2020 NHSN Training Webinar

Patient Safety Component Analysis Updates

February 12, 2020

Agenda

- Changes to NHSN Dataset Generation (DSG) – Maggie Dudeck
- Adjusted Ranking Metric (ARM) & the Reliability-Adjusted Rankings Dashboard – Sunny Xu
- MDRO/CDI Module Analysis Updates – Karen Jones and Sunny Xu
- 2020 CLABSI Analysis Changes and Introduction to SIR/SUR Percentile Distribution – Prachi Patel
- 2020 changes to the HAI-AR analysis reports, Recently published NHSN surveillance reports, and the Patient Safety Portal – Kathryn Haass

Changes to NHSN Dataset Generation (DSG)

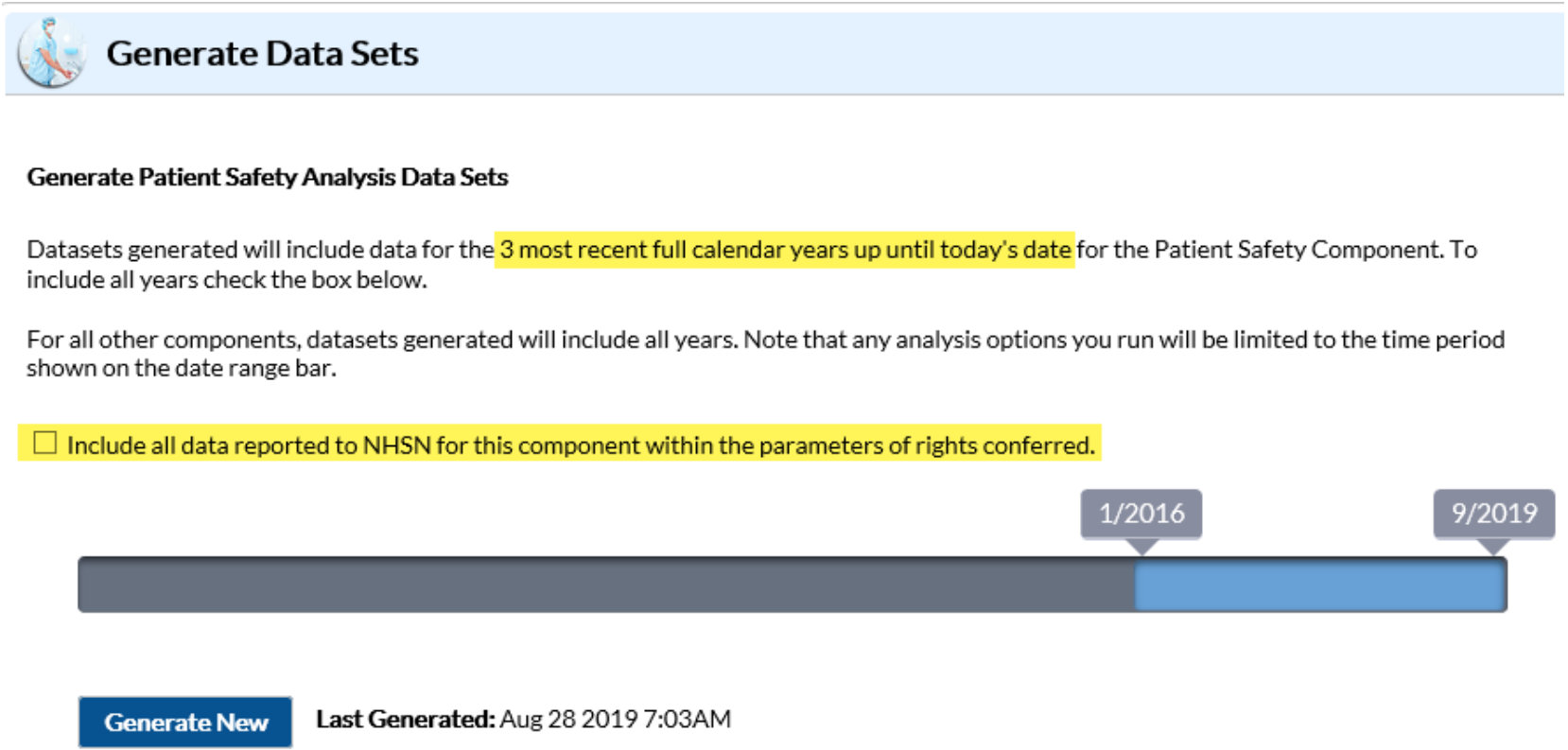
Maggie Dudeck, MPH

2020 PS Analysis Updates

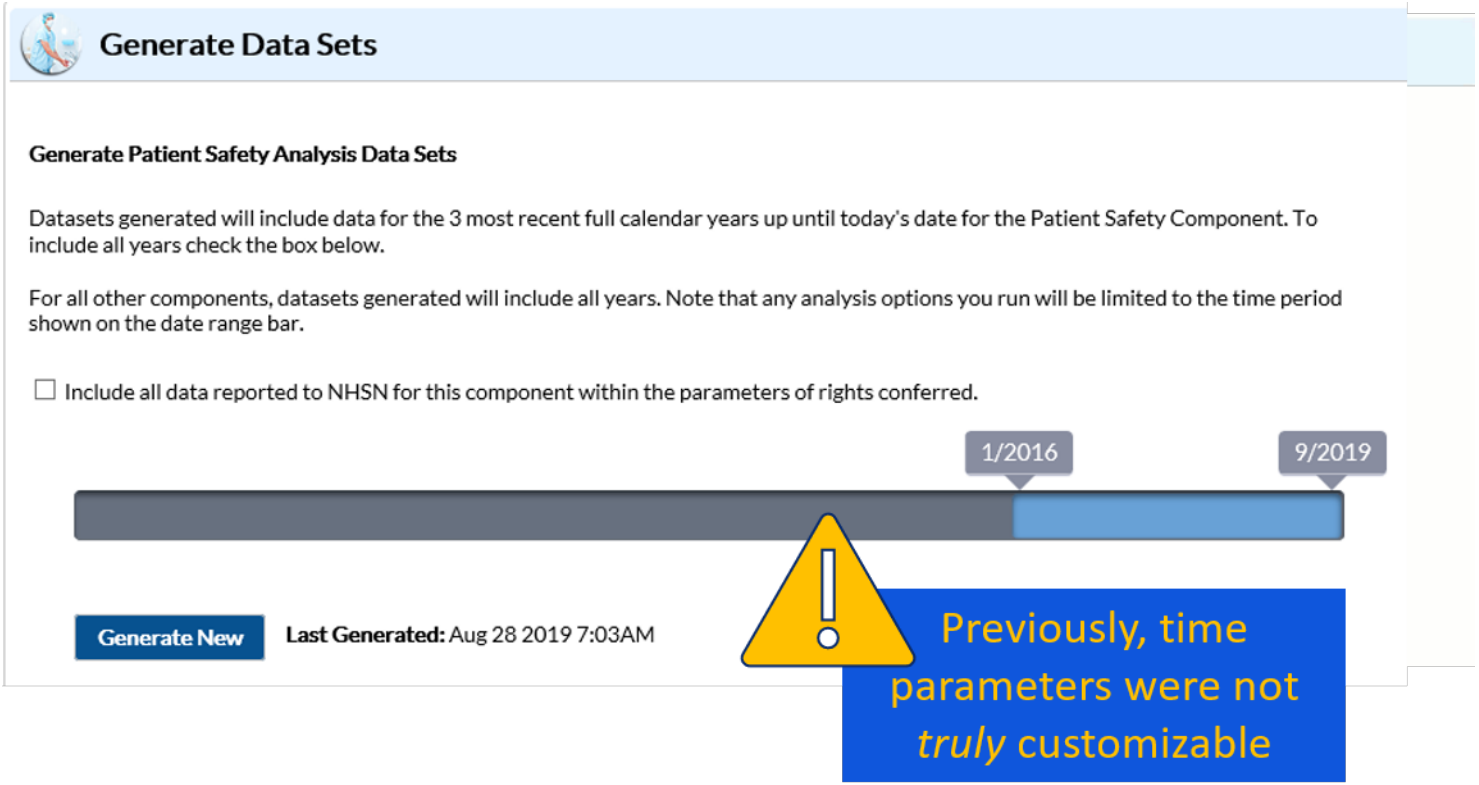
Changes to NHSN Dataset Generation (DSG)

- Background:
  - Generating data sets is the first step in NHSN analysis
  - Data will be frozen, for your use, at a specific point in time and copy those data into defined data sets.
  - Regenerate datasets for updates to be reflected in reports
  - Each user in NHSN who wishes to analyze data must generate data sets.
- Recent release of NHSN rolled out enhanced features for DSG
- Enhancements intended to improve DSG process, speed, and user experience

