National Center for Emerging and Zoonotic Infectious Diseases



NHSN Analysis: The Group's Experience

With Focus on the Patient Safety Component

Webinar September 2017 2– 3:30 PM EST

Methods and Analytics Team

National Healthcare Safety Network (NHSN)

- National Center for Emerging and Zoonotic Infections Diseases (NCEZID)
- Division of Healthcare Quality Promotion (DHQP)
- Centers for Disease Control and Prevention (CDC)

Disclosures:

The following speakers disclose no actual or potential conflict of interest in relation to this program/presentation. Rebecca Yvonne Konnor Rashad Arcement Prachi Patel

Objectives

- Demonstrate how to correctly complete the Group's Define Rights Template
- Demonstrate how to navigate the NHSN analysis functions
 - Locate and list specific types of reports available to Group users
- Using case scenarios, describe how to generate, analyze, and interpret the various NHSN analysis reports
 - CLABSI/CAUTI
 - TAP Reports and the TAP Dashboard
- Helpful tips on report selection for Acute Care Hospitals

NOTE: All Data used in the presentation are fictitious and does not reflect a real facility's or Group's data. They are for demonstration and education purposes only.

The More You Know

- NHSN Group Functions
 - <u>https://www.cdc.gov/nhsn/group-</u> <u>users/index.html</u>
- How to start a Group in NHSN
 - <u>https://www.cdc.gov/nhsn/pdfs/groups-</u> <u>startup/CreateGroup-current.pdf</u>
- How to join a Group in NHSN
 - <u>https://www.cdc.gov/nhsn/pdfs/groups-</u> <u>startup/JoinGroup-current.pdf</u>

NHSN User Resources									
 Guides for Group Functions 									
 Guide to Creating a Group in NHSN February 2015 S [PDF - 1M] <u>Guide to Joining a Group in NHSN February 2015</u> [PDF - 1M] <u>Guide to Setting Up the Confer Rights Template - Patient Safety Component February 2015</u> [PDF - 1M] 									
> Group Administrator	Ĩ								
> NHSN Group Analysis									
> FAQs									

The More You Know

- Analysis resources that you should know
 - NHSN Analysis Resources Page
 - <u>https://www.cdc.gov/nhsn/ps-analysis-resources/index.html</u>
 - Analysis Quick Reference Guides
 - <u>https://www.cdc.gov/nhsn/ps-analysis-resources/reference-guides.html</u>

Patient Safety Analysis Quick Reference Guides

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These quick reference guides were created to help you understand, modify, and interpret your data using the NHSN application's various analysis output (report) options for the NHSN Patient Safety Component. These guides serve as companions to the "Introduction to NHSN Analysis" training slideset.

• New! NHSN's Guide to the SIR (updated July 2017) 📩 [PDF - 3M]

A comprehensive guide to NHSN's SIR, including risk factors used in the SIR calculations under the 2015 baseline.

• New! How to Modify a Report 🔂 [PDF - 375K]

Analysis Quick Reference Guides

> General Tips	
> Troubleshooting Guides	
> Frequently Requested Output/Reports	
> Targeted Assessment Prevention (TAP) Strategy Reports	
> Antimicrobial Use and Resistance Module Reports	
 Output/Report Option Types 	
> Tips for Customizing Your Output/Reports	
> Detailed Guides for Specific Analysis Options	

The Define Rights Template

Rebecca Yvonne Konnor

The Group Define Rights Template



- Once a Group is created, a Define Rights template is set up by the Group's Administrator and is shared with Group member facilities
- The template specifies which data elements will be shared with Group
- Group members have limited ability to edit the template
- Group members accept the template of rights to complete data sharing with the Group
- Group can update the template as needed, and facilities must accept updated template to change data being shared with the Group
- NHSN is a vehicle for sharing data between the Group and the NHSN facility; the relationship is between those two entities.
- Only users at the Group organization can see facility-level data; facilities cannot see each other's data.
- To access this page, follow the path displayed in the screen shot

The Group Define Rights Template

- General Section
 - Patient
 information
 options

 Monthly reporting plan, data analysis and facility information are required

- Annual Surveys
 - Required for
 SIRs and
 SURs



Define Rights-Patient Safety

! Please select the rights that facilities joining "Maggie's test group" will confer



The Group Define Rights Template- DA Events



The Group Define Rights Template- PA Events

î In 🗸 January 🗸	2015 V To V Procedure: COLO - Colon surgery	 ✓ 	SSI - Surgical Site Infection ✓ Must select setting for SSI Setting: ✓ IN ✓ OUT ✓ ✓ ✓
In ✓ January ✓ Add Row Clear All Rows	2015 To Procedure: HYST - Abdominal hysterectomy	For SSI event type, add a separate row for each procedure category or select ALL SSI and PPP to request for All SSI	 SSI - Surgical Site Infection Setting: IN O OUT ALL SOL AND PPP ALL Non-SSI and PPP ALL Non-SSI and PPP BSI - Bloodstream Infection (CLA) CLP - Central Line Insertion Practices PNEU - Pneumonia (Vent) PNEU - Pneumonia (Post Procedure) SI - Surgical Site Infection UT - Urinary Tract Infection (Cath) VAE - Ventilator-Associated Event

The Group Define Rights Template: MDRO/CDI Events



- Location Type = FACWIDE, Location = FacWIDEIn
 - Includes FacWIDEIn (facility wide reporting, as one single location)
 - Must be included to receive FacWIDEIn data from facilities
- Location Type = (ALL), Location = (ALL)
 - Includes all <u>individual</u> inpatient and outpatient locations

The Group Define Rights Template: MDRO/CDI Events

Doun	January	2015	То			FACWIDE	Emergency Department		
		Specific O	rganism T	ype:			Event Type:		
	ACINE - ME CDIF - C. dit CEPHRKLE CRE - CRE (MRSA - MR MSSA - MS VRE - VRE	DR-Acinetoba fficile B - CephR-Kle CRE-Ecoli, CR SA SA	cter ebsiella RE-Entero	bacter, CRE-Klebsi	iella)	LABID - Laboratory-identified MDRO or CDI			
Both	January	2015	То			FACWIDE	Pediatric Emergency Department		
		Specific O	rganism T	ype:			Event Type:		
	CDIF - C. di	fficile B - CephR-Kle	ebsiella			LABID - Laboratory-Identified MDRO of CDTEVer			
	CRE - CRE (MRSA - MR MSSA - MS VRE - VRE	CRE-Ecoli, CF SA SA	RE-Entero	bacter, CRE-Klebsi	iella)				
Both	CRE - CRE (MRSA - MR MSSA - MS VRE - VRE January	CRE-Ecoli, CR SA SA 2015	RE-Entero	bacter, CRE-Klebsi	iella)	FACWIDE	24-Hour Observation Area		
Both	CRE - CRE (MRSA - MR MSSA - MSS VRE - VRE	CRE-Ecoli, CR SA SA 2015 Specific O	RE-Entero To rganism T	bacter, CRE-Klebsi	iella)	FACWIDE	24-Hour Observation Area Event Type:		

When you select Location Type = FACWIDE, Location = FacWIDEIn, the following are added automatically

- EmergencyDepartment
 - Adult
 - Pediatric
- 24-hourObservation Area

The Group Define Rights Template: MDRO/CDI Process and

Outcome Measures

- Used for requesting hand hygiene, gown, gloves and active surveillance testing data
- Request data by location type and location
- Similar to MDRO/CDI Events section
 - The location type and location selected should mirror that on the MDRO/CDI Events section
- The rights for ED/OBS are automatically added

RO/CDI Process &	& Outcome Measure	S				
Plan Month	Year	Month	Year L	ocation Type	Location	Other Location Requirements
In 🗸 Januar	y 2015	To 🗸	✓	Facwide 🗸	FacWIDEIn 🗸	9
Process	Measures		Organism	ASTAdm	AST Process & AST D/T	FACWIDEIN for 2015 and forward will also include ED and Observation locations
I Gow	n and Gloves		MRSA			
Auto adde	d rights for ED/OBS					
In Jan	uary 2015 To	FACW	IDE Emergend	y Department		
	cess Measures	Organism	ASTAdm	AST Proces AST D/T	ss & Outcome Measure AST Incidence	AST Prevalence
	Hand Hygiene Gown and Gloves	MRSA				
In Jan	uary 2015 To	FACW	IDE Pediatric I	Emergency Departme	ent	
				AST Proces	ss & Outcome Measure	es
	cess Measures	Organism	ASTAdm	AST D/T	AST Incidence	AST Prevalence
	Hand Hygiene Gown and Gloves	MRSA				
In Jan	uary 2015 To	FACW	IDE 24-Hour (Observation Area		
3 Pro	cess Measures	Organism	ASTAdm	AST Proces AST D/T	ss & Outcome Measure AST Incidence	AST Prevalence
\checkmark	Hand Hygiene Gown and Gloves	MRSA				
		VRE				

