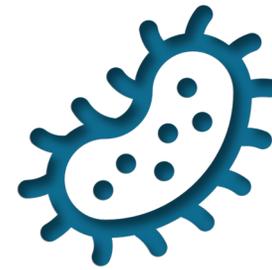


# Using the NHSN Antimicrobial Use Data for Action in a Critical Access Hospital



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# Objectives

- ▶ 1) Illustrate how to start an antimicrobial stewardship program in a critical access hospital
- ▶ 2) Describe how to utilize the NHSN antimicrobial use option data to guide and carry out antibiotic stewardship activities

# Our Critical Access Hospital



- ▶ Gritman Medical Center is a patient-centered, nonprofit critical access hospital
- ▶ Located in Moscow, Idaho
- ▶ Primarily serves over 40,000 residents of rural Latah County
- ▶ Operates six regional primary care clinics
- ▶ Offers numerous specialties including oncology, urology, interventional pain, wound care and orthopedics

# The Beginning of Antimicrobial Stewardship Programs

- ▶ In 2015 The Obama Administration released a National Action Plan to Combat Antibiotic Resistant Bacteria
  - ▶ Slow the Emergence of Resistant Bacteria and Prevent the Spread of Resistant Infections
    - ▶ Establishment of antimicrobial stewardship programs in all acute care hospitals and improved antimicrobial stewardship across all healthcare settings.

**The White House**

Office of the Press Secretary

For Immediate Release

March 27, 2015

**FACT SHEET: Obama Administration Releases National Action Plan to Combat Antibiotic-Resistant Bacteria**

[FACT SHEET: Obama Administration Releases National Action Plan to Combat Antibiotic-Resistant Bacteria](https://obamawhitehouse.archives.gov/the-press-office/2015/03/27/fact-sheet-obama-administration-releases-national-action-plan-combat-ant)  
(<https://obamawhitehouse.archives.gov/the-press-office/2015/03/27/fact-sheet-obama-administration-releases-national-action-plan-combat-ant>)

# The Beginning of a Antimicrobial Stewardship Program at GMC

- ▶ The Antimicrobial Stewardship Program Charter & Strategic Plan was created in 2016 by our director of pharmacy and signed by the hospital CEO
  - ▶ The Strategic Guiding Principles of this charter include:
    - ▶ Promote a culture of optimal antibiotic use through dedicated hospital and antimicrobial stewardship program leadership and positive culture change.
    - ▶ Timely and appropriate initiation of antibiotics for recipients of care.
    - ▶ Appropriate administration and de-escalation of therapy for recipients of care.

# Becoming a Stewardship Pharmacist

- ▶ Joined University of Washington Tele-antimicrobial Stewardship Program (UWTASP), now is the Center for Stewardship in Medicine (UW CSiM)
  - ▶ Weekly meetings on Tuesdays at 0900 or 1200 PT
  - ▶ Infectious disease related didactics
  - ▶ Case presentations and discussions
  - ▶ Numerous resources
    - ▶ Antibiotic Pocket Guides



## Get the Antibiotic Pocket Guide

The UW CSiM Antibiotic Guide is based on local, Pacific Northwest resistance-based data and expert opinion.

- ▶ Completed SIDP Antimicrobial Stewardship Certificate-2018 (had previously been completed by three other Gritman pharmacists)
- ▶ Completed BPS Board Certification in Infectious Diseases-2019



**CSiM** | CENTER FOR STEWARDSHIP IN MEDICINE  
UW Medicine

Finding Local Solutions to Emerging Health Challenges

*UW CSiM is a collaborative tackling today's stewardship challenges in rural medicine. Join us!*

[Click here to learn more >](#)

[University of Washington Center for Stewardship in Medicine \(www.uwcsim.org/\)](http://www.uwcsim.org/)

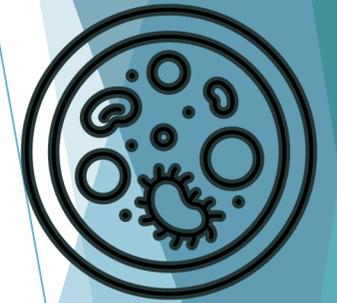


**SIDP** | SOCIETY OF INFECTIOUS DISEASES PHARMACISTS

[Society of Infectious Disease Pharmacists \(www.sidp.org/\)](http://www.sidp.org/)

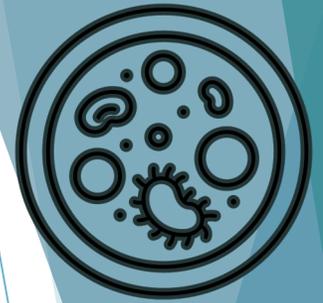
# Antimicrobial Stewardship Program Policy

- ▶ Created a hospital Antimicrobial Stewardship Policy
  - ▶ The participation and leadership of a pharmacist with training in infectious diseases and antimicrobial stewardship, with time and resources allotted for work in this area.
  - ▶ Created a new position and title as Antimicrobial Stewardship- Infectious Diseases Pharmacist
  - ▶ Created order sets and policies for treatment of some common conditions
    - ▶ Urinary tract infections and asymptomatic bacteriuria
    - ▶ Community acquired pneumonia
    - ▶ Antibiotics recommendations in Sepsis
    - ▶ Extended infusion piperacillin/ tazobactam (Zosyn)
    - ▶ Penicillin allergies and the use of cephalosporins



[CDC: Antibiotic Stewardship Core Elements at Small and Critical Access Hospitals \(https://www.cdc.gov/antibiotic-use/healthcare/pdfs/core-elements-small-critical.pdf\)](https://www.cdc.gov/antibiotic-use/healthcare/pdfs/core-elements-small-critical.pdf)

