National Healthcare Safety Network (NHSN)

WHAT YOU SHOULD KNOW

What is NHSN?

Nation's most widely used healthcare-associated infection tracking system

NHSN provides medical facilities, state, regions and the nation with data collection and reporting capabilities needed to:

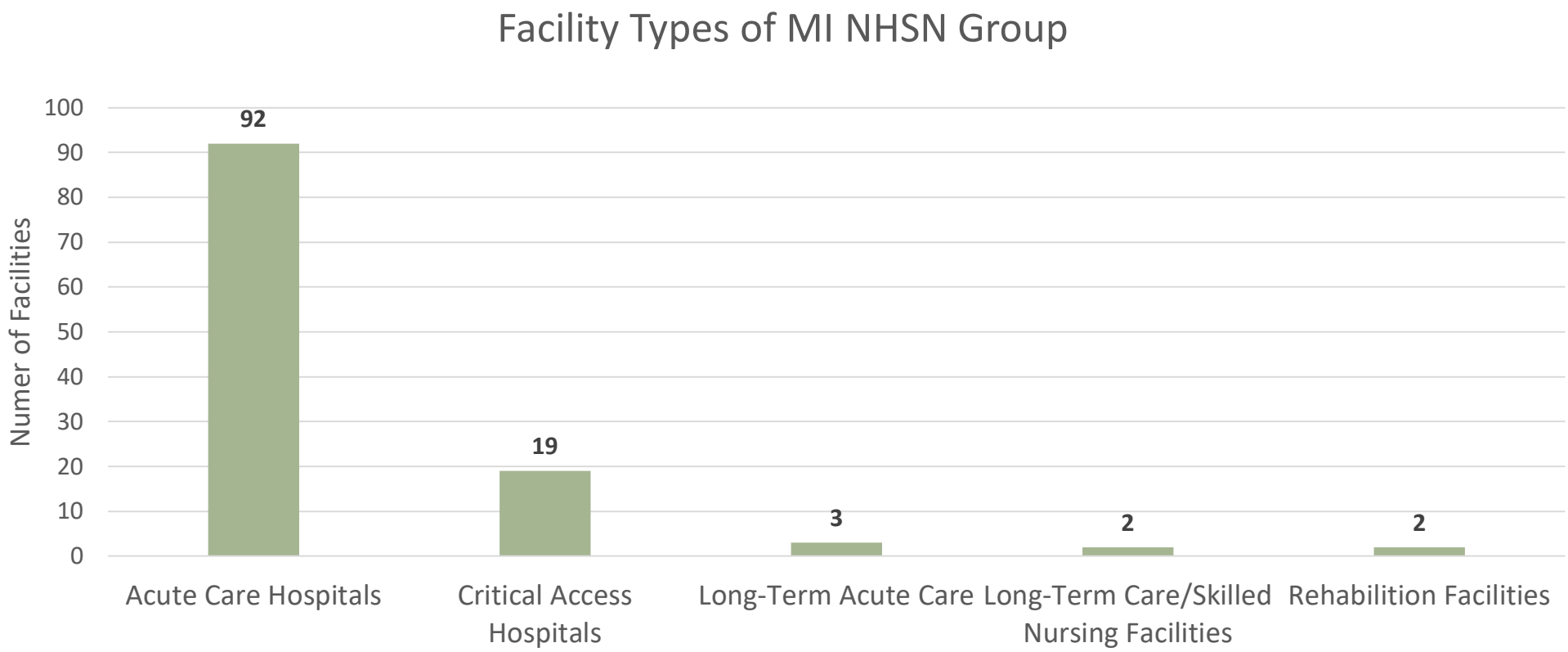
- Identify infection prevention problems by facility, state, or specific quality improvement project
- Benchmark progress of infection prevention efforts
- Comply with state and federal public reporting mandates
- Ultimately, drive national progress toward elimination of HAIs

NHSN HAI Types

HAI Types Healthcare Facilities may report into NHSN include:

- Central line associated bloodstream infections (CLABSI)
- Catheter-associated urinary tract infections (CAUTI)
- Surgical Site Infections (SSI)
  - COLO
  - HYST
  - HPRO
  - KPRO
- Hospital-onset *Clostridioides difficile* (C. difficile/CDI)
- Hospital-onset methicillin-resistant *Staphylococcus aureus* (MRSA) bacteremia (bloodstream infections)
- Ventilator-associated events (VAE)

Michigan NHSN Group



NHSN Key Terms

Identifying HAIs for NHSN Surveillance

7-day Infection Window Period (IWP)

- Defined as the 7-days during which all site-specific infection criteria must be met. It includes the collection date of the first positive diagnostic test that is used as an element to meet the site-specific infection criterion, the 3 calendar days before and the 3 calendar days after

Infection Window Period	
	3 days before
Date of first positive diagnostic test that is used as an element of the site-specific criterion **OR** **In the absence of a diagnostic test, use the date of the first documented localized sign or symptom that is used as an element of the site-specific criterion**	
	3 days after

Date of Event (DOE)

- The date the first element used to meet an NHSN site-specific infection criterion occurs for the first time within the seven-day infection window period

Example 1

HOSPITAL DAY	INFECTION WINDOW PERIOD
1	
2 Date of Event	Fever > 38.0 C
3	
4	**Urine culture:** >100,000 CFU/ ml *E. coli*
5	
6	
7	

Example 2

HOSPITAL DAY	INFECTION WINDOW PERIOD
1	
2	
3	
4 Date of Event	**Urine culture:** >100,000 CFU/ml *E. coli*
5	Fever > 38.0 C
6	Fever > 38.0 C
7	

*Not applicable to SSI, LabID or VAE surveillance

POA vs HAI

An infection is considered **Present on Admission (POA)** if the date of event of the NHSN site-specific infection criterion occurs during the POA time period, which is defined as the day of admission to an inpatient location (calendar day 1), the 2 days before admission, and the calendar day after admission.

An infection is considered a **Healthcare-associated Infection (HAI)** if the date of event of the NHSN site-specific infection criterion occurs on or after the 3rd calendar day of admission to an inpatient location where day of admission is calendar day 1.

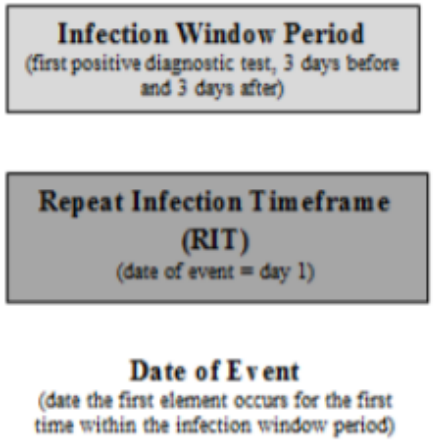
Hospital Day	Date of Event Assignment for RIT	Classification
2 days before admit	Hospital Day 1	POA
1 day before admit	Hospital Day 1	
1	Hospital Day 1	
2	Hospital Day 2	
3	Hospital Day 3	HAI
4	Hospital Day 4	
5	Hospital Day 5	

*Not applicable to SSI, LabID or VAE surveillance

14-day Repeat Infection Timeframe (RIT)

Timeframe during which no new infections of the same type are reported.

