Intro to NHSN Analysis

Scott Decker, MPH CHES

2019 NHSN Annual Training

Monday March 25, 2019
Learning Objectives

- Understand the scope and structure of NHSN data entry and analysis functions
- Understand how to modify NHSN reports in the application
- Gain exposure to more customized analyses available in NHSN
- Describe and show how to use NHSN analysis to conduct data quality checks
- Identify specific analysis reports found in the NHSN Reports Advanced Folder
A Message About the Data

- All data in this presentation has been created in a testing environment and is for training purposes only. Information seen on images during this presentation do not represent any actual data submitted to NHSN by participating facilities.
Data Analysis Preparation
Data Entry Sources

- **Event**
  - All infection events: CLABSI, CAUTI, SSI, LABID, etc.

- **Procedure**
  - Place to add all procedures, with covariates. Used for SSI

- **Summary Data**
  - Summary data forms for Device-Associated and MDRO/CDI surveillance

- **Surveys**
  - Facility level data collected once a year for previous calendar year
Accessing Data Entry Screens

3 Options: Add, Find, Incomplete

- Click ‘Add’ to enter data
- ‘Find’ is used to look for previously entered data forms.
- ‘Incomplete’ lists the forms that have been started, but all the required fields have not been completed.

The ‘Find’ and ‘Incomplete’ options are very useful for investigating data quality issues.
Annual Surveys and Data Analysis

- Every year a new survey is entered into NHSN to reflect data from the prior calendar year
- SIRS will use the most recent annual survey on file for the current SIRs
  - Right now, majority should have completed a 2018 annual survey
  - Those values will be used to calculate 2018 and 2019 SIRs
- Under the new baseline, SIRS will be risk adjusted using the corresponding annual survey from that year
- If the annual survey from that year hasn’t been completed, SIRs will be risk adjusted using the most recent available survey
NHSN User Data Entry

NHSN Analysis Functionality

Desired Reports – Rate, SIR, CMS, Custom, etc.
Monthly Reporting Plans (MRPs)

- Used by all NHSN facilities to inform CDC which patient safety modules will be used in a given month
- Participating facilities must select the modules used, if any, the events, procedures, and/or locations that will be monitored in-plan
- MRP is the first in indicating what data will be submitted from NHSN to CMS as part of the Quality Reporting Program
- Only in-plan data are submitted to CMS in accordance with CMS’s Quality Reporting Program
Adding Monthly Reporting Plan

Add a monthly reporting plan selecting “Add” from the left hand navigation bar.
# Adding Monthly Reporting Plan

<table>
<thead>
<tr>
<th>Add Monthly Reporting Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mandatory fields marked with</strong>: ✴</td>
</tr>
<tr>
<td><strong>Facility ID</strong>: DHQP MEMORIAL HOSPITAL (ID 10016)</td>
</tr>
<tr>
<td><strong>Month</strong>: February</td>
</tr>
<tr>
<td><strong>Year</strong>: 2019</td>
</tr>
<tr>
<td><strong>No NHSN Patient Safety Modules Followed this Month</strong></td>
</tr>
</tbody>
</table>

Select **only** if you have no data to report for that month. New facility, or facilities under construction are most likely to select this option.
Adding Monthly Reporting Plan

### Device-Associated Module

<table>
<thead>
<tr>
<th>Locations</th>
<th>CLASI</th>
<th>VAL</th>
<th>CAUTI</th>
<th>CLIP</th>
<th>PedVAP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Add Row  Clear All Rows  Copy from Previous Month

### Procedure-Associated Module

<table>
<thead>
<tr>
<th>Procedures</th>
<th>SSI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IN:</td>
</tr>
</tbody>
</table>

Add Row  Clear All Rows  Copy from Previous Month

### Antimicrobial Use and Resistance Module

<table>
<thead>
<tr>
<th>Locations</th>
<th>Antimicrobial Use</th>
<th>Antimicrobial Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Add Row  Clear All Rows  Copy from Previous Month