Previous Method for Data Set Generation:



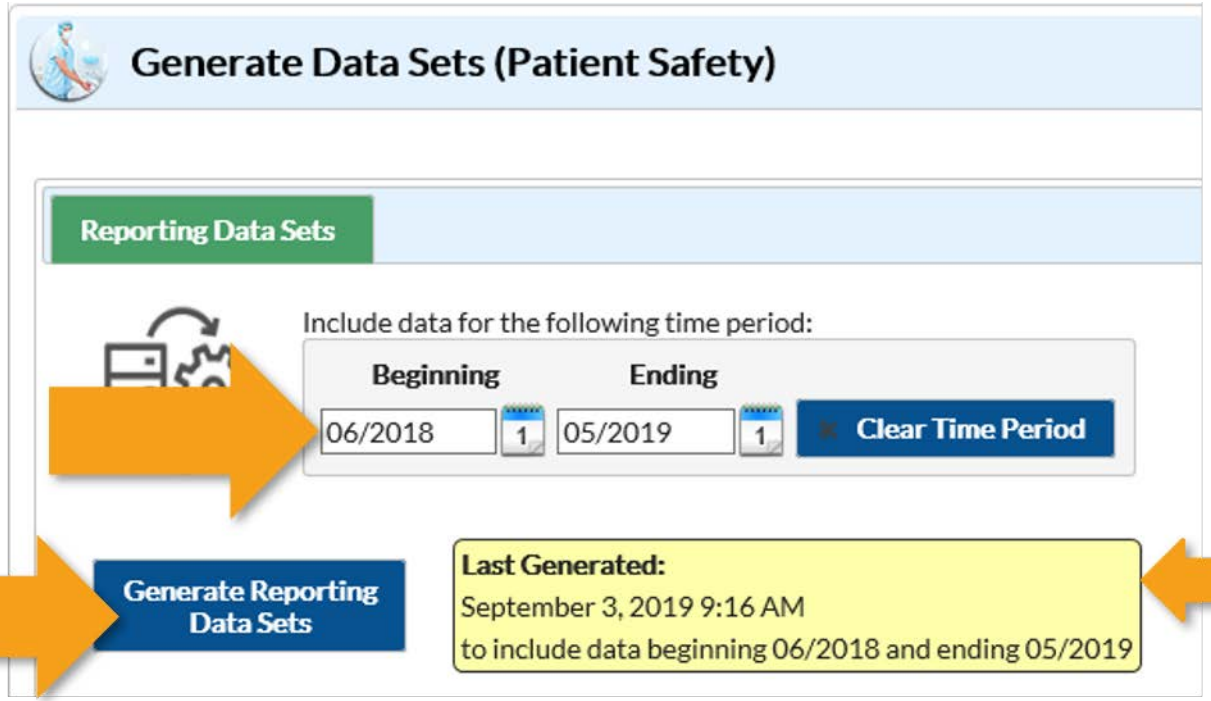
Previous Method for Data Set Generation:



New: Enhanced Timeboxing!

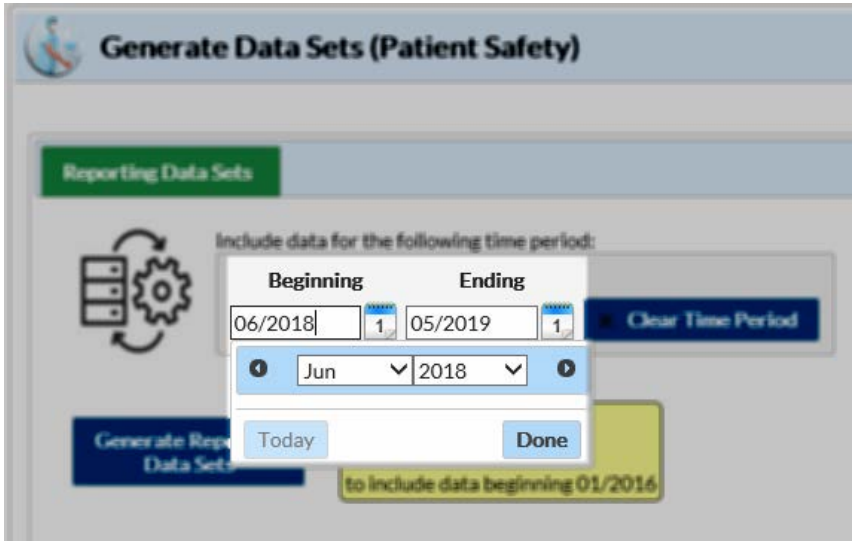
- Original intent of previous framework was to allow custom timeframes
  - This is known as **timeboxing**
- In 9.4, released on December 7, 2019, facility and group users are able to specify month/year for analysis datasets, prior to generating
  - Lowers size of datasets
  - Faster generation of datasets
  - Improves system resources
  - Improves experience for users

New Data Set Generation screen

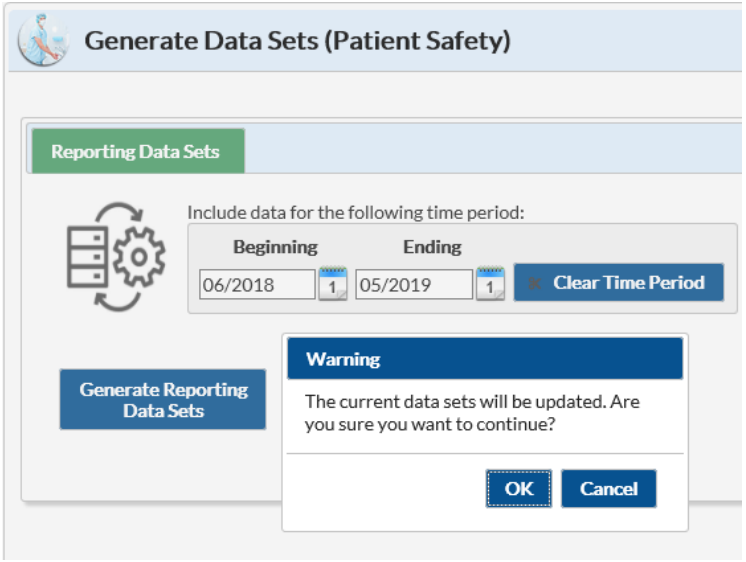


This information will appear in report footnotes

New Data Set Generation screen

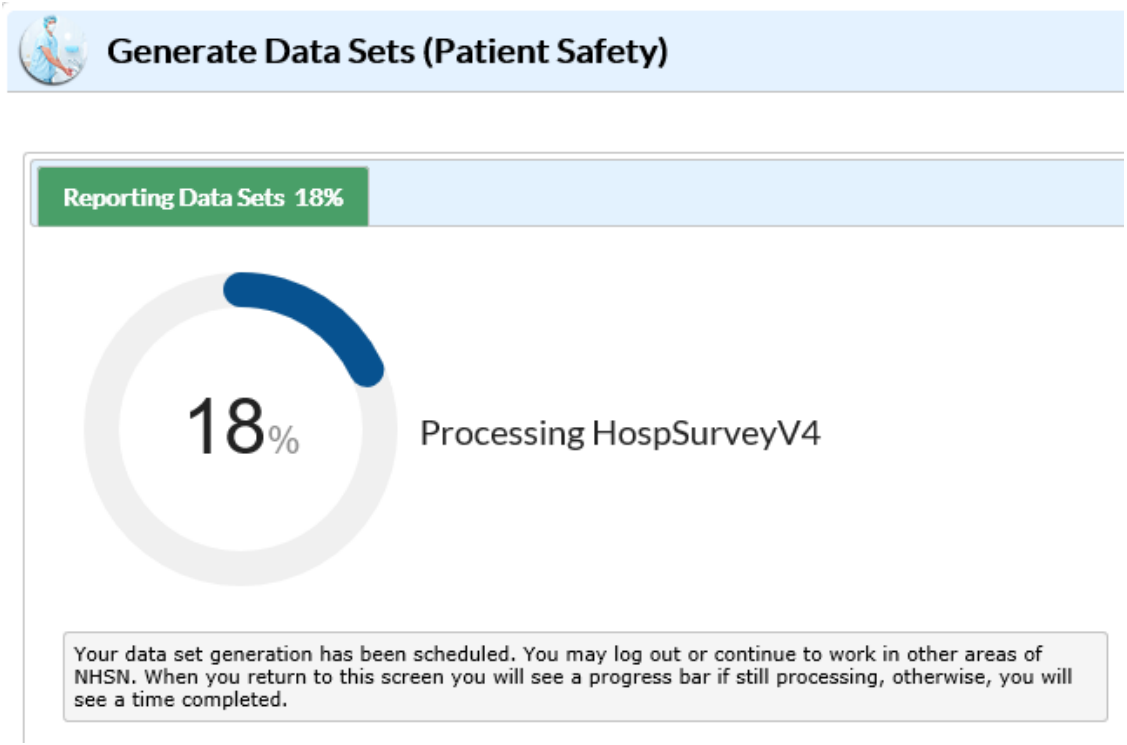


When clicking in the date box, the month and year drop downs will appear for selection. Once selected, click “Done”.