- The RIT applies to both POA and HAI determinations.
- The date of event is Day 1 of the 14-day RIT.
- If criteria for the same type of infection are met and the date of event is within the 14-day RIT, a new event is not identified or reported.
- Additional pathogens recovered during the RIT from the same type of infection are added to the event.
- Note the original date of event is maintained as is the original 14-day RIT.
- Device association determination and location of attribution are not to be amended.



HOSPITAL DAY	RIT	INFECTION WINDOW PERIOD
1		
2		
3		
4	1	**Urine culture:** >100,000 cfu/ml *E. coli*
5	2	Fever > 38.0 C
6	3	Fever > 38.0 C
7	4	
8	5	
9	6	Urine culture: No growth
10	7	
11	8	
12	9	Urine culture: > 100,000 cfu/ml *S. aureus*
13	10	
14	11	
15	12	
16	13	
17	14	
18		
19		
		SUTI-HAI **Date of Event = 4** **Pathogens = *E. coli*, *S. aureus***

*Not applicable to SSI, LabID or VAE surveillance

Transfer Rule

The process of assigning location of attribution when the**date of event is on the date of transfer or discharge, or the next day**; the infection is attributed to the transferring/discharging location.

If the patient was housed in multiple locations within the transfer rule time frame, attribute the infection to the first location in which the patient was housed the day before the infection's date of event.

Many real-life questions relate to patient transfers from ED to inpatient location – use transfer rule

Locations

The patient care area to which a patient is assigned **while receiving care** in the healthcare facility.

A CDC-defined designation given to a patient care area **housing patients who have similar disease conditions** or who are receiving care for similar medical or surgical specialties. Each facility location that is monitored is "mapped" to one CDC Location.

- The specific CDC Location code is determined by the type of patients cared for in that area according to **the 80% Rule** which requires that 80% of the patients in a location are of a certain acuity level and service type (for example, if 80% of the patients in a ward level area are pediatric patients receiving orthopedic care, this area should be designated as an Inpatient Pediatric Orthopedic Ward).

When mapping facility locations to CDC locations, use the following points:

- Acuity billing data (if available) is the most reliable and objective method of determining appropriate location mapping.
- Admission/transfer diagnosis can also be used to determine location mapping if billing data is not available.
- When possible, facilities should use one year's worth of data to make this determination. If that is not available, a shorter period of at least

Surveillance Definitions

Central line associated bloodstream infections (CLABSI)

A laboratory-confirmed bloodstream infection (LBCI) where a central line (CL) or umbilical catheter (UC) was in place for >2 calendar days on the date of event, with day of device placement being Day 1,

AND

a CL or UC was in place on the date of event or the day before. If a CL or UC was in place for >2 calendar days and then removed, the date of event of the LCBI must be the day of discontinuation of the next day.

If the patient is admitted or transferred into a facility with an implanted central line (port) in place, and that is the patient's only central line, day of first access in an inpatient location is considered Day 1.

CLABSI continued

LCBI Criterion 1

- Patient of any age has a recognized pathogen identified form one or more blood specimens by a culture or non-culture based microbiologic testing method

  AND

- organism(s) identified in blood is not related to an infection at another site

LCBI Criteria 2&3

- LCBI 2: Any age patient had at least one: fever (>38.0°C), chills or hypotension
- LCBI 3: A patient ≤ 1 year of age have at least one: fever (>38.0°C), apnea hypothermia, bradycardia

  AND

- organism(s) identified in blood is not related to an infection at another site

  AND

- the same NHSN common commensal is identified form two or more blood specimens drawn on separate occasions by a culture or non-culture based microbiologic testing method

Scenario #1

On June 3rd Mr. Rhoades was admitted to CCU after having a heart attack. On June 4th, a central line was placed. A blood culture was collected on June 7th because Mr. Rhoades had become confused and was having chills. The culture results were positive for *Serratia marcescens* (a recognized pathogen). No other source of infection was identified.

Is this an LCBI?

A. Yes

B. No

Catheter-associated urinary tract infections (CAUTI)

There are two specific types of UTI:

- Symptomatic UTI (SUTI)
- Asymptomatic Bacteremic UTI (ABUTI)

Both types, **if catheter-associated**, must be reported as part of any CMS CAUTI reporting requirements

Symptomatic UTI (SUTI)

- SUTI 1: Any age
  - SUTI 1a: Catheter-associated
  - SUTI 1b: Non-catheter-associated
- SUTI 2: Infants ≤1 year, with or without indwelling urinary catheter

Asymptomatic Bacteremic UTI (ABUTI)

- Any Age, with or without indwelling urinary catheter

SUTI 1a: Catheter-associated Urinary Tract Infection (CAUTI) Criteria

(Any Age) Patient must meet 1, 2, and 3 below:

1.	Patient had an indwelling urinary catheter that had been in place for > 2 calendar days (in the inpatient location) on the **date of event** AND was either:
	• Present for any portion of the calendar day on the **date of event** **OR** • Removed the day before the **date of event**
2.	Patient has at least ***one*** of the following signs or symptoms:
	• Fever (>38.0°C): To use fever in a patient > 65 years of age, the indwelling urinary catheter needs to be in place > 2 calendar days on **date of event** • Suprapubic tenderness* • Costovertebral angle pain or tenderness* • Urinary urgency ^ • Urinary frequency^ • Dysuria ^
3.	Patient has a urine culture with no more than two species of organisms identified, at least one of which is a bacterium of $\geq 10^5$ CFU/ml

***No other recognized cause**

^These symptoms cannot be used when catheter is in place

All elements of the UTI criterion must occur during the IWP

SUTI 1b: Non-Catheter-associated Urinary Tract Infection (Non-CAUTI) (Any Age) Patient must meet 1, 2, and 3 below:

1. One of the following is true:
   - Patient has/had an indwelling urinary catheter but it has/had not been in place >2 calendar days on the **date of event**

   OR

   - Patient did not have a urinary catheter in place on the date of event nor the day before the **date of event**

2. Patient has at least one of the following signs or symptoms:
   - **Fever (>38°C) in a patient that is ≤ 65 years of age**
   - Suprapubic tenderness*
   - Costovertebral angle pain or tenderness*
   - Urinary urgency ^
   - Urinary frequency^
   - Dysuria ^

***No other recognized cause**

^These symptoms cannot be used when catheter is in place

3. Patient has a urine culture with no more than two species of organisms identified, at least one of which is a bacterium of $\geq 10^5$ CFU/ml

All elements of the UTI criterion must occur during the IWP

SUTI 2: CAUTI or Non-CAUTI in patients 1 year of age or less

Patient must meet 1, 2, and 3 below:

1. Patient is ≤1 year of age (with or without an indwelling urinary catheter)
2. Patient has at least one of the following signs or symptoms:
   - Fever (>38°C)
   - **Hypothermia (<36.0°C)**
   - **Apnea***
   - **Bradycardia***
   - **Lethargy***
   - **Vomiting***
   - Suprapubic tenderness*
3. Patient has a urine culture with no more than two species of organisms identified, at least one of which is a bacterium of ≥10^5 CFU/ml

***No other recognized cause**

All elements of the UTI criterion must occur during the IWP

Asymptomatic Bacteremic Urinary Tract Infection (ABUTI) (Any Age)

Patient must meet 1, 2, and 3 below:

1.	Patient with or without an indwelling urinary catheter has **no signs or symptoms** of SUTI 1 or 2 according to age (**Note**: Patients > 65 years of age with a non-catheter-associated ABUTI may have a fever and still meet the ABUTI criterion)
2.	Patient has a urine culture with no more than two species of organisms identified, **at least one of which is a bacterium of ≥10^5 CFU/ml**
3.	Patient has organism identified from blood specimen with at least **one matching bacterium** to the bacterium identified in the urine specimen, OR meets LCBI criterion 2 (without fever) and matching common commensal(s) in the urine.

