

Using the “SIR – CLAB Data for CMS LTCH PPS” Output Option

The NHSN Analysis Output Option, “SIR – CLAB Data for CMS LTCH PPS” was created in order to allow long term care hospitals (known as long term acute care hospitals, or LTACHs, in NHSN) to review those data that would be submitted to CMS on their behalf if they are participating in the CMS LTCH Quality Reporting Program. It’s important to keep in mind the following as you begin to use this report:

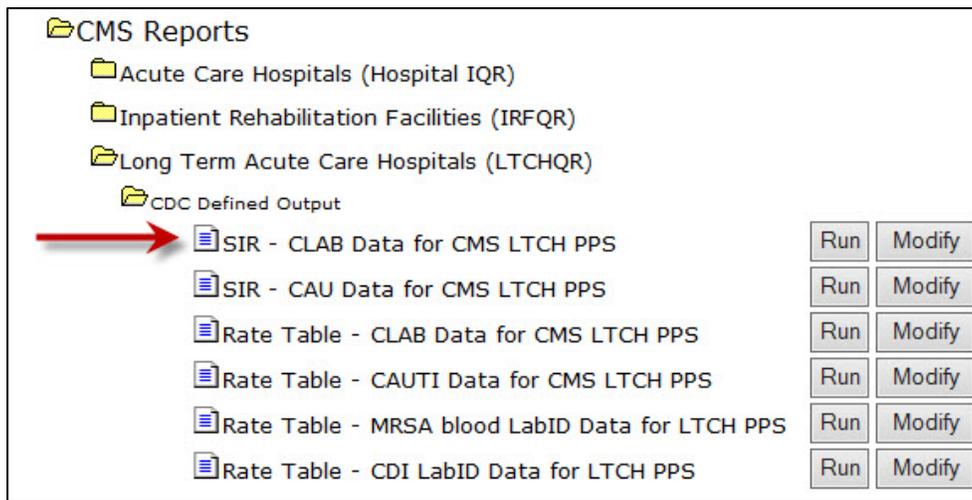
- a. These data will only be submitted for those facilities that are participating in the CMS Long Term Care Hospital Quality Reporting Program, as indicated by their CCN recorded in NHSN.
- b. This report will only include **in-plan CLABSI data for each LTAC ICU and ward location beginning with January 2014 data**. Earlier time periods for which you may have reported CLABSI data will not be included in this output. Note that rates were used through 2013 for CMS submission.
- c. **IMPORTANT!** Facilities must appropriately **Report No Events** for those locations and months for which no CLABSI events were identified.
- d. This output option provides an SIR for each LTACH, not each CCN. If your LTACH shares a CCN, the SIR will only represent the data that your LTACH has contributed to the overall SIR for all LTACHs that share the CCN. You may wish to use the Group function in NHSN to be able to view the SIR for all LTACHs that share a CCN. More information about the Group function can be found here: <http://www.cdc.gov/nhsn/group-users/index.html>.
- e. The SIR that will be shared with CMS and presented in this output option is calculated at the facility-level. Separate SIRs will be calculated for each LTACH location to allow for data accuracy checks.
- f. The data in this report will represent data current as of the last time you generated datasets. 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 1am ET on May 16th); any changes made to these data in NHSN after the final submission deadline will not be reflected in data shared with CMS.
- g. The information in this document should be used in conjunction with the document, “Helpful Tips for CLABSI Reporting for the Centers for Medicare and Medicaid Services’ Long Term Care Hospital Quality Reporting Program”, available at <http://www.cdc.gov/nhsn/PDFs/CMS/Helpful-Tips-CLABSI-LTAC.pdf>.



Example of the “SIR – CLAB Data for CMS LTCH PPS” Output Option:

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 > Output Options, navigate through the following folders: CMS Reports > Long Term Acute Care Hospitals (LTCHQR) > CDC-Defined Output. Click “Run” next to “SIR – CLAB Data for CMS LTCH PPS”, 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.
3. There will be four tables within the output, each described below:
 - i. **“SIR for Central Line-associated BSI Data for CMS LTCH PPS – By OrgID”**

The first table presents an SIR for each calendar-year quarter, for the entire facility. This is the information that will be submitted to CMS for your facility.

