (uploaded zip file name). Error message: null”
- **One or more AR Events in the zip file fail to upload**
- **Upon re-upload, the same file often passes successfully into the NHSN database**
- **Clarifying error message for known causes:**
 - PatientID on subsequent version of file does not match original saved in NHSN database
 - Error valid. Cannot change patientID on subsequent version of a file if original still exists in NHSN database.
 - SetID root+extension longer than 99 characters
 - IsolateID extension longer than 50 characters

Updates for 2026 AUR Reporting

Stephanie Sutton

Update to AU Option Drugs

- **Effective January 1, 2026**
- **Add:**
 - Aztreonam/avibactam – RxNorm 2705352
 - Gepotidacin – RxNorm 2709212
 - Sulopenem/probenecid – RxNorm 2717836
 - Monoclonal antibody: Clesrovimab – RxNorm 2716802
- **No removals for 2026**

Upcoming Enhancement – AR Option Summary Data by Inpatient Location

- **Allow facilities to report AR Option summary data (patient days) at the individual location level**
- **Key Updates:**
 - Reporting Plan: Update to allow the AR box to be checked per inpatient location
 - Business Rules: Modify to accept AR Summary CDA files tied to individual inpatient locations
 - Optional in 2026; required in 2027
- **Why This Matters:**
 - Enables alignment of AU and AR data
 - Provides clearer visibility into which inpatient locations are included in AR Option reporting
 - Supports more granular analysis and benchmarking

Update to AR Drug Panels

- **Effective January 1, 2026**
- **AntiP20 – *Acinetobacter* panel:**
 - Add: Sulbactam/Durlobactam – LOINC 106859-2
 - Remove: Doxycycline
- **AntiP20Ur – *Acinetobacter* urine panel**
 - Remove: Tetracycline
 - Remove entire panel. *Acinetobacter* urine specimens will use AntiP20 as of 1/1/2026.
- **AntiP21 – *Candida* panel:**
 - Add: Rezafungin – LOINC 106858-4

Update to AR Option Specimen Sources

- **Effective January 1, 2026**
- **All specimen source groups were reviewed & updated using Snomed 09/2025**
- **Terms added within each specimen source group to make reporting more inclusive using a rule-based approach to creating the value set**
- **Terms removed no longer existed in Snomed 09/2025**
- **See Specimen Source 2026 tab for complete details**

Update to AR Option Pathogens

- Will refresh AR Option Pathogen Roll-up Workbook using Snomed 09/2025

SAAR Rebaseline

Amy Webb

SAAR Rebaseline release planned for early 2026

- **Completed modeling using 2023 as the baseline year**
- **More locations!**
 - 26 adult
 - 9 pediatric
 - 4 neonatal
- **Minor updates to drugs in each category**
- **Risk adjustment variables still hospital and location-specific variables**
- **Education and training materials to be released starting later this month**

R4-D4 Update

Amy Webb

R4-D4 Implementation will be optional for 2026

- **AR Summary and AR Event will be updated to use R4-D4 IG effective June 2026.**
 - AU Summary is not moving to R4-D4, will continue to use R6 and R1.
- **AR Event is the only CDA with major changes.**
 - Due to inclusion in the CMS PI Program, ASTP has asked that AR CDAs use the same IG version, so we are additionally updating AR Summary to R4-D4.
- **R4-D4 IG is now published on the HL7 website**
- **Plan to implement in 14.2 June release**

R4-D4 AR Summary Updates

- No major updates when moving to R4-D4
- May have templateID updates

R4-D4 AR Event Updates

- **May have templateID updates**
- **Changes from administrative gender to sex observation**
 - Language and interpreter needed/used will be optional variables
- **Removing *Staph aureus*-specific requirement for PCR mec and PBP2a tests**
- **Adding section for gene identification tests**
 - Requests for reporting rapid molecular detection of antimicrobial resistance markers
 - Value set complete
 - Contains 88 LOINC terms
 - Examples: Bacterial carbapenem resistance blaKPC-18 gene [Presence] by Molecular method, Bacterial carbapenem resistance blaNDM-1 gene [Presence] by Molecular method

R4-D4 AR Event Updates – Rapid Molecular Detection of Antimicrobial Resistance Markers

- **Molecular test will be included in the AR Event CDA file if conducted**
 - Will not be tied to specific organisms (e.g., *S. aureus* for mecA gene)
 - Includes as many molecular tests as were conducted by the lab
 - Specific code to include if no molecular tests were performed on the isolate
- **Result value set using Snomed:**
 - Detected
 - Not detected
 - Indeterminate
 - Invalid
 - NA = No discrete data available

Plan to accept R3 & R4-D4 for 2026

- For 2026 AR Option reporting, you will be able to use either the R3 (current IG) or the R4-D4 IG.
- Rapid molecular detection of antimicrobial resistance markers results cannot be reported if using the R3 IG.

