

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

The NHSN Analysis Output Option, “SIR-CLAB Data for CMS PPS-Exempt Cancer Hospitals” was created in order to allow facilities to review those 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 CLABSI data for all oncology ICU, ward and step down locations beginning with 2021 data**. Other locations/earlier years for which you may have reported CLABSI 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. 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.
- f. To learn more about the standardized infection ratio (SIR), including how it is calculated for CLABSI data, please see the NHSN SIR Guide 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).*

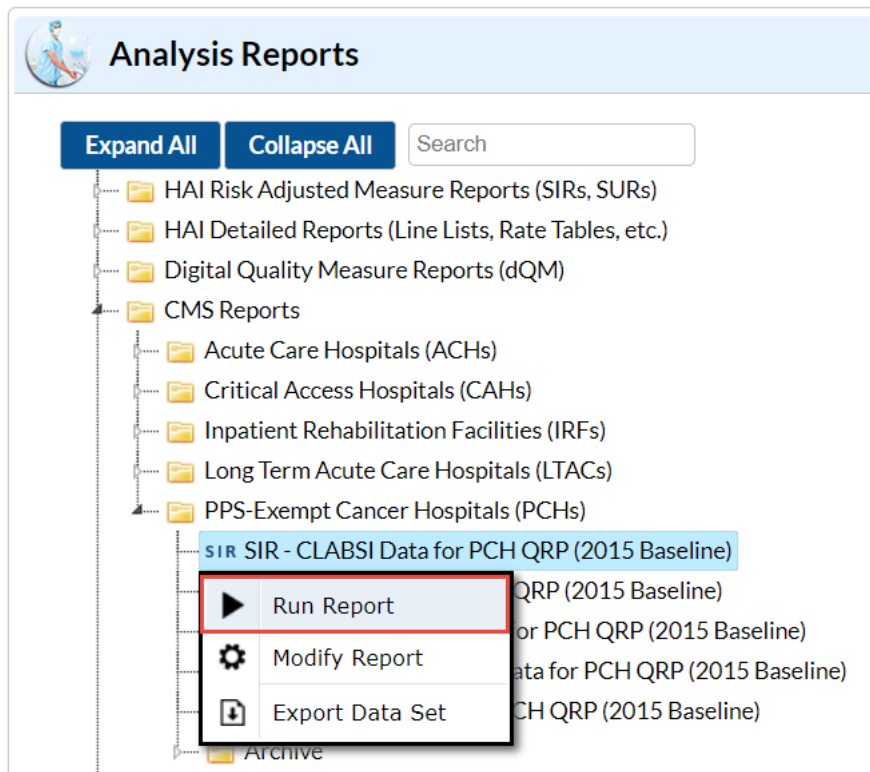


Example of the “SIR – CLABSI Data for CMS PPS-Exempt Cancer Hospitals”: Interpretation and Data Checking

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 – CLABSI 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 4 tables, each described below:

- i. **SIR for CLABSI Data for CMS PPS-Exempt Cancer Hospitals (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 PCHQR-participating facility, as indicated by the facility’s CCN. NOTE: This



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table will include in-plan CLABSI data for all oncology ICU, ward, and step-down locations.

National Healthcare Safety Network

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

As of: August 3, 2021 at 11:30 AM
 Date Range: BS2_CLAB_RATESONC_CMS summaryYQ 2020Q1 to 2020Q4
 if (((bsiPlan = "Y")))

Facility Org ID=11305 Type of Affiliation=' '

Facility Org ID	CMS Certification Number	Summary Yr/Qtr	Events	Number Predicted	Central Line Days	SIR	SIR p-value	95% Confidence Interval
11305	999999	2020Q1	1	4.715	6410	0.212	0.0602	0.011, 1.046

Notice that the SIR will not be calculated if the number of predicted infection (numPred) is < 1. Using the above table, one can conclude the following:

- a) This facility identified 1 CLABSI (infCount) among 6410 central line days (numCLDays) during the 1st quarter of 2020 (2020Q1).
 - b) The number of CLABSIs predicted (numPred), based on national data, was 4.715.
 - c) The overall SIR for this facility during this time period is 0.212, indicating that this facility observed approximately 79% less 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 for CLABSI 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, ward) with reported in-plan CLABSI data during each time period. "CC_ONC" in this table will represent all adult and pediatric oncology ICUs; "WARD_ONC" will include oncology wards and "STEP_ONC" will represent oncology step down units.

