

Rate Table

Description

Rate tables display a facility's calculated rates and device-utilization ratios (where appropriate). If available, rate tables also provide NHSN published pooled means and the comparison of the facility's rates and ratios to those pooled means. Descriptions of rates and ratios can be found in the event-specific chapters of the NHSN Patient Safety Component Manual.

Example

You would like to create a rate table for CLABSI data reported in 2011 for the cardiothoracic ICU (71 ICU) in your facility. You would also like to see separate CLABSI rates for each month in 2011.

Modification Page

Analysis Rate Table

Analysis Data Set: CLAB_RatesICU [Export Analysis Data Set](#)

Modify Attributes of the Output:

Last Modified On: 01/09/2012

Output Type: Rate Table

Output Name:

Output Title:

Select output format:

Output Format:

Use Variable Labels

Select a time period or Leave Blank for Cumulative Time Period:

Date Variable: Beginning: Ending: [Clear Time Period](#)

Enter Date variable/Time period at the time you click the Run button

Specify Other Selection Criteria:

[Show Criteria](#) [Column +](#) [Row +](#) [Clear Criteria](#)

location			
= 71ICU			

Other Options:

Group by:

Show Histogram

[Run](#) [Save As](#) [Reset](#) [Back](#) [Export Output Data Set](#)

Top Section of Modification Page:

- In the top section of the modification page, you can modify the name and title of the rate table. Note: If you wish to save your modifications as a template for future reports, you will be required to change the output name.

Tip: For more descriptive variable labels on your rate table, check the box to "Use Variable Labels" (recommended).

Middle Section of Modification Page:

- In the middle sections of the page, you can filter output by time period or other criteria (e.g., limit to a single location type).
- In this example, we have limited our rates to include only events and summary data for 2011 (summaryYr = 2011) and from a single location (location = 71 ICU).
- For additional details about how to use this section, please see the additional resources listed on page 2.

Bottom Section of Modification Page:

- The "Group by" option found at the bottom of the page allows you to view your rates by month, quarter, half-year, or year (e.g., one rate per month). SummaryYM is used in this example to show monthly CLABSI rates.
- Leave this option blank in order to obtain a cumulative rate for the time period you have specified above.
- For additional information, please see the additional resources listed on page 2.

Output/Results and Interpretation

Different rate tables for each location are automatically created. Below is the example of a rate table for CLABSI events, grouped by month in 2011 in 71 ICU of this facility (the result of modifications made on page 1 of this document).

National Healthcare Safety Network

Rate Table for Central Line-Associated BSI Data for ICU-Other

As of: February 15, 2012 at 9:54 AM

Date Range: CLAB_RATESICU summaryYr 2011 to 2011

Org ID=10018 CDC Location=IN:ACUTE:CC:CT

Location	Summary Yr/Mon	CLA BSI Count	Central Line Days	CLA BSIRate	NHSN CLAB Pooled Mean	Incidence Density p-value	Incidence Density Percentile	Patient Days	CL Util Ratio	NHSN Line DU Pooled Mean	Proportion p-value	Proportion Percentile
71ICU	2011M01	2	200	10.000	0.9	0.0155	100	300	0.667	0.68	0.3683	46
71ICU	2011M05	0	50	0.000	0.9	0.9543	25	150	0.333	0.68	0.0000	8

Source of aggregate data: Am J Infect Control 2011;39:798-816.

Data contained in this report were last generated on January 9, 2012 at 3:41 PM.

- During 2011, the cardiac ICU (71ICU) reported two months of CLABSI data. In January (2011M01), this location reported 2 central line-associated BSIs (“CLABSI Count”) and a total of 200 days in which patients had central lines (“Central Line Days”).
- Dividing 2 (numerator) by 200 (denominator) and multiplying by 1000 gives this location a CLABSI rate of 10.000 per 1000 central line days (CLABSI Rate).
- The “NHSN CLAB Pooled Mean” is the published pooled mean rate. Note that the source of this pooled mean is referenced below the rate table as a footnote.
- The “Incidence Density p-value” is the statistical measure that compares your CLABSI rate to the NHSN pooled mean. A p-value less than 0.05 indicates that a statistically significant difference (higher or lower) exists between the facility’s rate for that location and the NHSN pooled mean. In this example, the CLABSI rate in the cardiac ICU is statistically significantly higher than the NHSN pooled mean ($p=0.0155$).
- The “Incidence Density Percentile” indicates the percent of all of similar-type locations contributing to the NHSN pooled mean that have a CLABSI rate lower than or equal to the facility’s rate. In this example, the CLABSI rate for the cardiac ICU is at the 100th percentile, indicating that 100% of the cardiac ICU locations contributing to the NHSN pooled mean had a CLABSI rate at or below 10.0 per 1000 central line days.
- The device utilization (DU) ratio (CL Util Ratio) is calculated as the total number of central line days divided by the total number of patient days. The “NHSN Line DU Pooled Mean” is also shown in the table and is compared to your facility’s DU ratio by the “Proportion p-value”. This p-value (as well as the “Proportion Percentile”) should be interpreted in the same manner as described above for the comparison of rates.

Note: There is a difference between statistical significance and meaningful significance. Even if two measures are not statistically different, there may still be reason to investigate a large increase or decrease in infection rates or device utilization ratios.

Additional Resources:

Introduction to NHSN Analysis: <http://www.cdc.gov/nhsn/PDFs/training/intro-AnalysisBasics-PSC.pdf>

How to filter data by time period: <http://www.cdc.gov/nhsn/PS-Analysis-resources/PDF/FilterTimePeriod.pdf>

How to filter data on additional criteria: <http://www.cdc.gov/nhsn/PS-Analysis-resources/PDF/SelectionCriteria.pdf>

Annual Reports: <http://www.cdc.gov/nhsn/dataStat.html>