# Timeline and Summary of Antimicrobial Stewardship at Gritman Medical Center-

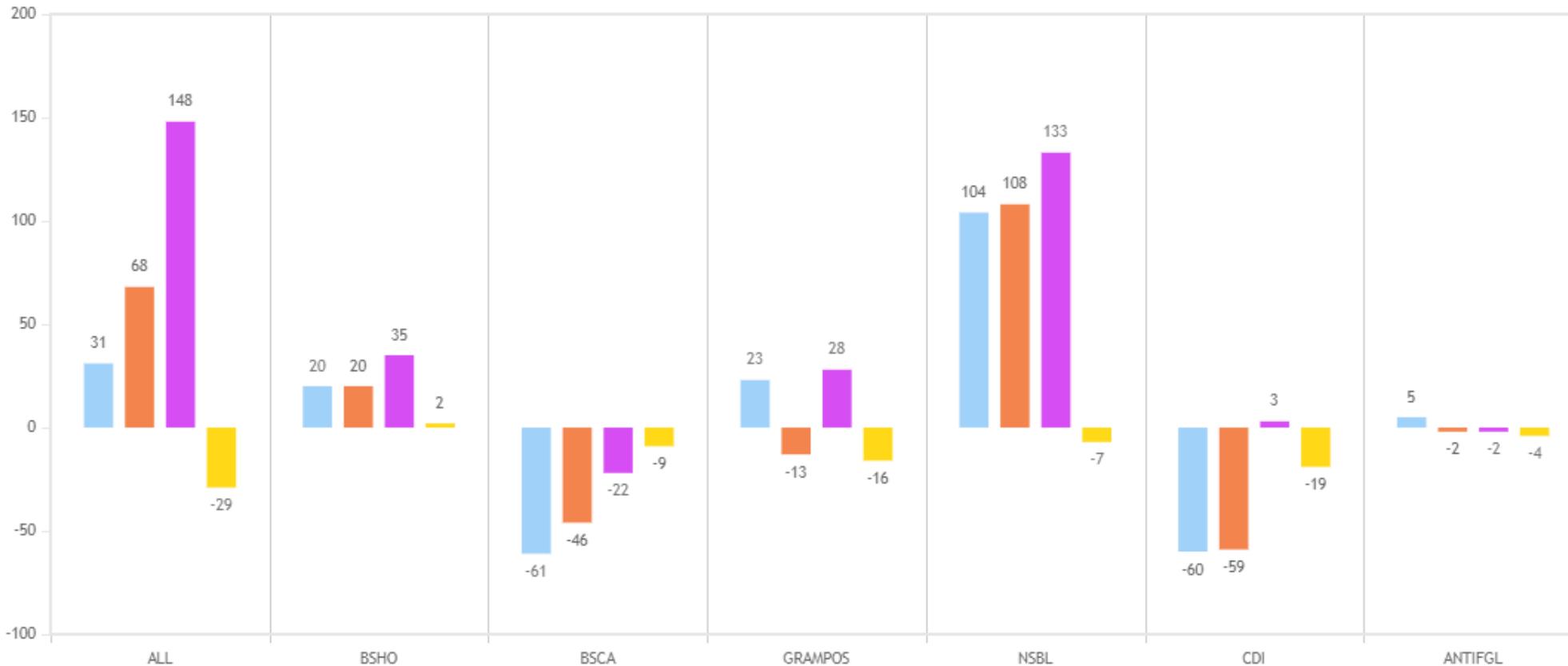


- ▶ Antimicrobial stewardship was started in 2016 by the director of pharmacy
  - ▶ Charter was created
- ▶ I became the lead pharmacist on the team in 2018
  - ▶ Joined the University of Washington's Tele-Antimicrobial Stewardship Program now Center for Stewardship in Medicine.
- ▶ Long path to be able to submit antimicrobial use data to the NHSN
- ▶ EHR issues with submitting our data
- ▶ Ended up going with a outside vendor to submit our data
- ▶ Started submitting our antimicrobial use and resistance data January 2023 (however was able to back submit data from April 2022 and on)

# Utilizing the National Health and Safety Network Antimicrobial Use Data-TAS Dashboard



Facility AU TAS Report Dashboard by Quarter



- ▶ The SAAR for each category is set to 1
- ▶ This includes data from Quarters 2-4 of 2023 and Quarter 1 of 2024

# Utilizing the National Health and Safety Network Antimicrobial Use Data- Antibiotics used for Resistant Gram-Positive Infections

- ▶ Will provide an example of assessing our use of antibacterial agents predominantly used for resistant Gram-positive infections (MRSA)
  - ▶ The Antibiotics included are:
    - ▶ Ceftaroline
    - ▶ Dalbavancin
    - ▶ Daptomycin\*\*
    - ▶ Linezolid\*\*
    - ▶ Oritavancin\*\*
    - ▶ Quinupristin/ Dalfopristin
    - ▶ Tedizolid
    - ▶ Telavancin
    - ▶ Vancomycin (IV only)\*\*

\*\*Antibiotics that are used or have been used at Gritman Medical Center

# National Health and Safety Network-TAS Report- Adult SAAR Types by Facility



- ▶ Antimicrobial Use and Resistance Module under Analysis Reports
  - ▶ Have found the Targeted Assessment for Stewardship (TAS) Reports to be a helpful place to start
  - ▶ The GRAMPOS SAAR type-highest used drugs are vancomycin, linezolid and daptomycin
  - ▶ SAAR is 1.219

## National Healthcare Safety Network TAS Report - Adult SAAR Types - Facility Adult SAAR Types Ranked by AU-CAD

Facility Identified SAAR Targets: All antibacterials = ( 0 ); BSHO = ( 0 ); BSCA = ( 0 ); GramPos = ( 0 ); NSBL = ( 0 ); CDI = ( 0 ); Antifungal = ( 0 )

As of: November 8, 2023 at 6:17 PM  
Date Range: All AU\_TAS  
if (((population = "ADULT" ) ) )

Facility Name	SAARTypeCat	AU-CAD Rank	Facility AU-CAD (Rounded)	Three highest use drugs within SAAR Type (Percentage)	Antimicrobial Days	Predicted Antimicrobial Days	Days Present	Location SAAR	95% Confidence Interval
GRITMAN MEDICAL CENTER	ALL	1	1216	CEFAZ(19); CEFTRX(17); VANC(6);	1216	1092.268	1855	1.113	1.052, 1.177
	NSBL	2	377	CEFAZ(63); CEPHLX(11); AMPIWS(9);	377	186.371	1855	2.023	1.826, 2.235
	CDI	3	362	CEFTRX(57); CEFEP(20); CEFDIN(10);	362	378.994	1855	0.955	0.880, 1.057
	BSCA	4	303	CEFTRX(68); CEFDIN(12); CEFUR(11);	303	340.441	1855	0.890	0.794, 0.995
	BSHO	5	178	CEFEP(41); MERO(34); PIPERWT(23);	178	164.893	1855	1.079	0.929, 1.247
	GRAMPOS	6	166	VANC(41); LNZ(38); DAPTO(21);	166	136.224	1855	1.219	1.044, 1.415
	ANTIFGL	7	19	FLUCO(63); CASPO(37);	19	21.010	1855	0.904	0.561, 1.386

1. Tables include the most recent 12 months of reported data from locations for which SAARs are generated. If SAAR Type-level AU-CADs are the same, their ranks are tied.
2. AU-CAD = Observed Antimicrobial Days - (Predicted Antimicrobial Days \* Facility Identified SAAR Target)
3. When selecting a SAAR Target, consider the lower bound of the SAAR Confidence Interval. See the TAS User Guide for further details.
4. A negative AU-CAD value means the SAAR Target was greater than the current SAAR value for that category. To increase your SAAR value, the negative AU-CAD value represents the number of antimicrobial days to add per time period to reach your SAAR Target.
5. The drug code and full drug name can be found here: <http://www.cdc.gov/nhsn/xls/aur/aur-eligible-antimicrobial-agents.xlsx>.
6. If the observed antimicrobial days exceed days present for a specific SAAR category, neither the SAAR nor the AU-CAD will be calculated, and data should be validated for accuracy.

