

SIR – CLABSI Data for CMS IPPS (2022 Baseline)

Updated October 2025

Purpose: Help facilities review the CLABSI data that NHSN will submit to CMS for IPPS, using the 2022 national baseline risk models. SIRs calculated under the 2022 baseline compare observed infections to those predicted from 2022 national aggregate data. *Please note: SIR under the 2022 baseline cannot be directly compared to SIRs calculated under other baselines (e.g., 2015).*

The NHSN Analysis Output Option, “**SIR – CLABSI Data for CMS IPPS (2022 Baseline)**,” lets facilities review the CLABSI data that will be submitted to CMS on their behalf. Keep the following in mind as you use this report:

1. These data are submitted only for facilities participating in the CMS IPPS, as indicated by their CCN in NHSN.
2. This report includes **in-plan CLABSI** data for each **adult, pediatric, and neonatal ICU** and for each **adult and pediatric medical, surgical, and medical/surgical ward**. Under the **2022 baseline**, only data **from January 2022 forward** are included; earlier years will not appear in this output. Please note, data from non-ICU oncology locations are not included in this report. *Note: While 2022 baseline includes data from 2022 forward, CMS will only use data from 2025 forward as part of IPPS.*
3. **IMPORTANT!** You must **Report No Events** for any location-months with no CLABSI events.
4. This output option represents an **SIR for each hospital**, not each CCN. If your hospital shares a CCN, the SIR reflects only your facility’s contribution. Use the Group feature if you need a single SIR across hospitals sharing a CCN.
 - a. More information about the Group feature can be found on the [NHSN Group Users page](#).
 - b. For information on how facilities SIR is aggregated at the CCN level, refer to the [SIR Aggregation for Facilities with a Shared CCN guidance document](#).

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 Provider Participation Report or on Hospital Compare.
5. To learn more about the standardized infection ratio (SIR), including how it is calculated for CLABSI data, please see the [NHSN SIR Guide](#).
6. The information in this document should be used in conjunction with the document(s):
 - a. [How to Set Up CLABSI and CAUTI Reporting per NHSN Protocol for the CMS Inpatient Prospective Payment System](#)
 - b. [NHSN Monthly Checklist for Reporting to CMS Hospital IQR Program](#)

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

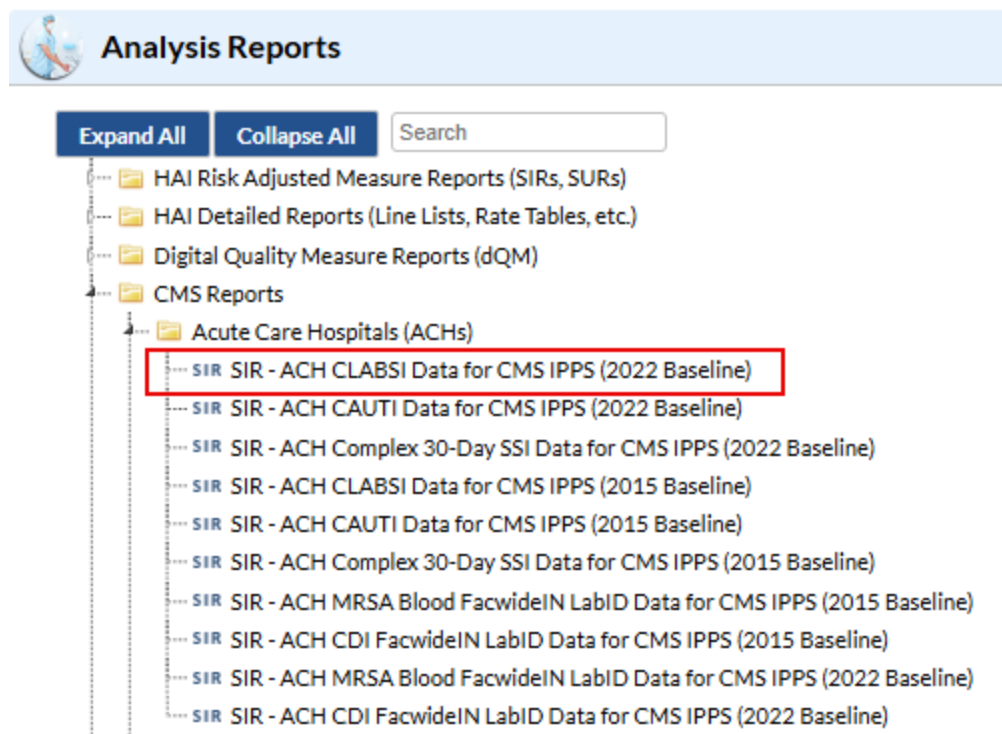
- Between second Sunday in March – first Sunday in November: subtract 4 hours from UTC to get Eastern Daylight Time (EDT).
- Between first Sunday in November – second Sunday in March: subtract 5 hours from UTC to get Eastern Standard Time (EST).



