

# NATIONAL HEALTHCARE SAFETY NETWORK FACILITY TAP REPORTS - CLABSI

## 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, 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 CLABSI 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 CLABSI TAP Report

1. Select Analysis on the NHSN home screen. Then select “Reports” (formerly known as Output Options) 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.

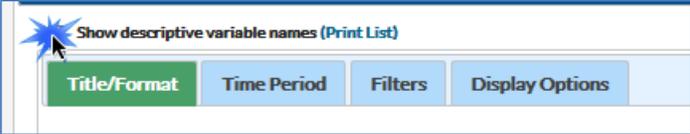
The screenshots illustrate the navigation process:

- Step 1:** The NHSN Home page shows a sidebar menu with 'Analysis' selected. A dropdown menu is open, and 'Reports' is highlighted. A blue box with the number '1' is next to the 'Reports' option.
- Step 2:** The 'Analysis Reports' page is shown with a tree view of report categories. 'TAP Reports' is expanded, and a blue box with the number '2' is next to it.
- Step 3:** The expanded 'TAP Reports' folder is shown, listing options for 'Acute Care Hospitals (ACHs)' and 'Long Term Acute Care Hospitals (LTACs)'. A blue box with the number '3' is next to the folder.



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- 2. Choose to either Run or Modify an Acute Care Hospitals (ACH) or Long Term Acute Care Hospitals (LTACs) CLABSI TAP Report. Please note: ACH TAP Reports contain both Acute Care and Critical Access Hospital (CAH) data and will exclude IRF-unit data.
  - a. Click Run to create a TAP Report that is inclusive of all data reported to NHSN and available in the analysis datasets (e.g., all CLABSI data from 2015 to present).
  - 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 (e.g., summaryYr 2015 to 2016).
      - 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 CLABSI 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.*

*(Continued on pg. 3)*



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## Example TAP Report Output – CLABSI

The following table is an example of a CLABSI 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 look below the table for an example interpretation of this table.

**National Healthcare Safety Network  
TAP Report for CLABSI Data for Acute Care and Critical Access Hospitals (2015 Baseline)  
Facilities within the Group Ranked by CAD  
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 February 16, 2017 at 2:00 PM  
Date Range: BS2\_CLAB\_TAP summaryYr2016 to 2016

FACILITY				LOCATION										
Facility Org ID	Facility Name	Facility CAD	Location Rank	Location	CDC Location	Events	Central Line Days	DUR %	CAD	SIR	SIR Test	No. Pathogens (CNS,YS,SA,ES,KS,EC)		
10000	DHQP Memorial Hospital	5.35	1	ICU	IN:ACUTE:CC:M	3	2181	53	2.06	1.6	.	3 (1, 1, 0, 0, 0, 0)		
			2	STEP1	IN:ACUTE:STEP	2	654	6	1.75	.	.	2 (0, 0, 1, 0, 0, 1)		
			3	ICU2	IN:ACUTE:CC:M	1	382	7	0.85	.	.	1 (0, 0, 0, 0, 1, 0)		
			4	ICU3	IN:ACUTE:CC:MS	2	2692	60	0.84	0.9	.	2 (0, 1, 0, 0, 0, 0)		
			5	1E	IN:ACUTE:WARD:M	1	496	6	0.81	.	.	1 (0, 1, 0, 0, 0, 0)		
			6	2E	IN:ACUTE:WARD:MS	1	1169	14	0.55	.	.	1 (0, 0, 0, 0, 1, 0)		
			7	1W	IN:ACUTE:WARD:PP	1	2194	21	0.16	0.6	.	1 (0, 0, 0, 0, 0, 0)		
			8	TELE	IN:ACUTE:WARD:TEL	0	11	1	0	.	.			
			8	PICU	IN:ACUTE:CC:M_PED	0	0	0	0	.	.			
			9	ICU4	IN:ACUTE:CC:N	0	1168	11	-0.5	0	.			

1. This report includes CLABSI data for 2015 and forward. Following the 2015 rebaseline, Mucosal Barrier Injury Laboratory-Confirmed Bloodstream Infections (MBI-LCBI) are excluded from CLABSI rates, SIRs and TAP reports.  
 2. If location-level CADs are the same in a given facility, their ranks are tied.  
 3. (CNS,YS,SA,ES,KS,EC) = No. of CNS, Yeast (both candida and non-candida species), Staph aureus, Enterococcus species, K. pneumoniae/K. oxytoca, E. coli  
 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  
 Source of aggregate data: 2015 NHSN CLABSI Data  
 Data contained in this report were last generated on January 19, 2017 at 12:17 PM.

## 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 = 0.5 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 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.



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- Looking at the third column in the TAP report, we can see that this facility's CAD is 5.35 – this means that the facility had approximately 6 excess infections when compared to the number of infections that were predicted, when using the HHS Goal of 0.5.
- 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 CLABSI data were reported during 2016.
  - There were 3 CLABSIs (events) identified in the ICU in 2,181 urinary catheter days.
  - The device utilization ratio (DUR), as a percent, was 53%. In other words, 53% of the patient days in this unit were also central line days.
  - The CAD in the ICU was 2.06 indicating that at least 3 infections would need to be prevented in order to meet the HAI reduction goal that was set (SIR Goal = 0.5). The standardized infection ratio (SIR) is 1.6. 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 3 organisms were identified as the cause of the ICU's 3 CLABSI events. Of those 3 organisms, 2 were common CLABSI pathogens. In this example, 1 event was caused by Coagulase Negative Staph and 1 by Yeast 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:  
<http://www.cdc.gov/nhsn/PDFs/training/intro-AnalysisBasics-PSC.pdf>
- 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: [http://www.cdc.gov/hai/surveillance/nhsn\\_nationalreports.html](http://www.cdc.gov/hai/surveillance/nhsn_nationalreports.html)

