Description

Rate tables for the AU option display a facility's calculated rate of antimicrobial use. Report options include rates of use for facility-wide (FACWIDEIN) or by location. Rates can be calculated by drug category and class, for specific drugs within separate classes (modified Selected Drugs option), or for individual drugs (modified Selected Drugs option).

For a more basic explanation of the NHSN modification screen, refer to this document: https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/howtomodifyreport.pdf.

Example (Using: Rate Table – Selected Drugs – by Location – All Months)

You would like to create a rate table for Ceftriaxone use reported from July 2018 through December 2018 for the medical-surgical ICU location (MSICU). You would like to see separate Ceftriaxone rates for each month during this time period.

After generating datasets, to run a rate table report, click Analysis > Reports > Antimicrobial Use and Resistance Module > Antimicrobial Use Data. After selecting the rate table report you want, in this case, "Rate Table – Selected Drugs – by Location – All Months," a pop-up box will appear that will allow you to "Run Report," "Modify Report," and "Export Data Set." Select "Modify Report" to customize your report.



Modifying the Report

When you choose to modify the report, the modification screen appears showing multiple tabs containing available modifications for the given report. The "Title/Format" tab allows you to update the report title and select the format in which you want the report displayed, such as HTML or PDF.





To filter the data by time period, choose the "Time Period" tab at the top of the page. In this example, we have limited the report to July 2018 through December 2018.

Tip: For more descriptive variable labels on your report, check the box "Show descriptive variable names" that appears near the top of the modification window (recommended).

Modify "Rate Table - Selected Drugs - by Location - All Months "					
Show descriptive	Show descriptive variable names (Print List)		Data Set Generated On: 01/04/2019 19:21:00		
Title/Format	Time Period	Filters	Display Options		
Time Period:					
Date Va	riable	Beginning	Ending		
Summary Yea	Summary Year/Month ✔ 07/2018		12/2018	Clear Time Per	riod
Enter Date	variable/Time per	riod at the tir	me you click the Run b	utton	
			🕨 Run 📄 Sa	ve 👔 Export	Close

The "Filters" tab allows you to further filter the data that will be displayed in the report. For our example, we want to filter the report to only show data for the medical-surgical ICU location and for antimicrobial agent Ceftriaxone. First, select the variable "Location" from the drop-down menu, set the operator to "equal" then select the value "MSICU – MEDICAL SURGICAL ICU". Next, click "Add rule" to add an additional filter. Then select the variable "Antimicrobial Agent~Description" from the drop-down menu, set the operator to "equal" and select the value "CEFTRX - Ceftriaxone".

Modify "Rate Table - Selected Drugs - by Location - A	1onths "
Show descriptive variable names (Print List)	Type: Rate TableData Set Generated On: 01/04/2019 19:21:00
Title/Format Time Period Filters D	ay Options
Additional Filters: 👩 Show 🛛 🎇 Cle	
AND OR	Add group
AND OR	Add rule
	Delete
MSICU - MEDICAL SURGICAL ICU	✓
Antimicrobial Agent~Description 🗸	CEFTRX - Ceftriaxone
1	
	🕨 Run 📲 Save 💼 Export Close



Tip: For including more than one item in each filter such as multiple locations or multiple antimicrobial agents, the "in" operator can be used instead of the "equal" operator.

The "Display Options" tab allows you to view your rates by month, quarter, half-year, year, or cumulative for the entire time period selected. Summary Year/Month is used in this example to show monthly Ceftriaxone usage rates.

Modify "Rate Table - Selected Drugs - by Location - All Months "					
✓ Show descriptive variable names (Print List)		Data Set Generated On: 01/04/2019 19:21:00			
Title/Format	Time Period	Filters	Display Options		
Rate Table Opt	ions:				
Group by: Sur	nmary Year/Mont	th 🗸			
		▶ Run	🖶 Save 🏦 Exp	ort Close	



3

Final Report

The example rate table below is the result of the modifications shown in this document. Location-specific rate tables will be shown using the location-specific days present counts for the denominator. The output below shows a rate table for Ceftriaxone use from July 2018 through December 2018, displayed by month for the medical-surgical ICU, MSICU.

Note: This example uses fictitious data for illustrative purposes only.

National Healthcare Safety Network Rate Table - Selected Drugs from All AU Data - Antimicrobial Utilization Rates by Location Rate per 1,000 Days Present As of: January 4, 2019 at 7:32 PM Date Range: AU DRUGRATESLOCATION summaryYM 2018M07 to 2018M12 if (((location = "MSICU") AND (drugIngredientDesc = "CEFTRX"))) Facility Org ID=10000 CDC Location=IN:ACUTE:CC:MS Location=MSICU

Summary Year/Month		Antimicrobial Days	Days Present	Rate per 1000 Days Present
1	2018M07	33	334	98.80
	2018M08	31	315	98.41
	2018M09	30	325	92.31
	2018M10	35	341	102.64
	2018M11	42	367	114.44
	2018M12	40	342	116.96

 In July (2018M07), this location reported 33 Ceftriaxone antimicrobial days and a total of 334 days present. Dividing 33 (numerator) by 334 (denominator) and multiplying by 1000 gives this location a Ceftriaxone Antimicrobial Utilization rate of 98.80 per 1000 days present for July 2018.

Additional Resources

AUR Module Protocol: http://www.cdc.gov/nhsn/pdfs/pscmanual/11pscaurcurrent.pdf

Introduction to NHSN Analysis: <u>https://www.cdc.gov/nhsn/pdfs/training/2018/intro-to-analysis-508.pdf</u>

How to Export Data from NHSN: <u>http://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/exportdata.pdf</u>

Surveillance for Antimicrobial Use Option: <u>https://www.cdc.gov/nhsn/acute-care-hospital/aur/</u>