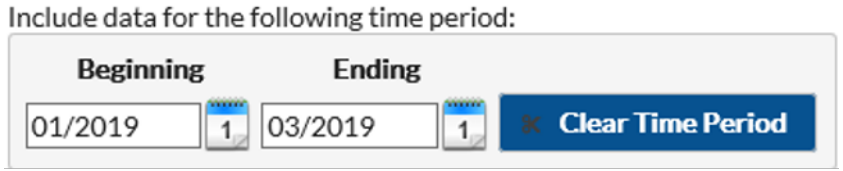
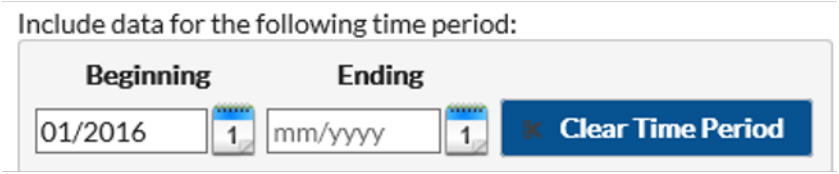
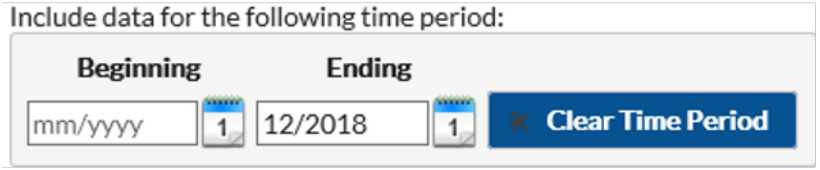
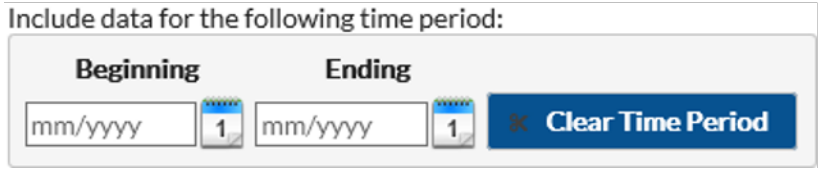
After date parameters are set, click “Generate Reporting Data Sets”.

New Data Set Generation screen



- When process starts, a new progress image will appear
- You can navigate to other areas of NHSN or log off
  - You cannot run analysis reports while data sets are generating

More about Specifying Dates

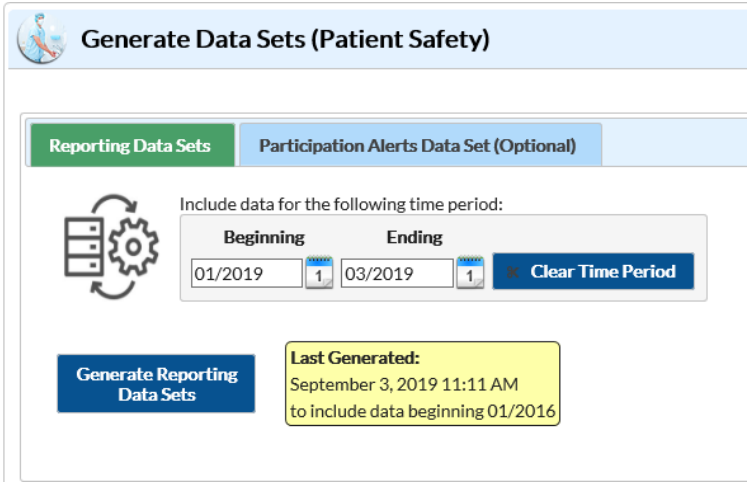
	**Both** beginning and ending = nonblank Will include all data within the time period (e.g., 01/01/19 thru 03/31/19)
	Ending date = blank Will include all data from 01/2016 through present day
	Beginning date = blank Will include all data through 12/2018
	**Both** beginning and ending = blank Will include all data reported, regardless of time period

Special Rules for PS

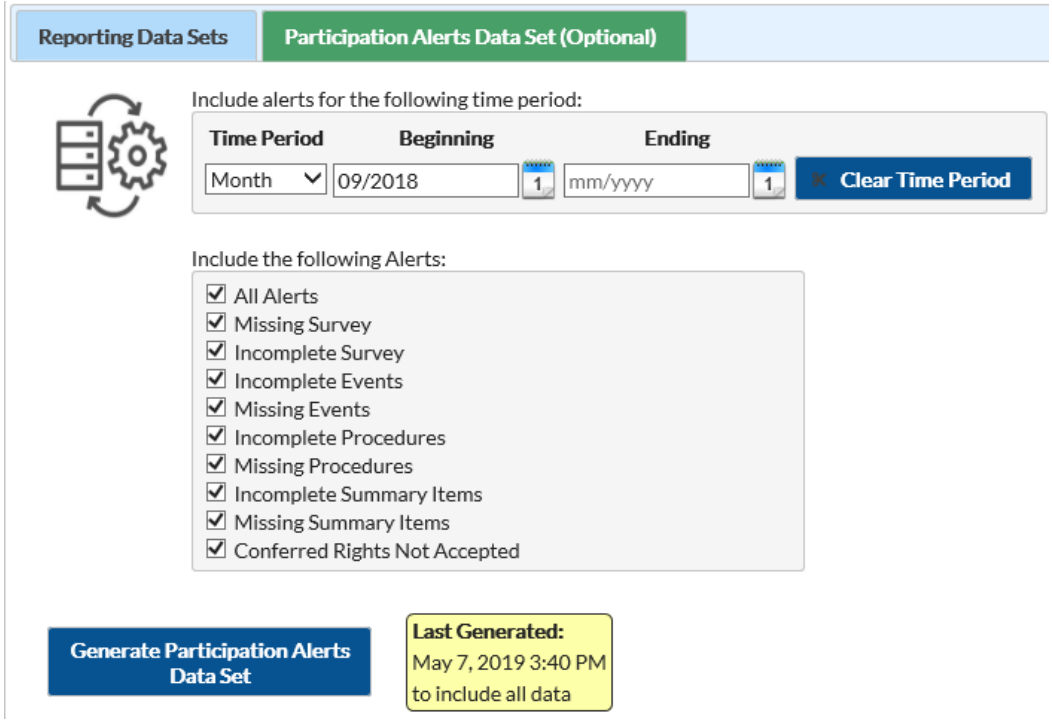
- Survey data will **not** be limited by time period
  - All surveys completed by the facility will be included, regardless of survey year
- SSIs with event dates up to 90 days past the “ending” date will be included
  - 90 days is the max surveillance period for a number of procedure categories
- DSG process will include all LabID events
  - Once algorithms are applied, events outside the time period will be removed from final analysis data sets (ADS)

Extra Data Set Generation for PS Group Users

- In 9.4, the ParticipationAlerts analysis dataset (ADS) is **separate** from main DSG process
- Group Users will have two tabs on “Generate Data sets” screen
  - Reporting data sets (same as Facility option)
  - Participation Alerts data Set (optional)
- Generating this data set is **optional**
  - This data set is used *only* for the Participation Alerts reports
  - This data set should only be generated if you’re interested in reviewing unresolved alerts and is not needed for any other report in NHSN