### Multi-Drug Resistant Organism Module

<table>
<thead>
<tr>
<th>Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

Add Row  Clear All Rows  Copy from Previous Month

MRPs organized by module. Select appropriate locations or procedures to follow for the month of reporting.
Adding Monthly Reporting Plan: Example

<table>
<thead>
<tr>
<th>Procedure-AssOCIATED Module</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Procedures</strong></td>
</tr>
<tr>
<td>KPRO - Knee prosthesis</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Add Row</td>
</tr>
</tbody>
</table>

KPRO procedure selected for this facility to report all inpatient and outpatient procedures.
Adding Monthly Reporting Plan: Example

<table>
<thead>
<tr>
<th>Locations</th>
<th>CLABSI</th>
<th>VAE</th>
<th>CAUTI</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICU - ICU</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td></td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Adding Monthly Reporting Plan: Example

<table>
<thead>
<tr>
<th>Locations</th>
<th>CLASSI</th>
<th>VAE</th>
<th>CAUTI</th>
<th>CLIP</th>
<th>PedVAP</th>
<th>PedVAE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NICU - LEVEL 3 NICU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICU - ICU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-West - Pediatric Card</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Copy from Previous Month populates selections made on your previous month’s reporting plan.
True or False: You can add Inactive Locations to monthly reporting plans.
Inactive locations can remain on existing reporting plans before they were inactivated, but they cannot be added once set to inactive. You will need to re-activate the location if you wish to add it to a new reporting plan.
Alerts

- Alerts are automatic checks in NHSN that remind you of incomplete or missing in-plan data

- Before using the analysis function, make sure to clear all (relevant) alerts
- Found on the Home Page, or by clicking on the ‘Alerts’ tab on the sidebar
Alerts

- When an alert category is selected, all incidents will be listed on a separate page for selection.
- Each incident will need to be resolved in order for alert category to clear.
Resolving Alerts

- Incomplete Summary Data Form
  - For DA and MDRO/CDI Events
- If there are no events for a given month, check the Report No Events box
- If not, alerts will appear if you have completed a summary form for a unit listed in your reporting plan but have not entered events.
Final step: Generating Datasets

- After data entry is complete, the data must be first compiled into your user specific NHSN dataset.
- After anything is changed in NHSN, generate datasets so that the change will be reflected in Analysis reports.
- This is often the first thing we recommend when troubleshooting Analysis problems.
  - NOTE: Unresolved alerts will prevent data from showing up in Rate and SIR reports, even if new datasets are generated.
Navigating Data Analysis Reports
NHSN Analysis Reports

- Click on ‘Reports’ under the Analysis tab to see all available reports in NHSN
- The highlighted reports on the right are the most commonly used and basic report types
NHSN Analysis Reports: Collapsed Folder

- Standard list of all report types.
  - Line List
  - Frequency Table
  - Bar/Pie Chart
  - Rate Table/Run Chart
  - SIR Report
- Clicking ‘Run’ will run a stock report using all CLABSI data for 2015 and forward
- Click Modify to create more specific reports
NHSN Analysis Reports: HAI Module Reports

Folders to provide specific analysis options for reportable HAIs
NHSN Analysis Reports: Collapsed LabID Folder

- MDRO/CDI Module - LABID Event Reporting
  - All LabID Events
  - All MRSA LabID Events
  - All MSSA LabID Events
  - All C. difficile LabID Events
  - All VRE LabID Events
  - All CephR-Klebsiella LabID Events
  - All CRE LabID Events
  - All CRE-Klebsiella LabID Events
  - All CRE-Ecoli LabID Events
  - All CRE-Enterobacter LabID Events
  - All Acinetobacter LabID Events
CMS Reports folder provide default reports that mirror CMS reporting requirements
Baseline Set 1 Reports

- Contains archived reports with the Baseline Set 1 data
- Can only be run for 2016 data and before
- Data after 2016 must be run using 2015 Rebaseline Analysis Reports
NHSN Analysis Reports: Advanced Folder

Advanced Folder includes several reports that can be modified more to analyze specific data for your facility.
NHSN Analysis Reports: Run a Report

“Run Report” will provide output for all available data for this HAI with default variables displayed.
NHSN Analysis Reports: Modify Report