Source of aggregate data: 2017 NHSN SAAR Data

# National Health and Safety Network-TAS Report- Adult SAAR Types by Location



- ▶ Antimicrobial Use and Resistance Module under Analysis Reports
  - ▶ Targeted Assessment for Stewardship (TAS) Report, Adult SAAR ranked by location- groups separated
  - ▶ GRAMPOS SAAR for MSU is 1.168, three highest used antibiotics are vancomycin, linezolid and daptomycin
  - ▶ GRAMPOS SAAR for CCU is 1.397, three highest used antibiotics are linezolid, vancomycin and daptomycin

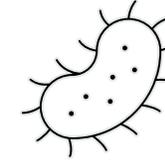
National Healthcare Safety Network  
 TAS Report - Adult SAAR Types - Locations  
 Adult SAAR Ranked by Location AU-CAD  
 Facility Identified SAAR Target: BSHO = ( 0 ); BSCA = ( 0 ); GramPos = ( 0 ); NSBL = ( 0 ); CDI = ( 0 ); Antifungal = ( 0 )

As of: November 8, 2023 at 7:21 PM  
 Date Range: All AU\_TAS  
 if (((population = "ADULT" )))

FACILITY				LOCATION									
Facility Org ID	Facility Name	SAARTypeCat	Facility AU-CAD (Rounded)	Location	CDC Location	Location Rank	Location AU-CAD (Rounded)	Three highest use drugs within SAAR Type (Percentage)	Antimicrobial Days	Predicted Antimicrobial Days	Days Present	Location SAAR	95% Confidence Interval
48248	GRITMAN MEDICAL CENTER	NSBL	377	MSU	IN:ACUTE:WARD:MS	1	369	CEFZD(63); CEPHLX(11); AMOXWC(8);	369	163.263	1625	2.280	2.038, 2.500
				CCU	IN:ACUTE:CC:MS	2	8	CEFZD(63); AMPIWS(38);	8	23.108	230	0.346	0.161, 0.657
		CDI	362	MSU	IN:ACUTE:WARD:MS	1	322	CEFTRX(56); CEFEP(19); CEFDIN(10);	322	322.004	1625	1.000	0.895, 1.114
				CCU	IN:ACUTE:CC:MS	2	40	CEFTRX(60); CEFEP(30); CEFDIN(10);	40	56.960	230	0.702	0.508, 0.946
		BSCA	303	MSU	IN:ACUTE:WARD:MS	1	275	CEFTRX(66); CEFUR(12); CEFDIN(12);	275	298.230	1625	0.922	0.818, 1.036
				CCU	IN:ACUTE:CC:MS	2	28	CEFTRX(86); CEFDIN(14);	28	42.211	230	0.683	0.449, 0.946
		BSHO	178	MSU	IN:ACUTE:WARD:MS	1	132	CEFEP(46); PIPERWT(27); MERO(24);	132	122.864	1625	1.074	0.902, 1.270
				CCU	IN:ACUTE:CC:MS	2	46	MERO(61); CEFEP(26); PIPERWT(13);	46	42.029	230	1.094	0.811, 1.447
		GRAMPOS	166	MSU	IN:ACUTE:WARD:MS	1	124	VANC(40); LNZ(33); DAPTO(27);	124	106.151	1625	1.168	0.976, 1.388
				CCU	IN:ACUTE:CC:MS	2	42	LNZ(52); VANC(43); DAPTO(5);	42	30.073	230	1.397	1.020, 1.870
		ANTIFGL	19	MSU	IN:ACUTE:WARD:MS	1	13	FLUCO(85); CASPO(15);	13	15.587	1625	0.834	0.464, 1.390
				CCU	IN:ACUTE:CC:MS	2	6	CASPO(83); FLUCO(17);	6	5.423	230	1.106	0.448, 2.301

1. Tables include the most recent 12 months of reported data from locations for which SAARs are generated. If SAAR Type-level AU-CADs are the same, their ranks are tied.
2. Location AU-CAD = Observed Antimicrobial Days - (Predicted Antimicrobial Days \* Facility Identified SAAR Target); Facility AU-CAD = Sum of Location AU-CADs
3. When selecting a SAAR Target, consider the lower bound of the SAAR Confidence Interval. See the TAS User Guide for further details.
4. A negative AU-CAD value means the SAAR Target was greater than the current SAAR value for that category. To increase your SAAR value, the negative AU-CAD value represents the number of antimicrobial days to add per time period to reach your SAAR Target.
5. The drug code and full drug name can be found here: <http://www.cdc.gov/nhsn/xls/aur/aur-eligible-antimicrobial-agents.xlsx>.
6. If the observed antimicrobial days exceed days present for a specific SAAR category, neither the SAAR nor the AU-CAD will be calculated, and data should be validated for accuracy.

# SAARs Table- Antimicrobials used for resistant Gram-positive infections- medical wards



## National Healthcare Safety Network

### SAARs Table - All Adult and Pediatric Standardized Antimicrobial Administration Ratios (SAARs) High-Level Indicators and High-Value Targets (2017 Baseline)

