# NHSN v9.5 (December 19, 2020) Release Notes

## Changes to All Components

<table>
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<tr>
<th>Component</th>
<th>Changes</th>
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| **Annual Survey** | **Patient Safety** - No new questions added for this release but there were some changes to upper limits for several fields. The field “Was this facility operational in the year prior to NHSN enrollment (i.e., last year)?” is now editable if the current year is equal to the enrollment year. Changes to the field affect the survey required for that year. If the field is changed from YES to NO, then the prior year’s survey will be replaced with the current year’s partial survey. If the field is changed from NO to YES, then the current year’s survey will be deleted and a full prior year survey (for example, in 2020, the 2019 annual survey) will be required. 
Facilities completing the 2020 Hospital Survey will now have the option to Save an Incomplete Survey. Users can return to the Incomplete Survey, complete the additional required fields, and Submit the survey. Incomplete Survey data will not be included in SIR calculations.
Total Inpatient Bed fields should only include the total number of hospital beds that are set up and staffed. Staffed beds are considered the ratio of staffed registered nurses to beds in each hospital unit. This total should also include all overflow and surge/expansion beds that are used for inpatients. These are not new definitions to the field.
**Dialysis** – There are changes to both the Outpatient Dialysis Annual Survey and for the Home Dialysis Annual Survey. |
| **Pathogen Codes updates** | Pathogen Codes and business rules have been updated for events with dates of 1/1/2021 or greater. For 2021, there are some additional business rules and additional new susceptibilities for drugs. The susceptibility antibiograms have changed for Dialysis, Long Term Care, and Patient Safety. In some cases, the antibiograms are unique between the different components. Other changes have been kept to a minimum this year. |

## Changes to Patient Safety Component

| Events | **MDRO/CDI** – There is a new warning when adding off-plan LabID events and summary data for MRSA and C. difficile. This warning message has been extended to off-plan events (for select units and organisms) and off-plan denominators (for select units and organisms). If new MRSA or C. difficile LabID events are entered for an Emergency Dept, 24 hour observation unit, or CMS-certified Inpatient Rehab (IRF) unit, and that location is not listed on the monthly reporting plan for that month and organism (based on the month/year of the specimen collection date), a new warning message will be triggered. This alert only applies to these select locations. |
| **Ped VAE** - There are updates to the antimicrobial list for PedVAE (new FDA approved drugs in 2019/2020 and drugs removed from the market).  
  - **Added**: Imipenem/Cilastatin/Relebactam, Lefamulin, Cefiderocol, Remdesivir  
  - **Removed**: Piperacillin, Doripenem |
| **CLIP** - The rules were tightened for a patient < 4months of age. There are some changes to the business rule so that the check box is disabled (not selectable) prior to both Date of Birth and Date of Insertion being entered. Once both dates are entered, if the patient age is calculated as
### Changes to Patient Safety Component

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<th>&gt;= 4 months, the check box will remain disabled (not selectable). If the patient age is calculated as &lt; 4 months, the check box will be enabled (selectable).</th>
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**UTI** – There were changes to the UTI event criteria
- Allow FEVER to be selected for SUTI when the patient is > 65
- Do not allow FEVER to be selected for ABUTI when the patient is > 65

**USI** – this event has been separated from the UTI event and is now its own event. USI can be selected separately as a HAI event.

**SSI** – There are some rule modifications for lab_posBld variable. When entering an SSI event, if ‘Laboratory’ field ‘Organism(s) identified from blood specimen’ (lab_posBld) is selected, the field ‘Secondary Bloodstream Infection’ will now default to ‘Yes’ and allow Edit [previously defaulted to ‘No’ allowing Edit].
- If Event type = SSI and spcEvent not = (SIP, DIP, SIS, DIS) where the lab_posBld = Y, default to Y for Secondary BSI and allow Edit.
- If Event type = SSI and spcEvent = (SIP, DIP, SIS, DIS, or O/S) where the lab_posBld = N, and (lab_positive or Lab_2 posCult or lab_othPos) is checked, then default to N for Secondary BSI and allow edit.
  - Note: there should be no scenario where Event type = SSI and spcEvent = (SIP, DIP, SIS, DIS) and lab_posBld = Y, because that data field is not an element of any of those criteria.