“Modify Report” will allow you to set specific time frame, select variables, and sort data you’re interested in looking at.
NHSN Analysis Reports: Export Data

“Export Data Set” allows you to transfer your data to several different file types (.xls, .txt, .sas7bdat, etc.)
Modifying Analysis Reports: CLABSI SIR Report

- Show Descriptive Variable Names
- Analysis Data Set Source
- Type of Report
- When Data Set was Generated

Modify "SIR - Acute Care Hospital CLAB Data"

- Show descriptive variable names (Print List)
- Analysis Data Set: bs2_CLAB_RatesICU
- Type: SIR
- Data Set Generated On: 02/23/2017 12:20:00

Title/Format | Time Period | Filters | Display Options
---|---|---|---

Title:
SIR for Central Line-Associated BSI Data for Acute Care Hospitals (2015 baseline)
Modifying Analysis Reports: Change Title

<table>
<thead>
<tr>
<th>Title/Format</th>
<th>Time Period</th>
<th>Filters</th>
<th>Display Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIR for DHQP Memorial Hospital for 2018</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you want to save a customized report, consider renaming the title.
Modifying Analysis Reports: Select Format

- **Title/Format**
  - You may choose the format in which the report is displayed, such as HTML, Excel, or PDF.
  - Default is HTML
Modifying Analysis Reports: Time Period

- Allows for selection of a specific time period for your report
- Select a date variable from the “Date Variable” drop down menu and specify the beginning and ending date for the desired time period
- If the “Ending” date is left blank, the results will include all data from the beginning time period and forward
Modifying Analysis Reports: Time Period

For this example, we are looking only at 2018 data at the annual level.
Modifying Analysis Reports : Filters

- Each addition of “group” and “rule” will allow you to specify values. After selecting a variable to filter, click in the empty box with the drop down arrow to select the operator (e.g., “equal”) then specify desired values of that variable that should be included in the report.
Modifying Analysis Reports: Filters

- Add Group vs. Add Rule
  - Group = Will generate a table with a select number of rules (conditions) set.
  - Rules = Conditions that will restrict what type of data is populated within a group (table)

- Our SIR table will be populated with data only from locations that have the variable `locationType` equal to “CC”.
  - `locationType` equal to “CC” includes only all active critical care locations mapped to your facility during 2018 (1 Group, 1 Rule).
Modifying Analysis Reports: Display Options

- “Display Options” tab allows you to view your report organized by a specific criteria
- Allows for the option to calculate and display results by time period – e.g., by month, year, quarter, or half year
  - Group By applicable to rates, SIRs, and SAARs
Modifying Analysis Reports: Run Report

To generate the report you modified, select “Run”
Modifying Analysis Report: Interpreting Output

- Modified report by our set conditions:
  - Time Period = summaryYR 2018
  - Display Options = locationType="CC"

The fields highlighted in the table indicate that NHSN completed the calculation.
Modifying Analysis Report: Interpreting Output

This is what your report looks like when you show descriptive variable names.
Modifying Analysis Report: Interpreting Output

- There were 1 events identified for 2018 from these locations
- SIR is the number of observed CLABSIs(Events) divided by the number of predicted CLABSIs
  - (1 event/2.671 Number predicted = SIR of 0.374)
- This signifies that during this time period, our facility identified less CLABSI events than predicted
- SIR will only be calculated if the number of predicted infections is ≥ 1
Interpreting your SIR Report: SIR p-value

- SIR p-value is a statistical measure that tells you if the observed number of infections is significantly different from what was predicted.
- P-value less than 0.05 indicates that the number of observed CLABSIs is [statistically] significantly different (higher or lower) from the number predicted.
- In this example, the p-value for the 2018 SIR is greater than 0.05 and thus there is no significant difference between the number of infections observed and the number of infections predicted.
Interpreting your SIR Report: SIR Confidence Interval

- The 95% Confidence interval is a range of values in which the true SIR is thought to lie.
- If the confidence interval includes the value of 1 (as in this example), then the SIR is not significant (the number of observed infections is not significantly different from the number predicted, using the same convenient cut point).
- If the confidence interval includes the value of 1, then the SIR is not significant—i.e., if the lower bound is ≤ 1 and the upper bound is ≥ 1, then the SIR is not significant.