As of: November 8, 2023 at 5:29 PM

Date Range: All AU\_SAAR\_2017

#### Antibacterial agents predominantly used for resistant Gram-positive infections (e.g., MRSA) used in adult SAAR wards

orgID	summaryYM	SAARType_2017	antimicrobialDays	numAUDaysPredicted	numDaysPresent	SAAR	SAAR_pval	SAAR95CI
46248	2022M04	Adult_GramPos_Ward_2017	15	18.944	290	0.792	0.3711	0.460, 1.277
46248	2022M05	Adult_GramPos_Ward_2017	8	20.446	313	0.391	0.0022	0.182, 0.743
46248	2022M06	Adult_GramPos_Ward_2017	17	20.185	309	0.842	0.4925	0.507, 1.321
46248	2022M07	Adult_GramPos_Ward_2017	28	21.492	329	1.303	0.1713	0.883, 1.858
46248	2022M08	Adult_GramPos_Ward_2017	32	21.426	328	1.494	0.0315	1.039, 2.083
46248	2022M09	Adult_GramPos_Ward_2017	37	22.275	341	1.661	0.0041	1.187, 2.265
46248	2022M10	Adult_GramPos_Ward_2017	33	17.245	264	1.914	0.0007	1.339, 2.656
46248	2022M11	Adult_GramPos_Ward_2017	45	21.361	327	2.107	0.0000	1.555, 2.794
46248	2022M12	Adult_GramPos_Ward_2017	20	19.532	299	1.024	0.8872	0.643, 1.553
46248	2023M01	Adult_GramPos_Ward_2017	19	23.843	365	0.797	0.3234	0.494, 1.221
46248	2023M02	Adult_GramPos_Ward_2017	23	19.205	294	1.198	0.3836	0.778, 1.769
46248	2023M03	Adult_GramPos_Ward_2017	17	22.210	340	0.765	0.2672	0.461, 1.201

- ▶ Starting on 07/2022 the SAAR on MSU for the antibiotics used for MRSA was > 1 and cont. upwards
- ▶ Peaked 11/2022 with a SAAR=2.107

Any reported use of Colistin will be combined with and reported as Colistimethate. Any reported use of Amikacin Liposomal will be combined with and reported as Amikacin.

Includes data for January 2017 and forward.

The SAAR is only calculated if the number of predicted antimicrobial days (numAUDaysPredicted) is >=1.

If antimicrobial days exceed days present for any SAAR categories except the All Antibacterial SAAR, a SAAR will not be calculated and data should be validated for accuracy.

Data restricted to medical, medical-surgical, surgical, step down and oncology locations.

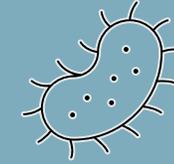
The SAAR percentile is not shown if the SAAR is not shown, nor is it shown for pediatric medical ICUs or pediatric surgical wards where the aggregate sample size was too small for analysis (<20).

Source of aggregate data: 2017 NHSN AU Data

Source of Percentile Distribution: 2021 NHSN AU Option Report: <https://www.cdc.gov/nhsn/pdfs/datastat/2021-AU-Report-508.pdf>

Data contained in this report were last generated on November 8, 2023 at 5:20 PM to include data beginning April 2022 through March 2023.

# SAARs Table- Antimicrobials used for resistant Gram-positive infections- ICUs



## National Healthcare Safety Network

### SAARs Table - All Adult and Pediatric Standardized Antimicrobial Administration Ratios (SAARs) High-Level Indicators and High-Value Targets (2017 Baseline)

As of: November 8, 2023 at 5:29 PM  
Date Range: All AU\_SAAR\_2017

#### Antibacterial agents predominantly used for resistant Gram-positive infections (e.g., MRSA) used in adult SAAR ICUs

orgID	summaryYM	SAARType_2017	antimicrobialDays	numAUDaysPredicted	numDaysPresent	SAAR	SAAR_pval	SAAR95CI
46248	2022M04	Adult_GramPos_ICU_2017	13	3.399	26	3.825	0.0001	2.127, 6.376
46248	2022M05	Adult_GramPos_ICU_2017	10	6.668	51	1.500	0.2141	0.762, 2.673
46248	2022M06	Adult_GramPos_ICU_2017	9	4.315	33	2.086	0.0455	1.017, 3.828
46248	2022M07	Adult_GramPos_ICU_2017	2	5.230	40	0.382	0.1399	0.064, 1.263
46248	2022M08	Adult_GramPos_ICU_2017	9	6.799	52	1.324	0.3948	0.646, 2.429
46248	2022M09	Adult_GramPos_ICU_2017	7	9.544	73	0.733	0.4257	0.321, 1.451
46248	2022M10	Adult_GramPos_ICU_2017	7	7.080	54	0.992	1.0000	0.434, 1.961
46248	2022M11	Adult_GramPos_ICU_2017	5	7.322	56	0.683	0.4071	0.250, 1.514
46248	2022M12	Adult_GramPos_ICU_2017	19	9.937	76	1.912	0.0100	1.185, 2.931
46248	2023M01	Adult_GramPos_ICU_2017	4	5.884	45	0.680	0.4627	0.216, 1.640
46248	2023M02	Adult_GramPos_ICU_2017	11	5.361	41	2.052	0.0306	1.079, 3.566
46248	2023M03	Adult_GramPos_ICU_2017	3	1.569	12	1.912	0.2833	0.486, 5.204

- ▶ Not a clear trend
- ▶ Some months have a high SAAR
- ▶ We don't always have patients in our CCU

Any reported use of Colistin will be combined with and reported as Colistimethate. Any reported use of Amikacin Liposomal will be combined with and reported as Amikacin.

Includes data for January 2017 and forward.

The SAAR is only calculated if the number of predicted antimicrobial days (numAUDaysPredicted) is >=1.

If antimicrobial days exceed days present for any SAAR categories except the All Antibacterial SAAR, a SAAR will not be calculated and data should be validated for accuracy.

Data restricted to medical, medical-surgical, surgical, step down and oncology locations.

The SAAR percentile is not shown if the SAAR is not shown, nor is it shown for pediatric medical ICUs or pediatric surgical wards where the aggregate sample size was too small for analysis (<20).