All elements of the UTI criterion must occur during the IWP

Scenario #2

Your facility is performing CAUTI surveillance on your medical ward 5-West.

Patient is admitted to 5-West on 1/15/2018 with urine culture positive for > 100,000 CFU/ml of E. coli. No NHSN UTI symptoms are present. Foley is inserted at time of urine culture.

9 days later (1/23/18), the Foley remains, and patient has temperature of 38.2°C and positive urine culture of > 100,000 CFU/ml of E. coli.

A CAUTI should be reported for this patient for 1/23/18.

A. True

B. False

MRSA Bacteremia and C. *difficile* LabID Event

C. *difficile* LabID Event

- A positive laboratory test result for C. *difficile* toxin A and/or toxin B tested on an unformed stool specimen OR a toxin-producing C. *difficile* organism detected by culture or other laboratory means performed on an unformed stool sample for a patient in a location with no prior C. *difficile* specimen result reported within 14 days for the patient and location
- When using multi-testing methodology for CDI identification, the final result of the last test finding will determine if the CDI positive laboratory assay definition is met.

MRSA bacteremia LabID Event

- Any MRSA blood specimen obtained for clinical decision-making purposes (excluding screening cultures) OR the first MRSA positive blood specimen for a patient in a location with no prior MRSA positive blood specimen result collected within 14 days for the patient and location

Scenario #3

Janet comes to the ER with complaint of ankle pain following a flag football tackle. X-rays show a fracture and she goes directly to surgery for ORIF where Levaquin is used for prophylaxis. She has a fever in the recovery room and is admitted to 3 Main for observation with an order to continue Levaquin for 48 hours. On hospital day(HD) 4, Janet complains of abdominal pain and diarrhea. The next day, HD 5, a loose stool is submitted for C. difficile testing and is reported to be PCR+.

This facility participates in C. *difficile* LabID Event Reporting for FacWideIN. Would you report the HD 5 PCR+ lab result as a LabID Event?

A. No. It's too quick to be a true CDI case

B. Yes. This is the first positive lab finding for the patient and the location

C. No. Testing doesn't count forLabID Events

D. No. The antibiotics are the real problem

Scenario #4

Ms. Rainbow Johnson was admitted to ICU on 12/05/17. While on ICU she had a positive MRSA blood culture collected on 12/9. After a one week stay in ICU she was transferred to IRF on 12/11/2017 for strengthening. While on IRF she had another positive MRSA unique blood specimen collected on 12/21/2017. Based on this information is this a LabID event for ICU?

A. Yes

B. No

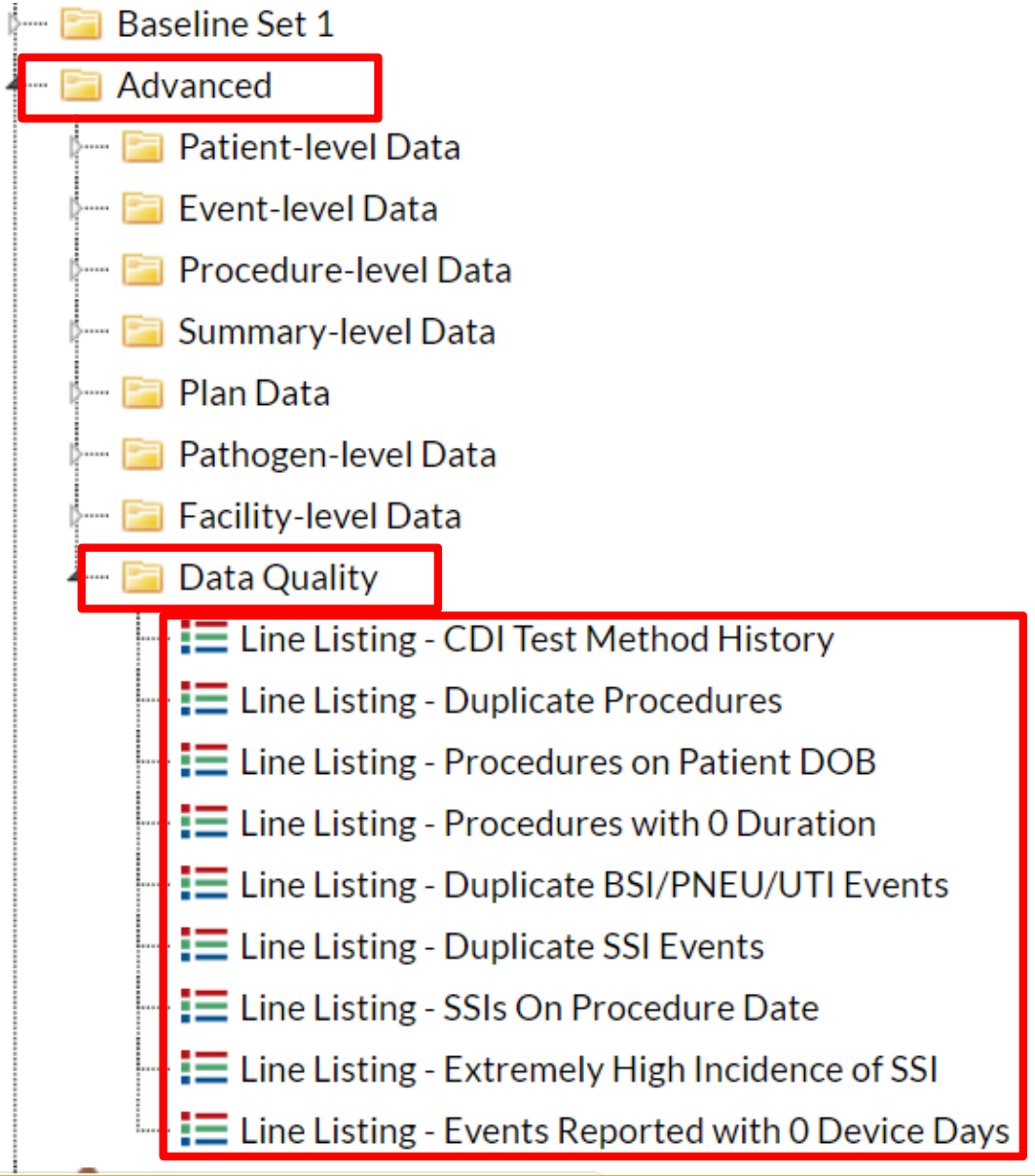
NHSN Analysis

Data Quality

Convenient, pre-built reports available to pinpoint potential errors in data

SHARP runs these reports, in addition to others, prior to every quarter reporting deadline to ensure your facility is reporting the most accurate data

