Using the "SIR – CDI LabID Data for IRF QRP" Report

This document applies to CMS Inpatient Rehabilitation Facility (IRF) units located <u>within</u> an acute care, critical access, or long-term acute care hospital. A similar document for free-standing IRFs can be found at:
https://www.cdc.gov/nhsn/pdfs/cms/irfs/CMS-CDIF-SIR-FSIRFs.pdf

The NHSN Analysis Report, "SIR - CDI LabID Data for IRF QRP (2015 Baseline)" was created in order to allow acute care, critical access, or long-term acute care hospitals to review those data from their CMS IRF units that would be submitted to CMS on their behalf. It's important to keep in mind the following:

- These data will only be submitted for those facilities that are participating in the CMS Inpatient Rehabilitation Facility Quality Reporting Program (IRF QRP), as indicated by their IRF's CCN recorded in NHSN.

- **The SIRs generated in this output will be calculated using the 2015 national baseline data**. To learn more about the standardized infection ratio (SIR) under the 2015 baseline as it pertains to CDI data, please see: https://www.cdc.gov/nhsn/2015rebaseline/.

- This report will only include **in-plan *C. difficile* LabID data for all CMS IRF units within an acute care, critical access, or long-term acute care hospital beginning with January 2015 data**. Earlier time periods for which you may have reported CDI LabID data in your IRF unit will <u>not</u> be included in this output. Data that have previously been submitted to CMS for participation in the IRF Quality Reporting Program can be found at the following folders: HAI Risk Adjusted Measure Reports (SIRs, SURs) > Original Baseline (Baseline Set 1) > CMS - Inpatient Rehabilitation Facilities (IRFQR) > Rate Table – CDI LabID Data for IRF PPS.

- **IMPORTANT!** Facilities must appropriately **Report No Events** for those locations and months for which no CDI LabID events were identified.

- This output option provides an SIR report for all CMS-certified IRF units within your facility. If your IRF unit shares a CCN with another facility, the SIRs will only represent the data that your IRF unit(s) has contributed to the overall SIR for all IRFs under that CCN. You may wish to use the Group function in NHSN to be able to view the SIRs for all IRFs that share a CCN. More information about the Group function can be found here: http://www.cdc.gov/nhsn/group-users/index.html.

- The information in this document should be used in conjunction with the document, "How to Set Up NHSN Reporting for MRSA Bacteremia and *C. difficile* LabID events for the CMS Inpatient Rehabilitation Facility (IRF). Quality Reporting Program", available at: https://www.cdc.gov/nhsn/pdfs/cms/irfs/settingup_reporting_labid_event_irf_acutec.pdf.

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- The data in this report will represent data current as of the last time you generated datasets.
  NOTE: 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 the data submitted to CMS.

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 – CDI LabID Data for IRF QRP": Interpretation and Data Checking

Before running this report, 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 Reporting Data Sets".

1. After selecting Analysis > Reports, navigate through the following folders: CMS Reports > Inpatient Rehabilitation Facilities (IRFs) > SIR - CDI LabID data for IRF QRP (2015 Baseline). After clicking the title of the report, click "Run" on the subsequent pop-up menu.
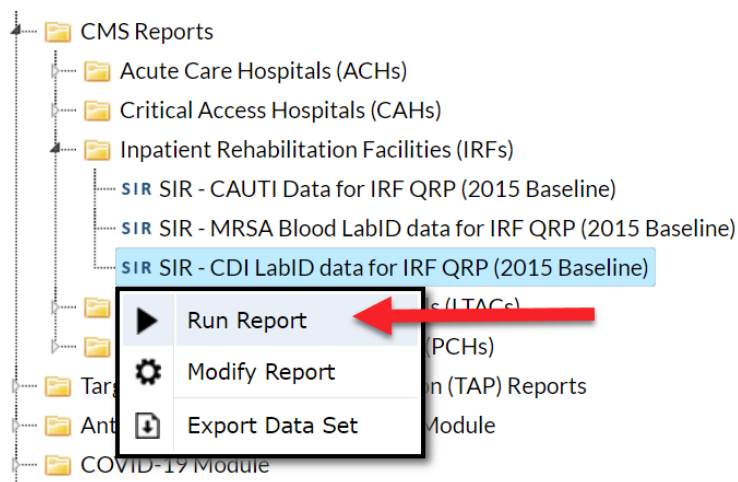
2. By default, the results will appear in an HTML window. If a second window does not pop-up, please be sure to check your pop-up blocker and allow pop-ups from *.cdc.gov.