The Group Define Rights Template : AUR Module

A	ntimicrobial	Use and Resista	nce					
	Plan	Month	Year	Month	Year	Location Type	Location	Other Location Requirements
Î	(AII) 🗸	~	✓ To	~	\sim	(ALL) 🗸	(ALL) V	
	✓ Antimic	robial Use		☑ Antimicrobial R	esistance			
Î	(All) 🗸	\checkmark	✓ To	~	~	FACWIDE V	FacWIDEIn 🗸	
	✓ Antimic	robial Use		🗹 Antimicrobial R	esistance			
	Add Row	Clear All Rows					_	

- Location Type = (ALL), Location = (ALL)
 - Includes all <u>individual</u> inpatient and outpatient locations
- Location Type = FACWIDE, Location = FacWIDEIn
 - Includes FacWIDEIn
 - Must be included to receive FacWIDEIn data from facilities

Rights Acceptance Report

- Rights Acceptance Report indicates that a facility has conferred rights to the Group
- It does not always mean the Define
 Rights template
 was a accepted as
 defined by the
 Group

NHSN Home						
Reporting Plan	•		14 😽 Pag	e 1 of 1 🕨 🖭 100 🗸		View 1 - 29 of 29
Event		Facility name	Facility ID	Accepted Date	Defined Date	Status 🔶
Litone		DHQP MEMORIAL HOSPITAL	10018	Jul 14 2017 12:35PM	Jul 14 2017 12:33PM	Accepted
Procedure		Lovelace Rehabilitation Hospital	10957	Jul 20 2017 8:17AM	Jul 14 2017 12:33PM	Accepted
Summary Data	•	Rehab Hospital	10962	Jul 14 2017 12:36PM	Jul 14 2017 12:33PM	Accepted
Surveys		Rebmann LTAC Hospital	10546	Jul 14 2017 12:34PM	Jul 14 2017 12:33PM	Accepted
Analusia		Phelps Memorial	10586	Jul 6 2017 12:55PM	Jul 14 2017 12:33PM	Not Accepted
Analysis		Dudeck Regional Life Center	10587	Nov 30 2016 8:42AM	Jul 14 2017 12:33PM	Not Accepted
Users	•	RL Test REHAB	10661	Nov 30 2016 8:49AM	Jul 14 2017 12:33PM	Not Accepted
Group	•	Find Excility				
Tools		Edit Group Info				
Logout		Joining Password				
		Evict Members				
		Send Email				
		Define Rights				
		Rights Acceptance Report				

NHSN Analysis-Groups

Rebecca Yvonne Konnor

Analysis: Dataset Generation

- Dataset generation is user specific
- A generated dataset includes most recent 3 years by default
- To include all years of data, check the box highlighted in yellow
- Facilities do not have to generate datasets in order for Groups to analyze data
- When verifying a facility's data at the Group's view, be aware that the facility's report outputs may be based on a different dataset generation date
- Dataset generation may take several minutes based on the size of the Group



Analysis: Dataset Generation

 When analyzing your NHSN data, use the graphic to determine which baseline year to use for the years of data included in generated datasets



Analysis: Statistic Calculator

- Statistical tools that help you compare various measures including
 - Comparing two proportions
 - Comparing two SIRs
 - Comparing single SIR to 1
 - Comparing two IDR
 - Comparing single proportion to a benchmark
 - Comparing single SIR to nominal value
- SAS Macro: http://www.cdc.gov/nhsn/PS -Analysisresources/index.html



Analysis Reports

- The layout of the Analysis page (by Baseline year) is the same for Groups as it is for facilities
- Each Module specific report is organized in HAI specific folders
- There are different types of reports per each module
 - Line Listing
 - Frequency table
 - Bar charts
 - Pie Charts
 - Rate Tables
 - SIR reports (by facility type, BS2)
 - SUR report (by facility type, BS2)
- There are three options for report manipulation:
 - Run the report
 - Modify report
 - Export analysis dataset

 SIR SIR - Adult Complex AR SSI Data by Procedure										
 ►	Run Report	SSI Data by Procedure								
 ¢	Modify Report	Data by Surgeon SSI Data by Surgeon								
 Ŧ	Export Data Set	Procedure								
 SIR - Pediatric All SSI Data by Procedure										



Analysis Reports: AUR Module

- Same reports as available for facilities
 - Groups will see all facilities in single output
 - Refer to Facility Org ID variable in output
- Will likely be too much data to display using NHSN default reports
 - Modifications or export will be necessary



Group Analysis: AUR Module Example

- AU Option: SAARs by location
- Output is sorted by the organization IDs within the Group
- Included in this report are the SAAR and supporting statistics in pale yellow
- Location, SARR type, antimicrobial days, number of predicted AU days and number of days present

National Healthcare Safety Network SAARs Table - All SAARs by Location As of: July 10, 2017 at 12:51 PM Date Range: All AU_SAAR

Antimicrobials used for hospital-onset/multi-drug resistant infections in adult ICUs

orgID	SAARType	location	summaryYM	locCDC	antimicrobialDays	numAUDaysPredicted	numDaysPresent	SAAR	SAAR_pval	SAAR95CI
10656	TAR-Adult-1	AMICU-1	2014M06	IN:ACUTE:CC:M	122	30.851	100	3.954	0.0000	3.298, 4.705
10656	TAR-Adult-1	AMICU-1	2014M08	IN:ACUTE:CC:M	1700	30.851	100	55.104	0.0000	52.532, 57.770
10656	TAR-Adult-1	AMICU-2	2014M06	IN:ACUTE:CC:M	1870	33.936	110	55.104	0.0000	52.648, 57.644
10656	TAR-Adult-1	AMSICU-1	2014M08	IN:ACUTE:CC:MS	1942	34.243	120	56.712	0.0000	54.230, 59.278
10656	TAR-Adult-1	AMSICU-2	2014M06	IN:ACUTE:CC:MS	2210	37.097	130	59.574	0.0000	57.130, 62.098
10656	TAR-Adult-1	AMSICU-2	2014M08	IN:ACUTE:CC:MS	2210	37.097	130	59.574	0.0000	57.130, 62.098
10656	TAR-Adult-1	ASICU-1	2014M06	IN:ACUTE:CC:S	2290	38.461	140	59.541	0.0000	57.140, 62.018
10656	TAR-Adult-1	ASICU-1	2014M08	IN:ACUTE:CC:S	2287	38.461	140	59.463	0.0000	57.065, 61.936
10656	TAR-Adult-1	ASICU-2	2014M08	IN:ACUTE:CC:S	2550	41.208	150	61.881	0.0000	59.514, 64.319
13860	TAR-Adult-1	MICU	2014M01	IN:ACUTE:CC:M	80	130.808	424	0.612	0.0000	0.488, 0.757
13860	TAR-Adult-1	MICU	2014M02	IN:ACUTE:CC:M	110	138.830	450	0.792	0.0132	0.654, 0.951
13860	TAR-Adult-1	MICU	2014M03	IN:ACUTE:CC:M	143	133.276	432	1.073	0.4211	0.908, 1.260
13860	TAR-Adult-1	MICU	2014M05	IN:ACUTE:CC:M	148	126.798	411	1.167	0.0709	0.990, 1.367
13860	TAR-Adult-1	MICU	2014M06	IN:ACUTE:CC:M	127	132.351	429	0.960	0.6820	0.803, 1.138
13860	TAR-Adult-1	MICU	2014M07	IN:ACUTE:CC:M	105	138.521	449	0.758	0.0036	0.623, 0.914
13860	TAR-Adult-1	MICU	2014M08	IN:ACUTE:CC:M	101	132.659	430	0.761	0.0050	0.623, 0.921
13860	TAR-Adult-1	MICU	2014M09	IN:ACUTE:CC:M	65	131.425	426	0.495	0.0000	0.385, 0.626

Analysis Reports-Advanced Folder

- The Advanced folder under the Analysis Reports section contains several supporting information categorized in sub folders:
- Reports to check details of numerator and denominator data are provided in the first four sub folders-highlighted in yellow
- The Plan Data line list
 - To check the HAIs that are included in plan for all conferred facilities
 - To check if conferred facilities reported events, summary data/procedures for the reporting month



Analysis Reports- Plan Line List



bedsize	bsiPlan	CCN	clipPlan	countyName	createDate	diPlan	fac Type	\leq	location	location	Гуре	
201-500		12345	\square	Appling	22DEC14:08:38		HOSP- CHLD					
201-500		12345		Appling	22DEC14:08:38		HOSP- CHLD					
201-500		12345		Appling	22DEC14:08:38		HOSP- CHLD					
201-500		12345		Appling	22DEC14:08:38		HOSP- CHLD	00	000	WARD		
201-500		12345		Appling	22DEC14:08:38		HOSP- CHLD	11	152ADBW	WARD		
201-500		12345		Appling	22DEC14:08:38		HOSP- CHLD	11	152BHVN	WARD		
201-500		12345		Appling	22DEC14:08:38		noEventCL	IP	noEventPPNU	noEventSSI	noProc	num Bed
201-500	Y	12345	N	Appling	22DEC14:08:38	N				Ν	N	40
201-500		12345		Appling	22DEC14:08:38			Ì		Y	N	40
201-500	Y	12345	N	Appling	22DEC14:08:38	Ν				Y	N	40
201-500		12345		Appling	22DEC14:08:38							40