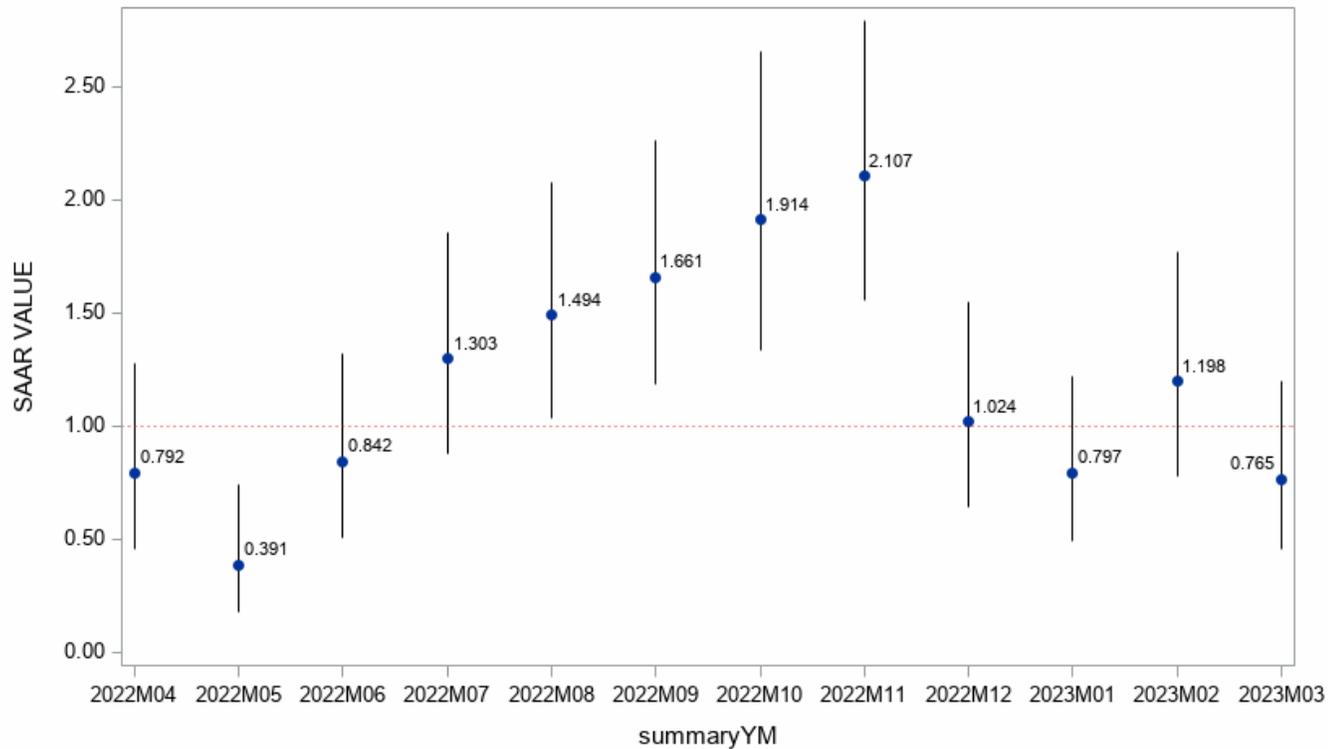
Source of aggregate data: 2017 NHSN AU Data

Source of Percentile Distribution: 2021 NHSN AU Option Report: <https://www.cdc.gov/nhsn/pdfs/datastat/2021-AU-Report-508.pdf>

Data contained in this report were last generated on November 8, 2023 at 5:20 PM to include data beginning April 2022 through March 2023 .

# Another way to look at the data, SAAR Plot for antibacterial agents used for MRSA on MSU

Monthly SAAR values for antibacterial agents predominantly used for resistant Gram-positive infections (e.g., MRSA) used in adult wards



Includes data for January 2017 and forward. The SAAR is only calculated if the number of predicted antimicrobial days (numAUDaysPredicted) is  $\geq 1$ .

If antimicrobial days exceed days present for any SAAR categories except the All Antibacterial SAAR, a SAAR will not be calculated and data should be validated for accuracy.

If a SAAR 95% confidence interval (vertical line) includes 1.0 (dashed horizontal line), this indicates that reported antimicrobial use is not statistically significantly different from predicted antimicrobial use.

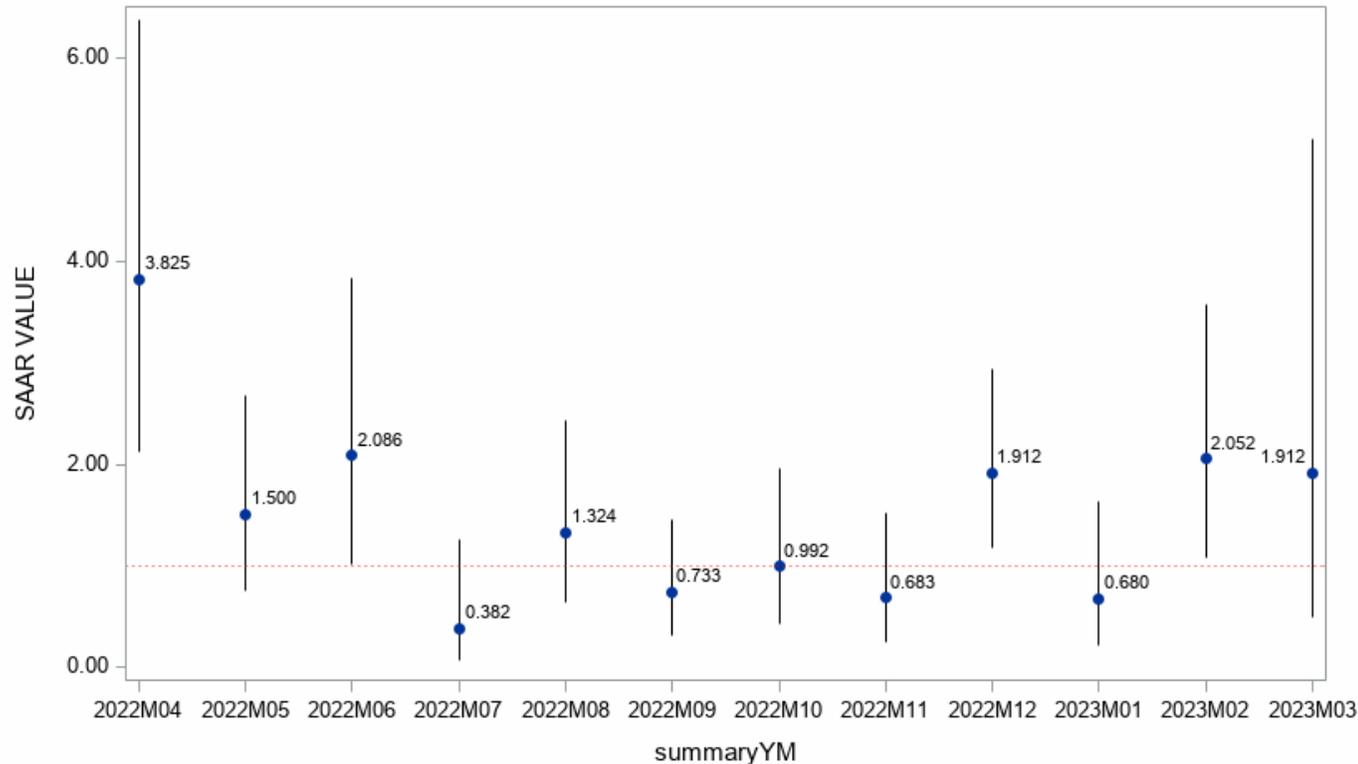
Data restricted to medical, medical-surgical, surgical, step down and oncology locations.