Data errors can affect data analysis and alter models which may prevent accurate representation of your data



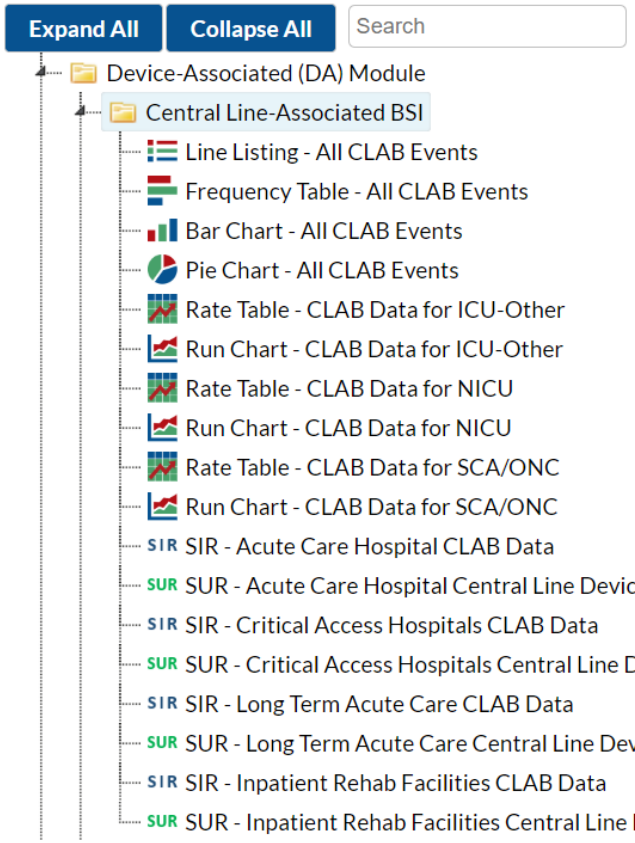
NHSN Analysis Reports

Reports can be beneficial in identifying areas of greatest need of prevention efforts specific to your facility.

Explore these reports! You can't "hurt" the data you've entered

Make modifications to explore the data you want to see

Data quality is important (hint, hint).



National Healthcare Safety Network
SIR for Central Line-Associated BSI Data for Acute Care Hospitals (2015 baseline) - By OrgID
As of: March 5, 2019 at 1:52 PM
Date Range: BS2_CLAB_RATESALL summaryYQ After and Including 2015Q1

orgID=15165 medType=' '

orgID	ccn	summaryYH	infCount	numPred	numCldays	SIR	SIR_pval	sir95ci
15165	999999	2016H1	0	1.497	1819	0.000	0.2238	, 2.001
15165	999999	2016H2	0	0.013	5	.	.	
15165	999999	2017H1	1	0.022	30	.	.	

1. This report includes CLABSI data from acute care hospitals for 2015 and forward excluding MBI events. For 2019 and forwar
2. The SIR is only calculated if the number predicted (numPred) is >= 1. Lower bound of 95% Confidence Interval only calculat
3. The number of predicted events is calculated based on national aggregate NHSN data from 2015. It is risk adjusted for CDC
4. If the risk factor data are missing, the record will be excluded from the SIR.

Source of aggregate data: 2015 NHSN CLABSI Data
Data con

National Healthcare Safety Network
Rate Table for Central Line-Associated BSI Data for ICU-Other
As of: March 5, 2019 at 1:55 PM
Date Range: All BS2_CLAB_RATESICU

orgID=15165 loccdc=IN:ACUTE:CC:MS

location	summaryYM	CLABCount	numCLDays	CLABRate	numPatDays	LineDU
L200	2016M01	0	350	0.000	700	0.500
L200	2016M02	0	50	0.000	100	0.500
MEDSURG CC	2016M03	0	555	0.000	1111	0.500

This report includes CLABSI data for 2015 and forward excluding MBI events. For 2019 and forward, this report al
Data contained in this report were last generated on December 4, 2018 at 10:02 AM.

Analysis Reports – Line List

Line Lists – provides detailed information on all reported infections or events

National Healthcare Safety Network
Line Listing for All Catheter-Associated UTI Events
As of: May 8, 2019 at 9:40 AM
Date Range: All CAU_EVENTS

orgID	patID	dob	gender	admitDate	eventID	eventDate	eventType	spcEvent	location
15165	132331	12/23/1988	F	03/08/2017	33363883	03/15/2017	UTI	SUTI	2E - MS 2
15165	22920	10/26/1984	F	01/04/2017	33191423	01/06/2017	UTI	SUTI	5 WEST
15165	L006	11/01/1995	F	02/26/2016	21871829	03/01/2016	UTI	SUTI	L800
15165	L007	12/01/1980	M	02/27/2016	21872962	03/02/2016	UTI	SUTI	L100
15165	L008	01/01/1985	F	02/28/2016	21872963	03/03/2016	UTI	SUTI	L100
15165	L009	02/01/2005	F	02/29/2016	21873027	03/03/2016	UTI	SUTI	L100

Data contained in this report were last generated on April 5, 2019 at 9:38 AM.
Beginning January 2015, the CAUTI definition excludes all non-bacterial pathogens and therefore, the number of CAU