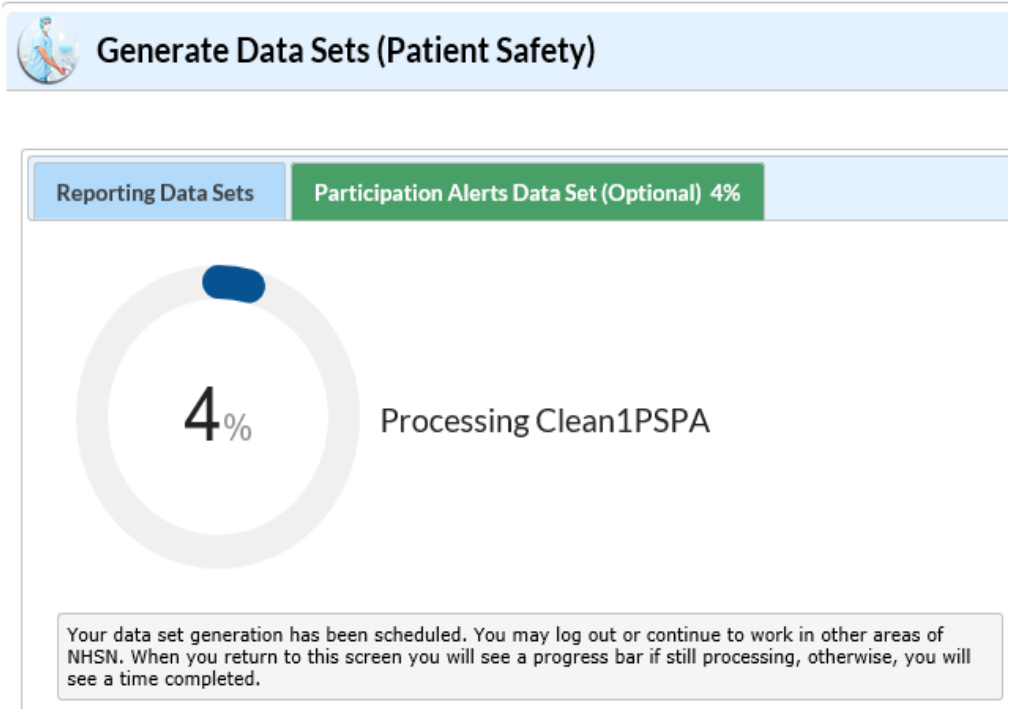
Participation Alerts ADS



- Group Users can select a time period for Participation Alerts
  - Smaller time period, fewer alerts = quicker DSG
- Group users can select which alerts to include
  - Can also select “All Alerts”
- “Last Generated” time stamp on this tab will always be specific to Participation Alerts ADS

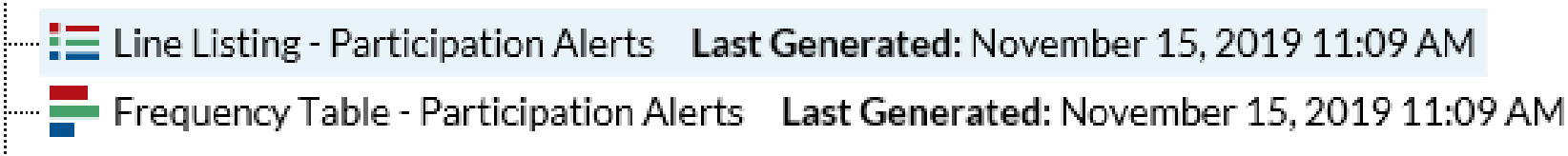
Participation Alerts ADS

- A new progress image appear on the Participation Alerts Data Set tab.
- You can navigate to other areas of NHSN, or log off.
  - NOTE: You cannot run the Participation Alerts reports while this data set is generating, however you **can** generate other reporting data sets or run other analysis reports.



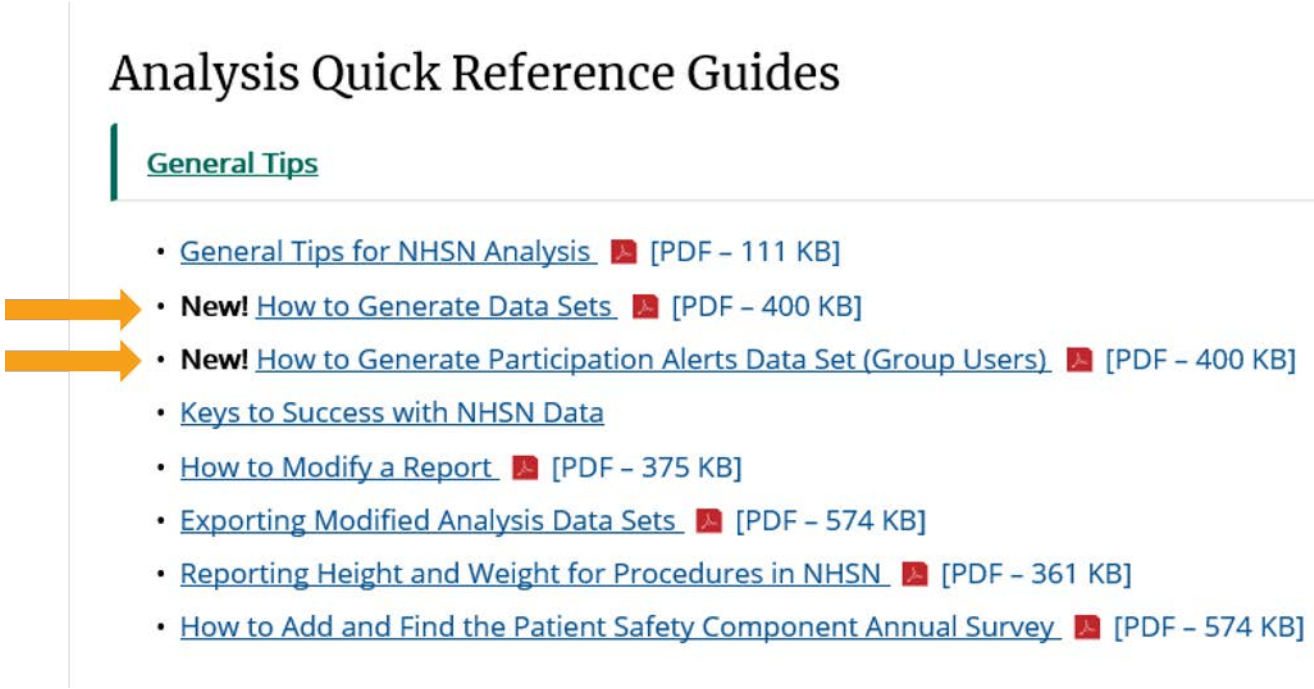
Participation Alerts ADS

- Once generated, you'll receive an alert that the data sets generated successfully.
- The date and time Last Generated will be updated and will appear next to the Participation Alerts reports.



Additional Information

- https://www.cdc.gov/nhsn/ps-analysis-resources/reference-guides.html



Analysis Quick Reference Guides

General Tips

- General Tips for NHSN Analysis [PDF – 111 KB]
- **New!** How to Generate Data Sets [PDF – 400 KB]
- **New!** How to Generate Participation Alerts Data Set (Group Users) [PDF – 400 KB]
- Keys to Success with NHSN Data
- How to Modify a Report [PDF – 375 KB]
- Exporting Modified Analysis Data Sets [PDF – 574 KB]
- Reporting Height and Weight for Procedures in NHSN [PDF – 361 KB]
- How to Add and Find the Patient Safety Component Annual Survey [PDF – 574 KB]

Adjusted Ranking Metric (ARM) & the Reliability-Adjusted Rankings Dashboard

New Measure & NHSN Dashboard

Sunny Xu, MPH

What is the ARM?

- The Adjusted Ranking Metric (ARM)
- Available for Acute Care Hospitals at this time
- Accounts for differences in volume of exposure between facilities and is preferable for ranking facilities
- Individual hospitals are ranked against all other acute care hospitals for the same year

How is the ARM calculated?

- The ARM is calculated as a ratio of numerator divided by denominator, where the ARM denominator is identical to that of the SIR.
- Explicitly, the ARM is the reliability-adjusted number of events divided by the risk-adjusted predicted number of events, whereas, the SIR is the number of events divided by the risk-adjusted predicted number of events.

ARM

$$\frac{\textit{Reliability adjusted number of events}}{\textit{Risk adjusted predicted number of events}}$$

SIR

$$\frac{\textit{Number of events}}{\textit{Risk adjusted predicted number of events}}$$

Reliability-Adjusted Ranking

- Annual, facility-specific Reliability-Adjusted Rankings based on the ARM are displayed as percentiles on the Reliability-Adjusted Ranking dashboard within NHSN.
  - Where lower percentiles imply better performance
- Reliability-Adjusted Rankings are available for CLABSI, CAUTI, MRSA, CDI, SSI-COLO and SSI-HYST.

