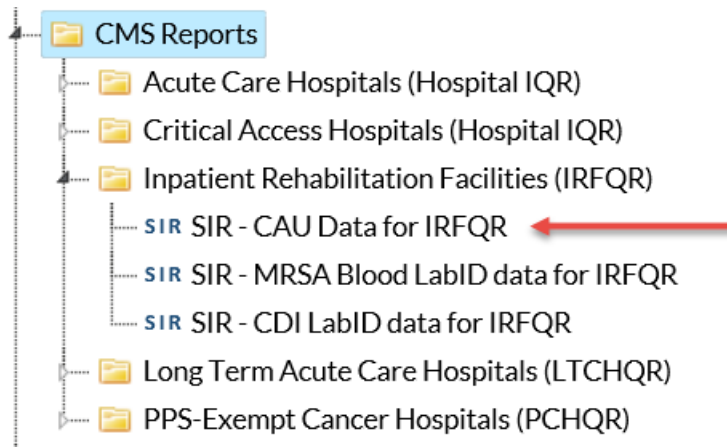# Using the "SIR – CAUTI Data for IRFQR" Output Option

The NHSN Analysis Output Option, "SIR– CAUTI Data for IRFQR" was created in order to allow both free-standing inpatient rehabilitation facilities (IRFs), acute care hospital (ACH) and long term acute care hospital (LTACH) rehabilitation wards designated as CMS IRF units to review those CAUTI data that would be submitted to CMS on their behalf if they are participating in the CMS IRF 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 IRF Quality Reporting Program, as indicated by their CCN recorded in NHSN.

b. **IMPORTANT NOTE FOR ACHs and LTACHs!** CAUTI data for IRF units within both hospital settings are submitted to CMS separately from ICU CAUTI data submitted to CMS as part of the Inpatient Quality Reporting Program. CAUTI data from IRF units will NOT be included in either ACH or LTACH hospital's CMS reports in NHSN Analysis; it will be included in the "SIR – CAUTI Data for CMS IRF PPS" report.

c. This report will only include **in-plan CAUTI data for each IRF location beginning with January 2015 data**. Earlier time periods for which you may have reported CAUTI data will not be included in this output.

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

e. This output option provides an SIR for each IRF, not each CCN. If your IRF shares a CCN, the SIR will only represent the data that your IRF has contributed to the overall SIR for all IRFs that share the CCN. You may wish to use the Group function in NHSN to be able to view the SIR 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.

f. The SIR that will be shared with CMS and presented in this output option is calculated at the IRF level. Separate SIRs will be calculated for each IRF location (if applicable) to allow for data accuracy checks.

g. 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., Q4 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.

h. The information in this document should be used in conjunction with the document, "Helpful Tips for CAUTI Reporting for the Centers for Medicare and Medicaid Services' Inpatient Rehabilitation Facility Quality Reporting Program", available at http://www.cdc.gov/nhsn/cms/index.html.

Example of the "SIR – CAU Data for CMS IRF PPS":

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 > Inpatient Rehabilitation Facilities (IRFQR). Click "Run Report" next to "SIR – CAU Data for IRFQR", 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 Urinary Catheter-associated UTI Data for CMS IRF PPS – By OrgID"**

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

National Healthcare Safety Network
SIR for Urinary Catheter-associated UTI Data for CMS IRFQR (2015 Baseline) - By OrgID
As of: June 30, 2021 at 11:25 AM
Date Range: All BS2_CAU_RATE SIRF_CMS
if (((utiPlan = "Y")))

orgid=10987 medType=' '

orgid	ccn	irfccn	summaryYQ	infcount	numPred	numucathdays	SIR	SIR_pval	SIR95CI
10987	323026		2020Q1	0	1.199	831	0.000	0.3014	, 2.498

From this output, we can conclude the following:

- For the first quarter of 2020 (*summaryYQ*), this IRF reported 0 CAUTI and 831 urinary catheter days (*numucathdays*).
- Based on the National baseline data, 1.199 CAUTIs were predicted (*numPred*).