► The top 3 antibiotics used to treat resistant Gram-positive infections on the MSU during this time period were:

1. Vancomycin
2. Linezolid
3. Daptomycin

# Another way to look at the data, SAAR Plot for antibacterial agents used for MRSA on CCU

Monthly SAAR values for antibacterial agents predominantly used for resistant Gram-positive infections (e.g., MRSA) used in adult ICUs



► The top 3 antibiotics used to treat resistant Gram-positive infections in the CCU during this time period were:

1. Linezolid
2. Vancomycin
3. Daptomycin

*Includes data for January 2017 and forward. The SAAR is only calculated if the number of predicted antimicrobial days (numAUDaysPredicted) is >=1.*

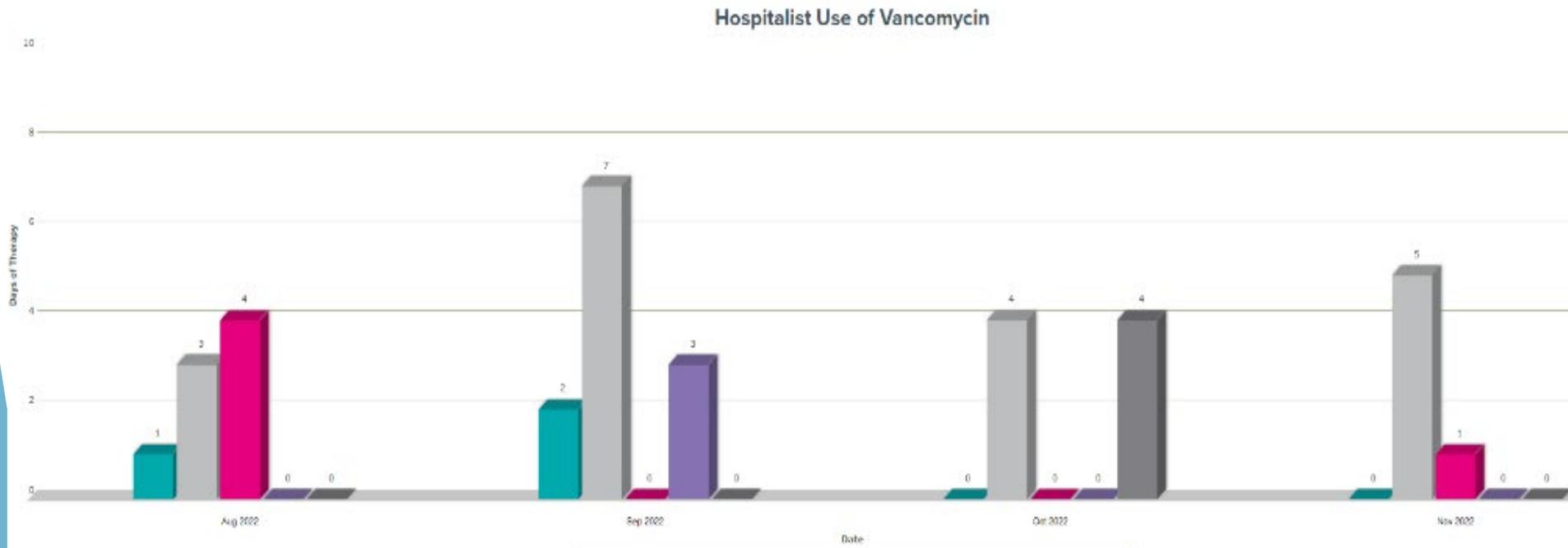
*If antimicrobial days exceed days present for any SAAR categories except the All Antibacterial SAAR, a SAAR will not be calculated and data should be validated for accuracy.*

*If a SAAR 95% confidence interval (vertical line) includes 1.0 (dashed horizontal line), this indicates that reported antimicrobial use is not statistically significantly different from predicted antimicrobial use.*

*Data restricted to medical, medical-surgical, surgical, step down and oncology locations.*

# What was happening with vancomycin prescribing?

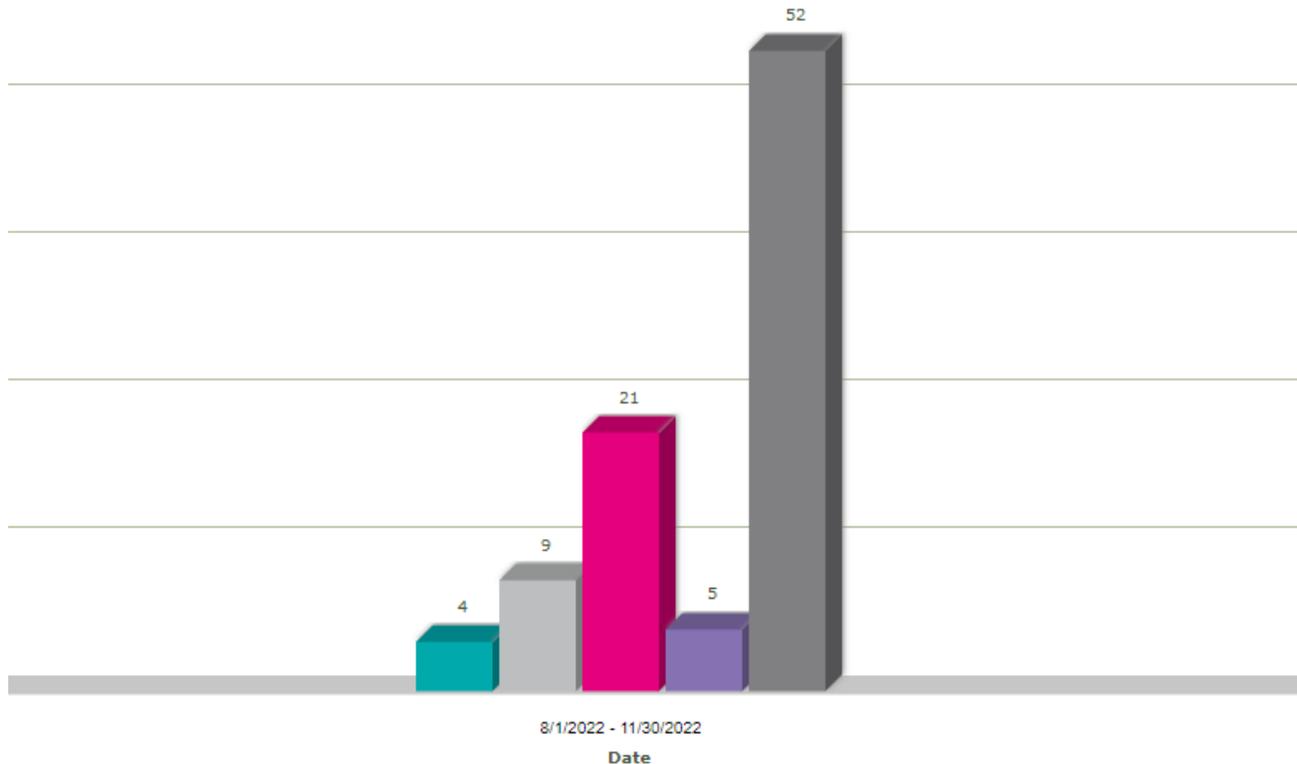
- ▶ Had to dig into our own data- not within NHSN
  - ▶ A new hospitalist started in August of 2022
  - ▶ Saw an increase in the use of vancomycin with this hospitalist
  - ▶ Ran a report comparing the different hospitalists use of vancomycin
  - ▶ Provided report cards to hospitalists