National Healthcare Safety Network

SIR for Central Line-associated BSI Data for CMS LTCH PPS - By OrgID

Date Range: CLAB_RATESLTAC summary Yr After and Including 2014
 if (((bsiPlan = "Y")))

orgid=10546 CCN=999999

orgid	summaryYQ	infCount	numExp	numCLDays	SIR	SIR_pval	SIR95CI
10546	2015Q1	1	0.511	471	.	.	.

If infCount in this table is less than you reported, aggregate data are not available to calculate numExp.
 Lower bound of 95% Confidence Interval only calculated if infCount > 0. SIR values only calculated if numExp >= 1.
 SIR excludes those months and locations where device days are missing.
 Source of aggregate data: 2013 NHSN Data

From this output, we can conclude the following:

- During the first quarter of 2015 (*summaryYQ*), the facility reported 1 CLABSI (*infCount*) and 471 central line days (*numCLdays*).
- Based on the National baseline data, 0.511 CLABSIs were predicted (*numExp*). Because the number of predicted CLABSIs is less than 1, the SIR, p-value (*SIR_pval*), and 95% Confidence Interval (*SIR95CI*) are not calculated.
- Although the SIR is not calculated, these data will still be submitted to CMS.

ii. **“SIR for Central Line-associated BSI Data for CMS LTCH PPS – By OrgID/Location Type”**

The second table provides an SIR for each quarter and location type. The LTAC Locations are categorized as follows:

Location Type	CDC Location Description	CDC Location Code (<i>locCDC</i>)
CC_LTAC	LTAC ICU	IN:ACUTE:CC:LTAC
CC_LTAC	Pediatric LTAC ICU	IN:ACUTE:CC:LTAC_PED
WARD_LTAC	LTAC Ward	IN:ACUTE:WARD:LTAC
WARD_LTAC	Pediatric LTAC Ward	IN:ACUTE:WARD:LTAC_PED

For example, if your LTAC has both an LTAC Ward and a Pediatric Ward, the data for both of these locations would be combined into the SIR for the WARD_LTAC location type.

National Healthcare Safety Network
SIR for Central Line-associated BSI Data for CMS LTCH PPS - By OrgID/Location Type
 Date Range: CLAB_RATESLTAC summaryYr After and Including 2014
 if (((bsiPlan = "Y")))

orgid=10546 CCN=999999

orgid	locationtype	summaryYQ	infCount	numExp	numCLDays	SIR	SIR_pval	SIR95CI
10546	CC_LTAC	2015Q1	0	0.282	217	.	.	.
10546	WARD_LTAC	2015Q1	1	0.229	254	.	.	.

If *infCount* in this table is less than you reported, aggregate data are not available to calculate *numExp*.
 Lower bound of 95% Confidence Interval only calculated if *infCount* > 0. SIR values only calculated if *numExp* >= 1.
 SIR excludes those months and locations where device days are missing.
 Source of aggregate data: 2013 NHSN Data

ii. **“SIR for Central Line-associated BSI Data for CMS LTCH PPS – By OrgID/CDC Location Code”**

The third table provides an SIR for each quarter and CDC location (e.g., pediatric LTAC ward). Note that if your facility reports data for more than one location of the same CDC location code (for example, 2 LTAC Wards), these locations will be grouped into one SIR in this table.

National Healthcare Safety Network
 SIR for Central Line-associated BSI Data for CMS LTCH PPS - By OrgID/CDC Location Code
 Date Range: CLAB_RATESLTAC summaryYr After and Including 2014
 if (((bsiPlan = "Y")))

orgid=10546 CCN=999999

orgid	loccdc	summaryYQ	infCount	numExp	numCLDays	SIR	SIR_pval	SIR95CI
10546	IN:ACUTE:CC:LTAC	2015Q1	0	0.282	217	.	.	.
10546	IN:ACUTE:WARD:LTAC	2015Q1	1	0.229	254	.	.	.