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3. Within the output, there may be multiple tables, each described below. ***Data presented below are fictitious.***

    a. SIR Example Report:

    <u>"SIR for CDI LabID for IRF QRP (2015 Baseline)"</u>

    The table presents an SIR for all CMS IRF units mapped in your facility combined for each calendar quarter. This is the information that will be submitted to CMS for your facility.

    Note: If an SIR cannot be calculated for your facility due to missing CDI test type (incomplete reporting) for the quarter, the SIR table will not display in the NHSN SIR Report, and an SIR will not be submitted to CMS for your facility. However, if patient days were reported during the incomplete quarter, a value for patient days will still be submitted to CMS.

National Healthcare Safety Network
SIR for CDI LabID for IRF QRP (2015 Baseline)
As of: November 14, 2023 at 12:55 PM
Date Range: BS2_LABID_RATESCDIFIRF_CMS summaryYr After and Including 2015
if (((cdifLabIDPlan = "Y")))

orgID=10000 medType=' '

orgID	ccn	irfccn	summaryYQ	months	CDIF_facIncHOCount	numPred	numpatdays	SIR	SIR_pval	sir95ci
10000			2023Q1	3	0	0.408	650	.	.	

1. This report includes data from IRFs for 2015 and forward.
2. The SIR is only calculated if number predicted (numPred) is >= 1. Lower bound of 95% Confidence Interval only calculated when number of observed events > 0.
3. The # of predicted events is calculated based on national 2015 NHSN data. It is adjusted for CDI test type, type of IRF, identification of community-onset events, and percent of annual admissions with orthopedic, spinal cord, and stroke conditions.
4. Information on how to determine which events are counted in the SIR can be found here: http://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/mrsacdi_tips.pdf
5. If any risk factor data are missing, the record is excluded from the SIR.
6. Data from public health emergency facilities are excluded.
Source of aggregate data: 2015 NHSN CDI LabID Data
Data contained in this report were last generated on November 6, 2023 at 10:47 AM to include data beginning January 2023 .

<u>Using the table above, we can conclude the following:</u>

- For the 1st quarter of 2023 (2023Q1), IRF unit(s) reported three months of CDI LabID data (*months*).
- In those three months, the IRF units reported 0 location-incident healthcare facility-onset (HO) CDI LabID events (*CDIF_facIncHoCount).* For more information about the events that are counted in the numerator of the SIR, refer to the LabID SIR Troubleshooting document (see Additional Resources below).
- 650 patient days (*numpatdays*) were reported for IRF units.
- The number of predicted location-incident CDI LabID events (*numPred*) was 0.408.

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- o If the number of predicted events is less than 1, as in the example above, an SIR, p-value (*SIR_pval*), and 95% confidence interval (*sir95ci*) will not be calculated. Refer to the SIR Guide for more information (see Additional Resources below). However, assuming all other reporting requirements are met, the SIR data are considered "complete" and will still be submitted to CMS in order to comply with Quality Reporting Programs.
- o Be sure to read the footnotes beneath the SIR report for important information about the SIR calculation.

b. SIR Risk Factors Example Report

"Risk Adjustment Factors for IRF CDI SIR"

The table below presents the SIR-associated risk factors used in the calculation of your facility's SIR for each calendar quarter for IRF units. This information is provided to help a facility understand their SIR calculation and ensure accuracy of each risk adjustment variable. These data are **not** submitted to CMS. Additional details regarding the SIR risk factors can be found in the SIR Guide (see Additional Resources below).