**HAI Pathogen Susceptibility Data Collection Forms** – The susceptibility antibiograms have been revised. Some antimicrobials were removed from the susceptibility collection, and some antimicrobials were added to the susceptibility data collection. Some result values were changed for some of the existing antimicrobials. These updates were made to the following PS HAI Pathogen Susceptibility data collection forms. Changes are effective for events dated 1/1/2021 and later
- 57.108 BSI
- 57.111 Pneumonia (PNEU)
- 57.112 VAE
- 57.113 Pediatric VAE
- 57.114 UTI
- 57.115 Custom Event
- 57.120 SSI

**Unusual Susceptibility Profiles Alerts** - Due to the changes made to the HAI Pathogen Susceptibility tables, the profiles in the Unusual Susceptibility Profiles tables and alerts have been updated to include the revised antimicrobials.

### SSI Procedures and Events
There are some annual updates for ICD-10 PCS codes, not many codes were added but some codes moved to a different procedure. The codes are effective for procedure denominators and associated SSI events dated 1/1/2021 or greater. **Note:** There are no CPT procedure code changes.

### Monthly Reporting Plans

**Inactive Locations** – monthly reporting plans can now be saved with an inactive location(s).

**IRF and IPF Locations** – IRF and IPF locations are now allowed for REHAB/LTAC Hospitals
Changes to Patient Safety Component

**Antimicrobial Use and Resistance**

AU – Drugs – Beginning with January 2021 AU Option data, please make the following updates to your AU reporting:

- **Added:** Amphotericin B lipid complex, Cefiderocol, Lefamulin, and Imipenem/cilastatin/relebactam
- **Removed:** Doripenem, Erythromycin/sulfisoxazole, and Piperacillin

2021 AU files should include between 89 - 92 drugs.

AU – Synthetic Data Set (SDS) Validation – There is a validation process to verify if the vendor producing the AU CDA file has passed AU SDS validation. Beginning with files for January 2021 forward, AU Summary CDAs must now include the author section. All vendors should be registered and include their vendor OID and SDS validation ID in the AU CDA, otherwise the AU file will not pass. This information is optional for dates 2020 and prior.

AR – Test Results – The max values were increased for the MIC, E-test and KB test results from 999.99 to 9999.99.

AR – Pathogens – The AR Option Pathogen Roll-up Workbook must be used by all submitters to determine if a pathogen is eligible for submission into the AR Option and whether that pathogen needs to be rolled up to (or mapped-to) a higher-level concept to be accepted into NHSN. The AR Option Pathogen Roll-up Workbook lists all pathogens that are eligible for AR Option reporting as of January 1, 2021. The AR Option Pathogen Roll-up Workbook and associated reference guide are posted within the Antimicrobial Resistance Option CDA Toolkit on this webpage: https://www.cdc.gov/nhsn/cdaportal/toolkits.html.

**Monthly Summary**

MDRO/CDI – There is a new warning message when adding off-plan LabID events and summary data for MRSA and C. difficile. The warning message has been extended to off-plan events (for select units and organisms) and off-plan denominators (for select units and organisms). If a new MDRO/CDI denominator record is entered into NHSN in which MRSA or C. difficile is selected for LabID event surveillance, and in which this location and organism are not listed on the monthly reporting plan for that month, the warning message will be triggered. The alert applies only to Emergency Dept, 24 Hour Observation Unit, or CMS-certified Inpatient Rehab (IRF) units.

