Fall 2021 NHSN CDA Vendor Meeting

October 20, 2021
Welcome

- General NHSN Updates
- COVID-19 Module Updates
- Release 10.0 Updates
- Patient Safety Component – 10.1
- CDA HAI Vocabulary
- AUR Module Updates
- Miscellaneous Vendor Services
- Q&A
General NHSN Updates

Dan Pollock
NHSN Release Schedule

- Continuing one major release a year
  - Changes included:
    - Protocol changes
    - Transition to new CDA versions due to protocol changes
    - Effective January 1st of each year

- Non-major releases as needed
  - May include:
    - New Component
    - Minor change requests
    - Defect resolutions
    - Infrastructure maintenance and support

- NHSN COVID Updates
  - Occurring on a six-week basis as needed
  - Email notification sent out prior to deployment (message alert when logging into NHSN)
NHSN Release Schedule

- Release 10.1
  - Scheduled for December 11, 2021
  - Defect fixes will be effective post deployment
  - Change Requests (CRs) will be effective January 1, 2022

- Mid-Year Release 2022
  - TBD
COVID-19 Module Updates

- Long-Term Care & Dialysis facilities are using NHSN to report COVID-19 data
- COVID-19 Vaccination data is now being reported in the Healthcare Personnel Safety Component as well as the Long-Term Care Component
COVID-19 Module Long Term Care Facilities

- The following pathways are being reported into NHSN for LTCF:
  - Resident Impact and Facility Capacity
  - Staff and Personnel Impact
  - Supplies and Personal Protective Equipment
  - Therapeutics
  - Vaccinations
  - Point of Care (POC) Testing
COVID-19 Module

- Direct CSV Submission is now available for LTC & Dial Pathways, POC Testing, and Vaccination uploads - for LTC, Dial, HPS Components
- The following are acceptable file formats:
  - CSV
  - HL7 2.5.1
- Instructions on how to sign up and use this method is available on the NHSN website: [https://www.cdc.gov/nhsn/cdaportal/importingdata.html#DIRECTProtocol](https://www.cdc.gov/nhsn/cdaportal/importingdata.html#DIRECTProtocol)

Technical Guides

- [Technical User Guide for DIRECT CDA Automation](https://www.cdc.gov/nhsn/cdaportal/importingdata.html#DIRECTProtocol)  [PDF – 300 KB]
  This is a quick reference guide for CDA vendors or facility’s IT technical staff.

- [Admin User Guide for DIRECT CDA Automation](https://www.cdc.gov/nhsn/cdaportal/importingdata.html#DIRECTProtocol)  [PDF – 150 KB]
  This is a quick reference guide for NHSN Admins who want to sign-up a facility to have the capability to send data to NHSN without logging into the NHSN application.

  This is a quick reference guide for LTC & Dialysis Facilities who want to submit their COVID-19 CSV File.
COVID-19 Module Dialysis

- Single data entry page with four sections:
  - Patient Impact
  - Staff and Personnel Impact
  - Supply and Personal Protective Equipment
  - Lab Testing

- COVID-19 Vaccination status for patients and staff
COVID-19 Module Training

- For both modules, training videos are available for each component.
- Please visit the NHSN website to find current CSV templates and other information for both LTCF and Dialysis components. 
  - [https://www.cdc.gov/nhsn/covid19/index.html](https://www.cdc.gov/nhsn/covid19/index.html)
- Questions can be sent to: [NHSN@CDC.GOV](mailto:NHSN@CDC.GOV)
Release 10.0

Lea Jordan
Patient Safety – Release 10.0 Updates

- Defect 9913 – Pathogens not following corresponding AntiB drug susceptibility requirements; manual CDA & Direct impact – resolved

- Vendor IDM for 10.0 is included in the Release 9.5 – 10.0 Toolkit
LOS/MEN – Release 10.0 Updates

- Deployed on September 18, 2021
- Neonatal Component is now live with two event types: Late-Onset Sepsis and Meningitis
- There is no manual data entry for this component; CDA only
- LOS and MEN Event and Summary is available
- Please review the R3-D4 IG
  - Note: the documents for LOS/MEN can be found in the 9.5/10.0 toolkits
  - A&R will be available in the late October 2021 release
Patient Safety Component
Release 10.1