If infCount in this table is less than you reported, aggregate data are not available to calculate numExp.
 Lower bound of 95% Confidence Interval only calculated if infCount > 0. SIR values only calculated if numExp >= 1.
 SIR excludes those months and locations where device days are missing.
 Source of aggregate data: 2013 NHSN Data

iv. **“SIR for Central Line-associated BSI Data for CMS LTCH PPS – 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 LTAC Ward location below, we can see that the “months” column shows a value of 3, indicating that three months of data have contributed to the quarterly SIR for this location (as one would expect). However, notice that only two months are indicated for the LTAC CC location. **If less than three months contribute to a quarterly SIR, then this indicates that the SIR for that quarter is incomplete and additional data checking is needed.**

National Healthcare Safety Network
 SIR for Central Line-associated BSI Data for CMS LTCH PPS - By OrgID/Location
 Date Range: CLAB_RATESLTAC summaryYr After and Including 2014
 if (((bsiPlan = "Y")))

orgid=10546 CCN=999999

orgid	location	summaryYQ	months	infcount	numExp	numcldays	SIR	SIR_pval	SIR95CI
10546	LTAC CC	2015Q1	2	0	0.282	217	.	.	.
10546	LTAC WARD	2015Q1	3	1	0.229	254	.	.	.

If infCount in this table is less than you reported, aggregate data are not available to calculate numExp.
 Lower bound of 95% Confidence Interval only calculated if infCount > 0. SIR values only calculated if numExp >= 1.
 SIR excludes those months and locations where device days are missing.
 Source of aggregate data: 2013 NHSN Data

4. What can be done if data are incomplete or if the number of infections or central line days is incorrect?
 - i. To pinpoint which month(s) is missing from the quarter, the report can be modified to display by month. To make this modification, after selecting Analysis > Output Options, navigate through the following folders: CMS Reports > Long Term Acute Care Hospitals (LTCHQR) > CDC-Defined Output. Click “Modify” next to “SIR – CLAB Data for CMS LTCH PPS.”
 - a. On the Analysis SIR Table modification page, scroll down to the Other Options section of the page. Use the drop down menu next to “Group by” to select “Summary YM” to display the SIR report by month. Click the grey “Run” button to run the report.

Sample output for the fourth table, “SIR for Central Line-associated BSI Data for CMS LTCH PPS – By OrgID/Location” is displayed by month below; this sample output shows that CLABSI data are missing for March 2015 in the LTAC CC location:

National Healthcare Safety Network
SIR for Central Line-associated BSI Data for CMS LTCH PPS - By OrgID/Location
 Date Range: CLAB_RATESLTAC summaryYr After and Including 2014
 if (((bsiPlan = "Y")))

orgid=10546 CCN=999999

orgid	location	summaryYM	infcount	numExp	numcldays	SIR	SIR_pval	SIR95CI
10546	LTAC CC	2015M01	0	0.134	103	.	.	.
10546	LTAC CC	2015M02	0	0.148	114	.	.	.
10546	LTAC WARD	2015M01	0	0.047	52	.	.	.
10546	LTAC WARD	2015M02	0	0.067	74	.	.	.
10546	LTAC WARD	2015M03	1	0.115	128	.	.	.

If infCount in this table is less than you reported, aggregate data are not available to calculate numExp.
 Lower bound of 95% Confidence Interval only calculated if infCount > 0. SIR values only calculated if numExp >= 1.
 SIR excludes those months and locations where device days are missing.
 Source of aggregate data: 2013 NHSN Data

- ii. Once the missing month(s) has been identified, double check the below data elements:
 - a. Check that the summary data for this location have been entered for the month. This includes central line days and patient days.

- b. If summary data have been entered, double-check your monthly reporting plan for that month. Check to make sure that each location is included in your monthly reporting plan, with the CLABSI box checked.
- c. If summary data have been entered and no CLABSIs have been identified, be sure to check the 'Report No Events' box either on the summary record, next to the Central Line days count, or through the "Missing Events" tab on the Alerts page.
- 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 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.

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/CMS/LTCH-CLABSI-Guidance_2015.pdf

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

