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 how to use NHSN analysis to conduct data quality checks
- Identify specific analysis reports found in the NHSN Reports Advanced Folder
Data Analysis Preparation
Data Entry Sources

- **Event**
  - All infection events: CLABSI, CAUTI, SSI, LABID, and more

- **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 2017 annual survey
  - Those values will be used to calculate 2017 and 2018 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

Desired Reports – Rate, SIR, CMS, Custom, etc.

NHSN Analysis Functionality
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
Monthly Reporting Plan

[Image of a webpage from the National Healthcare Safety Network: Add Monthly Reporting Plan]

- **Device-Associated Module**:
  - Locations: Pedsurg_CC - Pedsurg_CC, Amau - Adult Mixed Acuity Unit
  - CLABSI, VAP, CAUTI, CLD

- **Procedure-Associated Module**:
  - Procedures: Colo - Colon surgery, Hyst - Abdominal hysterectomy
  - SSI, Post-procedure

[Arrows pointing to 'Add Row', 'Clear All Rows', 'Copy from Previous Month']
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.

### Incomplete “In Plan” Summary Data Records

<table>
<thead>
<tr>
<th>Summary ID</th>
<th>Summary Data Type</th>
<th>Year</th>
<th>Month</th>
<th>Location Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>218</td>
<td>ICU</td>
<td>2005</td>
<td>September</td>
<td>MICU</td>
</tr>
<tr>
<td>260</td>
<td>ICU</td>
<td>2006</td>
<td>February</td>
<td>S-ICU</td>
</tr>
<tr>
<td>293</td>
<td>ICU</td>
<td>2006</td>
<td>March</td>
<td>S-ICU</td>
</tr>
<tr>
<td>4096</td>
<td>ICU</td>
<td>2013</td>
<td>February</td>
<td>INSURGCC</td>
</tr>
<tr>
<td>5576</td>
<td>ICU</td>
<td>2013</td>
<td>February</td>
<td>JOYREHAB</td>
</tr>
<tr>
<td>5902</td>
<td>ICU</td>
<td>2013</td>
<td>March</td>
<td>ICU</td>
</tr>
<tr>
<td>5903</td>
<td>ICU</td>
<td>2013</td>
<td>May</td>
<td>ICU</td>
</tr>
<tr>
<td>5904</td>
<td>ICU</td>
<td>2013</td>
<td>September</td>
<td>ICU</td>
</tr>
<tr>
<td>7964</td>
<td>ICU</td>
<td>2014</td>
<td>January</td>
<td>ICU-A</td>
</tr>
<tr>
<td>5279</td>
<td>ICU</td>
<td>2014</td>
<td>January</td>
<td>ICU/CCU</td>
</tr>
</tbody>
</table>

All the alert categories from the previous page.
Resolving Alerts

- Incomplete Summary Data Form
  - 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.
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.
NHSN Data Analysis
NHSN Analysis Reports

- Click on ‘Analysis 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.
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: CLABSI

- 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
Modifying Analysis Reports: CLABSI SIR Report

- Show Descriptive Variable Names
- Analysis Data Set Source
- Type of Report
- When Data Set was Generated
**Modifying Analysis Reports : CLABSI SIR Report**

- **Title/Format**
  - Used to modify the name and title of the report
  - The Title is what will appear at the top of the generated report.
  - You may choose the format in which the report is displayed, such as HTML or PDF.
Modifying Analysis Reports: CLABSI SIR Report

- 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 : CLABSI SIR Report

- 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 (i.e., “equal”) then specify desired values of that variable that should be included in the report.
Modifying Analysis Reports: CLABSI SIR Report

- Add Group vs. Add Rule
- Resulting in a SIR table with data if the BSI Plan is Yes and the location type is CC or if the location type is CC_N

In this example, each Group is separated by "OR" and each rule within a group is connected by "AND". This report will select events and denominator data if the BSI Plan is Yes and the location type is CC or if the location type is CC_N.
Modifying Analysis Reports: CLABSI SIR