### National Healthcare Safety Network
**SIR for DHQP Memorial Hospital For 2018 - By OrgID**
As of: March 6, 2019 at 12:18 PM
Date Range: B52_CLAB_RATE(SALL summaryYr: 2018 to 2018
IF ([@location] TYPE = "CC") AND ([CCN = "12345"])

<table>
<thead>
<tr>
<th>Facility Org ID</th>
<th>CMS Certification Number</th>
<th>Summary Yr</th>
<th>Events</th>
<th>Number Predicted</th>
<th>Central Line Days</th>
<th>SIR</th>
<th>p-value</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>10018</td>
<td>12345</td>
<td>2018</td>
<td>1</td>
<td>2.671</td>
<td>3025</td>
<td>0.374</td>
<td>0.3232</td>
<td>0.019, 1.847</td>
</tr>
</tbody>
</table>
What interval of time is NOT available for the Date Variable selection when you modify a CMS report?

<table>
<thead>
<tr>
<th>Summary Year</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary Week</td>
<td>B</td>
</tr>
<tr>
<td>Summary Month</td>
<td>C</td>
</tr>
<tr>
<td>Summary Half Year</td>
<td>D</td>
</tr>
</tbody>
</table>
Answer

B.

You can modify data by time periods of Year, Half, Quarter, or Month.
Modifying Analysis Report: Saving Your Report

To save a modified report, select “Save”
Modifying Analysis Report: Saving Your Report

Specify a name for your Analysis Report:

Analysis Report Name: [SCOTT - SIR - ICU 2018 DHQP Memorial Hospital]

- Overwrite existing Custom Analysis Report (Save)
- Create a new Custom Analysis Report based on this one (Save as)

Enter a name that best describes the report for you and/or staff
Custom report will be saved at the bottom of the folder in which you found the initial report.
Modifying Analysis Report: Exporting Your Report

To export a modified report to a .Xls, .sas, .CSV and many more file types, select “Export”
Modifying Analysis Report: Exporting Datasets

- Export Analysis Data Set
  - Appears when you select your report type
  - Exports the entire dataset from which the resulting report is generated

- Export Output Data Set
  - Appears at the bottom of the Modify Screen
  - Two options:
    • Exports only data used in generating the report, for the specified time period and including selection criteria
    • Exports Analysis Data Set
### Modifying Analysis Report: Exporting Datasets

**Example of exporting to an Excel .Xls file**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>orgID</td>
<td>facType</td>
<td>state</td>
<td>summaryIcon</td>
<td>infCount</td>
<td>numPred</td>
<td>numIdays</td>
<td>SIR_prel</td>
<td>SIR</td>
<td>sir25</td>
<td>sir50</td>
<td>sir75</td>
</tr>
<tr>
<td>---</td>
<td>-----------</td>
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<td>-----------</td>
<td>----------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td></td>
<td>10318</td>
<td>HOSP-GEN</td>
<td>G</td>
<td></td>
<td>1/1/2019</td>
<td>12345</td>
<td>2.6703</td>
<td>3025</td>
<td>0.232</td>
<td>0.374</td>
<td>0.019</td>
<td>1.847</td>
</tr>
</tbody>
</table>
NHSN Analysis for Data Quality
Data Quality – What can impact my SIRs and Rates?

- Entry, edit, or deletion of events
- Changes to numbers of patient days, device days, admissions
- Removal or addition to monthly reporting plans
- Change in admission date, previous discharge date on LABID events
- Changes to relevant factors in the annual survey (e.g., medical school affiliation, facility bedsize)
- Resolution of “Report No Events” alerts
Data Quality – Places to look

- Monthly reporting plans
  - Are the monthly reporting plans complete?
  - Are “Active” locations applicable to NHSN surveillance listed?
  - Are all appropriate procedures selected?
  - Are the appropriate lab specimens selected to collect for LABID data?