400

100

The completely blank rows signifies a facility is not following the HAI

Analysis Reports-Facility-level Data

- The Facility-level Data sub folder contains some of the frequently used Group reports
- The survey data for conferred facilities
 - By facility type and group of yearsshown by the orange box
- The hospital adherence to stewardship core elements reports
 - New reports to show list of the core elements for conferred facilities
- Participation Alerts
 - To check Alerts of missing data for conferred facilities



- 📴 Group-level Data

Eine Listing - Membership Rights

Create Export File for CUSP - CLAB Rates for ICU/Other

Export File for CUSP - SUTI Rates for ICU/Other-SCA

Analysis Reports-Group-level Data

	A	В	C		D	E	F F	G	Н	1	J	K	L	M	N	0	P 🔺
1	parentO	orgID	name		objectname	objectA	objectModi	naFlag	locationTy	location	locCDC	procCode	setting	plans	monthFrom	yearFrom	monthT
2	10297	10018	DHQP MEMORIAL	HOSPITAL		Analyze											
3	10297	10018	DHQP MEMORIAL	HOSPITAL	Plan	View				F	acility 10018 is						
4	10297	10018	DHQP MEMORIAL	HOSPITAL	FacInfo	View	FacInfo-PS			K s	haring the ff locations						
5	10297	10018	DHQP MEMORIAL	HOSPITAL	Facility Survey Dat	View	FACSRV-PS				Attn Group 10297			(ALL)		2015	
6	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	0	IN:ACUTE:WARD:M			IN	1	2015	
7	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	0009A	NONPTC:NA:LAB:CHEM			IN	1	2015	
8	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View	IMPORTA	лт	(ALL)	00A	OUT:ACUTE:WARD			IN	1	2015	
9	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View	FEATURE	:	(ALL)	00B-OBS	OUT:ACUTE:WARD			IN	1	2015	
10	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View	Will indicat	te	(ALL)	3325	OUT:NONACUTE:CLINIC	:DIAB		IN	1	2015	
11	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View	elements a	are	(ALL)	1029-8	IN:ACUTE:CC:MS			IN	1	2015	
12	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View	not being		(ALL)	TESTSLJ	IN:ACUTE:MIXED:ALL_A	DULT		IN	1	2015	
13	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View	shared wit	h	(ALL)	TREAT	IN:ACUTE:SUPPORT:TRE	AT		IN	1	2015	
14	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View	the Group		(ALL)	TTLWT57	OUT:ACUTE:WARD			IN	1	2015	
15	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	WBL1	IN:ACUTE:WARD:NURS			IN	1	2015	
16	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	WTWLR6	IN:ACUTE:MIXED:ALL_A	DULT		IN	1	2015	
17	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	T12345	OUT:NONACUTE:MOBIL	.E		IN	1	2015	
18	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	TEST	IN:ACUTE:WARD:M			IN	1	2015	
19	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	TEST 1	IN:ACUTE:MIXED:ALL_A	DULT		IN	1	2015	
20	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	TEST 123	IN:ACUTE:MIXED:ALL_A	DULT		IN	1	2015	
21	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	TEST1234	4IN:ACUTE:WARD:VS			IN	1	2015	
22	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	TESTREH	IN:ACUTE:WARD:REHAE	5		IN	1	2015	
23	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	SCOTT BH	IN:ACUTE:WARD:BHV			IN	1	2015	
24	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	SICU	IN:ACUTE:CC:S			IN	1	2015	
		ineListing	_GroupRights 🔰 🔶)							•						•

Analysis Reports-Data Quality

- Data Quality Reports available to Groups
- Groups should monitor quality of data regularly
 - Monthly/quarterly
 - Events reported with 0 device days/CDI test method history
 - Coordinate with conferred facilities on updating data –based on findings
- List of duplicate data rarely happens. Groups should check for tracking and monitoring purposes



Analysis Reports-Custom Reports

- My Custom Reports
 - Created using various analysis datasets and report types
 - Various options of modifications can be made
 - Can be shared with Group users via publishing



New Report	
Analysis [ata Set: CLAB_MBI_Events ✓ Type: Frequency Table Line Listing Bar Chart Pie Chart



Analysis Reports-Report Sets

- My Report Sets
 - A sub folder under the My Custom Reports folder
 - Create and save multiple reports with one single set, you can run at the same time
- Path of create, modify and save reports are labelled by the yellow numbers



My Custom Reports

A My Report Sets

Oreate New Custom Report...

EBECCA - bs2_SIR_Cmpx30dSSIProc

EBECCA - bs2_CAU_RatesLTAC

REBECCA - Rebecca_bs2_CLAB_Rates_CMS

Analysis Reports- Report Sets

- My Report Sets
 - Add individual reports to the set.
 - Option to modify the reports-individually.
 - Option to arrange reports in desired order
 - You can include
 custom reports in your
 reports sets as well indicated by the blue
 star in the screenshot



Analysis Reports-Report Sets

- Options to run, modify, publish, delete or rename My Report Sets
- When you modify the report set, you can 'run' to any format

Modify "RFBFCCA - NewReportSet"

/ My Custom Reports	My Custom Reports										
- o Create New Custom R											
REBECCA - bs2_SIR_C											
REBECCA - Rebecca_t											
REBECCA - bs2_CAU_											
🚣 🚔 My Report Sets											
Create New Repor	rt Set										
🖬 REBECCA - NewR	eportS	Set									
🖬 DA_BarCharts											
- T MDRO_BarCharts											
PA_LineLists		Run Set									
Published Reports	\$	Modify Set									
	Ь	Publish Set									
	I .										

					Published Reports	-	Moulty	Set	
This	Title: NewReportSet			_		×	Delete	Set	_
example uses	Format:		ь С	Publisł Renam	n Set ne Set				
Fxcel			Nan	ne 🔹	Туре	Compressed	size	Password p	Size
			Xa	1_SIR - In-Plan CAU Data	Microsoft Excel Comma S		4 KB	No	
	□ Show descriptive variable names		Xa	_SIR - CAU Data for Hospital IQR Microsoft Excel Comma		3 KB 2 KB		No	
	Repor	leports:		3_SIR - CAU Data for Hospital IQR	Microsoft Excel Comma S			No	
	Selected	Reports:	Xa	4_SIR - CAU Data for LTCHQR	Microsoft Excel Comma S		3 KB	No	
	SIR - CAU Data for LTCHQR		Xa	5_SIR - All CLAB Data	Microsoft Excel Comma S		5 KB	No	
	SIR - AII CLAB Data		Xa	6_Rate Table - CLAB Data for NICU	Microsoft Excel Comma S		2 KB	No	
	Rate Table - CLAB Data for NICU		Xa	7_SIR - Acute Care Hospital CLAB	Microsoft Excel Comma S		4 KB	No	
	SIR - Acute Care MBI-CLABSI Data		Xa	8_SIR - Acute Care MBI-CLABSI Data	Microsoft Excel Comma S		4 KB	No	
	Line Listing - Procedures Excluded from SSI SI	R	Xa	9_Line Listing - Procedures Exclude Microsoft Excel Comma S				No	
	SIR - Adult Complex AR SSI Data by Procedure	e	Xa	10_SIR - Adult Complex AR SSI Dat		3 KB	No		
	I ine Listing - Procedures Excluded from SIR			11 Line Listing - Procedures Exclud	Microsoft Excel Comma S		23 KB	No	

Analysis Reports: Publishing Reports

- Once you create a custom report, you can publish it
- Published reports show up in the Published Reports folder
- Both Published and the Custom report will produce the same output
- When you modify the published report and save, it will have no effect on the Custom Report that produced it
- When modify the Custom report and save, it will have no effect on the Published report
- If you deleted the published report and ran the custom report, it will produce the same output



Running and Exporting Analysis Reports



Running and Exporting Analysis Reports

Modify "Line Listing - All SSI Events"												
Show descriptive	variable names (Prir	nt List)		Analysi	s Data Set: SSI_Events	Type: Line Listing	Data Set Generated On: 08/16/2017 14:3	31:00				
1 Title/Format	Time Period	Filters	Display Variables	Sort Variables	Display Options							
Title												
Line Listing for /	Line Listing for All Surgical Site Infection Events											
Format:	the top of the set											
html	pdf	2	xls	rtf								
		۲										
					3	🕨 Run 🛛 🖶 Sa	ve 👔 Export Close					