*Data for example only

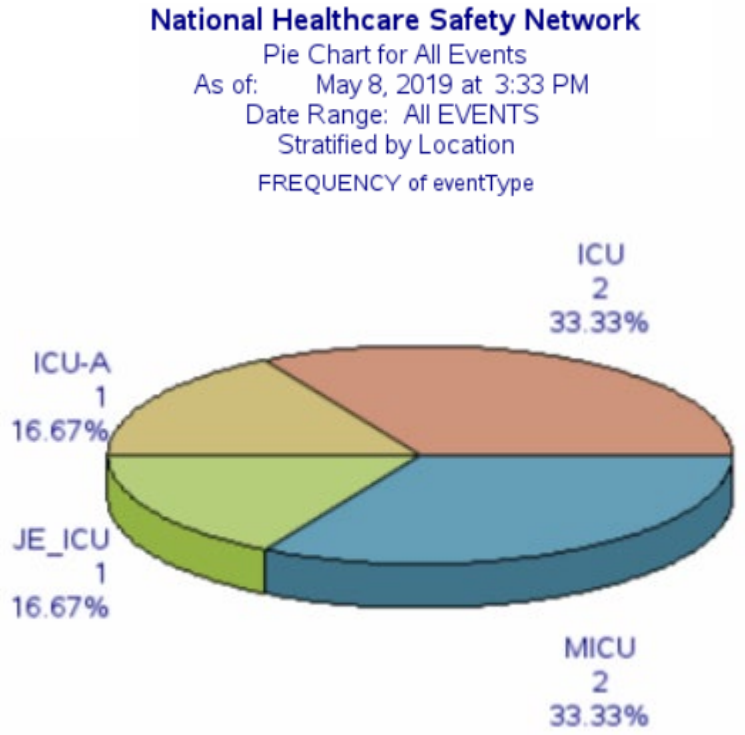
Analysis Reports – Charts

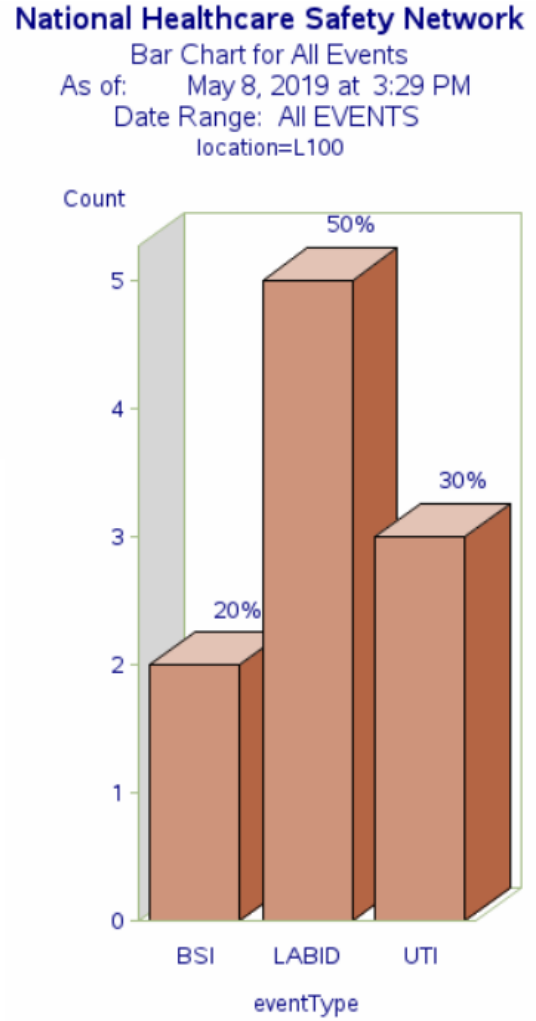
Frequency Tables and Bar/Pie Charts– graphical representation of counts infections or events

National Healthcare Safety Network
Frequency Table for All Events
As of: May 8, 2019 at 3:37 PM
Date Range: EVENTS evntDateYQ 2015Q1 to 2018Q3

Frequency Row Pct	Table of evntDateYQ by eventType				
	eventType				
evntDateYQ	BSI	LABID	SSI	UTI	Total
2015Q1	0 0.00	4 100.00	0 0.00	0 0.00	4
2016Q1	7 36.84	6 31.58	2 10.53	4 21.05	19
2016Q2	1 50.00	1 50.00	0 0.00	0 0.00	2
2016Q3	0 0.00	2 100.00	0 0.00	0 0.00	2
2016Q4	0 0.00	1 100.00	0 0.00	0 0.00	1
2017Q1	1 16.67	2 33.33	0 0.00	3 50.00	6
Total	9	16	2	7	34

Data contained in this report were last generated on April 5, 2019 at 9:38 AM.





*Data for example only

Analysis Reports – Rate Table

Rate table – calculates the rate of infections or events per 1,000 device use or patient days

orgID=10018 loccdc=IN:ACUTE:CC:CT

location	summaryYM	CLABCount	numCLDays	CLABRate	numPatDays
71ICU	2015M01	0	250	0.000	1280

Data contained in this report were last generated on October 18, 2016 at 10:11 AM.

*Data for example only

Analysis Reports - SIR

Standardized Infection Ratios (SIR) – compares the actual number of infections to the predicted number of infections

SIR < 1.0 indicates more infections observed than predicted

The primary summary measure used by NHSN to track HAIs

Adjusts for various facility and/or patient-level factors that contribute to HAI risk

Standardized = permits comparisons between the number of infections experienced by a facility, group, or state to the number of infections predicted based on national data

National Healthcare Safety Network

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

As of: February 24, 2017 at 12:42 PM

Date Range: BS2_CLAB_RATESALL summaryYQ 2015Q1 to 2015Q4

orgID=10000 CCN=32M22222 medType=M

orgID	summaryYQ	infCount	numPred	numcldays	SIR	SIR_pval	sir95ci
10000	2015Q1	4	1.903	1917	2.102	0.1701	0.668, 5.070
10000	2015Q2	4	2.310	2018	1.731	0.2878	0.550, 4.176
10000	2015Q3	0	0.026	32	.	.	
10000	2015Q4	0	0.042	49	.	.	

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 >= 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 NHSN 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 NHSN CLABSI Data

Data contained in this report were last generated on February 23, 2017 at 12:20 PM.

*Data for example only

Analysis Reports - SUR

Standardized Utilization Ratios (SUR) – compares the observed number of device days to the predicted number of device days

National Healthcare Safety Network

SUR for Central Line Device Use for Acute Care Hospitals (2015 baseline) - By OrgID

As of: June 8, 2017 at 2:43 PM
Date Range: BS2_CLAB_RATESALL summaryYM 2016M01 to 2016M06
if (((location = "MED CC")))

orgID=10315 CCN=N/A medType=M

orgID	numCLDays	numPredDDays	SUR	SUR_pval	SUR95CI
10315	797	443.221	1.798	0.0000	1.677, 1.926

1. This report includes central line utilization data from acute care hospitals for 2015 and forward.
2. The SUR is only calculated if number of predicted device days (numPredDDays) is >= 1. Lower bound of 95% Confidence Interval only calculated when number of observed device days > 0.
3. The predicted device utilization days is calculated based on national aggregate NHSN data from 2015. It is risk adjusted for CDC location, hospital beds, medical school affiliation type, and facility type.

*Data for example only

TAP Reports

- Purpose: Use NHSN data to provide detailed report identifying facilities/units with excess burden of HAIs using the Cumulative Attributable Difference (CAD) metric
- MDHHS SHARP provides these reports on a quarterly basis to individual facilities in addition to aggregate and regional reports available here: www.michigan.gov/hai

Standardized Infection Ratio (SIR)

$$SIR = \frac{\text{Observed \# HAIs}}{\text{Predicted \# HAIs}}$$

A measure that compares the number of HAIs reported to NHSN to the number of infections that would be predicted based on national baseline data

Cumulative Attributable Difference (CAD)

CAD = Observed # HAIs – (Predicted # HAIs x SIR goal)

A measure that shows difference between the number of observed infections and 'predicted infections multiplied by SIR goal' in a defined period

Arcement R., White K. Targeted Assessment for Prevention (TAP) Strategy. March 1, 2018. Centers for Disease Control and Prevention, National center for Emerging and Zoonotic Infectious Diseases.

