NHSN Can Be Your Friend: Using SAAR Data to Enhance Your ASP

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Disclosure Statement

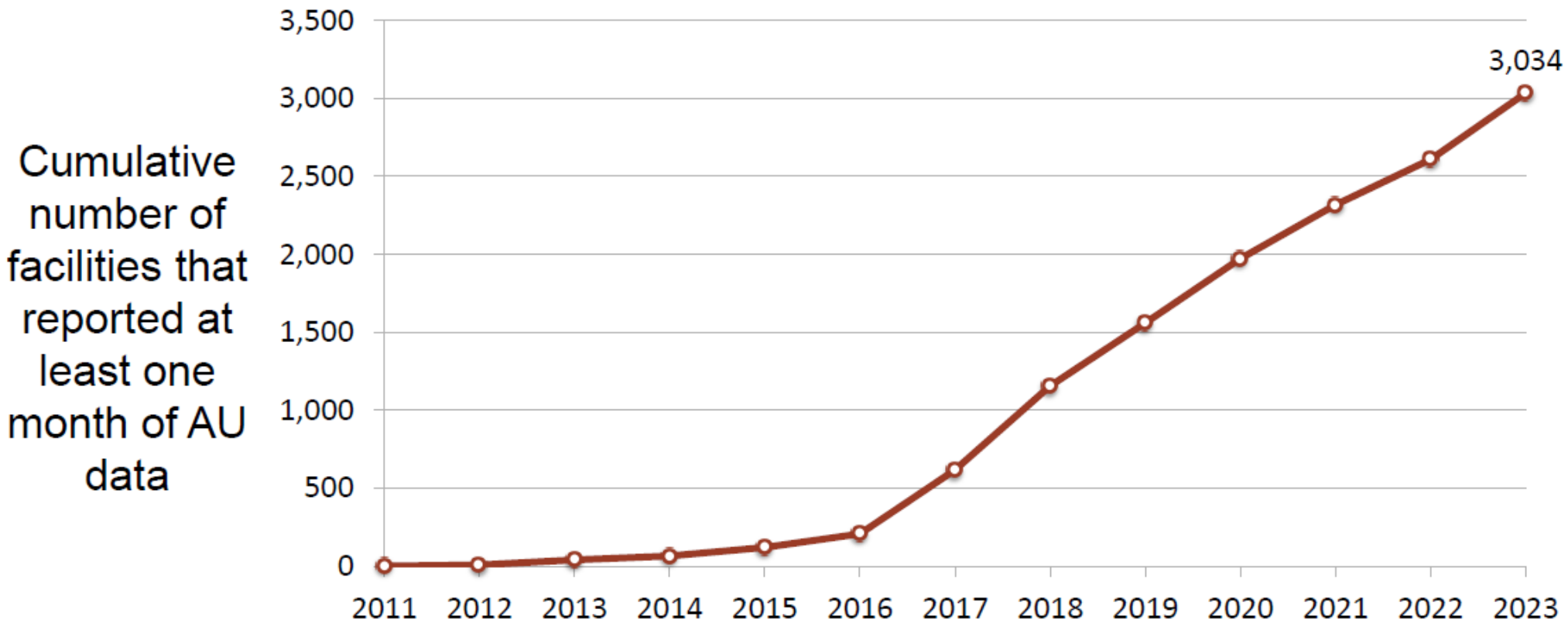
Disclosure of Affiliations and Significant Relationships:

- Speaker’s Bureau for Thermo Fisher Scientific

Objectives

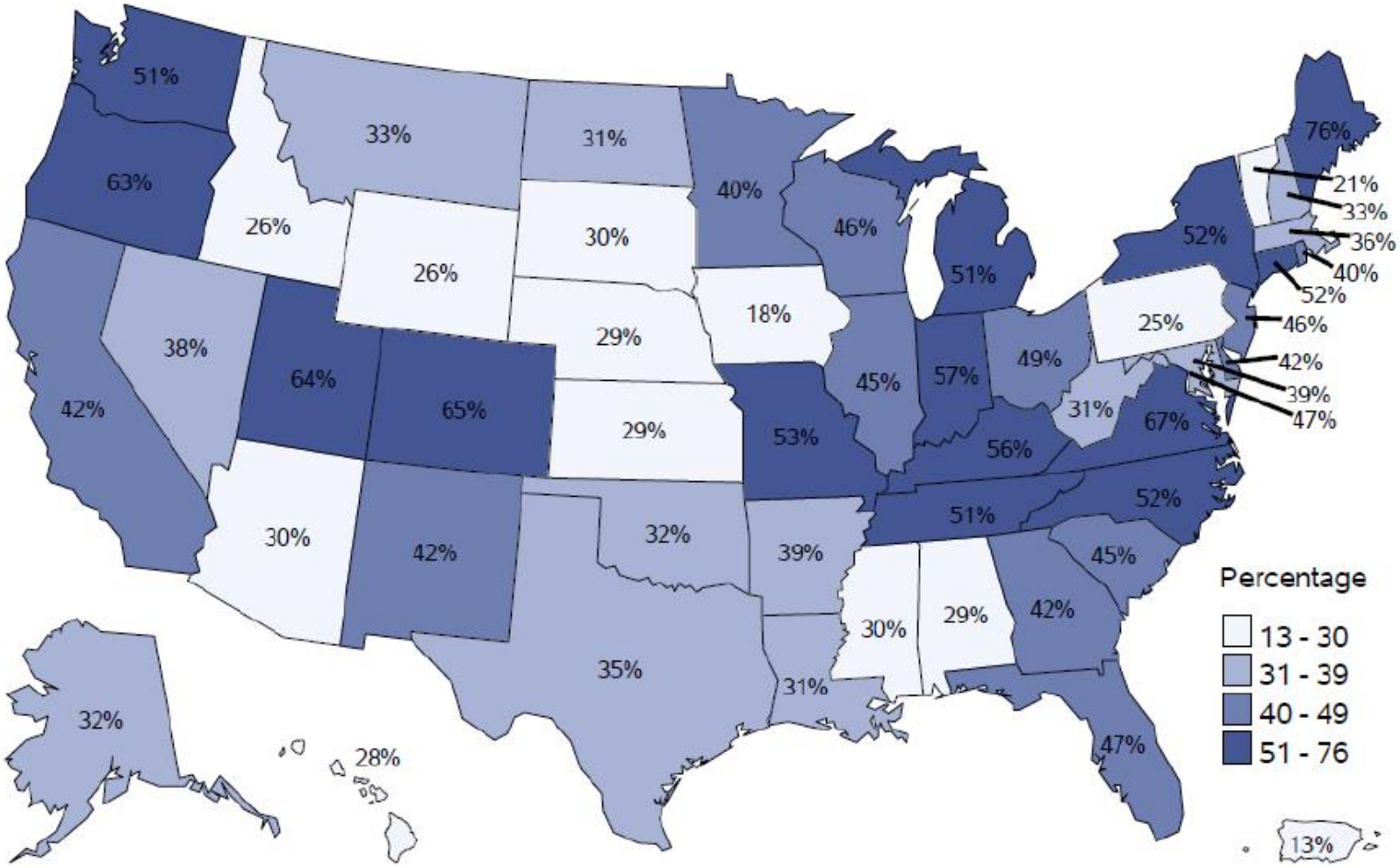
1. Be aware of the new ASP reporting requirements for participating in the CMS PI Program
2. Understand the importance of how SAAR data can be used to identify and fill gaps in your ASP
3. Identify examples of how SAAR data can yield improvements in your ASP

Cumulative Annual Submission to the AU Option



*As of Oct. 1, 2023

Cumulative Percentage of Facilities Reporting at Least One Month of Data to the AU Option



*As of Oct. 1, 2023

AUR Module Data Are Required in CY 2024

- Beginning in **CY 2024**, AUR Module data are required under the Public Health and Clinical Data Exchange Objective of the CMS PI Program
- Applies to eligible hospitals and critical access hospitals that participate in the CMS PI Program
- **Measure includes submission of both AU and AR Option data**
- For CY 2024 facilities attest to either:
  - Being in active engagement with NHSN to submit AUR data or,
  - Claim an applicable exclusion

An Example in Interpreting the AU-CAD Value

AU-CAD = Observed antimicrobial days - (Predicted antimicrobial days x **0.95**)

- If a facility has an AU-CAD of 75 when they run a TAS report with a SAAR target of 0.95, the interpretation would be "The facility would have needed 75 fewer antimicrobial days to reach their SAAR target of 0.95 during this time period."