Understanding the SIR Exports at Group Level

- SUR/SIR reports at Group level will have multiple tables when you run in HTML or Export to CSV or Excel
 - For Device-associated HAIs:
 - Overall Group (groups only)
 - Overall Group/Location Type (groups only)
 - Overall Group/CDC Location
 - Overall Facility
 - Overall Facility/Location Type
 - Overall Facility/CDC Location
 - Overall Facility/Location
 - If applicable: Data Excluded from the SIR
 - If applicable: Data with missing or 0 device days
- When you export the SUR/SIR reports to Excel
 - The overall Group SUR/SIR rows will have blank columns for location, location type
- For a complete list of locations, see the Appendices section

Understanding the SIR Exports at Group Level

6	ສ່າ ∂ -	⇒ SIRforCentralLine_AssociatedBSI [Read-Only] - Excel												—		
F	ile Home	Insert Page	e Layout Fo	rmulas Data	Review V	iew 🖓 '	Tell me what	you want to do					Konn	or, Rebecca `	/. (CDC/OID/N	icezid) (Ctf
Pas	Cut Copy - Ste Clipboard	Calibri inter B I	- 14 U - □ - ∠ Font		≣ ₩ • ≡ ≡ € • Align	Wrap ⁻ Merge	Text & Center 👻	General \$ - % • 50 Number	Conditional Format as Formatting ▼ Table ▼	nal ral	Bad Calculation	Good Check Cell		ells	∑ AutoSum ↓ Fill ▼ Clear ▼	Sort & I Filter • S
E1	3 -	: × 🗸	f _x						Overall G	roup S	IR					
	А	В	С	D	E	F	G	Н				L	М	N	0	Р
1	summaryYC	Q infCount	numPred	numcldays	SIR_pval	SIR	sir95ci	locationType		orgID	CCN	facType	medType	state	location	months
2	2016Q1	16	12.955	11464	0.3937	1.235	0.731, 1	963		_		_				
3	2016Q1	9	3.0/385	2391	0.0058	2.928	1.428, 5									
4	2016Q1	0	0.59258	5 347												
5	2016Q1	0	0.34133	400					Overall Group	SIR						
0 7	2016Q1	0	0.13336	5 14J				STEP	by location typ	be						
/ 8	201601	1	0.07447	/ 00 / 103												
9	201601	1	8.4472	7918	0.0022	0.118	0.006.0	WARD ONC								
10	201601	-	0.60372	240	010022	01110	01000,0		IN:ACUTE:CC:B		1					
11	2016Q1	1	0.01101	. 11					IN:ACUTE:CC:C							
12	2016Q1	0	1.91654	1500	0.1471	0	, 1.563		IN:ACUTE:CC:M PED							
13	2016Q1	2	0.28523	168			-		IN:ACUTE:CC:NURS			Over	all Group			
14	2016Q1	0	0.1918	3 170					IN:ACUTE:CC:ONC_M			SIR	ov CDC			
15	2016Q1	0	0.15795	5 140					IN:ACUTE:CC:ONC_MS			locati	ion			
16	2016Q1	0	0.1918	3 170					IN:ACUTE:CC:ONC_S			locat				
17	2016Q1	8	0.31887	475					IN:ACUTE:CC:S							
18	2016Q1	0	0.22372	165					IN:ACUTE:CC:T							
19	2016Q1	3	0.30734	179					IN:ACUTE:CC_STEP:NUR	S						
20	2016Q1	0	0.15356	5 145					IN:ACUTE:SCA:DIAL							
21	2016Q1	0	0.07175	80					IN:ACUTE:STEP							
22	2016Q1	0	0.06724	93					IN:ACUTE:WARD:BHV							
23	2016Q1	1	8.16718	3 7748	0.0029	0.122	0.006, 0	.604	IN:ACUTE:WARD:ONC_H	IONC						
24	201601	0 forCentralLine	0.28002 Associated						IN:ACUTE:WARD:ONC	ISCT						

Understanding the SIR Exports at Group Level

	A	В	С	D	E	F	G	Н	Ι	J	К	L	М	N
24	2016Q1	0	0.28002	170					IN:ACUTE:WARD:ONC_HS	SCT				
25	201601	1	0.00723	10					INITA					
26	2016Q1	2	10.9802	9857	0.0014	0.182	0.031, 0	.602	Facility	<mark>10018</mark>	12345	HOSP-CHLD	U	GA
27	2016Q1	5	0.53151	311						<mark>10312</mark>	2222222222	HOSP-GEN		GA
28	2016Q1	8	0.56116	595						<mark>11211</mark>	N/A I	HOSP-GEN		NV
29	2016Q1	1	0.88209	701						<u>11305</u>	220162	HOSP-ONC	M	MA
30	2016Q1	1	2.5127	1796	0.3658	0.398	0.020, 1	CC		10018	12345	HOSP-CHLD	U	GA
31	2016Q1	0	0.06107	36				CC_N		10018	12345	HOSP-CHLD	U	GA
32	2016Q1	0	0.15356	145				SCA		<mark>10018</mark>	12345	HOSP-CHLD	U	GA
33	2016Q1	0	0.07175	80				STEP	Facility	10018	12345	HOSP-CHLD	U	GA
34	2016Q1	1	0.07447	103				WARD	Overall SIR	<mark>0018</mark>	12345	HOSP-CHLD	U	GA
35	2016Q1	0	8.10666	7697	0.0003	0	, 0.370	WARD_ON(by Location	<mark>)018</mark>	12345	HOSP-CHLD	U	GA
36	2016Q1	5	0.53151	311				CC_N	typo	0312	2222222222	HOSP-GEN		GA
37	2016Q1	8	0.56116	595				СС	lype	<mark>11211</mark>	N/A I	HOSP-GEN		NV
38	2016Q1	0	0.54155	480				CC_ONC		<mark>11305</mark>	220162	HOSP-ONC	Μ	MA
39	2016Q1	1	0.34054	221				WARD_ONC		<mark>11305</mark>	220162	HOSP-ONC	М	MA
40	2016Q1	0	0.36142	120					IN:ACUTE:CC:B	10018	12345	HOSP-CHLD	U	GA
41	2016Q1	1	0.01101	11					IN:ACUTE:CC:C	<mark>10018</mark>	12345	HOSP-CHLD	U	GA
42	2016Q1	0	1.91654	1500	0.1471	0	, 1.563		IN:ACUTE:CC:M_PED	<mark>10018</mark>	12345	HOSP-CHLD	U	GA
43	2016Q1	0	0.03465	25					IN:ACUTE:CC:NURS	<mark>10018</mark>	12345	HOSP-CHLD	U	GA
44	2016Q1	0	0.22372	165	Fa	-ility (Waral	l hv	IN:ACUTE:CC:T	<mark>10018</mark>	12345	HOSP-CHLD	U	GA
45	2016Q1	0	0.02642	11				r by	IN:ACUTE:CC_STEP:NUR	10018	12345	HOSP-CHLD	U	GA
46	2016Q1	0	0.15356	145	CD		cation		IN:ACUTE:SCA:DIAL	10018	12345	HOSP-CHLD	U	GA
47	2016Q1	0	0.07175	80					IN:ACUTE:STEP	10018	12345	HOSP-CHLD	U	GA
	SIRTO	orcentraiLine_	AssociatedBS	• (+)						•				
Understanding the SIR Exports at Group Level

- Data SIR reports at Group levels will have multiple tables
 - For Procedures/SSIs:
 - Overall Group
 - Overall Group/Procedure Categories
 - Overall Facility
 - Overall Facility/Procedure Categories
 - If applicable: Data Excluded from the SIR/by Facility
 - For MDRO/CDI, the FACWIDEIN SIRs are presented by:
 - Overall Group
 - Overall Facility
 - If applicable: Data Excluded from the SIR/by Facility

Troubleshooting Data When a Single Facility is Missing from an Analysis Report

- Step 1: Confirm the facility is sharing ALL data defined on the Group's Define Rights Template
 - Facilities can limit the data they share with a Group although they have conferred rights to the Group
 - A Group does not have the same RIGHTS to facility data as the facility user
 - The facility has the option to limit data shared with Group by checking the NA box shown in the screen shot below. This is the facility's view of the Define Rights Template

MDRO/CDI Events Includes Applicable Denominators and "No Events" Indicators												
Plan	Month	Year	Mor	nth Year	Location Type	Location	Other Location Requirements	Your Locations	N/A			
Both	January	2015	То		FACWIDE	FacWIDEIn						
	Specific Org ACINE - CDIF - C	anism Type: MDR-Acineto . difficile	bacter		Event Type: LABID - Laborato	ory-identified MDRO or	CDI Event	bershin Rights line li	iet			
	CEPHRKLEB - CephR-Klebsiella CRE - CRE (CRE-Ecoli, CRE-Enterobacter, CRE-Klebsiella) MRSA - MRSA MSSA - MSSA						report to dete boxes are che	ermine if any of the N ecked.	IA			
	VRE - VF	RE										