MDRO/CDI FACWIDEIN – There is a new warning message to MDRO/CDI FACWIDEIN denominator to improve data quality for lines 2 and 3 (patient days and admissions variables) of the General Section. This applies to Facility-Wide Inpatient (FacWideIN), in-plan records only, beginning with the January 2021 MDRO/CDI denominator form. The warning message will be triggered when a value is entered on line 2 and/or line 3 that is less than 25% of the values entered on line 1.

**Analysis & Reporting Changes to Patient Safety Component**

<table>
<thead>
<tr>
<th>SIR/SUR Reports</th>
<th>This change adds the patient day variable, &quot;numpatdays&quot; to SUR reports</th>
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<tbody>
<tr>
<td>TAP Reports</td>
<td>A new CDI TAP Report is introduced for Acute Care Hospitals (ACH) and Critical Access Hospitals (CAH). The CDI TAP report is formatted like the LabID TAP reports; both are displayed in a common format.</td>
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<tr>
<td>HAI Antimicrobial Resistance</td>
<td>As a result of updates to the antimicrobial susceptibility data collection on the HAI forms, the definitions of certain AR phenotypes (CRE, MDR Acinetobacter, MDR Pseudomonas, and ESC resistance) have been adjusted for events in 2021 and later. This impacts the HAI AR Line List, Frequency Table, and Rate Table. Updated definitions can be found in the footnote of these reports.</td>
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</table>
### Analysis & Reporting Changes to Patient Safety Component

| Other | 1. Changes to the display, text, and layout of the NHSN Statistics Calculator have been implemented. (Analysis → Statistics Calculator). The standardized ratio comparison is now applicable to SURs and SAARs. The ‘Compare 2 Proportions’ calculation was updated to include the new field, “Number of Non-Events”. |
|       | 2. This change adds PedVae EventType Variable to HAI event filters for "Line Listing - All Summary Data” Report. |

### Changes to Biovigilance Component

| Adverse Reaction Event | There are modifications to the TACO case definition and imputability criteria on the adverse reaction form. There is a change to the number of hours within the instructions from 6 to 12. And, at least 3 of the 6 criteria must be checked to meet the case definition for TACO. One of the three criteria must be either:  
- Acute respiratory distress (dyspnea, orthopnea, cough)  
- Radiographic evidence of pulmonary edema |

### Changes to Dialysis Component

| Event | **Event Date - 21 Day Rule** - The specific event dates (that were added in 9.4) will now be required and the 21 Day business rule has been updated. The rule now compares each event’s specific events dates with the other event’s specific events dates. In scenarios where the specific event is null for any of the events in comparison, the overall specific event date as that event’s date will be used. For comparisons involving 2020 events, the rule might compare specific date with specific date or specific date with overall date or overall date with overall date. |
|       | **AKI Clinic (location)** – The AKI error message has been changed to a warning. The error message, now a warning, “An in-plan event with an ‘Outpatient Hemodialysis Clinic – Acute Kidney Injury (AKI) location cannot be created for this patient because an in-plan event with the same location type has been created six months or more...” displays when a user is attempting to create a new Dialysis Event for a patient when another Dialysis Event exists for same patient, and same AKI location, that has been created six months or more months prior to or after the date of the event that the user is creating. |
|       | **HAI Pathogen Susceptibility Data Collection Forms** - The susceptibility antibiograms have been revised. Some antimicrobials were Removed from the susceptibility collection, and some antimicrobials were to the susceptibility data collection, and some result values were changed for some of the existing antimicrobials. These updates were made to the following DIAL HAI Pathogen Susceptibility data collection form. Changes are effective for events dated 1/1/2021 and greater |
| Monthly Reporting Plan | There is a new alert “Missing Reporting Plan Data” that will let users know when they have created a Monthly Reporting plan with ERSD or AKI locations that do not have the DE Events box checked. |
| Annual Survey | Updates were made to the Annual home Dialysis Survey and Outpatient Dialysis surveys. There are some new questions, some existing questions were updated, and some questions were deleted. |
### Changes to Dialysis Component

**Analysis and Reporting**

1. There has been an update for dialysis aggregate data from 2017 data to 2018 data for all dialysis rate tables and run charts
2. There has been an update footnote for Line Listing - CMS ESRDQIP report to let users know that AKI reporting is not part of QIP

### Changes to Healthcare Personnel Safety Component

**Analysis and Reporting**

Earlier in the year we added Flu Vaccination Summary for weekly reporting. A new line list is available.

