

# NHSN Group TAP Reports - MRSA

December 2023

## Description

CDC's Targeted Assessment for Prevention (TAP) strategy uses a metric known as the Cumulative Attributable Difference (CAD) to help facilities identify and rank locations and target those areas with the greatest need for improvement. The CAD is the number of infections that must be prevented to achieve a HAI reduction goal. TAP Reports can be generated within NHSN for CLABSI, CAUTI, CDI LabID, and MRSA Bacteremia LabID data. The ranking is established using the overall Hospital CAD (highest to lowest). TAP Reports can help to prioritize the facilities where the greatest prevention impact could be achieved.

This quick reference guide will describe how a group can generate a TAP report for MRSA LabID data within NHSN. It will also explain how to interpret the TAP report output for group users. For more information about the TAP Strategy, please visit: <http://www.cdc.gov/hai/prevent/tap.html>.

## Generate a MRSA TAP Report

1. Select Analysis on the NHSN home screen. After generating data sets, you can select "Reports" from the dropdown menu that opens. Expand the "Targeted Assessment for Prevention (TAP) Reports" folder. The TAP reports are organized by facility type. Expand the folder for the facility type relevant to your analysis to see the available TAP Report options.

The screenshot displays the NHSN Patient Safety interface. On the left, the 'NHSN Home' sidebar lists various options, with 'Analysis' highlighted. A blue arrow points to 'Analysis' with a box labeled '1'. The 'Analysis' dropdown menu is open, showing options: 'Generate Data Sets', 'Reports', 'Statistics Calculator', and 'Preferences'. A blue arrow points to 'Reports' with a box labeled '1'. The main content area, titled 'NHSN Patient Safety', includes an 'Assurance of Confidentiality' statement and a 'Get Adobe Acrobat' link. On the right, the 'Analysis Reports' section is shown with a tree view of report categories. A blue arrow points to the 'Targeted Assessment for Prevention (TAP) Reports' folder with a box labeled '2'. The TAP Reports folder is expanded, showing sub-folders for 'Acute Care Hospitals (ACHs) and Critical Access Hospitals (CAHs)', 'Long Term Acute Care Hospitals (LTACs)', and 'Inpatient Rehabilitation Facilities (IRFs)'. Other report categories listed include 'HAI Risk Adjusted Measure Reports (SIRs, SURs)', 'HAI Detailed Reports (Line Lists, Rate Tables, etc.)', 'CMS Reports', 'Antimicrobial Use and Resistance Module', 'COVID-19 Module', 'Nursing Hours Per Patient Day (NHPPD)', 'Supplemental Reports', 'My Custom Reports', and 'Published Reports'.

2. Choose to either **Run** or **Modify** the FACWIDEIN MRSA LabID TAP Report for Acute Care Hospitals (ACH) and Critical Access Hospitals (CAHs). Please note: ACH and CAH TAP Reports contain both Acute Care and Critical Access Hospital (CAH) data, and exclude data reported from CMS-certified IRF units.
  - a. Click **Run** to create a TAP Report that is inclusive of all data reported to NHSN and available in the analysis datasets.
  - b. Click **Modify** to customize the TAP Report.
    - i. It is recommended that users check the box above Title/Format titled “Show descriptive variable names.” Not only will this show more descriptive variable names while modifying a TAP report, but it will also create more descriptive column headers in the tables created.

- ii. Use the Title/Format tab to change the name of the Report generated or to change the format (HTML, PDF, CSV, and RTF). **TIP:** If the format is changed to PDF or RTF, change the orientation of the report to Landscape to allow all columns to fit on a single page.
- iii. Use the Time Period tab to modify the date variable by months, quarters, half-years, or year.
- iv. Display Options. Choose the source value of the SIR goal. The SIR goal can be a custom/value or the user can use the HHS Goal or MRSA National SIR. These are available in the source drop down menu. If a custom value is used, remember that the multiplier must be <1.

## Example TAP Report Output – MRSA

The following table is an example of a MRSA TAP report generated by a Group with three member hospitals for the calendar year 2021. The footnotes provided with each table define the data that appear in the derived columns. Please see page 3 and 4 for an example interpretation of both tables.

**Table 1 of the LabID MRSA Group TAP Report**

### National Healthcare Safety Network

### TAP Report for FACWIDEIN MRSA LabID data for Acute Care and Critical Access Hospitals (2015 Baseline)

### Totals for all Facilities in Group

**SIR Goal: HHS Goal = 0.5**

As of: March 30, 2022 at 4:41 PM

Date Range: BS2\_MR SA\_TAP summaryYr After and Including 2021

Number of Facilities	Number of Beds	Patient Days	MRSA Blood Incident LabID Count	Number Predicted	Excess Infections	SIR	SIR Test
3	395	87000	12	6.178	8.910	1.940	SIG

1. This report includes facility-wide inpatient data from acute care hospitals for 2015 and forward.
  2. Facility Rank = Priority ranking for Targeted Assessment of Prevention by CAD in descending order
  3. CAD = Observed - Predicted\*SIR Goal
  4. SIR is set to '.' when predicted number of events is <1.0. SIR TEST = 'SIG' means SIR > SIR Goal significantly
- Source of aggregate data: 2015 NHSN MRSA Blood LabID Data
- Data contained in this report were last generated on March 30, 2022 at 4:10 PM to include data beginning January 2021 .

