

# Pie Chart

Last Updated: November 2023

## Description

A pie chart is a graphical representation of data. The different slices of the pie represent different values of a variable, with the relative size of the slice representing the amount of data included in the slice.

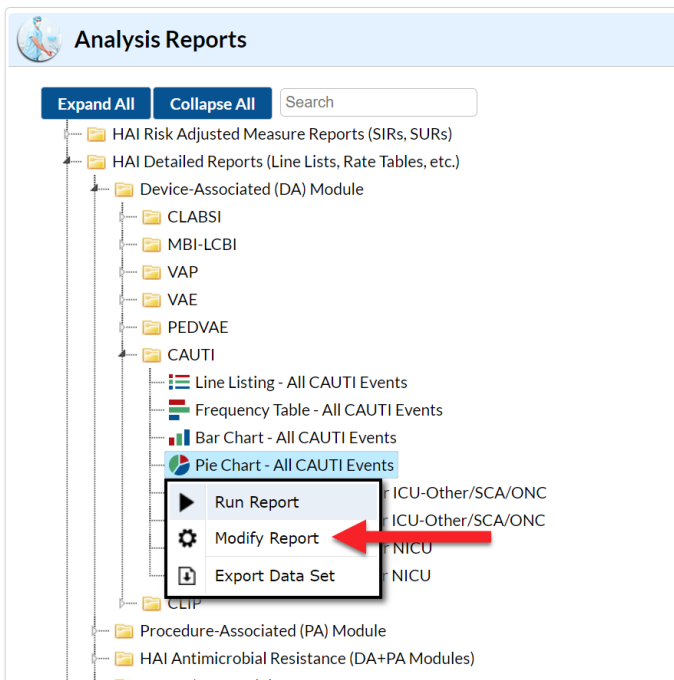
## Example

You would like to create a pie chart showing the distribution of catheter-associated urinary tract infections (CAUTI) across different critical care locations in your facility from 2021 through 2022.

## Modification Page

For further information, please visit the Modification Guidelines page: <https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/howtomodifyreport.pdf>

Expand the “HAI Detailed Reports (Line Lists, Rate Tables, etc.)” folder and select the “Device-Associated (DA) Module” folder. Then select “CAUTI” to display the available reports. Click “Pie Chart- All CAUTI Events” and select “Modify Report” to limit the time period and select filters.



To select a time period, navigate to the “Time Period” tab of the Modify window. Select “evntDateYr” as your Date Variable and enter the date range 2021 to 2022.

Title/Format **Time Period** Filters Display Options

Time Period:

Date Variable	Beginning	Ending	<input type="button" value="Clear Time Period"/>
evntDateYr	2021	2022	

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

To select filters for your report, navigate to the “Filters” tab. In this example, we have limited the pie chart to include only events from a single location type (locationType=CC), which will include each individual critical care location.

Title/Format Time Period **Filters** Display Options

Additional Filters:

AND OR

AND OR

locationType equal CC - CC

To modify the display of the pie chart, navigate to the “Display Options” tab. The “Chart variable” is the variable that will make up the slices of the pie. Different pies will be created for each value of the “Stratification variable”. In this case, we wish to look at the distribution of locations within each event type. Separate pages of output will be created based on values of the “Page By” variable. You can also choose the number and orientation of pies on a page and to place various descriptive statistics inside or outside the pie.

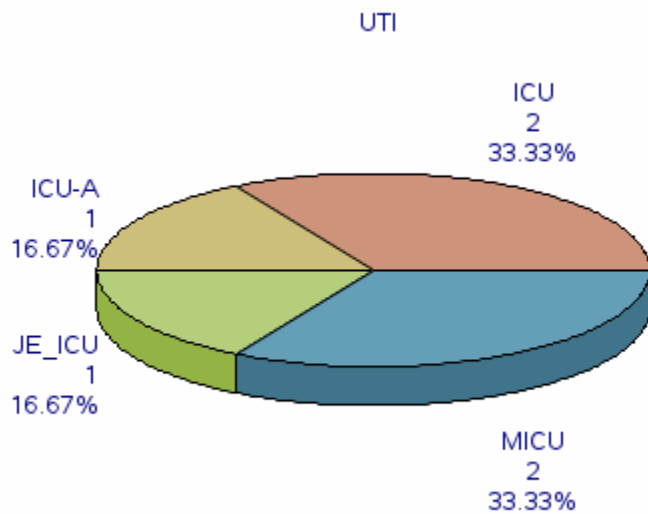
Title/Format Time Period Filters **Display Options**

Pie Chart Options:

Chart Variable	Stratification Variable	Page by
location	eventType	
Number of pies across a page:	2	
Number of pies down a page:	1	
Placement of the Percent:	Outside	
Placement of the Slice Label:	Outside	
Placement of the Value:	Outside	
Placement of Legend:	None	

## Output/Results and Interpretation

In this example, location is the “chart variable” and event type is the “stratification variable”. The output will include a different pie chart for each event type; only the UTI pie chart is shown below. Four values are given for each slice of the pie.



- The top value for each slice is the value of the “chart variable” (e.g., location).
- The second value is a count of the number of events included in each slice of the pie. *Example: there were 2 UTIs in the MICU between 2021 and 2022.*
- The bottom number is a percent corresponding to this slice’s percent of the entire pie. *Example: 33.33% (2/6) of all UTIs were in the MICU.*

## Additional Resources:

- Introduction to NHSN Analysis: <https://www.cdc.gov/nhsn/pdfs/training/2022/Introduction-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>