Risk Adjustment Factors for IRF CDI SIR
As of: November 6, 2023 at 11:00 AM
Date Range: BS2_LABID_RATESCDIFIRF_CMS summaryYr After and Including 2015
if (((cdifLabIDPlan = "Y")))

orgID=10000 medType=' '

orgID	ccn	irfccn	summaryYQ	facType	cdiTestType	pctOrthoAdm	pctSpinalGroupAdm	pctStrokeAdm	numpatdays
10000		10T48J	2023Q1	HOSP-GEN	NAAT	14.285714	28.571429	14.285714	650

1. The table above displays the values that are included in the calculation of your IRF's CDI LabID Event SIR.
2. If any risk factor data are missing, the record is excluded from the SIR.

c. Incomplete Quarters

"CDI Data – Months Excluded from SIR Due to Missing CDI Test Type"

An additional table may appear if there are any incomplete/partial quarters of CDI LabID data entered into NHSN. The CDI SIR can only be calculated at the end of a quarter, once CDI Test Type has been reported. If CDI test type has not yet been entered into NHSN for a quarter, any months for which data *have* been entered into NHSN for that quarter will be identified in the table below. Of the data presented in the table below, only the sum of patient days (numPatDays) is submitted to CMS.

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CDI Data - Months Excluded from SIR Due to Missing CDI Test Type
As of: November 14, 2023 at 12:55 PM
Date Range: BS2_LABID_RATESCDIFIRF_CMS summaryYr After and Including 2015
if (((cdifLabIDPlan = "Y")))

orgID=10000 medType=' '

orgID	ccn	location	summaryYM	CDIF_IRFIncCount	numPatDays	numAdms	cdiTestType
10000		CMS IRF	2023M04	0	154	67	
10000		CMS IRF	2023M05	0	107	34	

1. This table displays months that are excluded from the SIR report. These months will be included in the SIR once reporting for the entire quarter has been completed and CDI test type has been reported.
Data contained in this report were last generated on November 6, 2023 at 10:47 AM to include data beginning January 2023 .

Using the table above, we can conclude the following:

o   This facility has entered April and May 2023 CDI LabID data into NHSN but *has not yet entered June 2023 data* for the IRF units.
o   The facility reported 154 patient days in April and 107 patient days in May for the IRF units. The facility reported 67 IRF admissions in April and 34 IRF admissions in May.
o   April and May are currently excluded from the facility's SIR because CDI test type is missing for 2023 Q2 (i.e., June data have not been reported). Once CDI test type is reported on the June IRF Unit denominator form, these months will be included in the SIR.

4. What can be done if data are incomplete, or if the number of LabID events or patient days is incorrect?
   a. Check that the summary data for the CMS IRF location(s) have been entered for each month in the quarter. This includes patient days and admissions.
   b. If summary data have been entered, double-check your monthly reporting plan for each month in the quarter. Check to make sure that the monthly reporting plans include the CMS IRF unit(s) for CDI LabID Data.
   c. If summary data have been entered and no CDI LabID events have been identified, be sure to check the 'Report No Events' box on the summary record for applicable IRF unit(s) or through the "Missing Events" alerts tab.
   d. If the number of CDI LabID events is less than you reported *and* you've confirmed that the summary data have been entered in-plan, double check the LabID events in NHSN using the "Line Listing for All CDI LabID Events" report option.

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.

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Additional Resources:

Troubleshooting MRSA and CDI LabID Event SIR:
https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/mrsacdi_tips.pdf

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

Operational Guidance for IRFs to report CDI:
https://www.cdc.gov/nhsn/pdfs/cms/irfs/irf-cdi-op-guidance.pdf

Analysis Quick Reference Guides:
http://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

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