- Annual Survey
  - Are the number of beds updated from the previous survey year?
  - Has the hospitals medical school affiliation changed?

- Alerts
  - Have the alerts been resolved for the required analysis months?

- Using NHSN Analysis
  - Are new datasets generated?
  - Were new events entered after I ran my analysis?
Advanced Folder

- Many customizable options to create and save reports
- The “How to View, Create, and Modify Dates in NHSN” document provides suggested variables to use
- Can help inform if some data is a data quality issue or accurate
NHSN Advanced Folder

- A tool to assist users with data quality efforts
- Allows users to create custom reports at various levels to check their data
  - Event Data
  - Procedure Data
  - Summary Data
  - Monthly Plan Data
  - Facility Data
  - Data Quality
Analyzing the Annual Survey

- Analysis of the annual survey in NHSN datasets are a good tool for routine data quality checks
- Survey responses found on these reports can be easily compared to across multiple survey years
- The report can accessed within NHSN Reports > Advanced Folder > Facility Level Data
Analyzing the Annual Survey (cont.)

- Select “Modify” if you’d like to edit the survey line list
- Select “Modify” to select specific survey questions/variables to be displayed
- Please view the resource guide “How to Modify a Line List” for more instruction on how to save and export your reports
Analyzing the Annual Survey (cont.)

- Output will be ordered by survey year and will include all completed surveys.
- Information found on the report can help explain potential data quality issues found in other analysis (e.g. Medical School Affiliation Change).

<table>
<thead>
<tr>
<th>orgID</th>
<th>surveyYear</th>
<th>name</th>
<th>facOwnerDesc</th>
<th>medAff</th>
<th>medTypeDesc</th>
<th>numBeds</th>
<th>numICUBeds</th>
<th>numAdmits</th>
<th>numPatDays</th>
<th>numICP</th>
<th>totHR Surg</th>
<th>totHR Oth</th>
</tr>
</thead>
<tbody>
<tr>
<td>10376</td>
<td>2015</td>
<td>Inter-Community Mem Hospital</td>
<td>GOV - Government</td>
<td>Y</td>
<td>M - Major</td>
<td>120</td>
<td>20</td>
<td>2000</td>
<td>30000</td>
<td>1.00</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>10376</td>
<td>2016</td>
<td>Inter-Community Mem Hospital</td>
<td>NP - Not for profit, including church</td>
<td>Y</td>
<td>U - Undergraduate</td>
<td>25</td>
<td>5</td>
<td>700</td>
<td>2700</td>
<td>1.00</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>10376</td>
<td>2017</td>
<td>Inter-Community Mem Hospital</td>
<td>NP - Not for profit, including church</td>
<td>N</td>
<td></td>
<td>25</td>
<td>20</td>
<td>700</td>
<td>2700</td>
<td>1.00</td>
<td>10</td>
<td>40</td>
</tr>
</tbody>
</table>

- Surveys can always be edited and saved in NHSN if a correction needs to be made.
Advanced Folder – Data Quality Folder

- Line lists:
  - CDI Test Method History
  - Duplicate Procedures
  - Procedures on Patient DOB
  - Procedures with 0 Duration
  - Duplicate BSI/PNEU/UTI Events
  - Duplicate SSI Events
  - SSIs on Procedure Date
  - Extremely High Incidence of SSI
  - Events Reports with 0 Device Days
Using Advanced Folder: Scenario

- Scenario: You want to confirm that COLO and HYST Inpatient and Outpatient Procedures were selected for 2018 Q1 data on your monthly reporting plans.
There are two ways you can check this.
Using Advanced Folder: Scenario

1. Review each monthly reporting plan.
Using Advanced Folder: Scenario

2. Use the Advanced Folder to run a Patient Safety Plan line list
Using Advanced Folder: Scenario

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Using Advanced Folder: Scenario

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Using Advanced Folder: Scenario