# Hospitalist prescribing of Antibiotics used to treat MRSA

Includes vancomycin, linezolid and daptomycin use by hospitalist Aug 2022- Nov 2022

Hospitalist Use of MRSA Antibiotics



- ▶ Continued to dig deeper into hospital specific data
- ▶ The dark gray bar was my antimicrobial stewardship physician at the time
- ▶ Looked into specifics of his prescribing
  - ▶ Majority was from one patient who had received daptomycin then linezolid for osteomyelitis and was here for 6 weeks.

# Other Stewardship Initiatives using data from the NHSN- Fluoroquinolone use



- ▶ Monitor the use of fluoroquinolones, and ensure they are used sparingly and appropriately.
- ▶ Use of FQ's from April 2022- March 2023 accounted for 2.65% of use
- ▶ Use of FQ's from March 2023- February 2024 accounted for 1.69% of use

## National Healthcare Safety Network

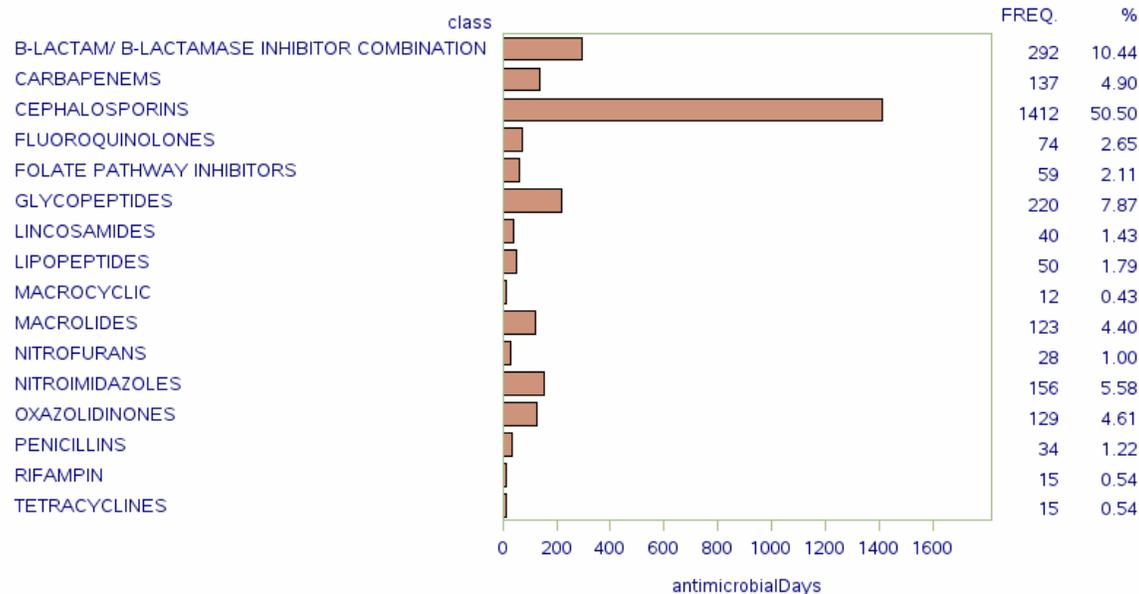
Bar Chart - All Data - Proportion of Antimicrobial Days per Antibacterial Class by Location

As of: November 8, 2023 at 6:55 PM

Date Range: Default SUMMARYAU

if (((category = ANTIBACTERIAL )))

location=FACWIDEIN



## National Healthcare Safety Network

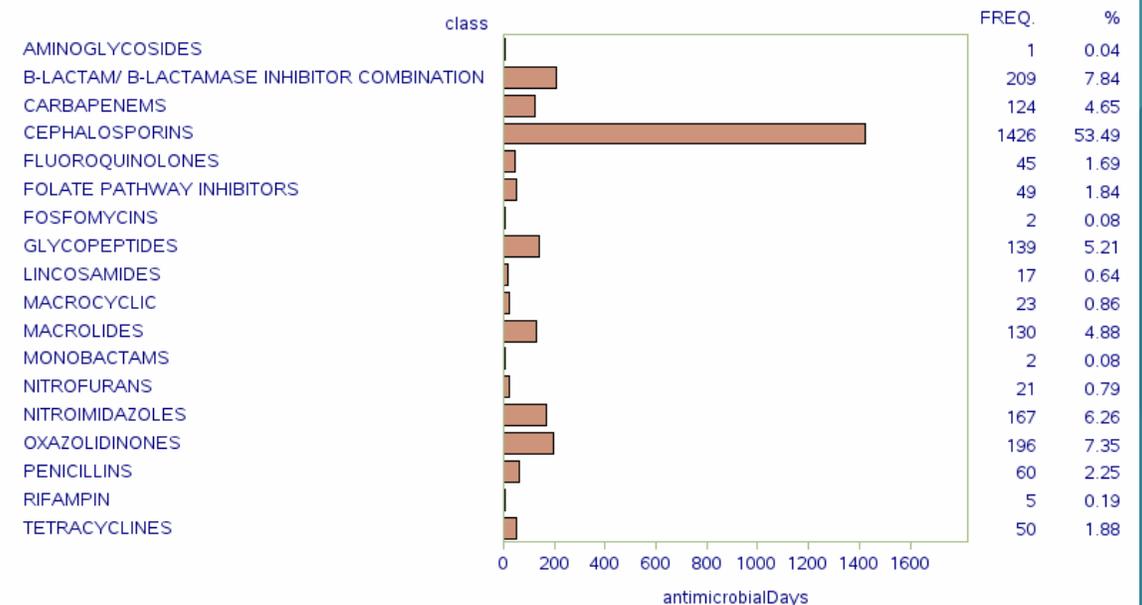
Bar Chart - All Data - Proportion of Antimicrobial Days per Antibacterial Class by Location

As of: April 11, 2024 at 10:37 PM

Date Range: Default SUMMARYAU

if (((category = ANTIBACTERIAL )))

location=FACWIDEIN



Any reported use of Colistin will be combined with and reported as Colistimethate. Any reported use of Amikacin Liposomal will be combined with and reported as Amikacin.