A little more about CAD…

Facility A: Observed = 50, Predicted = 70.805, SIR = 0.706			
HHS Reduction Goal	**SIR Goal**	**CAD Formula** Observed – (Predicted X SIR goal)	**CAD**
25%	0.75	50 - (70.8 X 0.75)	-3.10
50%	0.50	50 - (70.8 X 0.50)	14.60

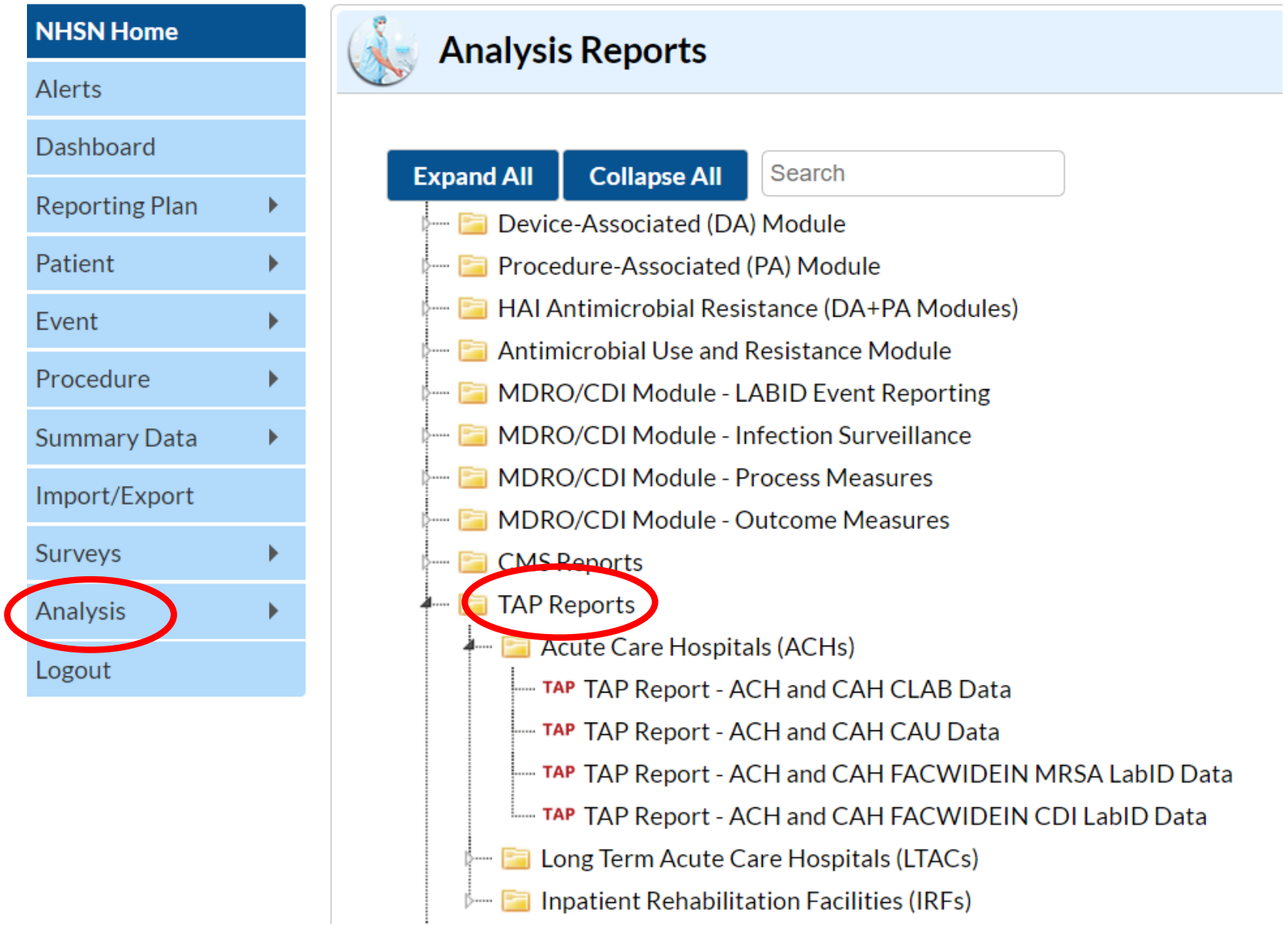
- CAD can be Positive or Negative
  - Positive CAD = additional burden of infections than what would be predicted with regard to the SIR goal (“excess” infections)
  - Negative CAD = fewer infections than what would be predicted

Arcement R., White K. Targeted Assessment for Prevention (TAP) Strategy. March 1, 2018. Centers for Disease Control and Prevention, National center for Emerging and Zoonotic Infectious Diseases.

How to Run a TAP Report

TAP reports allow the user to rank every reporting location for each module

- Rank by highest to lowest CAD, regardless of if there are enough predicted infections to calculate an SIR
  - i.e. Location Rank 1 needs the most prevention work
- See top performing and bottom performing locations


NHSN Home
Alerts
Dashboard
Reporting Plan
Patient
Event
Procedure
Summary Data
Import/Export
Surveys
Analysis
Logout
Analysis Reports
Expand All
Collapse All
Search
Device-Associated (DA) Module
Procedure-Associated (PA) Module
HAI Antimicrobial Resistance (DA+PA Modules)
Antimicrobial Use and Resistance Module
MDRO/CDI Module - LABID Event Reporting
MDRO/CDI Module - Infection Surveillance
MDRO/CDI Module - Process Measures
MDRO/CDI Module - Outcome Measures
CMS Reports
TAP Reports
Acute Care Hospitals (ACHs)
TAP TAP Report - ACH and CAH CLAB Data
TAP TAP Report - ACH and CAH CAU Data
TAP TAP Report - ACH and CAH FACWIDEIN MRSA LabID Data
TAP TAP Report - ACH and CAH FACWIDEIN CDI LabID Data
Long Term Acute Care Hospitals (LTACs)
Inpatient Rehabilitation Facilities (IRFs)

National Healthcare Safety Network
TAP Report - CLABSI Data for Acute Care Hospitals
Locations Ranked by CAD Within a Facility
Cumulative Attributable Difference (CAD) Multiplier: HHS Goal = 0.5

As of: April 26, 2016 at 9:52 AM
Date Range: All CLAB_TAP

FACILITY			LOCATION									
orgID	name	facCAD	locRank	location	loccdc	infCount	numcldays	locDUR	locCAD	locSIR	SIRtest	numPathBSI
15165	NHSN State Users Test Facility #2	2.28	1	5M	IN:ACUTE:WARD:M	1	50	14	0.96	.		3 (1, 0, 1, 0, 0, 1)
			2	5ICU	IN:ACUTE:CC:N	1	140	37	0.90	.		2 (0, 0, 1, 0, 0, 0)
			3	1	IN:ACUTE:CC:MS	1	200	40	0.79	.		2 (0, 0, 1, 1, 0, 0)
			4	L600	IN:ACUTE:WARD:M	0	25	17	-0.02	.		
			4	L700	IN:ACUTE:WARD:MS	0	30	60	-0.02	.		
			6	L200	IN:ACUTE:CC:MS	0	50	50	-0.05	.		
			7	L800	IN:ACUTE:WARD:S	0	100	57	-0.07	.		
			8	L300	IN:ACUTE:CC:S	0	75	33	-0.09	.		
			9	L100	IN:ACUTE:CC:M	0	100	50	-0.13	.		