AUR Module Updates: AR and AU Synthetic Data Set

Amy Webb

AU SDS Release 5.1

- **AU SDS v5.1 available**
- **Includes changes to bring the dataset up to current standards**
 - Uses 2023 dates, required drugs/codes, and updates to the admissions counting logic to match AR SDS
- **Vendors are expected to revalidate using AU SDS v5.0 prior to March 2025**
 - Any AU file for March 2025 and forward will fail to upload without an updated AU SDS Validation ID

1.1

The AU Summary file does not contain an updated SDS Validation ID. Please work with your vendor to correct the issue prior to re-uploading the file.

AR SDS Release 1.6

- AR SDS Release 1.6 available
- Re-validation with AR SDS 1.6 is optional
- Includes updated dim_wardmapping to test transfers to ineligible inpatient locations
- Currently working on an updated version (2.0) of AR SDS which will include 2026 value sets & logic
 - Including validating patient day reporting from individual inpatient locations
 - To be released in early 2026

SDS web service links

- **AU SDS:**
 - <https://nhsnpilot.ng.techlab.cdc.gov/AUValidation-Production/home.html>
- **AR Event SDS:**
 - <https://nhsnpilot.ng.techlab.cdc.gov/ARValidation-Numerator/home.html>
- **AR Denominator SDS:**
 - <https://nhsnpilot.ng.techlab.cdc.gov/ARValidation-Denominator/home.html>

Reminders for CDA files

Amy Webb

Size limit

- **Limit: 1000 files or 2MB zipped whichever comes first**
- **Larger zip files will take longer to process**
- **Recommend splitting large files into separate smaller zip files**

Rhapsody errors

- **Added infrastructure and code changes in July & August to mitigate Rhapsody errors**
- **If an upload generates a Rhapsody error, try the upload again outside of peak hours (prior to 10am ET or after 4pm ET)**

Other reminders

- **Match year of summary/event to value set for that year**
 - Example: if creating an AR Event for a specimen collected in December 2024, use the 2024 value sets even though the file is being uploaded in 2025
- **Include admission date (or encounter date) in all AR Event files**
 - All AR Event files must include a date in the admission date field regardless of whether the patient was admitted to an inpatient location during that encounter
 - See [AUR Module Protocol Appendix G](#)

NHSN Pre-Production Test Site (NPPT)

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NHSN Pre-Production Test Site

- Copy of the NHSN development environment
- Includes Analysis and Reporting (A&R) functionality
- Does not include DIRECT CDA Automation or Groups
- No SAMS credentials required
- To enroll:
 - Complete form found on the [Validation Tools and Test Sites](#) page.
 - Send completed form to the nhsncda@cdc.gov mailbox.



NHSN Pre-Production Test Site (NPPT) cont.

- **V14.0.0 is the current environment**
 - Reminder: Read “Important Message” at login
- **Blast email will be sent out when NPPT is upgraded to new version**
- **Report any issues you find to the nhsncda@cdc.gov mailbox**

Miscellaneous

Hamna Baig

DIRECT CDA Automation Updates

- **~207 direct addresses and > 9,500 facilities sending via DIRECT**
- **DIRECT**
 - Batch submission process
 - No immediate reply
 - Turnaround time based on volume of messages in the queue
- **New to implement DIRECT?**
 - DIRECT toolkit on the [NHSN Importing Data webpage](#).
 - Contact NHSNCDA@cdc.gov for any questions or to set up an onboarding discussion.

CDA Version Support

- [CDA Submission Support Portal \(CSSP\)](#)
- [CDA Toolkits](#)
- [Guide to CDA versions](#)

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	2025	2024	2023	2022
CDA Toolkit Release	<u>13.1</u>	12.2	11.1	10.1
DIALYSIS				
Dialysis Event	R3-D4	R3-D4	R3-D4	R3-D4
Dialysis Denominator	R3-D3	R3-D3	R3-D3	R3-D3
EVENTS				
Primary Bloodstream Infection (BSI)	R4-D1	R4-D1	R4-D1	R3-D3
Central Line Insertion Practices Adherence (CLIP) Monitoring	R2-D2.1	R2-D2.1	R2-D2.1	R2-D2.1

CDA Version Support (continued)

- Implementers can also use the HL7 GitHub website for latest IG Guides
- [HL7 GitHub site](#) also includes:
 - XML
 - Related files
 - Schematron
 - CDA Schema
 - Samples
 - Stylesheet

Helpful NHSN Resources

- [NHSN Newsletter](#)
- [Release Notes and Communication Updates](#)



NHSN Reminders

- Welcome feedback
- Offer individual vendor conference calls
- Make sure you are on the NHSNCDA email distribution list.
- Visit the [CDA Submission Support Portal \(CSSP\)](#).



CDA Submission Support Portal (CSSP)

Toolkits, FAQs, webinars and resources for testing and validation for CDA implementers.

Additional Vendor Engagement Opportunities

- **1-1 meetings with NHSN**
 - Opportunity to ask questions, receive updates, and dive deeper into discussions around specific topics
 - Send a request to NHSNCDA@cdc.gov to schedule

Thank you!
Questions?

NHSNCDA@cdc.gov

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

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