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Any reported use of Colistin will be combined with and reported as Colistimethate. Any reported use of Amikacin Liposomal will be combined with and reported as Amikacin.

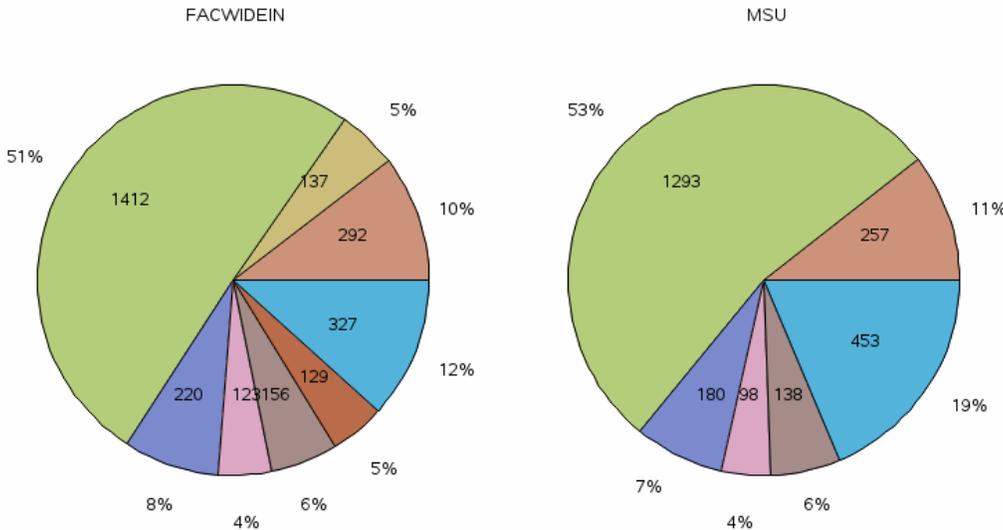
Data contained in this report were last generated on April 11, 2024 at 9:30 PM to include data beginning March 2023 through February 2024.

# Another way to look at the data, Pie Chart- Proportion of Antimicrobial Days per Antibacterial Class by Location

## National Healthcare Safety Network

Pie Chart - All Data - Proportion of Antimicrobial Days per Antibacterial Class by Location  
 As of: November 8, 2023 at 6:53 PM  
 Date Range: Default SUMMARYAU  
 Stratified by Location  
 if (((category = "ANTIBACTERIAL" ) ))

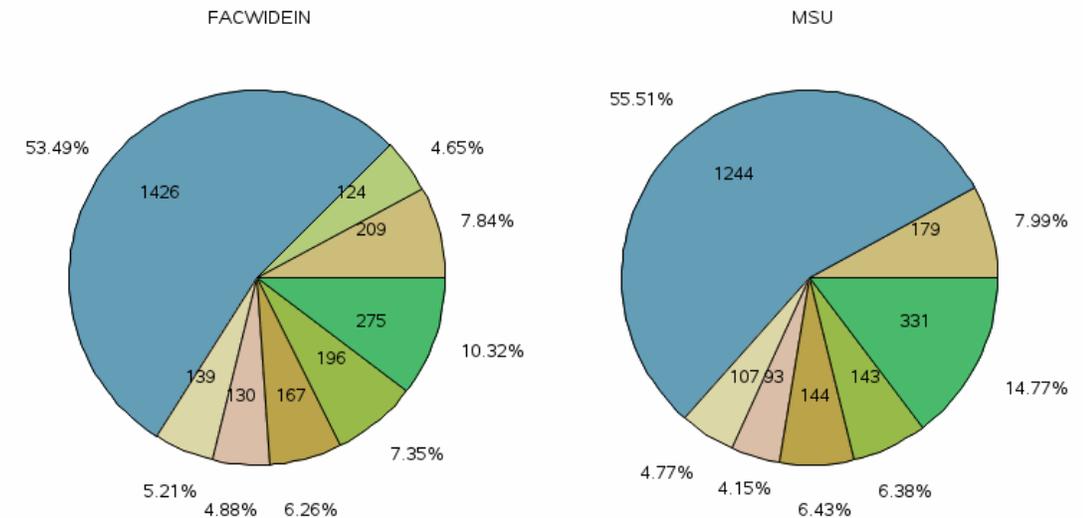
- B-LACTAM/ B-LACTAMASE INHIBITOR COMBINATION
- CARBAPENEMS
- CEPHALOSPORINS
- GLYCOPEPTIDES
- MACROLIDES
- NITROIMIDAZOLES
- OXAZOLIDINONES
- OTHER



## National Healthcare Safety Network

Pie Chart - All Data - Proportion of Antimicrobial Days per Antibacterial Class by Location  
 As of: April 11, 2024 at 11:06 PM  
 Date Range: Default SUMMARYAU  
 Stratified by Location  
 if (((category = "ANTIBACTERIAL" ) ))

- B-LACTAM/ B-LACTAMASE INHIBITOR COMBINATION
- CARBAPENEMS
- CEPHALOSPORINS
- GLYCOPEPTIDES
- MACROLIDES
- NITROIMIDAZOLES
- OXAZOLIDINONES
- FLUOROQUINOLONES
- LINCOSAMIDES
- NITROIMIDAZOLES
- OTHER



# Summary and Resources

- ▶ NHSN Antimicrobial use data can be used to guide and inform antibiotic decisions
  - ▶ There are numerous tools available within the NHSN network
- ▶ There are many resources available to help begin and/ or further a antimicrobial stewardship program
  - ▶ [Duke Antimicrobial Stewardship Outreach Network](https://dason.medicine.duke.edu/)  
(<https://dason.medicine.duke.edu/>)
  - ▶ [University of Washington Center for Stewardship in Medicine](https://www.uwcsim.org/)  
(<https://www.uwcsim.org/>)