*Data for example only

NHSN: Long Term Care Component

Overview

The Long-term Care Facility (LTCF) Component provides long-term care facilities with a customized system to track infections and prevention process measures.

Tracking this information allows facilities to identify problems, improve care, and determine progress toward national healthcare-associated infection goals.

Facilities eligible to report into all modules of this component include:

- Nursing homes
- Skilled nursing facilities
- Chronic care facilities
- Developmental disability facilities

https://www.cdc.gov/nhsn/ltc/

Available Modules in the LTCF Component

- C. *difficile* Infection (CDI) and Multidrug-resistant Organisms (MDRO)
- Urinary Tract Infections (UTIs)
- Prevention Process Measures
  - Hand Hygiene
  - Gloves
  - Gown Use and Adherence
- Healthcare Personnel Vaccination Component

Why Use NHSN?

Real-time Data and Analysis

- NHSN gives healthcare facilities the ability to see their data in real-time, use pre-built analysis tools, and share that information with clinicians and facility leadership

Surveillance and Prevention

- Tracking infections can assist facilities in identifying problem areas and track progress with implemented prevention strategies

Meet CMS Requirements

- No current CMS reporting requirements for Long-term care facilities
- However, provides a channel for facilities to comply with Centers for Medicare and Medicaid Services (CMS) infection reporting requirements

How Do I Enroll?

Enroll in NHSN

- Facility must complete the Agreement to Participate and Consent enroll in the Long-Term Care Component of NHSN
- Once processed by NHSN, the facility is active
- After processing all users must acquire SAMS credentials and SAMS grid card to access NHSN
  - Instructions are provided by NHSN post-activation
  - Complete form and send identity verification materials to CDC

NHSN Set-up

1. Mapping Locations
   - Each resident care location in your facility should be mapped to a CDC location code/description
   - Provides information about the type of residents or care service of that location
     - NHSN 80% Rule – Location code best reflects the majority, or 80%, of the residents of that unit
2. Monthly Reporting Plans
   - Tells NHSN which modules and events your facility will be tracking for the month
   - Must be submitted for every month that your facility plans to perform surveillance
     - Can be up to one year in advance
3. Add Users and Assign Rights
   - Facility Administrator (FacAdmin) can add additional users to access NHSN and assigns rights to each user
   - Best practice to have at least two users to limit gaps in reporting
4. Report your data!
5. Share your Data with MDHHS!
   - Join MDHHS SHARP Group with Group ID and Password
   - After joining, facility will “Confirm Rights” and “Accept”

NHSN Analysis

Entering Event Data

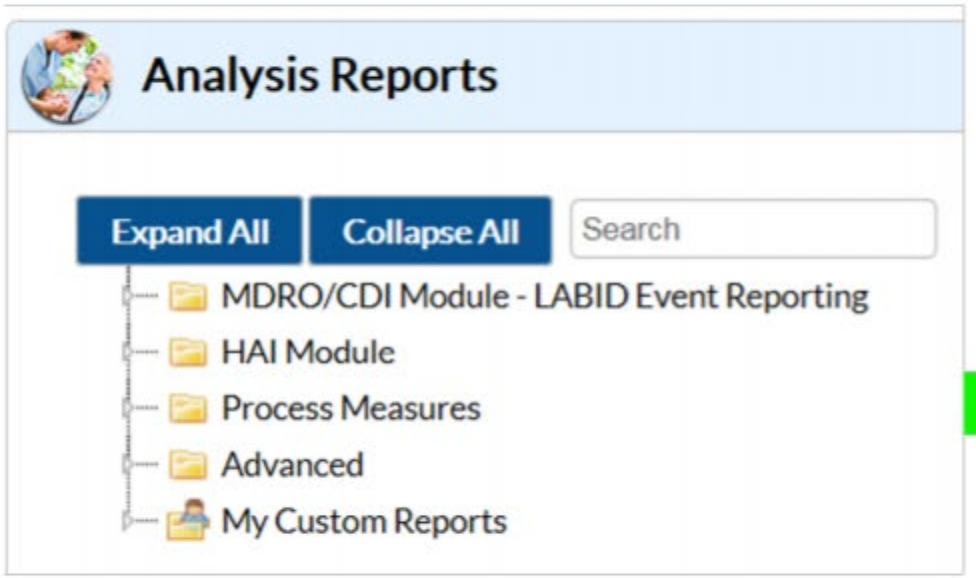
- Once it is determined that an event or infection has met NHSN surveillance definition, it is reported into NHSN
- Report Total Resident Days

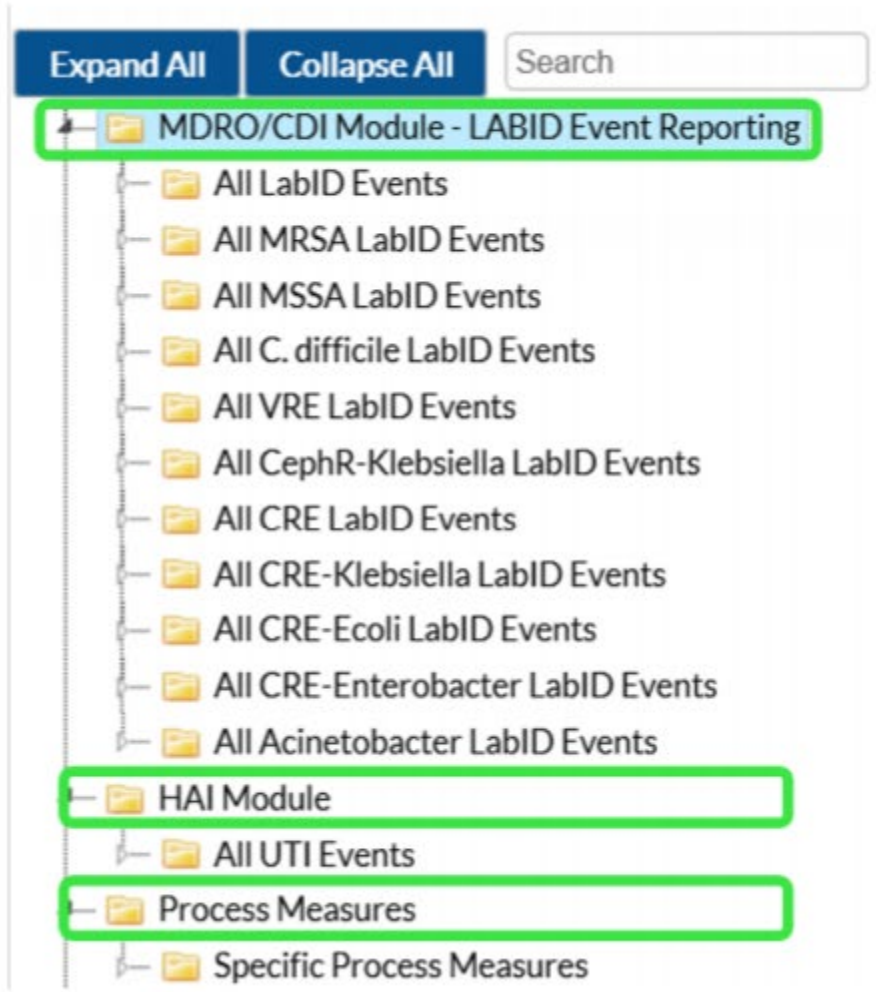
Generating datasets

- Datasets must be generated following any changes so that it can be reflected in the analysis reports
  - Including the addition of new events

Start analyzing!