- “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, etc.
  - Group By applicable to rates, SIRs, and SAARs.
Interpreting your SIR Report

- Modified report by:
  - Time Period
    SummaryYQ: 2015Q1-2015Q4
  - Display Options
    Group By: SummaryYQ

1. This report includes non-MBI CLABSI data from acute care hospitals for 2015 and forward.
2. The SIR is only calculated if the number predicted (numPred) is $\geq 1$. Lower bound of 95% Confidence interval only calculated when number of observed events $> 0$.
3. The number of predicted events is calculated based on national aggregate NHISN data from 2015. It is risk adjusted for CDC location, hospital beds, medical school affiliation type and facility Type.
4. If the risk factor data are missing, the record will be excluded from the SIR.

Source of aggregate data: 2015 NHISN CLABSI Data
Data contained in this report were last generated on February 23, 2017 at 12:20 PM.
Interpreting your SIR Report: The SIR

- There were 4 events identified for Q1 and Q2 for 2015.
- SIR is the number of observed CLABSI (numerator) divided by the number of predicted CLABSI (denominator) (e.g., 4/1.903 = 2.102).
- This signifies that during this time period, our facility identified more CLABSI events than predicted.
- SIR will only be calculated if the number of predicted infections is ≥ 1.

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### National Healthcare Safety Network

**SIR for Central Line-Associated BSI Data for Acute Care Hospitals (2015 baseline) - By OrgID**

As of February 23, 2017 at 12:45 PM

Date Range: BSZ_CLAB_RATE ALL summaryYG 2015Q1 to 2015Q4

<table>
<thead>
<tr>
<th>orgID</th>
<th>summaryYG</th>
<th>IntCount</th>
<th>numPred</th>
<th>numcidays</th>
<th>SIR</th>
<th>SIR_pval</th>
<th>SIR95ci</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>2015Q1</td>
<td>4</td>
<td>1.903</td>
<td>1917</td>
<td>2.102</td>
<td>0.1701</td>
<td>0.668, 5.070</td>
</tr>
<tr>
<td>1000</td>
<td>2015Q2</td>
<td>4</td>
<td>2.310</td>
<td>2018</td>
<td>1.731</td>
<td>0.2878</td>
<td>0.550, 4.176</td>
</tr>
<tr>
<td>1000</td>
<td>2015Q3</td>
<td>0</td>
<td>0.026</td>
<td>32</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>1000</td>
<td>2015Q4</td>
<td>0</td>
<td>0.042</td>
<td>49</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
</tbody>
</table>
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
Saving Analysis Reports

- Save your custom reports you customize by selecting “Save”

- Provide a unique name for your report to display
Saving Analysis Reports

- New report will be displayed under the folder where the original report was generated.
- Only the user who created the report will be able to access from their NHSN login.
- Can always be edited and deleted.
Saving Analysis Reports

- It’s encouraged to save analysis reports prior to CMS Deadlines
  - Unlike the frozen datasets sent to CMS, NHSN reports can change when data is edited or added
  - A saved report can ensure continuity between comparing the two reports
- Prior to locations changing their description type, or becoming inactive
- Before new surveys are added
Using the Advanced Folder
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 hospital’s 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
Risk Adjustment Example: CAUTI

### National Healthcare Safety Network

**SIR for CAUTI Data for Critical Access Hospital IQR (2015 Baseline) - By OrgID/Location**

As of: February 5, 2018 at 1:25 PM

Data Range: BS2_CAU_RATE SCAH CMS summaryYQ 2016Q1 to 2017Q4

<table>
<thead>
<tr>
<th>orgID</th>
<th>ccm</th>
<th>location</th>
<th>summaryYQ</th>
<th>months</th>
<th>inCount</th>
<th>numPred</th>
<th>numucathdays</th>
<th>SIR</th>
<th>SIR_pval</th>
<th>SIR95CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>10376</td>
<td>N/A</td>
<td>INMEDCC</td>
<td>2016Q1</td>
<td>3</td>
<td>3</td>
<td>1.859</td>
<td>761</td>
<td>1.614</td>
<td>0.4036</td>
<td>0.410, 4.392</td>
</tr>
</tbody>
</table>

