

Using the “SIR – CAU Data for Hospital IQR” Output Option

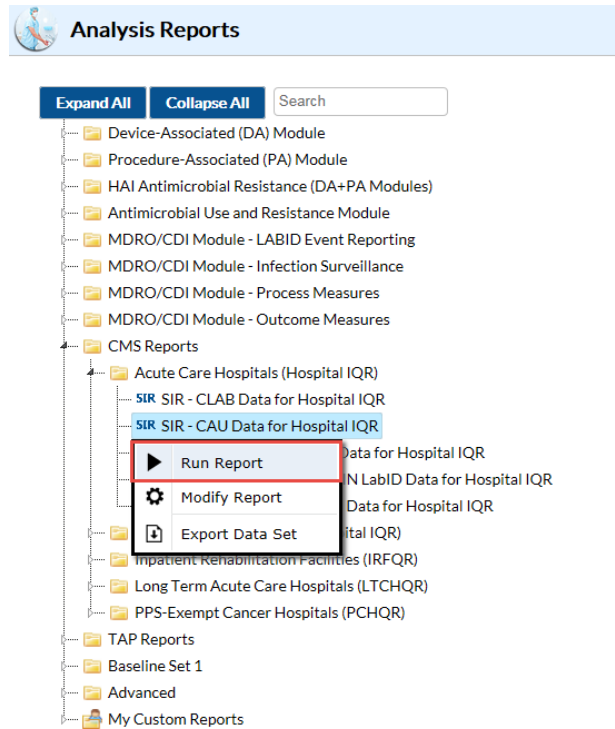
The NHSN Analysis Report, “SIR – CAU Data for Hospital IQR” was created in order to allow facilities to review those CAUTI data that would be submitted to CMS on their behalf. It’s important to keep in mind the following as you begin to use this report:

- a. These data will only be submitted for those facilities that are participating in the CMS IPPS Hospital IQR Program, as indicated by their CCN recorded in NHSN.
- b. This report will only include: **in-plan CAUTI data for each adult and pediatric ICU beginning with 2015 data and in-plan CAUTI data for each adult and pediatric medical, surgical, and medical/surgical ward beginning with 2015 data.** Other locations/earlier years for which you may have reported CAUTI data will not be included in this output.
- c. **IMPORTANT!** Facilities must appropriately **Report No Events** for those locations and months for which no events of each type under surveillance were identified.
- d. This output option represents an SIR for each hospital, not each CCN. If your hospital shares a CCN, this SIR will only represent the data that your hospital has contributed to the overall SIR for all hospitals that share the CCN. You may wish to use the Group feature in NHSN to obtain a single SIR for all the hospitals that share a CCN. More information about the Group feature can be found here: <http://www.cdc.gov/nhsn/group-users/index.html>.
- e. The data in this report will represent data current as of the last time you generated datasets. Note that data in the Quality Net Provider Participation Report are not updated simultaneously with your data in NHSN. Data changes made in NHSN will be reflected in the next monthly submission to CMS.
EXCEPTION: Quarterly data are frozen as of the final submission date for that quarter (e.g., Q1 data will be frozen as of 3am ET on August 16th); any changes made to these data in NHSN after the final submission deadline will not be reflected in later months on the Quality Net Provider Participation Report or on Hospital Compare.
- f. To learn more about the standardized infection ratio (SIR), including how it is calculated for device-associated data, please see the SIR Newsletter at <https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf>
- g. The information in this document should be used in conjunction with the document, “**Helpful Tips for CAUTI Reporting for the Centers for Medicare and Medicaid Services’ Hospital Inpatient Quality Reporting Program (CMS Reporting Program)**”, available from: <http://www.cdc.gov/nhsn/cms/index.html#cauti>.

Example of the “SIR – CAU Data for Hospital IQR”: Interpretation and Data Checking

Before running this output option, remember to generate your datasets for the most up-to-date data reported to NHSN by your facility! To generate datasets, go to Analysis > Generate Data Sets, then click “Generate New”.

1. After selecting Analysis > Reports, navigate through the following folders: CMS Reports > Acute Care Hospitals (Hospital IQR). Click “Run Report” next to “SIR – CAU Data for Hospital IQR”, as shown below:



2. By default, the results will appear in an HTML window. If a second window does not pop-up, please be sure to check your pop-up blocker and allow pop-ups from *.cdc.gov.

Within the output, there will be four tables, each described below:

- i. SIR CAUTI Data for Hospital IQR (2015 Baseline) – **By OrgID**

The first table represents an overall, single SIR for your facility, per calendar-year quarter, as shown below. This is the information that will be submitted to CMS for each IPPS-participating facility, as indicated by the facility’s CCN. NOTE: This table will include data from all ICUs and the six selected ward locations.

