

### Using the “SIR – CAU Data for CMS PPS-Exempt Cancer Hospitals” Output Option

The NHSN Analysis Report, “SIR – CAU Data for CMS PPS-Exempt Cancer Hospitals” 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 PPS-Exempt Cancer Hospital Quality Reporting (PCHQR) Program, as indicated by their CCN recorded in NHSN
- b. This report will only include: **in-plan CAUTI data for all oncology ICU, ward and step down locations beginning with 2021 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>.
- a. 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. For example, Q1 data will be frozen as of 7am UTC\* (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.
- e. 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>

*\*All NHSN timestamps are displayed in the UTC Time Standard. To convert UTC to Eastern Time:*

- *Between second Sunday in March – first Sunday in November: subtract 4 hours from UTC to get Eastern Daylight Time (EDT).*
- *Between first Sunday in November – second Sunday in March: subtract 5 hours from UTC to get Eastern Standard Time (EST).*



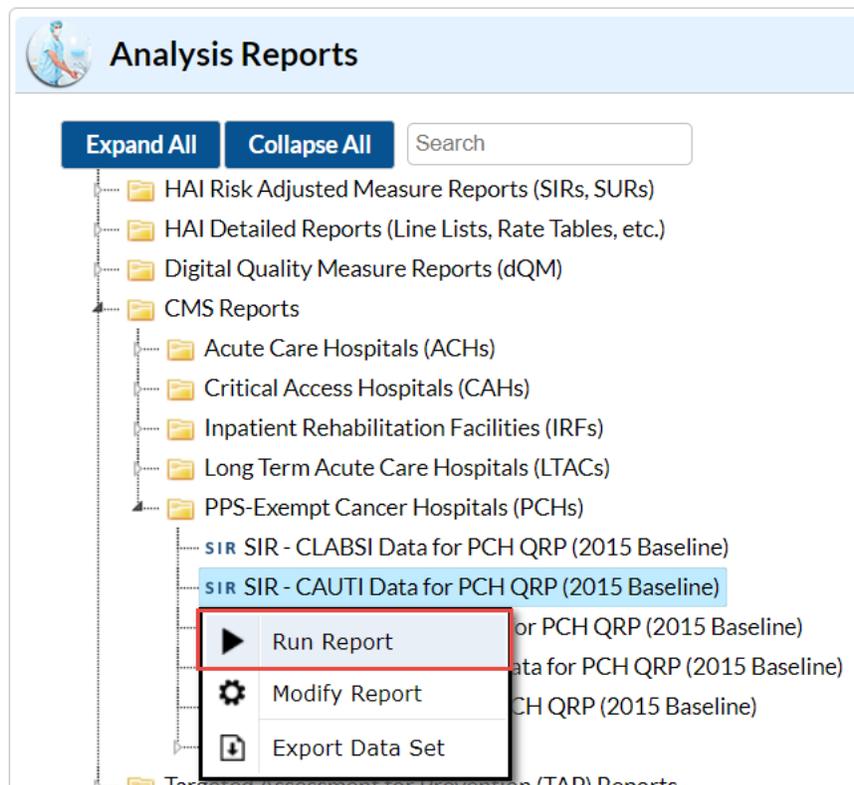
Updated August 2024

## Example of the “SIR – CAU Data for CMS PPS-Exempt Cancer Hospitals”: Interpretation and Data Checking

All data shown in this document are fictitious and intended for illustrative purposes.

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 > PPS-Exempt Cancer Hospitals (PCHQR). Click “Run Report” next to “SIR – CAUTI Data for CMS PPS-Exempt Cancer Hospitals”, 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 for CAUTI Data for CMS PPS-Exempt Cancer Hospitals (2015 Baseline) – **By OrgID**

**Updated August 2024**

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 PCHQR participating facility, as indicated by the facility’s CCN. NOTE: : This table will include in-plan CAUTI data for all oncology ICU, ward, and step-down locations.

**National Healthcare Safety Network**

**SIR for CAUTI Data for CMS PPS-Exempt Cancer Hospitals (2015 Baseline) - By OrgID**

As of: August 3, 2021 at 12:47 PM  
 Date Range: BS2\_CAU\_RATESONC\_CMS summaryYQ After and Including 2020Q1  
 if (((utiPlan = "Y" )))

Facility Org ID=11305 Type of Affiliation=' '

Facility Org ID	CMS Certification Number	Summary Yr/Qtr	Events	Number Predicted	Urinary Catheter Days	SIR	SIR p-value	95% Confidence Interval
11305	999999	2020Q1	12	1.791	3433	6.700	0.0000	3.630, 11.390

Using the above table, one can conclude the following:

- i. This facility identified 12 CAUTI (infCount) among 3433 urinary catheter days (numcathDays) during the 1st quarter of 2020 (summaryYQ).
  - ii. The number of CAUTIs predicted (numPred), based on 2015 national data, was 1.791.
  - iii. The overall SIR for this facility during this time period is 6.700, indicating that this facility observed approximately 670% more infections than expected. Based on the p-value (SIR\_pval) and the 95% confidence interval (SIR95CI), the SIR for this facility is statistically different from 1, indicating that there were significantly more infections identified than were expected.
- ii. **SIR for CAUTI Data for CMS PPS-Exempt Cancer Hospitals (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\_ONC” in this table will represent all adult and pediatric oncology ICUs; “WARD\_ONC” in this table will represent oncology wards and “STEP\_ONC” will represent oncology step down units

**National Healthcare Safety Network**

**SIR for CAUTI Data for CMS PPS-Exempt Cancer Hospitals (2015 Baseline) - By OrgID/Location Type**

As of: August 3, 2021 at 12:47 PM  
 Date Range: BS2\_CAU\_RATESONC\_CMS summaryYQ After and Including 2020Q1  
 if (((utiPlan = "Y" )))

Facility Org ID=11305 Type of Affiliation=' '

Facility Org ID	CMS Certification Number	Location Type	Summary Yr/Qtr	Events	Number Predicted	Urinary Catheter Days	SIR	SIR p-value	95% Confidence Interval
11305	999999	CC_ONC	2020Q1	8	1.135	2400	7.051	0.0000	3.275, 13.389
11305	999999	STEP_ONC	2020Q1	1	0.142	300	.	.	.
11305	999999	WARD_ONC	2020Q1	3	0.515	733	.	.	.

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.

**Updated August 2024**

**iii. SIR for CAUTI Data for CMS PPS-Exempt Cancer Hospitals (2015 Baseline) – By OrgID/CDC Location Code**

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

**National Healthcare Safety Network**

**SIR for CAUTI Data for CMS PPS-Exempt Cancer Hospitals (2015 Baseline) - By OrgID/CDC Location Code**

As of: August 3, 2021 at 12:47 PM  
 Date Range: BS2\_CAU\_RATESONC\_CMS summaryYQ After and Including 2020Q1  
 if (((utiPlan = "Y" ) ) )

Facility Org ID=11305 Type of Affiliation='1'

Facility Org ID	CMS Certification Number	CDC Location	Summary Yr/Qtr	Events	Number Predicted	Urinary Catheter Days	SIR	SIR p-value	95% Confidence Interval
11305	999999	IN:ACUTE:CC:ONC_M	2020Q1	2	0.425	900	.	.	
11305	999999	IN:ACUTE:CC:ONC_MS	2020Q1	3	0.236	500	.	.	
11305	999999	IN:ACUTE:CC:ONC_S	2020Q1	3	0.473	1000	.	.	
11305	999999	IN:ACUTE:STEP:ONC	2020Q1	1	0.142	300	.	.	
11305	999999	IN:ACUTE:WARD:ONC_HSCT	2020Q1	3	0.515	733	.	.	

**iv. SIR for CAUTI Data for PPS-Exempt Cancer Hospitals (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 ONC\_MS 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, which is fewer months than would be expected. If less than 3 months contribute to a quarterly SIR, then this will indicate that the SIRs in this output option are incomplete and additional data checking is needed.

**National Healthcare Safety Network**

**SIR for CAUTI Data for CMS PPS-Exempt Cancer Hospitals (2015 Baseline) - By OrgID/Location**

As of: August 3, 2021 at 12:47 PM  
 Date Range: BS2\_CAU\_RATESONC\_CMS summaryYQ After and Including 2020Q1  
 if (((utiPlan = "Y" ) ) )

Facility Org ID=11305 Type of Affiliation='1'

Facility Org ID	CMS Certification Number	Location	Summary Yr/Qtr	Months	Events	Number Predicted	Urinary Catheter Days	SIR	SIR p-value	95% Confidence Interval
11305	999999	ONC_HSC	2020Q1	2	3	0.515	733	.	.	
11305	999999	ONC_M	2020Q1	2	2	0.425	900	.	.	
11305	999999	ONC_MS	2020Q1	1	3	0.236	500	.	.	
11305	999999	ONC_S	2020Q1	2	3	0.473	1000	.	.	
11305	999999	TESTSTEP	2020Q1	1	1	0.142	300	.	.	



## Updated August 2024

3. What can be done if data are incomplete or if the number of infections or urinary catheter days is incorrect?
  - a. 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.
  - b. 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.
  - c. 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.
  - d. 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: <https://www.cdc.gov/nhsn/cms/index.html>

Operational Guidance: <https://www.cdc.gov/nhsn/pdfs/cms/Final-PCHQR-CAUTI-Guidance-508.pdf>

Analysis Quick Reference Guides: <https://www.cdc.gov/nhsn/ps-analysis-resources/reference-guides.html>

NHSN's Guide to the SIR: <https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf>