### SIR report using the 2016 Annual Survey

### National Healthcare Safety Network

**SIR for CAUTI Data for Critical Access Hospital IQR (2015 Baseline) - By OrgID**

As of: February 5, 2018 at 1:25 PM

Data Range: BS2_CAU_RATE SCAH CMS summaryYQ 2016Q1 to 2017Q4

<table>
<thead>
<tr>
<th>orgID</th>
<th>ccm</th>
<th>summaryYQ</th>
<th>inCount</th>
<th>numPred</th>
<th>numucathdays</th>
<th>SIR</th>
<th>SIR_pval</th>
<th>sir95ci</th>
</tr>
</thead>
<tbody>
<tr>
<td>10376</td>
<td>N/A</td>
<td>2017Q1</td>
<td>3</td>
<td>0.497</td>
<td>761</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
</tbody>
</table>
Risk Adjustment Example: CAUTI (cont.)

- Advanced folder can help provide data quality checks to provide explanations from your analysis.
- Summary Level Data reports can help identify if there are discrepancies with the denominator data.
Risk Adjustment Example: CAUTI (cont.)

- Modify your report to reflect only time periods and variables need to help identify a potential issue.
## National Healthcare Safety Network
### Line Listing for All Summary Data

As of February 5, 2010 at 1:15 PM
Data Range: PS SUMMARY summaryYM 2016M01 to 2017M03

<table>
<thead>
<tr>
<th>orgid</th>
<th>CCN</th>
<th>summaryYM</th>
<th>summarytype</th>
<th>location</th>
<th>locationtype</th>
<th>locdc</th>
<th>locLabel</th>
<th>eventtype</th>
<th>numpatdays</th>
<th>numdays</th>
<th>noEvents</th>
</tr>
</thead>
<tbody>
<tr>
<td>10376</td>
<td>N/A</td>
<td>2016M01</td>
<td>ICU</td>
<td>INMEDCC</td>
<td>CC</td>
<td>IN.ACUITE:CC:M</td>
<td>CAU</td>
<td>400</td>
<td>250</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>10376</td>
<td>N/A</td>
<td>2016M02</td>
<td>ICU</td>
<td>INMEDCC</td>
<td>CC</td>
<td>IN.ACUITE:CC:M</td>
<td>CAU</td>
<td>375</td>
<td>255</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>10376</td>
<td>N/A</td>
<td>2016M03</td>
<td>ICU</td>
<td>INMEDCC</td>
<td>CC</td>
<td>IN.ACUITE:CC:M</td>
<td>CAU</td>
<td>350</td>
<td>256</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>10376</td>
<td>N/A</td>
<td>2017M01</td>
<td>ICU</td>
<td>INMEDCC</td>
<td>CC</td>
<td>IN.ACUITE:CC:M</td>
<td>CAU</td>
<td>400</td>
<td>250</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>10376</td>
<td>N/A</td>
<td>2017M02</td>
<td>ICU</td>
<td>INMEDCC</td>
<td>CC</td>
<td>IN.ACUITE:CC:M</td>
<td>CAU</td>
<td>375</td>
<td>255</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>10376</td>
<td>N/A</td>
<td>2017M03</td>
<td>ICU</td>
<td>INMEDCC</td>
<td>CC</td>
<td>IN.ACUITE:CC:M</td>
<td>CAU</td>
<td>350</td>
<td>256</td>
<td>N</td>
<td></td>
</tr>
</tbody>
</table>

Summary Data for Q1 2016 and Q1 2017
Risk Adjustment Example: CAUTI (cont.)