2. Use the Advanced Folder to run a Patient Safety Plan line list
### Using Advanced Folder: Scenario

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5212</td>
<td>10016</td>
<td>2018M01</td>
<td>COLO</td>
<td>COLO - Colon surgery</td>
<td>IN</td>
<td>Y</td>
<td>25JUN17 14:04</td>
<td>1797</td>
<td>11MAR19 14:28</td>
<td>8240</td>
</tr>
<tr>
<td>5212</td>
<td>10018</td>
<td>2018M01</td>
<td>HYST</td>
<td>HYST - Abdominal hysterectomy</td>
<td>IN</td>
<td>Y</td>
<td>25JUN17 14:04</td>
<td>1797</td>
<td>11MAR19 14:28</td>
<td>8240</td>
</tr>
<tr>
<td>5212</td>
<td>10018</td>
<td>2018M01</td>
<td>HYST</td>
<td>HYST - Abdominal hysterectomy</td>
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<td>Y</td>
<td>25JUN17 14:04</td>
<td>1797</td>
<td>11MAR19 14:28</td>
<td>8240</td>
</tr>
<tr>
<td>5448</td>
<td>10018</td>
<td>2018M02</td>
<td>COLO</td>
<td>COLO - Colon surgery</td>
<td>IN</td>
<td>Y</td>
<td>01MAR18 11:31</td>
<td>2534</td>
<td>05MAR19 09:36</td>
<td>8240</td>
</tr>
<tr>
<td>5448</td>
<td>10018</td>
<td>2018M02</td>
<td>COLO</td>
<td>COLO - Colon surgery</td>
<td>OUT</td>
<td>Y</td>
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<tr>
<td>5448</td>
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<td>2018M02</td>
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<td>OUT</td>
<td>Y</td>
<td>01MAR18 11:31</td>
<td>2534</td>
<td>05MAR19 09:36</td>
<td>8240</td>
</tr>
</tbody>
</table>

**Note:** The table shows that there is a missing COLO procedure for OUT in January.
Using Advanced Folder: Scenario

<table>
<thead>
<tr>
<th>Report Plan ID</th>
<th>Facility Org ID</th>
<th>Plan YM</th>
<th>Procedure Code</th>
<th>Procedure Code Description</th>
<th>Setting</th>
<th>SSI Plan?</th>
<th>Create Date</th>
<th>User ID for Data Entry</th>
<th>Last Modified</th>
<th>Modify User ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>5212</td>
<td>10018</td>
<td>2018M01</td>
<td>COLO</td>
<td>COLO - Colon surgery</td>
<td>IN</td>
<td>Y</td>
<td>26JUN17:14:04</td>
<td>1797</td>
<td>11MAR19:14:28</td>
<td>8240</td>
</tr>
<tr>
<td>5212</td>
<td>10018</td>
<td>2018M01</td>
<td>HYST</td>
<td>HYST - Abdominal hysterectomy</td>
<td>IN</td>
<td>Y</td>
<td>26JUN17:14:04</td>
<td>1797</td>
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<td>HYST</td>
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<td>OUT</td>
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<td>8240</td>
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<tr>
<td>5448</td>
<td>10018</td>
<td>2018M02</td>
<td>COLO</td>
<td>COLO - Colon surgery</td>
<td>IN</td>
<td>Y</td>
<td>01MAR18:11:31</td>
<td>2534</td>
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</tr>
</tbody>
</table>

Only two months worth of data in this table.
Using Advanced Folder: Scenario

Comparing the Create Date and Last Modified variable can help identify if the plan was changed.
Data Quality with NHSN

- Use the NHSN guide to the SIR to identify important factors in your facility’s data that can impact SIRs
- Work with staff to develop a list of routine checks that you can perform on a monthly, quarterly, and/or annual basis
- Modify and save NHSN reports to help expedite and organize your processes
Additional Resources

- Data Entry and Analysis Training
  [http://www.cdc.gov/nhsn/training/analysis/index.html](http://www.cdc.gov/nhsn/training/analysis/index.html)

- NHSN SIR Guide

- 2015 Rebaseline Page

- How to View Create & Modify Dates within NHSN

- How to Modify a Report
  [https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/howtomodifyreport.pdf](https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/howtomodifyreport.pdf)

- How to Run Analysis on Custom Fields
  [https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/customfields.pdf](https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/customfields.pdf)