Example of the “SIR – CLABSI Data for CMS IPPS (2022 Baseline)”: 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”. Please refer to the [Generating Data Sets guidance document](#) for further instructions.

- 1) After selecting Analysis > Reports, navigate through the following folders: CMS Reports > Acute Care Hospitals (ACHs). Click “Run” next to “SIR – ACH CLABSI Data for CMS IPPS (2022 Baseline)”, 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:



SIR for Central Line-Associated BSI in Acute Care Hospitals for CMS IPPS (2022 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.

National Healthcare Safety Network

SIR for Central Line-Associated BSI in Acute Care Hospitals for CMS IPPS (2022 Baseline) - By OrgID

As of: December 18, 2025 at 3:43 PM UTC

Date Range: BS3_CLAB_RATES_CMS summaryYQ 2025Q1 to 2025Q1

if (((bsiPlan = "Y") AND (locationType IN ("CC", "CC_N", "CC_ONC"))) OR ((bsiPlan = "Y") AND (locCDC IN ("IN:ACUTE:WARD:M", "IN:ACUTE:WARD:MS", "IN:ACUTE:WARD:S", "IN:ACUTE:WARD:M_PED", "IN:ACUTE:WARD:MS_PED", "IN:ACUTE:WARD:S_PED"))))

orgID=10401

orgID	ccn	summaryYQ	clabcount	numPred	numclDays	SIR	SIR_pval	sir95ci
10401	000000	2025Q1	1	4.796	5075	0.208	0.0561	0.010, 1.028

Using the table below, one can conclude the following:

- This facility identified 1 CLABSI (clabcount) among 5075 central line days (numclDays) during the 1st quarter of 2024 (2024Q1).
- The number of CLABSI predicted (numPred), based on 2022 national data, was 4.796.
- The overall SIR for this facility during this time period is 0.208 , indicating that this facility observed approximately 80% fewer CLABSI events than expected.
- 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.

SIR for Central Line-Associated BSI in Acute Care Hospitals for CMS IPPS (2022 Baseline) - By OrgID/Location Type

The second table provides an SIR for each quarter and location type (e.g., ICU, NICU) with reported in-plan CLABSI data during each time period. "CC" in this table will represent all adult and pediatric ICUs; "CC_N" will include all level 2/3, level 3, and level 4 neonatal ICUs; and "WARD" will include all adult and pediatric medical, surgical, and medical/surgical wards.

**Notice that the SIR will not be calculated if the number of predicted infection (numPred) is <1.*

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



National Healthcare Safety Network

SIR for Central Line-Associated BSI in Acute Care Hospitals for CMS IPPS (2022 Baseline) - By OrgID/Location Type

As of: December 18, 2025 at 3:43 PM UTC

Date Range: BS3_CLAB_RATES_CMS summaryYQ 2025Q1 to 2025Q1

if (((bsiPlan = "Y") AND (locationType IN ("CC", "CC_N", "CC_ONC"))) OR ((bsiPlan = "Y") AND (locCDC IN ("IN:ACUTE:WARD:M", "IN:ACUTE:WARD:MS", "IN:ACUTE:WARD:S", "IN:ACUTE:WARD:M_PED", "IN:ACUTE:WARD:MS_PED", "IN:ACUTE:WARD:S_PED"))))

orgID=10401

orgID	ccn	locationType	summaryYQ	clabcount	numPred	numclays	SIR	SIR_pval	sir95ci
10401	000000	CC	2025Q1	1	1.671	1625	0.598	0.6901	0.030, 2.951
10401	000000	CC_N	2025Q1	0	1.490	1250	0.000	0.2254	, 2.010
10401	000000	CC_ONC	2025Q1	0	0.913	1200	.	.	
10401	000000	WARD	2025Q1	0	0.722	1000	.	.	