- Check event level data to ensure that all CAUTI events for that time period are accounted for.
- This can be done in either the DA Module folder OR from the Advanced Folder > Event Level Data.
- You’ll include the same time frames and necessary variables to create the appropriate output.
Risk Adjustment Example: CAUTI (cont.)

<table>
<thead>
<tr>
<th>orgID</th>
<th>patID</th>
<th>dob</th>
<th>gender</th>
<th>admitDate</th>
<th>eventID</th>
<th>eventDate</th>
<th>eventType</th>
<th>spcEvent</th>
<th>location</th>
</tr>
</thead>
<tbody>
<tr>
<td>10376</td>
<td>DS3456</td>
<td>05/29/1962</td>
<td>M</td>
<td>01/06/2016</td>
<td>58529</td>
<td>01/27/2016</td>
<td>UTI</td>
<td>ABUTI</td>
<td>INMEDCC</td>
</tr>
<tr>
<td>10376</td>
<td>DS3456</td>
<td>05/29/1962</td>
<td>M</td>
<td>01/06/2017</td>
<td>61053</td>
<td>01/27/2017</td>
<td>UTI</td>
<td>ABUTI</td>
<td>INMEDCC</td>
</tr>
<tr>
<td>10376</td>
<td>P1299</td>
<td>03/04/1925</td>
<td>M</td>
<td>01/19/2016</td>
<td>58531</td>
<td>02/19/2016</td>
<td>UTI</td>
<td>ABUTI</td>
<td>INMEDCC</td>
</tr>
<tr>
<td>10376</td>
<td>P1299</td>
<td>03/04/1925</td>
<td>M</td>
<td>01/19/2017</td>
<td>61055</td>
<td>02/19/2017</td>
<td>UTI</td>
<td>ABUTI</td>
<td>INMEDCC</td>
</tr>
<tr>
<td>10376</td>
<td>RP1234</td>
<td>05/21/1965</td>
<td>M</td>
<td>03/03/2016</td>
<td>58533</td>
<td>03/19/2016</td>
<td>UTI</td>
<td>ABUTI</td>
<td>INMEDCC</td>
</tr>
<tr>
<td>10376</td>
<td>RP1234</td>
<td>05/21/1965</td>
<td>M</td>
<td>03/03/2017</td>
<td>61057</td>
<td>03/19/2017</td>
<td>UTI</td>
<td>ABUTI</td>
<td>INMEDCC</td>
</tr>
</tbody>
</table>

CAUTI Events for Q1 2016 (n=3), and Q1 2017 (n=3)
Risk Adjustment Example: CAUTI (cont.)

- Medical school affiliation is a risk factor for CAUTI surveillance within Critical Access Hospitals
- Facility’s that select “Undergraduate” as their status have found to have a higher risk for CAUTI infection compared to facilities who have Major/Graduate/Non-teaching status

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Parameter Estimate</th>
<th>Standard Error</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-7.3337</td>
<td>0.0970</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Medical school affiliation*: Undergraduate</td>
<td>1.3191</td>
<td>0.4744</td>
<td>0.0054</td>
</tr>
<tr>
<td>Medical school affiliation*: Major/Graduate/Non-teaching</td>
<td>REFERENT</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* Table taken from NHSN’s “Guide to the SIR”
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

Please pay attention to the survey years when selecting a report to run.
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
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).

Surveys can always be edited and saved in NHSN if a correction needs to be made.

<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>totHRUSrv</th>
<th>totHRUth</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>
Core Elements Line List Output Option

- Line list that maps responses Antibiotic Stewardship Practices section of the annual survey to the CDC’s 7 Core Elements of Antibiotic Stewardship (questions 23-33)
- Option is found in the Advanced Folder > Facility Level Data and be simply run without any or much modifications
- The core elements that a facility has met will be summed in the “coreElementsMet” column
Core Elements Question Mapping

- Please view the resource guide on How to Run the Core Elements Line list to identify which survey questions and variables map to each specific element.