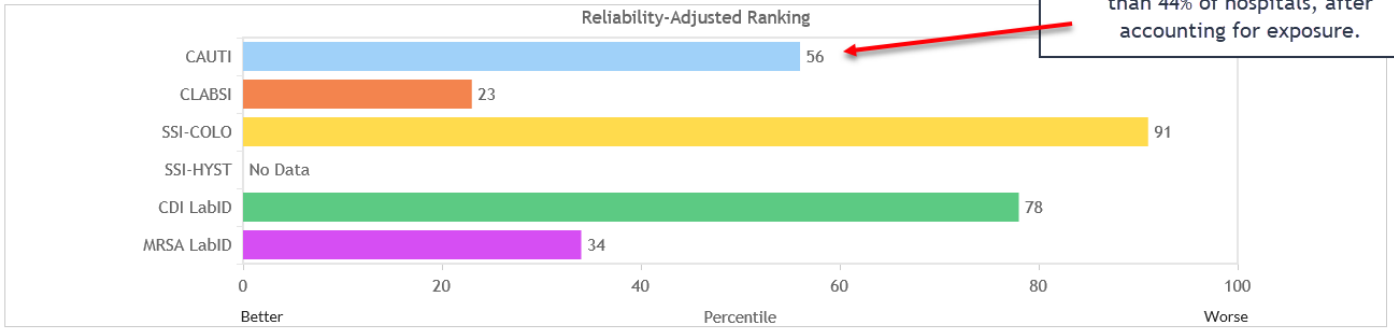
Reliability-Adjusted Ranking

Name: [redacted]

Year: 2019

Data as of: July 01, 2019

Print



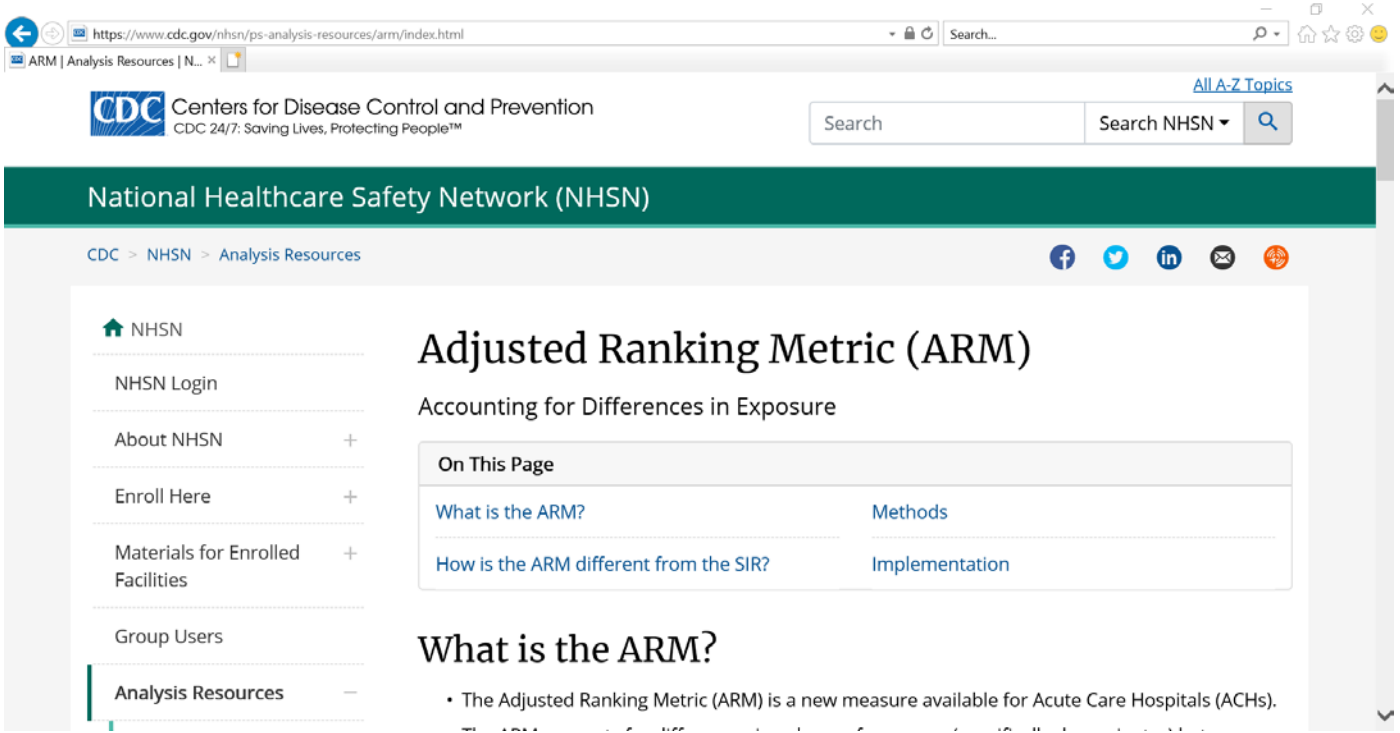
CAUTI Ranking Interpretation: A percentile of 56 out of 100 means your hospital is performing better than 44% of hospitals, after accounting for exposure.

About these data:

1. The reliability-adjusted ranking for each HAI is based on the Adjusted Ranking Metric (ARM) score.
2. This score is unique to your hospital and accounts for differences in exposure (or patient group "at risk") between acute care hospitals.
3. Your acute care hospital is ranked against all other participating acute care hospitals and this rank is presented as a percentile, where a lower score is better. For example, a percentile of 31 out of 100 means that your hospital is performing better than 69% of hospitals, for the same HAI and year, after accounting for exposure.

For more information, please visit the NHSN website: https://www.cdc.gov/nhsn/ps-analysis-resources/arm/index.html

- For more information please visit the ARM webpage: https://www.cdc.gov/nhsn/ps-analysis-resources/arm/index.html



MDRO/CDI Module Analysis Updates

Sunny Xu, MPH and Karen Jones, PhD, MPSH

MDRO/CDI Module Analysis Updates 2020

- Updates to the “Incomplete Data” table located in the CDI SIR report
- Edits to the Summary Data Line List
- MRSA bacteremia de-duplication algorithm improvement
- New Combined ED/OBS CDI prevalence rate

Data Excluded from the CDI SIR Report

- CDI SIRs are only available on a quarterly-basis or longer (e.g., annual)
- CDI SIRs are not available until the quarter is complete
  - 2020 Q1 CDI SIRs are not available until March 2020 data entry is complete
  - CDI test type is necessary for the SIR, and is not entered until the March 2020 FacWideIN denominator
- If running a CDI SIR report on an *incomplete* quarter, the SIR report contains an extra data table in the results
  - Recent improvements to this table

Data Excluded from the CDI SIR Report *continued*

CDI Data - Months Excluded from SIR Due to Missing CDI Test Type

As of: October 28, 2019 at 2:50 PM
Date Range: BS2_LABID_RATESCDIF_CMS summaryYr After and Including 2015
if (((cdifLabIDPlan = "Y")))

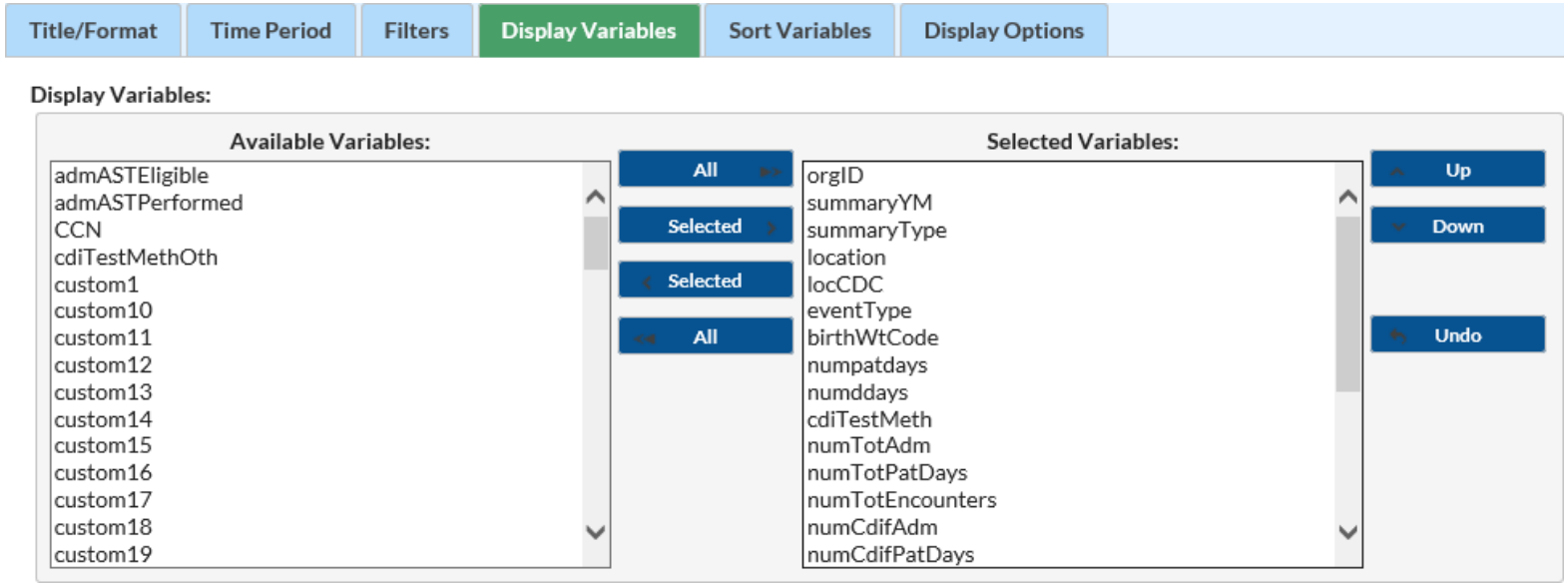
orgID	ccn	location	summaryYM	CDIF_facIncHOCount	numPatDays	numAdms	cdiTestType
10401	991999	FACWIDEIN	2020M01	3	1400	205	
10401	991999	FACWIDEIN	2020M02	2	1250	345	

This column is 'blank' because CDI Test Type is missing for the quarter

1. This table displays months that are excluded from the SIR report. These months will be included in the SIR once reporting for the entire quarter has been completed and CDI test type has been reported.