**National Healthcare Safety Network
SIR for CAUTI Data for Hospital IQR (2015 Baseline) - By OrgID**

As of: December 14, 2016 at 11:23 AM
Date Range: BS2_CAU_RATES_CMS summaryYr 2015 to 2015
if(((utiPlan = "Y")))

orgID=10018 CCN=868768

orgID	summaryYQ	infCount	numPred	numcathdays	SIR	SIR_pval	sir95ci
10018	2015Q1	2	1.013	546	1.974	0.351	0.331, 6.523

Using the above table, one can conclude the following:

- a. This facility identified 2 CAUTI (infCount) among 546 urinary catheter days (numcathDays) during the 1st quarter of 2015 (summaryYQ).
- b. The number of CAUTIs predicted (numPred), based on 2015 national data, was 1.013.
- c. The overall SIR for this facility during this time period is 1.974, indicating that this facility observed approximately 97% more infections than expected.
- d. Based on the p-value (SIR_pval) and the 95% confidence interval (SIR95CI), the SIR for this facility is not statistically different from 1, indicating that there were not significantly fewer infections identified than were expected.

ii. SIR CAUTI Data for Hospital IQR (2015 Baseline) – By OrgID/Location Type

The second table provides an SIR for each quarter and location type (e.g., ICU) with reported in-plan CAUTI data during each time period. “CC” in this table will represent all adult and pediatric ICUs; “WARD” in this table will represent all adult and pediatric medical, surgical, and medical/surgical wards.

**National Healthcare Safety Network
SIR for CAUTI Data for Hospital IQR (2015 Baseline) - By OrgID/Location Type**

As of: December 14, 2016 at 12:54 PM
Date Range: All BS2_CAU_RATES_CMS
if(((utiPlan = "Y")))

orgID=10018 CCN=868768

orgID	locationType	summaryYQ	infCount	numPred	numcathdays	SIR	SIR_pval	sir95ci
10018	CC	2015Q1	1	0.813	246	.	.	
10018	CC	2015Q1	0	0.754	146	.	.	
10018	WARD	2015Q1	0	0.562	108	.	.	



The data in this table can be interpreted similar to the first SIR table, described above. Note that this table will allow you to see the how many CAUTIs and device days were reported in each location type, as defined by CDC.

iii. SIR for CAUTI Data for Hospital IQR (2015 Baseline) – **By OrgID/CDC Location Code**

The third table provides an SIR for each quarter and CDC location (e.g., adult medical ICU, pediatric medical/surgical ICU). Note that if your facility reports data for more than one location of the same CDC type (for example, 2 medical ICUs), these locations will be grouped into one SIR in this table.

National Healthcare Safety Network

SIR for CAUTI Data for Hospital IQR (2015 Baseline) - By OrgID/CDC Location Code

As of: December 14, 2016 at 12:54 PM

Date Range: All BS2_CAU_RATES_CMS

if(((utiPlan = "Y")))

orgID=10018 CCN=868768

orgID	loccdc	summaryYQ	infCount	numPred	numcathdays	SIR	SIR_pval	sir95ci
10018	IN:ACUTE:CC:C	2015Q1	0	0.351	74	.	.	
10018	IN:ACUTE:CC:MS	2015Q1	1	0.813	246	.	.	
10018	IN:ACUTE:CC:MS	2015Q1	0	0.349	72	.	.	
10018	IN:ACUTE:WARD:M	2015Q1	0	0.562	108	.	.	

iv. SIR for CAUTI Data for Hospital IQR (2015 Baseline) – **By OrgID/Location**

The fourth table provides an SIR for each quarter and individual location within your facility. This is also the only table that will allow you to see how many months of data are included in each location’s quarterly SIR.

For example, looking at the LOTEACCA location below, we can see that the “months” column shows a value of 1, indicating that 1 month of data have contributed to the quarterly SIR for this location (as one would expect). If less than 3 months contribute to a quarterly SIR, than this will indicate that the SIRs in this output option are incomplete and additional data checking is needed.



Updated December 2016

National Healthcare Safety Network

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

As of: December 14, 2016 at 12:54 PM

Date Range: All BS2_CAU_RATES_CMS

if(((utiPlan = "Y")))

orgid=10018 CCN=868768

orgid	location	summaryYQ	months	infcount	numPred	numcathdays	SIR	SIR_pval	SIR95CI
10018	5G	2015Q1	3	0	0.351	74	.	.	
10018	ICU	2015Q1	3	1	0.813	246	.	.	
10018	ICU	2015Q1	3	0	0.349	72	.	.	
10018	LOTEACCA	2015Q1	1	0	0.562	108	.	.	

3. What can be done if data are incomplete or if the number of infections or urinary catheter days is incorrect?
 - i. Check that the summary data for this location have been entered for each month in the quarter. This includes urinary catheter days and patient days.
 - ii. If summary data have been entered, double-check your monthly reporting plan for each month in the quarter. Check to make sure that each location is included in your monthly reporting plan, with the CAUTI box checked.
 - iii. If summary data have been entered and no CAUTIs have been identified, be sure to check the 'Report No Events' box on the summary record, next to the Urinary Catheter days count.
 - iv. If the number of infections is less than you reported *and* you've confirmed that the summary data have been entered in-plan, double check the UTI events in NHSN: if urinary catheter is entered as "NEITHER", the event is *not* considered a CAUTI and will not appear in this report. Note that you can edit the event with the correct information, if necessary.

REMEMBER: If you have made any changes to your data, regenerate your datasets in order to review your output options with the most up-to-date data in NHSN.

Additional Resources

CMS Resources for NHSN Users: <http://www.cdc.gov/nhsn/cms/index.html>

Operational Guidance: <http://www.cdc.gov/nhsn/PDFs/FINAL-ACH-CAUTI-Guidance.pdf>

Analysis Quick Reference Guides: <http://www.cdc.gov/nhsn/PS-Analysis-resources/reference-guides.html>