- 📴 Group-level Data

Eine Listing - Membership Rights

Create Export File for CUSP - CLAB Rates for ICU/Other

Export File for CUSP - SUTI Rates for ICU/Other-SCA

Analysis Reports-Group-level Data

	A	В	C		D	E	F F	G	Н	1	J	K	L	M	N	0	P 🔺
1	parentO	orgID	name		objectname	objectA	objectModi	naFlag	locationTy	location	locCDC	procCode	setting	plans	monthFrom	yearFrom	monthT
2	10297	10018	DHQP MEMORIAL	HOSPITAL		Analyze											
3	10297	10018	DHQP MEMORIAL	HOSPITAL	Plan	View				F	acility 10018 is						
4	10297	10018	DHQP MEMORIAL	HOSPITAL	FacInfo	View	FacInfo-PS			K s	haring the ff locations						
5	10297	10018	DHQP MEMORIAL	HOSPITAL	Facility Survey Dat	View	FACSRV-PS				Attn Group 10297			(ALL)		2015	
6	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	0	IN:ACUTE:WARD:M			IN	1	2015	
7	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	0009A	NONPTC:NA:LAB:CHEM			IN	1	2015	
8	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View	IMPORTA	лт	(ALL)	00A	OUT:ACUTE:WARD			IN	1	2015	
9	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View	FEATURE	:	(ALL)	00B-OBS	OUT:ACUTE:WARD			IN	1	2015	
10	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View	Will indicat	te	(ALL)	3325	OUT:NONACUTE:CLINIC	:DIAB		IN	1	2015	
11	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View	elements a	are	(ALL)	1029-8	IN:ACUTE:CC:MS			IN	1	2015	
12	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View	not being		(ALL)	TESTSLJ	IN:ACUTE:MIXED:ALL_A	DULT		IN	1	2015	
13	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View	shared wit	h	(ALL)	TREAT	IN:ACUTE:SUPPORT:TRE	AT		IN	1	2015	
14	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View	the Group		(ALL)	TTLWT57	OUT:ACUTE:WARD			IN	1	2015	
15	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	WBL1	IN:ACUTE:WARD:NURS			IN	1	2015	
16	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	WTWLR6	IN:ACUTE:MIXED:ALL_A	DULT		IN	1	2015	
17	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	T12345	OUT:NONACUTE:MOBIL	.E		IN	1	2015	
18	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	TEST	IN:ACUTE:WARD:M			IN	1	2015	
19	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	TEST 1	IN:ACUTE:MIXED:ALL_A	DULT		IN	1	2015	
20	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	TEST 123	IN:ACUTE:MIXED:ALL_A	DULT		IN	1	2015	
21	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	TEST1234	4IN:ACUTE:WARD:VS			IN	1	2015	
22	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	TESTREH	IN:ACUTE:WARD:REHAE	5		IN	1	2015	
23	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	SCOTT BH	IN:ACUTE:WARD:BHV			IN	1	2015	
24	10297	10018	DHQP MEMORIAL	HOSPITAL	CL assoc BSI Event	View			(ALL)	SICU	IN:ACUTE:CC:S			IN	1	2015	
		ineListing	_GroupRights 🔰 🔶)							•						•

Troubleshooting Data When a Single Facility is Missing from an Analysis Report

- Step 2: Confirm data is included on monthly reporting plan, if running analysis reports on in-plan data
 - Use the Plan Data Line List
- Step 3: If a location specific report, confirm locations are mapped accordingly or if the facility has such locations

Infections and other Events (Not specific to MDRO/CDI) Includes Applicable Denominators and "No Events" Indicators												
Plan	Month	Year	Month	Year E	vent	Facilities can select	N/A					
In	January Location type: (ALL)	2015 Location: (ALL)	То	B Other Location Requi	SI - Bloodstream Infection (CLA) ements: Your Locations 239 selected	the locations they choose to share with Groups, regardless of what is requested on						
In	January	2015	То	l L	TI - Urinary Tract Infection (Cath)	the Group's Define Rights Template. In this example, the						
	Location type: (ALL)	Location: (ALL)		Other Location Requi	ements: Your Locations 240 selected	Group requested ALL locations, the facility is sharing 239						
						Sharing 200						

- Step 4: Confirm there are no Alerts of missing data for a particular month(s)
 - Participation Alerts Line List

Notes: The use of these steps are specific to the type of issue you encounter as a Group user. Steps can be used out of order

CLABSI/CAUTI

Prachi Patel, MPH

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





NHSN Analysis Reports : CLABSI Report

- Standard list of all report types
 - Line List
 - Frequency Table
 - Bar/Pie Chart
 - Rate Table/Run Chart
 - SIR Report
- The Device Associated (DA)
 Module reports will
 contain data from ALL
 locations that have DA data



Start Q1 2015 - a dult and pediatric medical, surgical, and medical/surgical wards

NHSN Analysis Reports : Hospital IQR Report

- Hospital IQR Reports
 - Will only contain data from locations that are required to be reported
 - Important for checking facility data before quarterly deadlines
- IRF IQR Reports
 - Will contain IRF data for quarterly deadlines
- LTCH IQR Reports





Standardized Infection Ratio (SIR)

 The SIR is 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:

Observed # HAIs

SIR = -----

Predicted # HAIs

- SIR interpretation:
 - 1 = same number of infections reported as would be predicted given the US baseline data
 - Greater than 1= more infections reported than what would be predicted given the US baseline data
 - Less than 1 = fewer infections reported than what would be predicted given the US baseline data

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

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			
Time Period:			
Date Variable Beginning Ending			
	ne Period		
L Enter Date variable/Time period at the time you click the Run button			

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

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 Additional Filters: Show Clear 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 Xes and the location type is CC or if the location		
type is CC N.	Various operators	can be selected to modify the outpu
AND OR	Operator	Meaning
	=	Equal to
bsiPlan V equal V Y	>	Greater than
	>=	Greater than or equal to
locationType V equal V CC-CC V	<	Less than
	<=	Less than or equal to
Add end	~=	Not equal to
AND OR	In	In a set of defined values
		Not in a set of defined
	~In	values
	Between	Within a range of defined values

Interpreting your SIR Report

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

As of: March 10, 2017 at 9:58 AM Date Range: BS2_CLAB_RATESALL summaryYr 2015 to 2015

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.

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.

Standardized Infection Ratio (SIR)

- The standardized infection ratio (SIR) is a summary measure used to track HAIs at a national, state, or local level over time.
- SIR compares the observed number of HAIs reported to what would be predicted, given the standard population.

National Healthcare Safety Network

SIR for Central Line-Associated BSI Data for Acute Care Hospitals (2015 baseline) - By OrgID As of February 16, 2017 at 2:00 PM Date Range: All BS2_CLAB_RATESALL

Org ID	Events	Number Predicted	Central Line Days	SIR	SIR p-value	95% Confidence Interval
10000	30	30.003	49032	0.999	0.1587	0.749, 3.841

Facility Org ID=10000 CMS Certification Number=12345 Type of Affiliation='

TAP Reports and the TAP Dashboard

Rashad Arcement, MSPH

Cumulative Attributable Difference (CAD)

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

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

- SIR goal represents an HAI Reduction Goal.
 - Therefore, should always be less than 1.
- Unlike SIR, CAD is calculated even if the predicted number of events is less than 1.

CAD and the HAI Reduction Goal

- CAD = Observed (Predicted X SIR goal)
- SIR goal represents an "HAI Reduction Goal"
- HHS Action Plan Goals for 2020: <u>https://health.gov/hcq/prevent-hai-measures.asp</u>
 - HHS 50% reduction goal for CLABSI \rightarrow SIR = 0.50

Facility A: Observed=30, Predicted=30, SIR=1.0 in 2016

HHS Reduction Goal (Reduction in Reported)	SIR	CAD Formula Observed – (Predicted X SIR goal)	CAD
0%	1.0	30 - (30 X 1.0)	0
50% HHS Reduction Goal	0.50	30 – (30 X 0.50)	15
75%	0.25	30 – (30 X 0.25)	22.5

TAP Reports

- The TAP Reports for All HAI Types utilize 2015 baseline data.
- Analyze all data dated from January 2015 forward.
- Data from earlier time periods (before Jan 2015) must be analyzed using the originals baseline models.