Updates to the Summary Data Line List

- Analysis Reports > Advanced > “Line Listing- All Summary Data”
- Shortened list of “Selected Variables” on the Modify screen



MRSA bacteremia de-duplication algorithm

- An improvement has been made to the de-duplication algorithms used for the MRSA bacteremia SIR numerator.
- This improvement adjusts the de-duplication that occurs in rare scenarios when a single patient has multiple positive MRSA bacteremia events that cross multiple units within the facility and multiple calendar months.

MRSA bacteremia de-duplication algorithm

National Healthcare Safety Network
Line Listing - All MRSA LabID Events
As of: October 23, 2019 at 2:39 PM
Date Range: All LABID_EVENTS

orgID	patID	eventID	spcOrgType	location	outpatient	prevPos	onset	admitDate	locationAdmitDate	specimenSource	specimenDate	FWMRSA_admPrevBldCount	FWMRSA_bldIncCount
10401	9516	86962	MRSA	MED	N	N	HO	06/17/2019	06/17/2019	BLDSPC	06/20/2019	0	1
10401	9516	86964	MRSA	PSYCH	N	N	HO	06/17/2019	06/23/2019	BLDSPC	06/23/2019	0	0
10401	9516	86965	MRSA	TELE	N	Y	HO	06/17/2019	07/01/2019	BLDSPC	07/04/2019	0	0

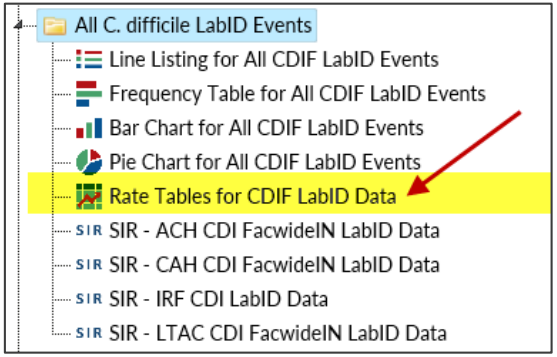
- A positive MRSA bacteremia will not be counted in the SIR if the patient had a prior positive MRSA bacteremia in the previous 14 days (where the first specimen date is considered Day 1).
- Updates and additional examples can be found in the LabID SIR Troubleshooting Guide: https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/mrsacdi_tips.pdf

New CDI prevalence rate

- Combined Outpatient Prevalence Rate for ED and 24 hour Observation Locations:

$$\frac{\text{Total number of unique CO CDI LabID Events identified in an ED or 24 hour Observation location}}{\text{Total patient encounters in ED and 24 hour Observation location(s)}} \times 100$$

Note: This rate has been added for informational purposes only and is *not* used in the risk adjustment calculations for the SIR.



Rate Table - All CDIF LabID Events by Location
Combined ED/Observation Unit CDIF Prevalence Rate
As of: October 28, 2019 at 1:54 PM
Date Range: BS2_LABID_RATESCDIF summaryYM 2019M04 to 2019M06

summaryYM	location	CDIF_EDOBSprevCount	numEncounters	CDIF_EDOBSPrevRate
2019M04	FACWIDEIN	1	1100	0.091
2019M05	FACWIDEIN	0	800	0.000
2019M06	FACWIDEIN	1	607	0.165

Notable mentions

- The MRSA bacteremia SIR reports that are located in the “CMS Reports” analysis folder for Inpatient Rehabilitation Facilities (IRFs) and Long-term Acute Care Hospitals (LTACHs) will not contain data beyond 2018 Q3.
- Additional guidance and examples have been provided to assist users in accurate reporting of primary CDI test type method. This clarification will assist facilities that use a single-step or conditional multi-step testing algorithm.

2020 CLABSI Analysis Changes and Introduction to SIR/SUR Percentile Distribution

Prachi Patel, MPH

Surveillance Branch, DHQP, NCEZID
Centers for Disease Control and Prevention

CLABSI Numerator exclusions

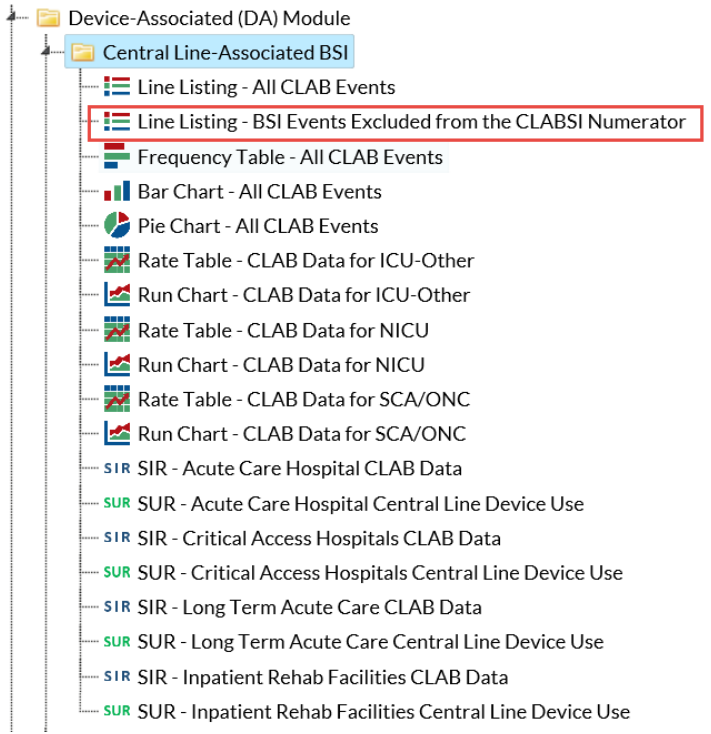
- 2015 : MBI-LCBI events
- 2019: Extracorporeal life support (ECMO) and Ventricular Assist Device (VAD) BSI events
- 2020: Munchausen Syndrome by Proxy (MSBP), Epidermolysis bullosa (EB), Patient self-injection, and Pus at vascular access site

Analysis Options Impacted

- CLABSI SIR and Rate tables
  - Excludes: MBI-LCBI, ECMO, VAD, MSBP, EB, Patient self injection, Pus at vascular site
- MBI-LCBI SIR and Rate tables
  - Excludes: ECMO, VAD, MSBP, EB, Patient self injection, Pus at vascular site

New Analysis Options

- BSI Events Excluded from the CLABSI Numerator line list
  - Will include all events that will not be included in the CLABSI numerator/event count
  - New analysis variable called clab_exclude
    - If any of the previously mentioned risk factors are met, this variable will show as “Yes”



Line List Example

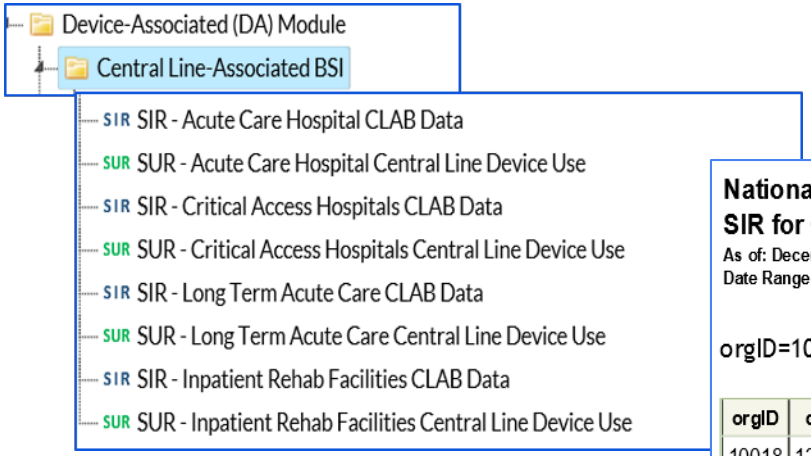
National Healthcare Safety Network
Line Listing for BSI Events Excluded from the CLABSI Numerator
As of: January 2, 2020 at 9:06 AM
Date Range: CLAB_EVENTS evntDateYr 2019 to 2019