Lea Jordan
Patient Safety – Release 10.1 Changes

- The following HAI Events will have the question added: COVID-19: Yes/No
  - Bloodstream Infection (BSI)
  - Surgical Site Infection (SSI)
  - Urinary Tract Infection (UTI)
  - Ventilator Associated Event (VAE)
    - Currently optional in the UI
    - It will be required starting January 1st, 2022
    - Please refer to the R4-D1 IG
- This question was updated, NHSN removed ‘confirmed or suspected’ if ‘Yes’ was selected
Vendor IDM

- The vendor IDM for Release 10.1 has been posted to the Toolkits Webpage as a *version 1*
- Few requirements are still being finalized – any tabs highlighted yellow may have a change in the finalized version
- We will notify vendors when the final version has been posted
CDA HAI Vocabulary

- No Pathogen Code updates for the January 2022 10.1 release

- Reminder: value sets specified in CDA Implementation Guides that have been distributed in the spreadsheet hai_voc.xlsx are now available in VSAC (Value Set Authority Center) [https://vsac.nlm.nih.gov/](https://vsac.nlm.nih.gov/)

- Value set inconsistencies between VSAC and content in the Vendor IDM - we are working on resolving discrepancies
AUR Change Requests for Release 10.0

- **Release 10.0 (September 2021)**
  - CR 2143 - Add ability to report no AR Option Events in CDA (R3-D4 required)
  - CR 2158 - Add ability to report AR Option summary data from outpatient locations (R3-D4 required)
AUR Change Requests for Release 10.1

- **Release 10.1 (December 2021)**
  - CR 3219 - Update AR Option Specimen Codes
  - CR 2422 - AR Event - Add field to assess patient admission status
  - CR 3174 - Update DIRECT to accept AR Events using R3
  - CR 2744 - Update AR Option Drug Panels
  - CR 2835 - Update AU Option drugs for 2022
AUR Module:
Defects for Releases 10.0.1 & 10.1

Malissa Mojica
AUR Defects for Release 10.1

- **Release 10.1 (December 2021)**
  - Defect 9922 – Add Alerts for AR Missing Event/Summary Alerts for outpatient locations
AUR Module: Protocol Updates

Laura Blum
AUR Protocol Updates

- **Clarification: procedural areas**
  - Previous version of AUR Protocol mentioned in Appendix H that only inpatient locations with an “overnight stay” should be included in facility-wide inpatient (FacWideIN) denominator data – this is incorrect
  - AUR Module supports data submission from all NHSN-defined inpatient acute care locations (including procedural areas like operating rooms), FacWideIN, and select outpatient acute care settings (specifically, outpatient emergency department, pediatric emergency department, and 24-hour observation area) from which numerator and denominator data can be accurately captured
  - AUR Module does not support data submission from non-acute locations

- **Updates to include information about outpatient encounters and reporting outpatient AR Option Summary data from emergency department (ED), pediatric ED, and 24-hour observation area**
AUR Module: Promoting Interoperability & Real World Testing

Wendy Wise
Defect 9855 - Promoting Interoperability (aka MU3) Report

- Monthly auto-generated report emailed twice with conflicting info
- Facility Administrators can access correct report at any time inside NHSN
CR 2804 – Track and record failed AU CDA submissions

- We already have info on successful AU submissions by vendor for 2021 due to requirement of SDS information.
- Create a new process to track and save the number of failed AU CDA submission by month & vendor.
- Vendors can use these AU metrics to support Real World Testing requirements within 21st Century Cures Act.
- Metrics will be available upon request to NHSNCDA@cdc.gov.
AUR Module:
AR Synthetic Data Set

Wendy Wise
AR Synthetic Data Set (SDS) Validation Timeline

- **2018**: Envisioned
- **2019 – 2021**: Development
- **2021**: Pilot
- **2022**: Validation Requirement Phase-in
- **2023**: Validation Requirement
Miscellaneous Updates

Lea Jordan
Future CDAs

- **Adverse Drug Events**
  - Module or component is TBD
  - All FHIR
  - Two Events: hypoglycemia & hyperglycemia

- **Long Term Care & Outpatient Procedure Components** – TBD
“Gender” Field Update

Henrietta Smith
Background: Gender

Several users (facilities and vendors) have inquired how to report gender when sex at birth and gender identity are not the same.