NHSN Home	
Reporting Plan	•
Event	•
Procedure	•
Summary Data	×
Surveys	•
Analysis	•
Users	
Group	•
Tools	•
Logout	

Analysis Reports

Expand All	Collapse All	Search								
- 🚞 Devic	e-Associated (DA	A) Module								
Proce	dure-Associated	(PA) Module								
- 🗀 HAI A	ntimicrobial Resi	stance (DA+PA Mod	ules)							
🚞 Antimicrobial Use and Resistance Module										
MDRO/CDI Module - LABID Event Reporting										
	O/CDI Module - I		CLABSI							
- 🚞 MDR	O/CDI Module - P	Process Measures		CALITI						
- 🔁 MDR	O/CDI Module - C	Outcome Measures		CAUTI						
- 🚞 CMSI	Reports			CDLLahID						
TAP F	leports									
4 🚞 A	cute Care Hospita	als (ACHs)								
TA	P TAP Report - A	CH and CAH CLAB D)ata 🔸							
TA	P TAP Report - A	CH and CAH CAU D	ata 🔶							
т <i>а</i>	P TAP Report - A	CH and CAH FACWI	DEIN CE)I LabID Data 🔸 🗕 🗕						
🦛 🚞 Lo	ong Term Acute C	are Hospitals (LTAC	s)							
TA	P TAP Report - L	TAC CLAB Data 🔸								
TA	P TAP Report - L	TAC CAU Data 🔶								
Inna TA	P TAP Report - L	TAC FACWIDEIN CE	I LabID (data 🔶						
🦾 🔚 In	patient Rehabilit	ation Facilities (IRFs)								
TA	P TAP Report - IF	RF CAU Data 🛛 🛶	-							
тд	P TAP Report - IF	RF CDI LabID Data	-							
🚞 Baseli	ine Set 1									
- 🔁 Advar	nced									
🦾 🚰 My Ci	ustom Reports									

Table 1 – Totals for all Facilities in Group

National Healthcare Safety Network

TAP Report for CLABSI Data for Acute Care and Critical Access Hospitals (2015 Baseline)

Totals for all Facilities in Group

SIR Goal: HHS Goal = 0.5

A TAP Report is the first step in the CDC TAP Strategy. For more informatin on the TAP Strategy, please visit: http://www.cdc.gov/hai/prevent/tap.html As of February 16, 2017 at 2:00 PM

Date Range: BS2_CLAB_TAP summaryYr2016 to 2016

Number of Facilities	Number of Beds	Location (LC)	Events (LC)	Device Days (LC)	DUR % (LC)	CAD (LC)	SIR (LC)	SIR Test	ICU No. Pathogens (CNS,YS,SA,ES,KS,EC)	NICU No. Pathogens (CNS,YS,SA,ES,KS,EC)	Ward+ No. Pathogens (CNS,YS,SA,ES,KS,EC)
10	2,420	87 (15, 6, 66)	44 (17, 0, 27)	60186 (20966, 569, 38651)	17 (45, 7, 13)	19 (7.5, -0.3, 11.8)	0.9 (0.9, ., 0.9)		19 (2, 8, 0, 2, 1, 0)	0 (0, 0, 0, 0, 0, 0)	28 (4, 8, 4, 1, 2, 1)

Group CAD

1. This report includes CLABSI data for 2015 and forward. Following the 2015 rebaseline, Mucosal Barrier Injury Laboratory-Confirmed Bloodstream Infections (MBI-LCBI) are excluded from CLABSI rates, SIRs and TAP reports.

2. If location-level CADs are the same in a given facility, their ranks are tied.

3. (CNS,YS,SA,ES,KS,EC) = No. of CNS, Yeast (both candida and non-candida species), Staph aureus, Enterococcus species, K. pneumoniae/K. oxytoca, E. coli

4. SIR is set to '.' when predicted number of events is <1.0.

5. LOCATION CAD = (OBSERVED_LOCATION - PREDICTED_LOCATION* SELECTED SIR Goal)

6. SIR TEST = 'SIG' means SIR > SIR Goal significantly

Source of aggregate data: 2015 NHSN CLABSI Data

Data contained in this report were last generated on February 14, 2017 at 10:57 AM.

 Location Category, abbreviated as (LC), gives a breakdown of the different types of locations contributing to the total in the following order: ICU, NICU, Ward+

Number of Facilities	Number of Beds	Location (LC)	Events (LC)	Device Days (LC)	DUR % (LC)
10	2,420	87 (15, 6, 66)	44 (17, 0, 27)	60186 (20966, 569, 38651)	17 (45, 7, 13)

CAD (LC)	SIR (LC)	SIR Test	ICU No. Pathogens (CNS,YS,SA,ES,KS,EC)	NICU No. Pathogens (CNS,YS,SA,ES,KS,EC)	Ward+ No. Pathogens (CNS,YS,SA,ES,KS,EC)
19 (7.5, -0.3, 11.8)	0.9 (0.9, ., 0.9)		19 (2, 8, 0, 2, 1, 0)	0 (0, 0, 0, 0, 0, 0)	28 (4, 8, 4, 1, 2, 1)

• For CAUTI, there are only 2 Location Categories: ICU, Ward+.

Number of Facilities	Number of Beds	Location (LC)	Events (LC)	Device Days (LC)	DUR % (LC)
10	2,420	87 (15, 6, 66)	44 (17, 0, 27)	60186 (20966, 569, 3865 <mark>1</mark>)	17 (45, 7, 13)

CAD (LC)	SIR (LC)	SIR Test	ICU No. Pathogens (CNS,YS,SA,ES,KS,EC)	NICU No. Pathogens (CNS,YS,SA,ES,KS,EC)	Ward+ No. Pathogens (CNS,YS,SA,ES,KS,EC)
19 (7.5, -0.3, 11.8)	0.9 (0.9, ., 0.9)		19 (2, 8, 0, 2, 1, 0)	0 (0, 0, 0, 0, 0, 0)	28 (4, 8, 4, 1, 2, 1)

- Number of common pathogens identified for each location.
- Pathogen list can be found in the footnotes.
- The Pathogen columns for each location category are in the same order as they are listed in parenthesis for the preceding columns.

Facility Rank

Table 2 – Facilities Within the Group Ranked by CAD

National Healthcare Safety Network

TAP Report for CLABSI Data for Acute Care and Critical Access Hospitals (2015 Baseline)

Facilities within the Group Ranked by CAD

SIR Goal: HHS Goal = 0.5

A TAP Report is the first step in the CDC TAP Strategy. For more informatin on the TAP Strategy, please visit: http://www.cdc.gov/hai/prevent/tap.html As of February 16, 2017 at 2:00 PM Date Range: BS2_CLAB_TAP summer, rr2016 to 2016

facRank	orglD	name	state	medType	numBeds	numLoc	numEvent	facDDays	facDUR	facCADloctype	facSIR	SIRtest
1	10000	DHQP Memorial Hospital	GA		677	27 (8, 0, 19)	157 (77, 0, 80)	112962 (54877, 0, 58085)	27 (71, ., 17)	100 (47.2, 0, 52.8)	1.4 (1.3, ., 1.5)	SIG
2	10401	DHQP Memorial Annex	GA	М	886	31 (7, 1, 23)	123 (57, 4, 62)	99541 (38931, 6884, 53726)	20 (44, 28, 14)	69.1 (32.6, -0.3, 36.9)	1.1 (1.2, 0.5, 1.2)	
3	10587	Dudeck Regional Life Center	IL	М	1,044	40 (7, 1, 32)	115 (27, 11, 77)	105785 (32839, 5901, 67045)	20 (59, 23, 15)	60.4 (8.4, 6.7, 45.2)	1.1 (0.7, 1.3, 1.2)	
4	90001	CDC Health Hospital	GA		357	20 (4, 1, 15)	61 (22, 4, 35)	22527 (6017, 1765, 14745)	16 (38, 15, 13)	49.3 (18.8, 2.6, 27.9)	2.6 (3.4, 1.4, 2.5)	SIG
5	10018	Weiner Center of Medicine	CA		535	20 (3, 1, 16)	53 (22, 2, 29)	20574 (5614, 725, 14235)	10 (36, 8, 8)	42.6 (18.9, 1.4, 22.3)	2.6 (3.5, 1.7, 2.2)	SIG
6	10297	Arcement Medical Center	LA		361	19 (3, 0, 16)	55 (20, 0, 35)	25796 (8169, 0, 17627)	15 (40, ., 12)	42.1 (15.4, 0, 26.7)	2.1 (2.2, ., 2.1)	SIG
7	10064	Falcon Memorial Hospital	GA		457	19 (4, 0, 15)	79 (18, 0, 61)	75493 (28370, 0, 47123)	31 (57, ., 24)	40.3 (2, 0, 38.3)	1 (0.6, ., 1.3)	
8	10957	All Saints Medical	LA		281	9 (2, 0, 7)	47 (9, 0, 38)	16691 (5102, 0, 11589)	14 (40, ., 11)	40.2 (6.7, 0, 33.4)	3.4 (2, ., 4.1)	SIG
9	10962	Louisiana Hospital of Texas	ТХ		595	20 (5, 1, 14)	62 (13, 2, 47)	40057 (14574, 3750, 21733)	19 (40, 21, 14)	40.2 (4.8, -1.3, 36.7)	1.4 (0.8, 0.3, 2.3)	SIG
10	88888	Georgia Hospital of Louisiana	LA	G	355	24 (5, 1, 18)	47 (12, 6, 29)	16936 (7952, 638, 8346)	11 (27, 7, 7)	38 (7.5, 5.4, 25.1)	2.6 (1.3, 5.1, 3.7)	SIG

Facility CAD

1. This report includes CLABSI data for 2015 and forward. Following the 2015 rebaseline, Mucosal Barrier Injury Laboratory-Confirmed Bloodstream Infections (MBI-LCBI) are excluded from CLABSI rates, SIRs and TAP reports.