orgID	patID	dob	gender	admitDate	eventID	eventDate	eventType	spcEvent	location	ecmo	vad	mbi_lcbi	msbp	eb	patInj	siteBldMatch	matchSite	clab_exclude
10000	01250605	06/02/1982	M	12/11/2018	34939026	01/21/2019	BSI	LCBI	CMICU_N	N	Y	N	Y	Y	N	N		Y
10000	05184123	03/21/1972	M	12/03/2018	35002183	01/16/2019	BSI	LCBI	CC_ONC	Y	N	N						Y
10000	1234	12/01/1918	F	01/01/2019	35043655	01/04/2019	BSI	LCBI	CMICU_N	Y	N	N	N	N	N	N		Y
10000	1234	12/01/1918	F	01/01/2019	35172159	01/28/2019	BSI	LCBI	CMICU_N	N	Y	Y	N	N	N	N		Y
10000	CM0130	01/13/1983	M	01/01/2019	35134732	01/05/2019	BSI	LCBI	9 SOUTH	Y	Y	N	Y	Y	Y	N		Y
10000	CM0219-STAG-A	05/05/2005	M	01/12/2019	35397483	01/19/2019	BSI	LCBI	CARDCRIT	Y	Y	N	Y	Y	Y	N		Y
10000	CM0305-BSI-A	05/05/1955	F	01/10/2019	35610047	01/12/2019	BSI	LCBI	CARDCRIT	Y	Y	N	Y	Y	Y	N		Y
10000	CM0427-BSI-A	05/05/1955	F	01/03/2019	36334508	01/05/2019	BSI	LCBI	CARDCRIT	Y	Y	N	Y	Y	Y	Y	ARTERCATH	Y
10000	MD55543	10/16/1947	M	01/01/2019	35802895	01/20/2019	BSI	LCBI	NSICU	Y	N	N						Y
10000	MD777543	12/01/2018	M	01/01/2019	35150350	01/15/2019	BSI	LCBI	NICU 3	Y	N	N						Y

The New SIR/SUR Percentile Distribution

- Percentile distribution of facility-specific SIRs/SURs are now included on SIR and SUR reports
  - Based on the national SIR and SUR distribution published in the annual HAI Progress Report
    - https://www.cdc.gov/hai/data/portal/progress-report.html
- The percentile distribution of facility-specific SIRs/SURs are available for
  - Device-associated HAIs (CLABSI, CAUTI and VAE)
    - By orgID overall
    - By Location Type
      - ICU, WARD and NICU (CLABSI only)
  - Surgical Site Infections: Complex Admission/Readmission SIR Model only
  - MDRO: CDI and MRSA at facility-wide

The Percentile Distribution and How to Interpret Them: CLABSI SIR Example



National Healthcare Safety Network

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

As of: December 19, 2019 at 2:01 PM

Date Range: BS2_CLAB_RATE SALL summaryYr After and Including 2018

orgID=10018 medType=M

orgID	ccn	summaryYr	infCount	numPred	numcldays	SIR	SIR_pval	sir95ci	SIR_pctl
10018	12345	2018	16	5.889	5915	2.717	0.0006	1.608, 4.318	99

- The SIR/SUR percentiles are available for the CLABSI reports listed in above
- Using the output table above as example
  - This can be interpreted as 99% of facilities in the nation (with at least 1 predicted infection) had a overall CLABSI SIR equal to or lower than 2.717

How to Interpret the SIR/SUR Percentile Distribution: CLABSI Example

National Healthcare Safety Network
SIR for Central Line-Associated BSI Data for Acute Care Hospitals (2015 baseline) - By OrgID/Location Type
As of: December 19, 2019 at 2:01 PM
Date Range: BS2 CLAB RATESALL summaryYr After and Including 2018

orgID=10018 medType=M

orgID	ccn	locationType	summaryYr	infCount	numPred	numcldays	SIR	SIR_pval	sir95ci	SIR_pctl
10018	12345	CC	2018	3	4.106	4025	0.731	0.6359	0.186, 1.988	56
10018	12345	CC_N	2018	0	0.237	180	.	.		.
10018	12345	OTHER	2018	4	0.354	500	.	.		.
10018	12345	STEP	2018	8	0.184	210	.	.		.
10018	12345	WARD	2018	0	0.085	100	.	.		.
10018	12345	WARD_ONC	2018	1	0.922	900	.	.		.

- On the Location Type table of our report output,
- Only the ICU location type, highlighted, has an SIR therefore the SIR percentile is calculated
- The other location types had less than 1 predicted infections and no SIR calculated
  - Therefore the SIR percentile is not calculated

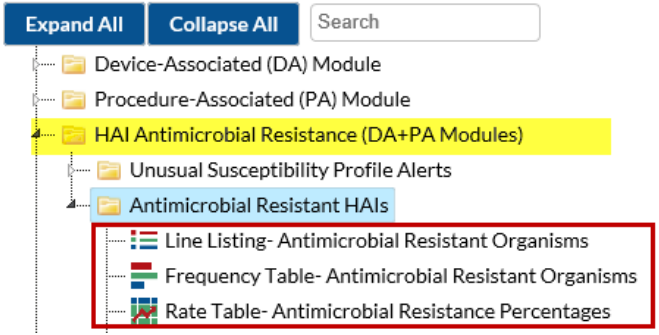
2020 Analysis Update Webinar

- 2020 changes to the HAI-AR analysis reports
- Recently published NHSN surveillance reports
- Patient Safety Portal

Kathryn Haass, MPH, CPH, M(ASCP)BB

Changes to HAI Antibiotic Resistance Analysis Reports

- Line list, frequency table, and rate table are available to show antibiotic-resistant pathogens reported for an HAI
  - CLABSIs, CAUTIs, SSIs, VAEs, pedVAEs



- <u>CRE definition change in analysis reports for 2020:</u>
  - CRE-E.coli, CRE-Klebsiella, CRE-Enterobacter
  - In 2020, NHSN adopted the new SNOMED classification for *Enterobacter aerogenes*
    - Starting in 2020, *Enterobacter aerogenes* will be known as *Klebsiella aerogenes*
  - Carbapenem-resistant *Klebsiella aerogenes* will be counted as **CRE-Klebsiella**
    - If reported as *Enterobacter aerogenes*, NHSN will re-classify as **Klebsiella**
  - No other changes to CRE definitions

Line List for CRE Klebsiella

National Healthcare Safety Network
Line Listing- Antimicrobial Resistant Organisms
CREklebsiella_HAI - Carbapenem-resistant Klebsiella pneumoniae/oxytoca/aerogenes

As of: January 2, 2020 at 10:41 AM
Date Range: ANTIBIOGRAM_HAI evntDateYQ 2020Q1 to 2020Q1

orgID	patID	dob	gender	admitDate	eventID	eventDate	eventType	location	pathogenDesc	phenotype
10401	12345	01/01/1960	F	12/17/2019	91129	01/02/2020	BSI	MED	Klebsiella aerogenes - EA	CREklebsiella_HAI
10401	12567	09/01/2019	M	11/12/2019	91130	01/01/2020	BSI	MED	Klebsiella aerogenes - EA	CREklebsiella_HAI
10401	83726	01/18/1955	F	12/29/2019	91131	01/01/2020	BSI	MED	Klebsiella oxytoca - KO	CREklebsiella_HAI
10401	527485	12/16/1991	M	12/02/2019	91132	01/01/2020	BSI	MED	Klebsiella pneumoniae - KP	CREklebsiella_HAI

- Updated titles to reflect pathogen change
- New footnotes beneath the report
- Guidance documents are available on the use of these reports, resistance definitions, etc.:

  https://www.cdc.gov/nhsn/ps-analysis-resources/reference-guides.html

New Publications: Common Pathogens and Resistance Patterns among HAIs in the U.S.

- CDC released two surveillance reports highlighting common pathogens and antibiotic resistance in U.S. healthcare facilities, 2015-2017
- **1. Adult HAI Report**:
  - Frequent pathogens for CLABSIs, CAUTIs, SSIs, & VAEs
    - SSI pathogens available for each NHSN operative procedure code
    - Data shown separately for ICUs, Wards, Oncology Units, LTACHs, IRFs
  - Resistance data stratified by infection type, location, and surgical category
  - https://doi.org/10.1017/ice.2019.296

Table 3. Distribution and Rank Order of the 15 Most Frequently Reported Pathogens Across All Types of Adult Healthcare-Associated Infections (HAIs), 2015–2017

Pathogen[a]	No. (%) Pathogens	Rank
Escherichia coli	62,571 (17.5)	1
Staphylococcus aureus	42,132 (11.8)	2
Selected *Klebsiella* spp	31,530 (8.8)	3
Pseudomonas aeruginosa	28,513 (8.0)	4
Enterococcus faecalis[b]	28,236 (7.9)	5
Coagulase-negative staphylococci	24,199 (6.8)	6
Enterobacter spp	16,568 (4.6)	7
Enterococcus faecium[b]	13,687 (3.8)	8

Reference: Weiner-Lastinger, L., et al. "Antimicrobial-resistant pathogens associated with adult healthcare-associated infections: Summary of data reported to the National Healthcare Safety Network, 2015–2017." Infection Control & Hospital Epidemiology 41(1); 2020: 1-18.