*Example of user inquiry:*

Hello—I’d like to confirm that when a patient was previously reported as one gender (for example female) and they undergo gender reassignment, the only option is for them to later be identified as Other?

There’s a case where we had a patient that was previously female that had data already in NHSN. The patient later underwent gender reassignment, and then subsequently had another event that needed to be reported. Since the patient’s gender is now male in the demographics, that’s how it was reported. But that caused an error because of the mismatch between the genders. I’m told the only way to resolve this is to report him as “other” which is not how he is identified in the medical record.
Background: Gender

The following guidance is currently provided:

For 'gender' field, the current options within the application are “Male”, “Female”, and “Other”. **The intent of the ‘gender’ field is to capture “sex at birth” for procedures and HAIs where gender (sex at birth) maybe a risk factor [risk adjustment].**

Our guidance is to report the patient’s current preferred/identified gender (the gender that is assigned in the current medical record). The following options are available:

- **If the gender has changed,** a new patient profile can be entered with a new Patient ID with the current gender, for internal tracking purposes it could be helpful to include the prior Patient ID as a Secondary ID.

- Another option is to **edit the patient’s profile** to reflect the current identified gender. However, editing the profile gender will retrospectively update the gender for all prior records.

- Reporting **“Other” as gender** is an option if the patient identifies as “Other”. If “Other” is selected for the patient’s sex the procedure will be excluded from the SIR calculation.
The resolution is to create two new variable fields:

- Sex at Birth
- Gender Identity

The new variable fields will be placed in a different location within the CDA implementation guide.

The new response selections are based on HL7 standard terminology.
Sex at Birth - to capture the individual’s birth sex

Must select from:
- Male
- Female
- Non-binary
- Other
- Unknown
Gender Identity – to capture the individual’s gender which most closely matches how the patient self-identifies

Must select from:
- Male
- Female
- Female-to-male transexual
- Male-to-female transexual
- Identifies as non-conforming
- Other
- Asked but unknown
Timeline for Implementation

**Optional reporting**
- Jan 1, 2023
- New variable fields will be available in the application for manual entry

**Required reporting**
- Jan 1, 2024
- New variable fields will be added for CDA upload
Send questions and feedback regarding this topic to nhsn@cdc.gov
CDA Import Data Comparison:

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DIRECT CDA Automation Updates

- 59 vendors and >8,000 facilities sending via DIRECT
- DIRECT
  - Batch submission process
  - No immediate reply (please allow 24 hours)
  - Turn around time based on volume of messages in the queue
  - Processing faster
- New to implement DIRECT?
  - DIRECT toolkit on the NHSN website
  - Contact NHSNCDA@cdc.gov for any questions or to set up an onboarding discussion
CDA Version Support

- **CDA support:**
  

- **Toolkits:**
  
  [https://www.cdc.gov/nhsn/cdaportal/toolkits.html](https://www.cdc.gov/nhsn/cdaportal/toolkits.html)

- **Guide to CDA versions:**
  
  [https://www.cdc.gov/nhsn/cdaportal/toolkits/guidetocdaversions.html](https://www.cdc.gov/nhsn/cdaportal/toolkits/guidetocdaversions.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.

<table>
<thead>
<tr>
<th>Events or Denominators</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
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<tr>
<td>CDA Toolkit Release</td>
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<td>9.5 &amp; 10.0</td>
<td>9.4</td>
<td>9.2 &amp; 9.3</td>
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<td>R3-D3</td>
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<td>R3-D3</td>
<td>R3-D3</td>
<td>R3-D3</td>
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CDA Version Support cont.

- 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

https://github.com/HL7/cda-hai
Helpful NHSN Resources

- NHSN Newsletter: [https://www.cdc.gov/nhsn/newsletters/index.html](https://www.cdc.gov/nhsn/newsletters/index.html)

- Release Notes and Communication Updates: [https://www.cdc.gov/nhsn/commup/index.html](https://www.cdc.gov/nhsn/commup/index.html)

NHSN Pre-Production Test Site (NPPT)

- 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 at https://www.cdc.gov/nhsn/cdaportal/datavalidation/toolsandtestsites.html
- Send completed form to the nhsncda@cdc.gov mailbox
NHSN Pre-Production Test Site (NPPT) cont.

- v10.0.0.5 is 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
NHSN Reminders

- Welcome feedback
- Make sure you are on the NHSN CDA email distribution list