

NHSN Facility TAP Reports – CAUTI

December 2023

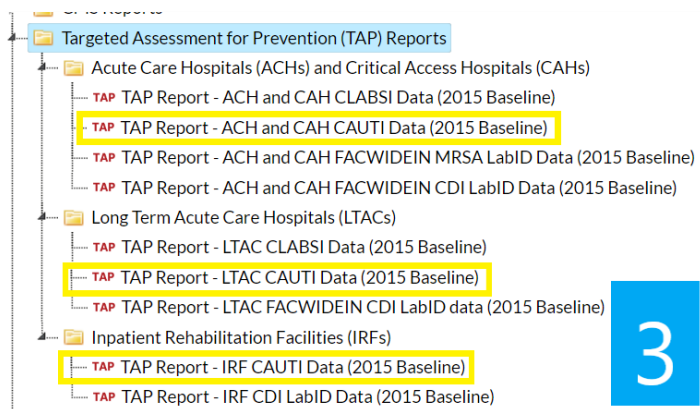
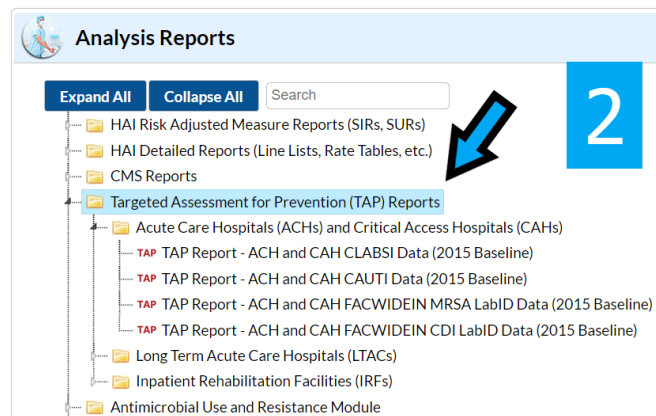
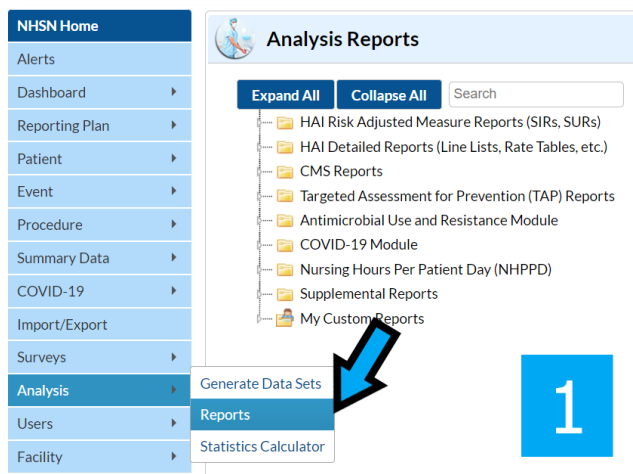
Description

CDC’s Targeted Assessment for Prevention (TAP) strategy allows for the ranking of facilities and/or locations to identify and target those areas with the greatest need for improvement using a metric known as the Cumulative Attributable Difference (CAD). This 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, MRSA Bacteremia LabID, and CDI LabID data. The ranking is established using the overall Hospital CAD (highest to lowest) and location CAD for locations within the facility. TAP Reports can help to prioritize the facility’s prevention efforts to the locations where the greatest prevention impact could be achieved.

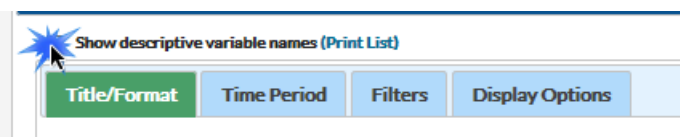
This quick reference guide will describe how a facility can generate a TAP report for CAUTI data within NHSN. It will also explain how to interpret the TAP report output for facility users. For more information about the TAP Strategy, please visit: <http://www.cdc.gov/hai/prevent/tap.html>.

Generate a CAUTI 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 “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.



2. Choose to either Run or Modify an Acute Care Hospitals (ACH), Long-Term Acute Care Hospitals (LTACs), or Inpatient Rehabilitation Facilities (IRFs) CAUTI TAP Report. Please note: ACH TAP Reports contain both Acute Care and Critical Access Hospital (CAH) data and will exclude data reported from CMS-certified IRF-units.
 - a. Click Run to create a TAP Report that is inclusive of all applicable 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, 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 in order 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 CAUTI National SIR. These are available in the source drop down menu. If a custom value is used, remember that the multiplier must be <1.

CLABSI and CAUTI TAP reports are generated using similar formats, but each uses a different HAI reduction goal in the calculation of the CAD. CLABSI also includes NICU data in the CAD calculations whereas CAUTI does not.