ii. **"SIR for Urinary Catheter-associated UTI Data for CMS IRF PPS – By OrgID/Location Type"**

The second table provides an SIR for each quarter and location type. Since IRFs are only able to report data under one location type (based on whether the IRF is free-standing or a unit within an acute care hospital), the data in this table will be the equivalent of the first table, but will be labeled as location type "IRF" or "WARD". IRF locations are categorized as follows:

Facility Type	Location Type	CDC Location Description	CDC Location Code (*locCDC*)
Free-standing IRF	IRF	REHAB Ward	IN:ACUTE:IRF
Free-standing IRF	IRF	REHAB Pediatric Ward	IN:ACUTE:IRF:PED
Acute Care Hospital	WARD	Inpatient Rehabilitation Ward	IN:ACUTE:WARD:REHAB
Acute Care Hospital	WARD	Inpatient Pediatric Rehabilitation Ward	IN:ACUTE:WARD:REHAB_PED

National Healthcare Safety Network
SIR for Urinary Catheter-associated UTI Data for CMS IRFQR (2015 Baseline) - By OrgID/Location Type
As of: June 30, 2021 at 11:25 AM
Date Range: All BS2 CAU RATE SIRF CMS
if (((utiPlan = "Y")))

orgid=10987 medType=' '

orgid	ccn	irfccn	locationtype	summaryYQ	infcount	numPred	numucathdays	SIR	SIR_pval	SIR95CI
10987	323026		IRF	2020Q1	0	1.199	831	0.000	0.3014	, 2.498

iii. **"SIR for Urinary Catheter-associated UTI Data for CMS IRF PPS – By OrgID/CDC Location Code"**

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

National Healthcare Safety Network
SIR for Urinary Catheter-associated UTI Data for CMS IRFQR (2015 Baseline) - By OrgID/CDC Location Code
As of: June 30, 2021 at 11:25 AM
Date Range: All BS2_CAU_RATE SIRF_CMS
if (((utiPlan = "Y")))

orgid=10987 medType=' '

orgid	ccn	irfccn	loccdc	summaryYQ	infcount	numPred	numucathdays	SIR	SIR_pval	SIR95CI
10987	323026		IN:ACUTE:IRF	2020Q1	0	1.199	831	0.000	0.3014	, 2.498

iv. **"SIR for Urinary Catheter-associated UTI Data for CMS IRF PPS – By OrgID/Location"**

The fourth table provides an SIR each quarter and individual location within the IRF. 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 REHAB 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. We should expect to see three months of data contributing for each location and quarter.

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 Urinary Catheter-associated UTI Data for CMS IRFQR (2015 Baseline) - By OrgID/Location
As of: June 30, 2021 at 11:25 AM
Date Range: All BS2_CAU_RATE SIRF_CMS
if (((utiPlan = "Y")))

orgid=10987 medType=' '

orgid	ccn	irfccn	location	summaryYQ	months	infcount	numPred	numucathdays	SIR	SIR_pval	SIR95CI
10987	323026		IRF_ACUTE	2020Q1	3	0	1.199	831	0.000	0.3014	, 2.498

4. What can be done if data are incomplete, or if the number of infections or urinary catheter 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 > Reports, navigate through the following folders: CMS Reports > Inpatient Rehabilitation Facilities (IRFQR). Click "Modify" next to "SIR – CAU Data for IRFQR."

        a. On the Analysis SIR modification page, navigate to "Display Option" tab. Use the drop down menu next to "Group by" to select "Summary YM" to display the SIR report by month. Click the "Run" button to run the report.

    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 urinary catheter 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 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 either on the summary record, next to the Urinary Catheter 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 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.

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.

January 2021

Additional Resources:

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

Operational Guidance: https://www.cdc.gov/nhsn/pdfs/cms/irfs/IRF-CAUTI-Guidance-508.pdf

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

National Center for Emerging and Zoonotic Infectious Diseases
Division of Healthcare Quality Promotion