## Table 2 of LabID MRSA Group TAP Report

### National Healthcare Safety Network

### TAP Report for FACWIDEIN MRSA LabID data for Acute Care and Critical Access Hospitals (2015 Baseline)

### Facilities Ranked by CAD 'Cumulative Attributable Difference'

### SIR Goal: HHS Goal = 0.5

A TAP Report is the first step in the CDC TAP Strategy. For more information on the TAP strategy, please visit: <http://www.cdc.gov/hai/prevent/tap.html>

As of: March 30, 2022 at 4:41 PM

Date Range: BS2\_MRSA\_TAP summaryYr After and Including 2021



Facility Rank	Facility Org ID	Facility Name	State	Type of Facility	Type of Affiliation	Number of Beds	Patient Days	MRSA Blood Incident LabID Count	Number Predicted	Facility CAD	SIR	SIR Test
1	10018	DHQP MEMORIAL HOSPITAL	GA	HOSP-GEN	U	150	36000	6	3.400	4.30	1.765	
2	10273	HAWAII STATE HOSPITAL	HI	HOSP-PSYCH		20	21000	3	0.458	2.77	.	
3	10401	DHQP MEMORIAL ANNEX	GA	HOSP-GEN	M	225	30000	3	2.320	1.84	1.293	

1. This report includes facility-wide inpatient data from acute care hospitals for 2015 and forward.

2. Facility Rank = Priority ranking for Targeted Assessment of Prevention by CAD in descending order

3. CAD = Observed - Predicted\*SIR Goal

4. SIR is set to '.' when predicted number of events is <1.0. SIR TEST = 'SIG' means SIR > SIR Goal significantly

Source of aggregate data: 2015 NHSN MRSA Blood LabID Data

Data contained in this report were last generated on March 30, 2022 at 4:10 PM to include data beginning January 2021.

## Interpretation

- The header above each table describes what information has been included in the table. The second line of the header is a descriptive title for the table. The title names which hospital types are included in the report and what baselines data sets are used for the analysis. The third line of the header describes how the data has been arranged (Facilities Ranked by CAD). The fourth line displays the value for the SIR goal. For the TAP report in this example, HHS Goal = 0.5 was used as the SIR goal. Lastly, the final line of the header helps users find out more about the CDC TAP Strategy. For more information about the TAP strategy, please visit: <https://www.cdc.gov/hai/prevent/tap.html>.
- The footnote for each table includes the rules for interpreting the data, meanings for abbreviation used in the table, pathogen names, and the date data sets were last generated. For example, footnote #4 states, "The SIR is set to '.' when predicted number of events is <1.0." This would be helpful to know if an SIR value is not given in the table. Additionally, the formula for calculating the CAD can also be found in the footnotes.
- The **first table** in the group TAP Report output (see page 2) provides cumulative totals for all facilities in the group. The total number of facilities contributing to the cumulative results in each subsequent column in the table can be found in the very first column labeled, "Number of facilities". The column labeled "Number of Beds" gives the total number of beds for all the facilities in the group combined. Remember, MRSA LabID data are collected and analyzed at the inpatient, facility-wide level; data in this report will not be displayed by location. All the subsequent columns follow this pattern of presenting a cumulative facility total for all the facilities in the group. The Group's CAD (Excess Infections) is 8.91 and the SIR is 1.94. The SIR Test indicates that the SIR is significantly greater than the SIR Goal.

- The **second table** in the group TAP Report output (see page 3) titled, Facilities Ranked by CAD, provides a list of facilities ranked by facility CAD in descending order. The first column in the facility-level table provides a rank by facility CAD; a Facility Rank of 1 indicates that the facility had the highest CAD among all hospitals in the group.
  - Since MRSA data is collected at the inpatient, facility-wide level, location specific information is not displayed in the table.
  - Looking at the data for the data DHQP Memorial Annex, the facility CAD was 1.84, indicating that at least 2 infections would need to be prevented to meet the set HAI reduction goal (SIR Goal = 0.5). The SIR for this hospital in 2021 was 1.293. The “SIR Test” column is blank, which indicates that the SIR is not significantly greater than the SIR Goal.

## Additional Resources:

- The Five “W”s of the Targeted Assessment for Prevention (TAP) Strategy:  
<https://www.cdc.gov/hai/prevent/tap.html>
- Introduction to NHSN Analysis:  
<https://www.cdc.gov/nhsn/pdfs/training/2019/intro-nhsn-analysis-508.pdf>
- How to filter your data by time period:  
<https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/filtertimeperiod.pdf>
- How to filter your data on additional criteria:  
<https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/selectioncriteria.pdf>
- Analysis Quick Reference Guides:  
<http://www.cdc.gov/nhsn/PS-Analysis-resources/reference-guides.html>
- HHS Action Plan to Prevent Healthcare-associated Infections:  
<http://health.gov/hcq/prevent-hai.asp>
- HAI Progress Report:  
<https://www.cdc.gov/nhsn/datastat/progress-report.html>