Example TAP Report Output – CAUTI

The following table is an example of a CAUTI TAP report generated by an acute care hospital for the calendar year 2016. The footnotes provided with each table define the data that appear in the derived columns. Please see page 3 for an example interpretation of this table.

National Healthcare Safety Network
TAP Report for CAUTI Data for Acute Care and Critical Access Hospitals (2015 Baseline)
Locations Ranked by CAD Within a Facility
SIR Goal: HHS Goal = 0.75

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 February 16, 2017 at 2:00 PM
 Date Range: BS2_CAU_TAP summaryYr2016 to 2016

FACILITY				LOCATION								
Facility Org ID	Facility Name	Facility CAD	Location Rank	Location	CDC Location	Events	Urinary Catheter Days	DUR %	CAD	SIR	SIR Test	No. Pathogens (EC,YS,PA,KS,PM,ES)
10000	DHQP Memorial Hospital	10.78	1	ICU	IN-ACUTE:CC:M	4	453	8	3.51	.	.	6 (3, 0, 0, 0, 0, 1)
			2	STEP1	IN-ACUTE:STEP	2	1054	12	1.5	.	.	2 (1, 0, 0, 0, 0, 0)
			3	ICU2	IN-ACUTE:CC:M	2	830	8	1.43	.	.	2 (0, 0, 0, 0, 0, 1)
			4	ICU3	IN-ACUTE:CC:MS	2	1008	12	1.38	.	.	3 (1, 0, 0, 0, 0, 2)
			5	1E	IN-ACUTE:WARD:M	3	950	68	1.24	1.3	.	3 (1, 0, 0, 2, 0, 0)
			6	2E	IN-ACUTE:WARD:MS	2	1325	13	0.98	1.5	.	3 (2, 0, 0, 1, 0, 0)
			7	1W	IN-ACUTE:WARD:PP	3	3090	75	0.86	1.1	.	4 (1, 0, 0, 0, 1, 1)
			8	ICU4	IN-ACUTE:CC:MS	3	3380	75	0.66	1	.	3 (1, 0, 1, 1, 0, 0)
			9	5E	IN-ACUTE:WARD:M	1	720	9	0.51	.	.	2 (0, 0, 0, 0, 0, 1)

1. This report includes CAUTI data for 2015 and forward.
2. If location-level CADs are the same in a given facility, their ranks are tied.
3. (EC,YS,PA,KS,PM,ES) = No. of E. Coli, Yeast (both candida and non-candida species), P. aeruginosa, K. pneumoniae/K. oxytoca, Proteus Mirabilis, Enterococcus species
4. SIR is set to '.' when predicted number of events is <1.0.
5. LOCATION CAD = (OBSERVED_LOCATION - PREDICTED_LOCATION* SELECTED SIR Goal)
6. SIR TEST = 'SIG' means SIR > SIR Goal significantly



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 (i.e., “Locations Ranked by CAD within a Facility”). The fourth line displays the value for the SIR goal. For the TAP report in this example, HHS Goal = 0.75 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 that datasets were 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 be found in the footnotes.
- Looking at the third column in the TAP report, we can see that this facility’s CAD is 10.78 – this means that the facility had approximately 11 excess infections when compared to the number of infections that were predicted, when using the HHS Goal of 0.75.
- When we look at the location-specific information, we can begin to interpret data at the location level. For example:
 - The ICU location is ranked as #1 (location rank). This means that this location has more “excess” infections than any other locations for which CAUTI data were reported during 2016.
 - There were 4 CAUTIs (events) identified in the ICU in 453 urinary catheter days.
 - The device utilization ratio (DUR), as a percent, was 8%. In other words, 8% of the patient days in this unit were also urinary catheter days.
 - The CAD in the ICU was 3.51 indicating that at least 4 infections would need to be prevented in order to meet the HAI reduction goal that was set (SIR Goal = 0.75). The standardized infection ratio (SIR) is not calculated, as the number of predicted events is < 1. The absence of SIG in the “SIR Test” column indicates that the SIR is NOT significantly greater than the SIR Goal.
 - “No. Pathogens” indicates that 6 organisms were identified as the cause of the ICU’s 4 CAUTI events. Of those 6 organisms, 4 were common CAUTI pathogens. In this example, 3 events were caused by *E. coli* and 1 was *Enterococcus* sp.

Addition Resources:

- The Five “W”s of the Targeted Assessment for Prevention (TAP) Strategy: <http://www.cdc.gov/hai/prevent/tap.html>
- Introduction to NHSN Analysis: <https://www.cdc.gov/nhsn/training/analysis/index.html>
- How to filter your data by time period: <http://www.cdc.gov/nhsn/PS-Analysis-resources/PDF/FilterTimePeriod.pdf>
- How to filter your data on additional criteria: <http://www.cdc.gov/nhsn/PS-Analysis-resources/PDF/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/hai/data/portal/progress-report.html>