2. If location-level CADs are the same in a given facility, their ranks are tied.

3. (CNS,YS,SA,ES,KS,EC) = No. of CNS, Yeast (both candida and non-candida species), Staph aureus, Enterococcus species, K. pneumoniae/K. oxytoca, E. coli

4. SIR is set to '.' when predicted number of events is <1.0.

LOCATION CAD = (OBSERVED_LOCATION - PREDICTED_LOCATION* SELECTED SIR Goal)

6. SIR TEST = 'SIG' means SIR > SIR Goal significantly

Source of aggregate data: 2015 NHSN CLABSI Data

Data contained in this report were last generated on January 19, 2017 at 12:17 PM.

TABLE 3 – Locations Ranked by CAD Within a Facility

National Healthcare Safety Network

TAP Report for CLABSI Data for Acute Care and Critical Access Hospitals (2015 Baseline)

Locations Ranked by CAD Within a Facility

SIR Goal: HHS Goal = 0.5

Facility CAD

A TAP Report is the first step in the CDC TAP Strategy. For more informatin on the TAP Strategy, please visit: http://www.cdc.gov/hai/prevent/tap.html As of February 16, 2017 at 2:00 PM Date Range: BS2_CLAB_TAP summaryYr2016 to 2016

		FACILITY					L	OCATION					
Facility Rank	Facility Org ID	Facility Name	Facility CAD	Location Rank Location		CDC Location	Events	Central Line Days	DUR %	CAD	SIR	SIR Test	No. Pathogens (CNS,YS,SA,ES,KS,EC)
1	10000	DHQP Memorial Hospital	6.35		OP WARD	OUT:ACUTE:WARD	0	56					
				1	STEP1	IN:ACUTE:STEP	3	1120	11	2.41	2.6		3 (1, 1, 0, 0, 0, 0)
				2	2W	IN:ACUTE:WARD:M	2	1312	22	1.39	1.6		2 (0, 0, 0, 0, 0, 0)
				3	ICU	IN:ACUTE:CC:MS	4	5073	54	1.33	0.8		4 (0, 2, 0, 2, 0, 0)
				4	STEP2	IN:ACUTE:STEP	2	2105	21	0.89	0.9		2 (0, 1, 1, 0, 0, 0)
				5	1E	IN:ACUTE:WARD:MS	1	402	9	0.81			1 (1, 0, 0, 0, 0, 0)
				6	2E	IN:ACUTE:WARD:PP	0	4	0	0			
				7	1W	IN:ACUTE:WARD:M	0	28	2	-0.01			
				8	TELE	IN:ACUTE:WARD:TEL	0	457	7	-0.21			
				9	ICU2	IN:ACUTE:CC:MS	0	564	10	-0.26			
2	2 10401	DHQP Memorial Annex	5.35	1	ICU	IN:ACUTE:CC:MS	3	2181	53	2.06	1.6		3 (1, 1, 0, 0, 0, 0)
				2	2 West	IN:ACUTE:WARD:TEL	2	654	6	1.75			2 (0, 0, 1, 0, 0, 1)
				3	6 West	IN:ACUTE:WARD:N	1	382	7	0.85			1 (0, 0, 0, 0, 1, 0)
				4	ICU4	IN:ACUTE:CC:MS	2	2692	60	0.84	0.9		2 (0, 1, 0, 0, 0, 0)
				5	ICU3	IN:ACUTE:CC:M	1	496	6	0.81			1 (0, 1, 0, 0, 0, 0)
				6	7 East	IN:ACUTE:WARD:S	1	1169	14	0.55			1 (0, 0, 0, 0, 1, 0)
				7	5 West	IN:ACUTE:WARD:M	1	2194	21	0.16	0.6		1 (0, 0, 0, 0, 0, 0)

Location Rank

and Location

A Few Reminders About TAP Reports in NHSN

- Acute care hospital TAP reports include data from critical access hospitals
 - Use the "Modify Report" option to select facility type
- TAP reports will show CLABSI + CAUTI data from all locations
- Groups will see three tables in their TAP Reports:
 - 1. Overall cumulative CAD for the Group
 - 2. Facility rankings within the Group
 - 3. Location rankings within each facility (CLABSI + CAUTI)
- Make sure your Group has requested access to annual survey data on the Define Rights template
- Groups will not have a TAP Dashboard

TAP Dashboard

- Available to Facility Users
- Facilities will see TAP report data on NHSN home screen
 - Data auto-populated after signing into NHSN
 - CADs generated using HHS Action Plan Goals for 2020
 - Users can generate new analysis datasets directly from the TAP dashboard
- Encourage facilities to be proactive and hands-on with their data

NHSN Patient Safety Component Home Page



TAP Dashboard provides a "snapshot" of the first step of the TAP Strategy, the TAP Report.

Action Items

Dashboard

- Dataset generation
- Bar graph showing facility-level CADs for each HAI type and can be altered by:
 - НАІ Туре
 - Quarter
- Display and print options
- CADs use 2020 HHS Action Plan Goals

2020 HHS Action Plan: https://health.gov/hcq/prevent-haimeasures.asp



Dashboard

- Select HAI type in the legend to see a detailed location level graph and table.
 - CAUTI for ACH
 - CLABSI for ACH
 - FacWideIN CDI for AC
 - CAUTI for RehabLocation
 - FacWideIN CDI for Rehab Location



https://health.gov/hcq/prevent-hai-measures.asp

TAP Dashboard Detail View

- Number of Infections to Prevent to reach SIR goal.
 - CAD rounded to the next whole number
- CAD Interpretation:
 - Positive CAD = excess infections
 - Negative CAD = fewer infections than what would be predicted

TAP Dashboard Detail

CLABSI Data for Acute Care Hospitals

Number of Infections to Prevent to Reach SIR Goal



TAP Dashboard Detail View

Location ranking table under the graph (CAUTI and CLABSI)

Location Rank	Location	Location Type	Infection Count	Location CAD	Organisms
	CV-ICU	WARD+	4	3.96	4 (0, 1, 0, 0, 0, 1)
2	3 CENTRAL	WARD+	4	3.85	9 (0, 1, 0, 3, 0, 0)
3	NICU 3	NICU	2	1.92	3 (0, 1, 0, 0, 0, 0)
ł	MSICU	ICU	2	1.78	3 (0, 2, 0, 0, 0, 0)
5	HEMONC	WARD+	1	0.99	1 (0, 0, 0, 0, 0, 0)
5	BURN ICU 2	ICU	1	0.98	1 (0, 1, 0, 0, 0, 0)
7	PICU2 ICU		1 0.93		1 (0, 0, 0, 1, 0, 0)
3	5 WEST	WARD+	1	0.92	2 (0, 0, 0, 0, 0, 0)
)	BURN	ICU	1	0.74	1 (0, 0, 0, 0, 0, 0)
LO	NEURO ICU	ICU	1	0.73	1 (0, 1, 0, 0, 0, 0)
1	ONC MS	WARD+	1	0.46	3 (0, 0, 0, 1, 0, 0)
12	9NORTH	WARD+	0	0	
13	9 WEST	WARD+	0	-0.01	
13	CTICU	ICU	0	-0.01	
	FICU	ICU	0	-0.01	

Direct link TAP Reports in the Analysis Reports section of NHSN

TAP Dashboard Detail View

Direct link to the Analysis Reports folder to run and modify TAP Reports





Helpful Tips

Selecting Analysis Reports: Acute Care Hospitals

Helpful Tips-Device Associated Models

- The CLABSI, CAUTI, and VAE data in the reports indicated by the blue outline in the screen shot are inclusive of data reported from all eligible locations within hospitals.
 - These data are also stratified by location type (critical care units, neonatal critical care units, and inpatient wards as appropriate)
 - Used in the National and State HAI Data Report



Helpful Tips-Device Associated Models

- The CMS reports include a subset of the locations included in the 'general' reports (that are inplan)
 - They include only the CMS reportable locations
 - All ICU locations
 - Medical Ward IN:ACUTE: WARD:M
 - Medical/Surgical Ward IN:ACUTE: WARD:MS
 - Surgical Ward IN:ACUTE: WARD:S
 - Pediatric Medical Ward IN:ACUTE: WARD:M_PED
 - Pediatric Medical/Surgical Ward IN:ACUTE: WARD:MS_PED
 - Pediatric Surgical Ward IN:ACUTE: WARD:S_PED

NOTE: Your State reporting mandates may be different from the CMS reporting mandates

CMS Reports
 Acute Care Hospitals (Hospital IQR)
 SIR SIR - CLAB Data for Hospital IQR
 SIR SIR - CAU Data for Hospital IQR
 SIR SIR - CAU Data for Hospital IQR
 SIR SIR - Complex 30-Day SSI Data for Hospital IQR
 SIR SIR - MRSA Blood FacwideIN LabID Data for Hospital IQR
 SIR SIR - CDI FacwideIN LabID Data for Hospital IQR