Analysis Reports: Organized by module, then into folder by event type



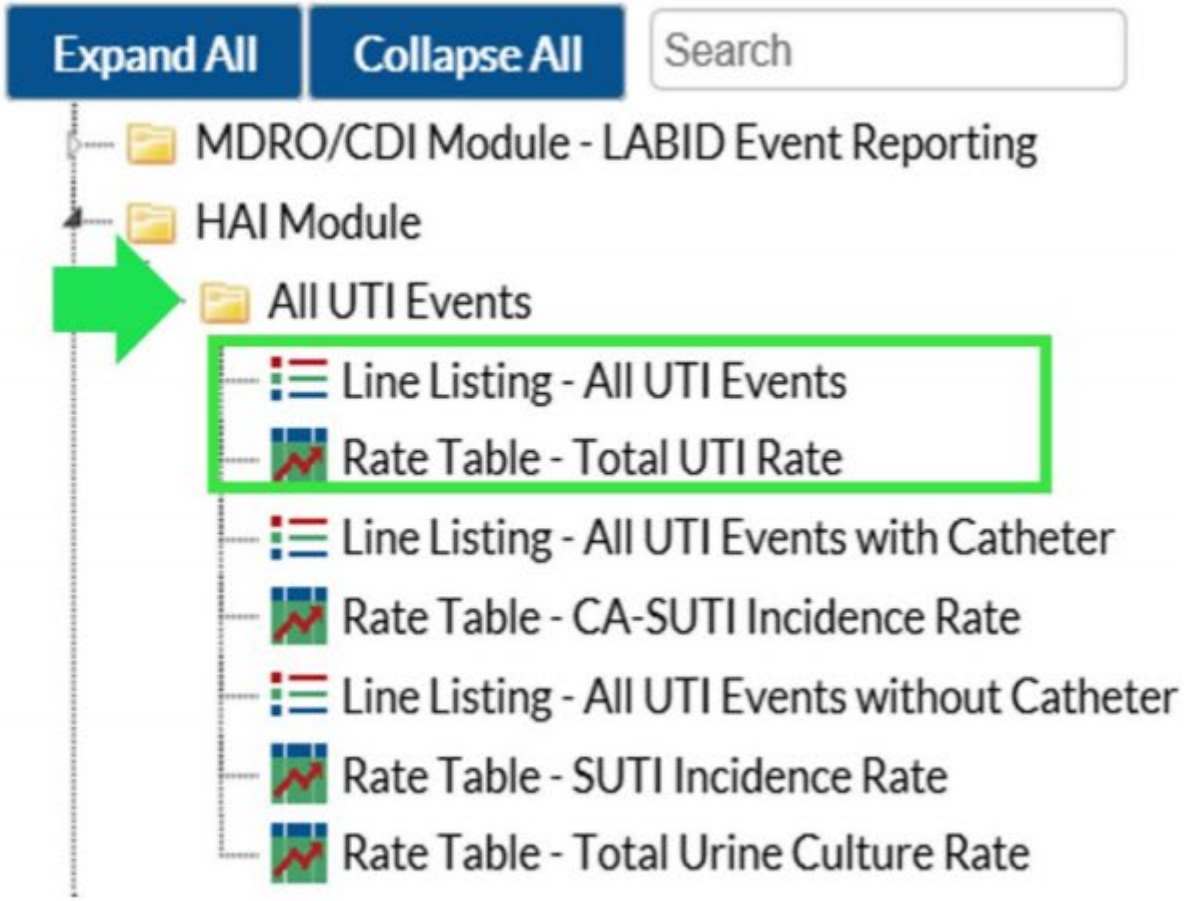


What Reports are available for my event data?

Line list allow resident-level review of data

Rate tables display an overall facility calculated rates

Available reports may be modified and saved to Custom Reports folder!!



Line Lists and Rate Tables Examples

National Healthcare Safety Network
Line Listing - All UTI Events
As of: July 9, 2018 at 12:20 PM
Date Range: LTCUTI_EVENTS eventDateYM 2018M01 to 2018M06

1 orgID	2 resID	3 curAdmDate	4 eventID	5 eventDate	6 ltcSpcEvent	7 cathStatus	8 location
11106	CDC-058	12/26/2014	1833	06/05/2018		NEITHER	GEN
11106	CDC-050	02/08/2018	1834	06/13/2018		INPLACE	GEN
11106	CDC-007	06/11/2011	1753	01/12/2018	CA-SUTI	INPLACE	DEMENTIA
11106	CDC-017	06/13/2013	1792	01/22/2018	CA-SUTI	INPLACE	DEMENTIA
11106	CDC-016	09/12/2014	1793	03/12/2018	CA-SUTI	INPLACE	DEMENTIA
11106	CDC-009	03/30/2018	1761	04/12/2018	CA-SUTI	INPLACE	GEN
11106	CDC-024	04/01/2018	1771	04/23/2018	CA-SUTI	NEITHER	GEN
11106	CDC-020	03/05/2018	1798	05/01/2018	CA-SUTI	INPLACE	DEMENTIA
11106	CDC-012	05/22/2012	1765	02/16/2018	SUTI	NEITHER	GEN
11106	CDC-003	01/25/2018	1745	03/14/2018	SUTI	NEITHER	GEN
11106	CDC-022	02/26/2018	1777	03/24/2018	SUTI	NEITHER	DEMENTIA
11106	CDC-025	12/01/2015	1796	05/01/2018	SUTI	NEITHER	GEN
11106	CDC-010	04/01/2018	1849	06/20/2018	SUTI	NEITHER	GEN

Sorted by ltcSpcEvent eventDate cathStatus
Data contained in this report were last generated on July 9, 2018 at 10:37 AM.

Total CDI Rate = CDI count / Total Resident Days x 10,000

Options available to review different rate metrics

National Healthcare Safety Network
Rate Tables for CDI LabID Event Data
Total CDI Rate
As of: April 11, 2017 at 1:31 PM
Date Range: LTCLABID_RATESCDIF summaryYM 2017M01 to 2017M04

orgID=39455

summaryYM	location	ltcCDICount	numResDays	ltcCDIRate
2017M01	FACWIDEIN	2	2444	8.183
2017M02	FACWIDEIN	3	2490	12.048
2017M03	FACWIDEIN	3	2590	11.583

Conclusion

Benefits of using NHSN:

- HAI Surveillance allows facilities to identify problem areas, improve patient care, and track progress towards infection prevention
- See data in real-time using pre-built analysis tools
- Leverage resources by sharing data with clinicians and facility leadership
  - Ability to provide quick response time to administrator requests
- Get familiar with the system before CMS required enrollment

Already using NHSN?

- Share your data with the MI NHSN Group!
- Additional resource to help you understand your data
- SHARP Unit support with enrollment, reporting and analyzing data
  - Local, prompt response to questions