SIR for Central Line-Associated BSI in Acute Care Hospitals for CMS IPPS (2022 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 Central Line-Associated BSI in Acute Care Hospitals for CMS IPPS (2022 Baseline) - By OrgID/CDC Location Code

As of: December 18, 2025 at 3:43 PM UTC

Date Range: BS3_CLAB_RATES_CMS summaryYQ 2025Q1 to 2025Q1

if (((bsiPlan = "Y") AND (locationType IN ("CC", "CC_N", "CC_ONC"))) OR ((bsiPlan = "Y") AND (locCDC IN ("IN:ACUTE:WARD:M", "IN:ACUTE:WARD:MS", "IN:ACUTE:WARD:S", "IN:ACUTE:WARD:M_PED", "IN:ACUTE:WARD:MS_PED", "IN:ACUTE:WARD:S_PED"))))

orgID=10401

orgID	ccn	locCDC	summaryYQ	CLABCount	numPred	numclays	SIR	SIR_pval	sir95ci
10401	000000	IN:ACUTE:CC:B	2025Q1	0	0.825	800	.	.	
10401	000000	IN:ACUTE:CC:M	2025Q1	0	0.825	800	.	.	
10401	000000	IN:ACUTE:CC:ONC_M	2025Q1	0	0.913	1200	.	.	
10401	000000	IN:ACUTE:CC:S	2025Q1	1	0.021	25	.	.	
10401	000000	IN:ACUTE:CC_STEP:NURS	2025Q1	0	1.490	1250	0.000	0.2254	, 2.010
10401	000000	IN:ACUTE:WARD:M_PED	2025Q1	0	0.722	1000	.	.	



SIR for Central Line-Associated BSI in Acute Care Hospitals for CMS IPPS (2022 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.

National Healthcare Safety Network

SIR for Central Line-Associated BSI in Acute Care Hospitals for CMS IPPS (2022 Baseline) - By OrgID/Location

As of: December 18, 2025 at 3:43 PM UTC

Date Range: BS3_CLAB_RATES_CMS summaryYQ 2025Q1 to 2025Q1

if (((bsiPlan = "Y") AND (locationType IN ("CC", "CC_N", "CC_ONC"))) OR ((bsiPlan = "Y") AND (locCDC IN ("IN:ACUTE:WARD:M", "IN:ACUTE:WARD:MS", "IN:ACUTE:WARD:S", "IN:ACUTE:WARD:M_PED", "IN:ACUTE:WARD:MS_PED", "IN:ACUTE:WARD:S_PED"))))

orgID=10401

orgID	ccn	location	summaryYQ	months	CLABCount	numPred	numclays	SIR	SIR_pval	sir95ci
10401	000000	5 NORTH	2025Q1	2	0	0.825	800	.	.	
10401	000000	ICU	2025Q1	2	0	0.825	800	.	.	
10401	000000	NEO1	2025Q1	3	0	1.490	1250	0.000	0.2254	, 2.010
10401	000000	ONC ICU	2025Q1	3	0	0.913	1200	.	.	
10401	000000	PEDMED	2025Q1	3	0	0.722	1000	.	.	
10401	000000	SURG	2025Q1	1	1	0.021	25	.	.	

For example, looking at the 5 NORTH and ICU locations below, we can see that the “months” column shows a value of 2, indicating that only 2 months of data have contributed to the quarterly SIR for this location. This will indicate that the SIRs in this output option are incomplete and additional data validation is required.

Note: Each quarter is expected to have contributed 3 months of data

- 3) What can be done if data are incomplete, as in the ONC ICU example above, or if the number of events (CLABCount) or central line days (numclays) are 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 the 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 central line is 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. Additionally, verify that the event is not being excluded, for more information refer to the [BSI Events Excluded from the CLABSI SIR Numerator Line Listing](#). **Note:** line listing will include non-CMS locations.

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.



IMPORTANT REMINDERS:

- 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 .
- The number of predicted events is calculated based on national 2022 NHSN data. Please see the [SIR Guide](#) for details on the HAI-specific risk adjustments and inclusion/exclusion criteria:
- Only in-plan CLABSI data from 2022 and forward are included in this report.
- Refer to the [BSI Events Excluded from the CLABSI SIR Numerator Line Listing guidance document](#) for further information regarding the events included in the CLABSI numerator.

Additional Resources:

- [CMS Resources for NHSN Users](#)
- [Operational Guidance](#)
- [Analysis Quick Reference Guides](#)