Helpful Tips-Surgical Site Infections

All SSI SIR Data Report	Complex Admission/Readmission SSI SIR Data SIR Data Report	Complex 30-day SSI SIR Data Data Report
 All Inclusive SSI SIR report. Includes all procedure categories Includes inpatient procedures ONLY 	 Subset of All SSI SIR report with focus on complex SSIs detected upon admission and readmission to the same facility at which procedure was performed. Includes all procedure categories Includes inpatient procedures ONLY 	 Subset of the All SSI SIR report with focus on complex SSIs, regardless of of detection method in COLO and HYST procedures procedures In-plan, inpatient COLO and and HYST procedures in adults 18 years and older
 Often used by facilities to estimate estimate overall SSI burden within within their facility over time 	 Used by CDC for the annual National and State HAI Data Report-due to the inclusion inclusion criteria, reporting bias of SSI events is limited 	 For CMS reporting and verification

Helpful Tips-Surgical Site Infections

	All SSI	Complex AR SSI	All SSI	Complex AR	
	Model-	Model-	Model-	SSI Model-	Complex 30-Day
Included in model: Under 2015 Baseline	Adult	Adult	Pediatric	Pediatric	Model
All NHSN procedure categories	X	X	X	X	COLO and HYST
Procedures in patients <18 years			X	X	
Procedures in patients >=18 years	X	X			X
Inpatient procedures	X	X	Х	X	X
Superficial incisional primary (SIP) SSIs	X		X		
Deep incisional primary (DIP) SSIs	X	X	X	X	X
Organ/space (O/S) SSIs	X	X	X	X	X
DIP and O/S SSIs identified > 30 days after					
procedure (per protocol)	X	X	X	X	
SSIs detected on current admission (A)	X	X	X	X	X
SSIs detected on follow-up admission to the same					
facility (RF)	X	X	X	X	X
SSI detected on follow-up admission to different					
facility (RO)	X		X		X
SSIs detected through post-discharge surveillance efforts (P)	X		×		×

Helpful Tips-MDRO LabID

- CMS and non CMS SIR reports function similarly
 - Difference is that CMS SIR reports include in-plan data only
 - Used in the National and State HAI Data Report
- SIR analyzed at FacWIDEIn
- SIR Generated quarterly or higher
 - If you generate monthly SIR for a completed quarter, the numPred, SIR, P-value, and 95% CI will Not be calculated
 Adjust "Group by" to Summary VM2
- ED/OBS Events excluded from the numerator of the SIR


Helpful Tips-Annual Reports Using HAI Data

- National and State HAI Data Report (formally called HAI Progress Report)
 - <u>https://www.cdc.gov/hai/surveillance/progress-report/index.html</u>
- Antibiotic Resistance Patient Safety Atlas
 - <u>https://www.cdc.gov/hai/surveillance/ar-patient-safety-atlas.html</u>
- Antimicrobial-Resistant Pathogens Associated with HAIs Report to NHSN, 2011-2014: <u>https://www.cdc.gov/nhsn/pdfs/datastat/2014-AR-data-summary-nhsn.pdf</u>
- National Healthcare Personnel Influenza Vaccination Summary Data Tables by Facility Types
 - <u>https://www.cdc.gov/nhsn/datastat/index.html</u>
- Summary of Device-associated (DA) Module
 - <u>https://www.cdc.gov/nhsn/datastat/index.html</u>

Resources

- NHSN SIR Guide: <u>https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf</u>
- Analysis Quick Reference Guides: <u>https://www.cdc.gov/nhsn/ps-analysis-</u> resources/reference-guides.html
- Analysis Training Resources: <u>https://www.cdc.gov/nhsn/ps-analysis-resources/index.html</u>
- Plan line list: <u>https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/plan-line-list-qios.pdf</u>
- SAS Macros: <u>http://www.cdc.gov/nhsn/PS-Analysis-resources/index.html</u>
- TAP FAQs: <u>http://www.cdc.gov/hai/prevent/tap.html</u>
- TAP Report Quick Reference Guides: <u>https://www.cdc.gov/nhsn/ps-analysis-resources/reference-guides.html</u>

Resources

- Journal article by Soe et al. published in *Infection Control & Hospital Epidemiology* describing the cumulative attributable difference (CAD) metric: <a href="https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/div-classtitletargeted-assessment-for-prevention-of-healthcare-associated-infections-a-new-prioritization-metricdiv/9C6A5C82359703538798D31F16A3407A
- HAI Progress Reports: <u>http://www.cdc.gov/hai/surveillance/nhsn_nationalreports.html</u>
- Rebaseline Web page: <u>https://www.cdc.gov/nhsn/2015rebaseline/index.html</u>
- HHS Action Plan Goals for 2020:

https://health.gov/hcq/prevent-hai-measures.asp

- Help with the TAP Strategy: email HAIPrevention@cdc.gov
- Help with TAP Dashboard: email NHSN@cdc.gov

Thank You! Email: NHSN@cdc.gov

For more information, contact CDC 1-800-CDC-INFO (232-4636) TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.





Appendix A: 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

Appendix A: Monthly Reporting Plan

Centers for Disease Control and Prevention CDC 24/7: Saving Lives, Protecting People TM								
NHSN - National Healthcare Safety Network (apt-v-nhsn-test:8001)								
NHSN Home Alerts		Add Monthly Reporting Plan						
Reporting PlanPatientEventProcedure	• • •	Mandatory fields marked with * Facility ID *: DHQP MEMORIAL HOSPITAL (ID 10018) Month *: Year *: No NHSN Patient Safety Modules Followed this Month						
Summary Data	•	Device-Associated Module						
Import/Export		Locations	CL	ABSI VAP	CAUTI	CLIP		
Surveys	•	PEDSURG_CC - PEDSURG_CC			~			
Analysis	•	Image: Amage:			✓			
Users	•							
Facility	•	Add Row Clear All Rows Copy from Previous Month						
Group	•	Procedure-Associated Module						
Tools	•			Post-	procedure			
Logout		Procedures	SSI	, ost	PNEU			
		COLO - Colon surgery	IN: 🗹 OUT: 🗆	IN - In	patient 🗸			
		Image: Image	IN: 🗹 OUT: 🗆	IN - In	patient 🗸			
_	-	Add Row Clear All Rows Copy from Previous Month						

Appendix B: Universal Exclusion Criteria

 Line Listing of Procedures Excluded from the SIR report to investigate this (see quick reference guide: <u>https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/line-list-proceduresexcluded-sir.pdf</u>)

Variable Names	Definition: Procedure is excluded because one or more of the ff is true: =Y (for Yes)
exclMissingVarInd	Missing a variable required for the risk adjustment of the SIR
exclMissingVarList	If missing variables
exclDurThresholdInd	The procedure duration is greater than the duration cut off point
exclAgeGT109Ind	The patient was older than 109 years old at the time of surgery
exclOutpatientInd	The procedure is an outpatient procedure
exclPedIndcmpx30d	Procedure is a pediatric procedure and excluded from the CMS model
exclGenderOth	The patient's gender was reported as "Other"
exclInvalidJointRepHemi	The value set for 2015 data entered for KPRO and HPRO as JointRepHemi is invalid
exclBMIThresholdInd	The patient's BMI is less than 12 or greater than 60 (adults)
	The patient's BMI is less than 10.49 or greater than 65.79 (pediatrics)

Appendix B contd: Universal Exclusion Criteria

- Note: *The BMI exclusion applies to all procedures on adult patients in all 3 SSI models (All SSI, Complex A/R, Complex 30-Day).
- **The BMI exclusion applies to all procedures on pediatric patients, in both applicable SSI models (All SSI and Complex A/R). CDC Growth Charts are used to assess BMI in pediatric patients, calculated using height, weight, age, and gender. Additional clarification on the BMI exclusion rule for pediatric procedures: Although there are BMI thresholds for procedures performed on pediatric patients (10.49-65.79), there is an additional level of consideration made for the biological plausibility of that BMI using the patient's age and gender. After applying the BMI outlier exclusion rule, we review the BMIs for the remaining pediatric procedures to determine if they are biologically plausible based on the patient's age and gender. So essentially, we take age and gender into consideration along with the calculated BMI. Only procedures in which the patient's BMI meets the inclusion rule (10.49-65.79), and in which the patient's BMI is biologically plausible based on age and gender, are included in the SIR. The determination of biologically plausible BMIs are made using the macro available at this site: https://www.cdc.gov/nccdphp/dnpao/growthcharts/resources/sas.htm

Appendix C: SSI Indicator Variables

Line Listing of SSI Events (see quick reference guide: <u>https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/ssi-events-line-list-qrg.pdf</u>)

Variable Name	Definition SSI is included in the specified model (if value is set to 1)
bs2_AllSSI	Included in All Adult SSI SIR model
bs2_SSIPedAll	Included in All Pediatric SSI SIR model
bs2_SSIComplex	Included in Complex AR Adult SSI SIR model
bs2_SSIPedComplex	Included in Complex AR Pediatric SSI SIR model
bs2_SSIComplex30d	Included in Complex 30-daySSI SIR model