National Healthcare Safety Network

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

As of: August 3, 2021 at 11:30 AM
 Date Range: BS2_CLAB_RATESONC_CMS summaryYQ 2020Q1 to 2020Q4
 if (((bsiPlan = "Y")))

Facility Org ID=11305 Type of Affiliation=' '

Facility Org ID	CMS Certification Number	Location Type	Summary Yr/Qtr	Events	Number Predicted	Central Line Days	SIR	SIR p-value	95% Confidence Interval
11305	999999	CC_ONC	2020Q1	0	3.019	4500	0.000	0.0488	0.992
11305	999999	STEP_ONC	2020Q1	1	0.240	400			
11305	999999	WARD_ONC	2020Q1	0	1.455	1510	0.000	0.2334	2.059



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 CLABSIs and device days were reported in each location type, as defined by CDC.

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

As of: August 3, 2021 at 11:30 AM
 Date Range: BS2_CLAB_RATESONC_CMS summaryYQ 2020Q1 to 2020Q4
 if (((bsiPlan = "Y")))

Facility Org ID=11305 Type of Affiliation=' '

Facility Org ID	CMS Certification Number	CDC Location	Summary Yr/Qtr	Events	Number Predicted	Central Line Days	SIR	SIR p-value	95% Confidence Interval
11305	999999	IN:ACUTE:CC:ONC_M	2020Q1	0	1.006	1500	0.000	0.3655	, 2.977
11305	999999	IN:ACUTE:CC:ONC_MS	2020Q1	0	1.006	1500	0.000	0.3655	, 2.977
11305	999999	IN:ACUTE:CC:ONC_S	2020Q1	0	1.006	1500	0.000	0.3655	, 2.977
11305	999999	IN:ACUTE:STEP:ONC	2020Q1	1	0.240	400			
11305	999999	IN:ACUTE:WARD:ONC_HSCT	2020Q1	0	1.455	1510	0.000	0.2334	, 2.059

iv. SIR for CLABSI 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_M location below, we can see that the “months” column shows a value of 3, indicating that all 3 months of data have contributed to the quarterly SIR for this location. This will indicate that the SIRs in this output option are complete and no additional data checking is needed.



**National Healthcare Safety Network
SIR for CLABSI Data for CMS PPS-Exempt Cancer Hospitals (2015 Baseline) - By OrgID/Location**

As of: August 3, 2021 at 11:30 AM
Date Range: BS2_CLAB_RATESONC_CMS summaryYQ 2020Q1 to 2020Q4
if (((bsiPlan = "Y")))

Facility Org ID=11305 Type of Affiliation=' '

Facility Org ID	CMS Certification Number	Location	Summary Yr/Qtr	Months	Events	Number Predicted	Central Line Days	SIR	SIR p-value	95% Confidence Interval
11305	999999	ONC_HSC	2020Q1	3	0	1.455	1510	0.000	0.2334	2.059
11305	999999	ONC_M	2020Q1	3	0	1.006	1500	0.000	0.3655	2.977
11305	999999	ONC_MS	2020Q1	3	0	1.006	1500	0.000	0.3655	2.977
11305	999999	ONC_S	2020Q1	3	0	1.006	1500	0.000	0.3655	2.977
11305	999999	TESTSTEP	2020Q1	1	1	0.240	400	-	-	-

3. What can be done if data are incomplete or if the number of infections or central line days is incorrect?
 - i. Check that the summary data for this location have been entered for each month in the quarter. This includes central line 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 CLABSI box checked.
 - iii. If summary data have been entered and no CLABSIs have been identified, be sure to check the 'Report No Events' box on the summary record, next to each Central Line 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 BSI events in NHSN: if both central line types are entered as "No", the event is *not* considered a CLABSI 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-CLABSI-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>