- **2. Pediatric HAI Report**: https://doi.org/10.1017/ice.2019.297
  - CLABSIs, CAUTIs, SSIs, & pediatric VAPs
  - Pathogen and resistance data are stratified by infection type, location type, and surgical category
    - Data shown separately for NICUs, pediatric ICUs, pediatric wards, pediatric oncology units

- Both reports, as well as supplemental data tables, are available at:

https://www.cdc.gov/nhsn/datastat/index.html

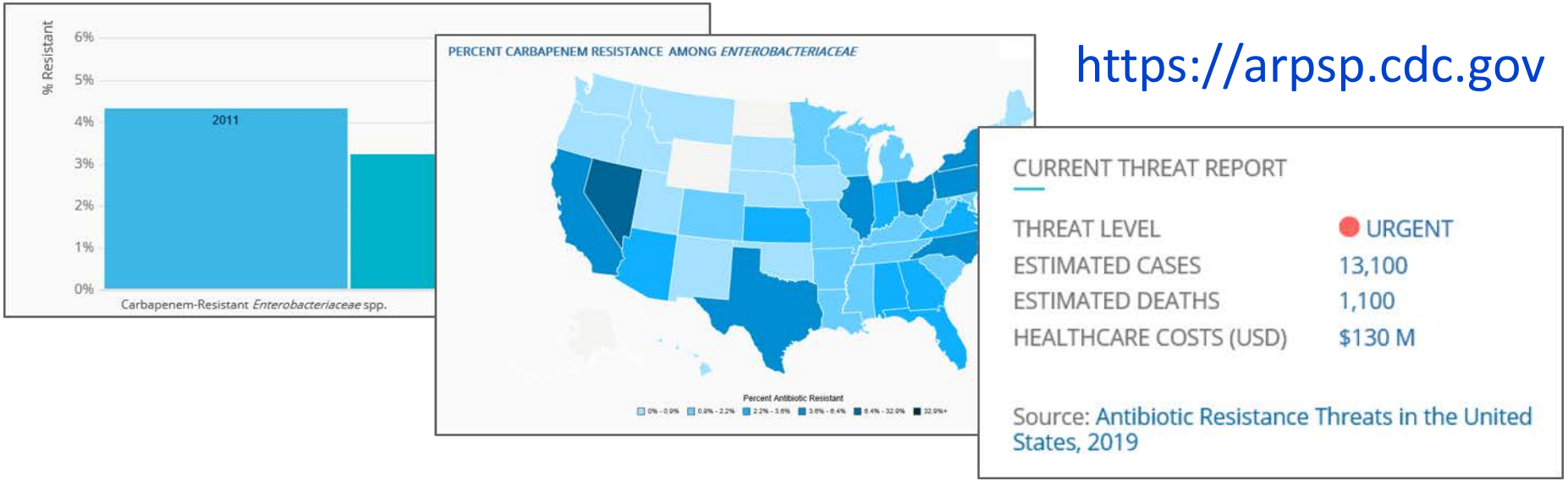
Table 5. Distribution and Rank Order[a] of the 15 Most Commonly Reported Pediatric Central Line-Associated Bloodstream Infection (CLABSI) Pathogens, by Location Type,[b] 2015–2017

	NICUs[b]		Pediatric ICUs[a]		Pediatric Oncology Units[a]		Pediatric Wards[a,b]	
Pathogen	No. (%) Pathogens	Rank	No. (%) Pathogens	Rank	No. (%) Pathogens	Rank	No. (%) Pathogens	Rank
Staphylococcus aureus	1,381 (25.2)	1	420 (12.6)	2	266 (7.7)	5	313 (12.4)	2
Coagulase-negative staphylococci	1,145 (20.9)	2	345 (10.4)	4	316 (9.1)	4	289 (11.4)	3
Escherichia coli	596 (10.9)	3	151 (4.5)	9	429 (12.4)	2	205 (8.1)	5

Reference: Weiner-Lastinger, L., et al. Antimicrobial-resistant pathogens associated with pediatric healthcare-associated infections: Summary of data reported to the National Healthcare Safety Network, 2015–2017. Infection Control & Hospital Epidemiology, 41(1); 2020: 19-30.

Antibiotic Resistance & Patient Safety Portal

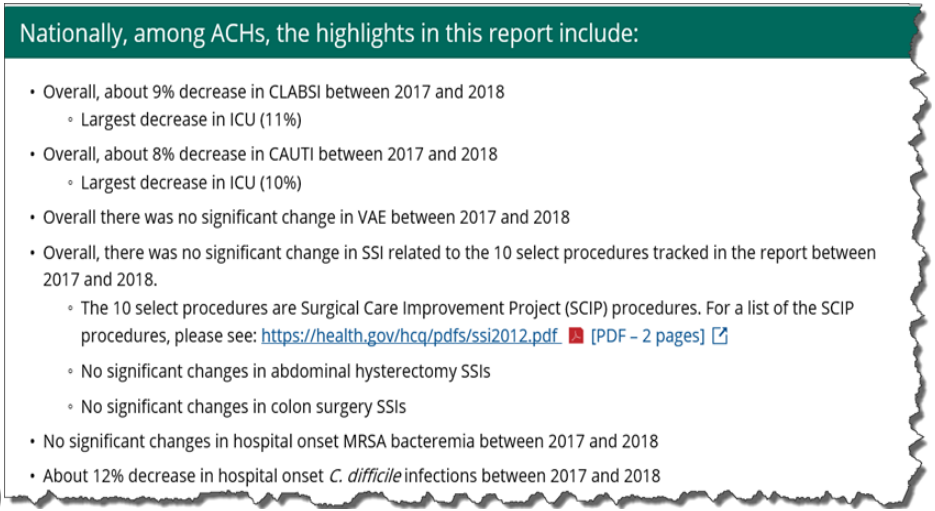
- A re-designed web-based platform that allows users to explore HAI and antibiotic resistance data in their state, region, and across the country
- Replaces the Patient Safety Atlas



https://arpsp.cdc.gov

2018 National and State HAI Progress Report

- The 2018 HAI Progress Report, which summarizes national and state-level progress in the prevention of HAIs, was released late last year
- SIR and SUR data for:
  - Device-Associated HAIs: CLABSI, CAUTI, & VAE
- SIR data for:
  - SSIs for All NHSN Operative Procedures
  - MRSA and CDI LabID Event
- SIR and SUR data are separated by four healthcare settings:
  - Acute care hospitals (ACHs)
  - Critical access hospitals (CAHs)
  - Inpatient rehabilitation facilities (IRFs)
  - Long-term acute care hospitals (LTACHs)



Nationally, among ACHs, the highlights in this report include:

- Overall, about 9% decrease in CLABSI between 2017 and 2018
  - Largest decrease in ICU (11%)
- Overall, about 8% decrease in CAUTI between 2017 and 2018
  - Largest decrease in ICU (10%)
- Overall there was no significant change in VAE between 2017 and 2018
- Overall, there was no significant change in SSI related to the 10 select procedures tracked in the report between 2017 and 2018.
  - The 10 select procedures are Surgical Care Improvement Project (SCIP) procedures. For a list of the SCIP procedures, please see: https://health.gov/hcq/pdfs/ssi2012.pdf [PDF – 2 pages]
  - No significant changes in abdominal hysterectomy SSIs
  - No significant changes in colon surgery SSIs
- No significant changes in hospital onset MRSA bacteremia between 2017 and 2018
- About 12% decrease in hospital onset *C. difficile* infections between 2017 and 2018

2018 National and State HAI Progress Report

- Includes state-level reporting mandates and data validation activities performed by states
- The full report consists of
  - Executive Summary
  - National and State-level Data Highlights
  - Technical Appendix which describes the analytic methodology used in the report
  - Data Tables (by healthcare setting)
- The report is located on the HAI Data Page:
  - https://www.cdc.gov/hai/data/portal/progress-report.html
- Also available on the newly redesigned Antibiotic Resistance & Patient Safety Portal (AR & PSP)
  - https://arpsp.cdc.gov