**Vaccination Summary**

The COVID-19 Vaccination Summary for weekly reporting has been added for non-LTC staff.

### Changes to LTCF Component

**All Event Forms**: The social security number (SSN) field has been removed from Resident Information screen and event forms (UTI and LabID event).

**UTI**: There was a change to the definition of “leukocytosis from (> 14,000 cells/mm³), or Left shift (> 6% or 1,500 bands/mm³)” to “(> 10,000 cells/mm³), or Left shift (> 6% or 1,500 bands/mm³)”.

**UTI Pathogen Susceptibility Data Collection Forms** - The susceptibility antibiograms have been revised for UTI event reporting, including: 1) some antimicrobials were removed from susceptibility data collection; 2) some antimicrobials were added to susceptibility data collection; and 3) result values were changed for some of the existing antimicrobials. Additionally, antimicrobials were added when *Proteus mirabilis* is selected and nitrofurantoin added as drug option for *E. coli*, *Citrobacter spp.*, *E. faecalis*, *Enterobacter spp.*, *Klebsiella spp.*, and *E. faecium*. Changes are effective for events dated 1/1/2021 and greater.

**Vaccination Summary**

The COVID-19 Vaccination Summary for weekly reporting has been added for LTC staff

**Analysis and Reporting**

1. **Dashboard**: There was a change to the multiplier for *Total CDI Rate* and *CDI LTCF-onset incidence rate*. This change affects the A&R LabID Rates ADSs, the SAS program that populates the LTCF Dashboard table, and the LTCF Dashboard.
   a. Total CDI Rate/1,000 resident-days = Number of CDI LabID Events per month regardless of time spent in the facility (specifically, CO + LO) / Number of resident-days per month x 1,000.
   b. CDI Long-term Care Facility-onset Incidence Rate/1,000 resident-days* = Number of all incident LO CDI LabID Events per month / Number of resident-days x 1,000
2. **Variable**: utiPlan (UTI Plan) variable replaced CAU Plan variable to align with UTI reporting requirements specific to the LTCF Component. This change is specific to the LTCF Component.
3. **Variable**: Descriptive variable names added to footnotes to match the LTCF Line Listings and Rate Tables, which also default to descriptive variable names. This change will improve consistency.
## Changes to Clinical Document Architecture (CDA)

| Antimicrobial Use and Resistance | AU – Drugs – Beginning with January 2021 AU Option data, please make the following updates to your AU reporting:  
- Add: Amphotericin B lipid complex, Cefiderocol, Lefamulin, and Imipenem/cilastatin/relebactam  
- Remove: Doripenem, Erythromycin/sulfisoxazole, and Piperacillin  
2021 AU files should include between 89 - 92 drugs. |
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| Events | Dialysis: CDA_Catchup Import for Dialysis Events. There will now be individual date for the three event types, the overall event date will not be used. The 21 Day rule will be updated to use the individual date for each event, instead of using the overall event date. Dialysis Event will also be updated to R3-D4 IG. These rules apply to all events dated 1/1/2021. |
| Other CDA related | Update pathogen Codes and business rules for 2021 - Pathogen Codes and business rules have been updated for events with dates of 1/1/2021 or greater. For 2021 there are some additional business rules and additions of new susceptibility for drugs. Other changes have been kept to a minimal this year. The new rules apply for events with dates of 1/1/2021 or greater. |