### HOW TO RUN THE CORE ELEMENTS LINE LIST WITHIN NHSN

#### Table of Core Elements Mapping to Hospital Annual Survey

<table>
<thead>
<tr>
<th>Core Element</th>
<th>Questions from PS Annual Survey-Hospital</th>
<th>Variable name(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>Q23: Does your facility have a written statement of support from leadership that supports efforts to improve antibiotic use (antibiotic stewardship)?</td>
<td>facSupp</td>
</tr>
<tr>
<td></td>
<td>Q26: Does your facility provide any salary support for dedicated time for antibiotic stewardship leadership activities?</td>
<td>abxStewardSalary</td>
</tr>
<tr>
<td>Accountability</td>
<td>Q24: Is there a leader responsible for stewardship activities at your facility? If Yes, what is the position of this leader?</td>
<td>abxSteward</td>
</tr>
<tr>
<td>Drug Expertise</td>
<td>Q25: Is there at least one pharmacist responsible for improving</td>
<td>abxPharm</td>
</tr>
</tbody>
</table>
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
Custom Fields

- Variables that a user can create for event or procedure-specific data
- A list of your facilities custom fields and how to add them can be found under the Facility tab > Customize Forms
- Instructions on how to add, edit, find, delete variables on the page
Adding Custom Fields

1. Select the form type from the list of choices in the drop-down box
   - This field will be seen on the collection form in NHSN

2. Create a Description to help describe the custom field being created
Adding Custom Fields

3. Define the custom field- create the label that be used in the data entry form

4. Select the type
   - This will be confined to only this format for data entry
     - NHSN will label each custom field variable as “custom 1”, “custom 2”, etc. as opposed to the labels
     - NHSN will number the variables based on the order they appear here in the manager
Adding Custom Fields

- Once you’ve added your custom field, it will be displayed at the bottom of the appropriate reporting form.
Custom Fields Analysis

- Analysis that includes custom fields variables can only be done within the advanced folder
- **Reminder:** The custom field variable names will not be displayed with the description you provided. Please know the order of the custom variables to allow you to select the appropriate ones
- To access the custom field created, use Advanced Folder > Patient Level Data > Line Listing All Patients
Custom Field Analysis

- Modify reports in order to display the data you’re interested in
- For this example, I want to identify patients under the age of 30 who have diabetes
Custom Fields Analysis

- The line list will display the custom Diabetes (Y/N) variable as “custom1” in the output column

<table>
<thead>
<tr>
<th>patient ID</th>
<th>orgID</th>
<th>dob</th>
<th>gname</th>
<th>surname</th>
<th>custom1</th>
</tr>
</thead>
<tbody>
<tr>
<td>10000</td>
<td>10376</td>
<td>02/07/1990</td>
<td>Tim</td>
<td>Thomas</td>
<td>Y</td>
</tr>
<tr>
<td>CDA113A</td>
<td>10376</td>
<td>10/12/2007</td>
<td>Wendy</td>
<td>Goode</td>
<td>N</td>
</tr>
<tr>
<td>CDA127C-2</td>
<td>10376</td>
<td>09/30/1988</td>
<td>Inactive</td>
<td>Brown</td>
<td>Y</td>
</tr>
<tr>
<td>CDA127D-1</td>
<td>10376</td>
<td>09/30/1988</td>
<td>Bob</td>
<td>Bake</td>
<td>N</td>
</tr>
<tr>
<td>LB111</td>
<td>10376</td>
<td>10/12/2007</td>
<td>Wee</td>
<td>One</td>
<td>Y</td>
</tr>
<tr>
<td>FL1</td>
<td>10376</td>
<td>02/08/2008</td>
<td>Ethel</td>
<td>Dupe</td>
<td></td>
</tr>
</tbody>
</table>
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)

- How to run Core Elements Line List
  [https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/core-elements-linelist.pdf](https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/core-elements-linelist.pdf)