How Do I Interpret the AU-CAD Value?

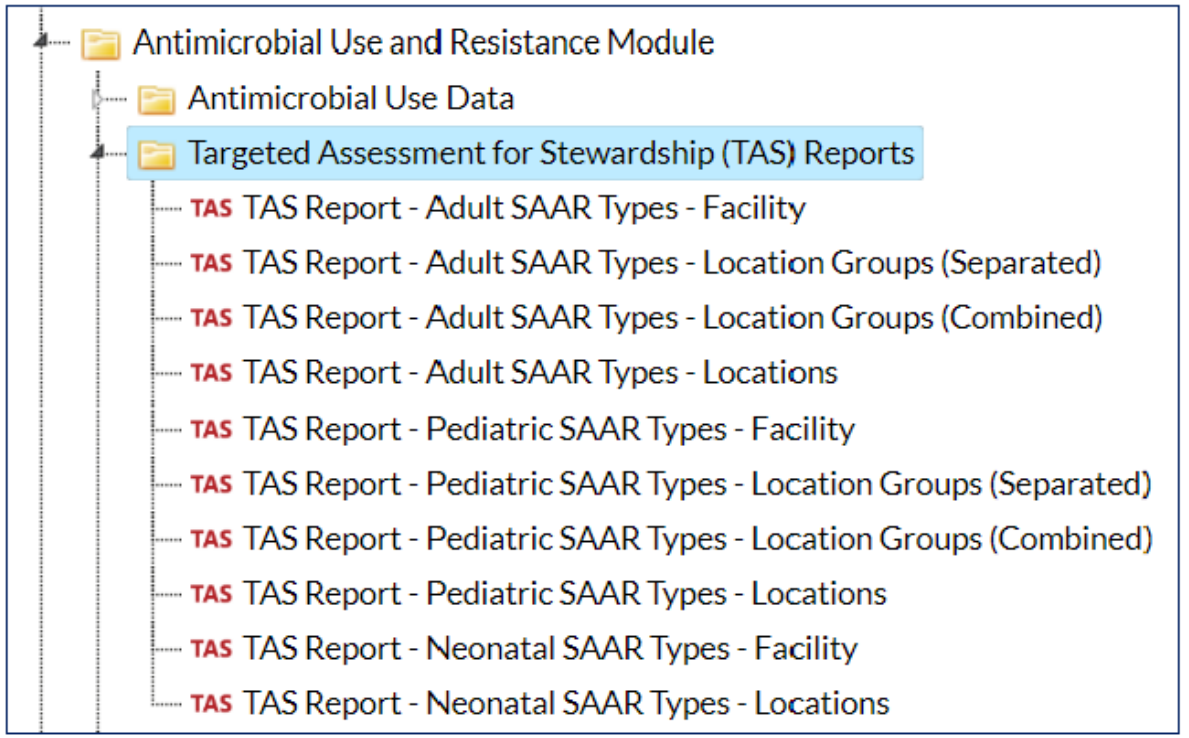
- Like the SAAR, the AU-CAD is not a measure of the appropriateness
  - Stewards will need to evaluate the appropriateness of AU for select antibiotics or infections to inform the clinical relevance of AU-CAD reductions or additions.

- A ***positive*** AU-CAD value represents the number of antimicrobial days that should be ***reduced*** to ***decrease*** the SAAR value and reach the SAAR target.

- A ***negative*** AU-CAD value represents the number of antimicrobial days to ***add*** to ***increase*** the SAAR value and reach the SAAR target.

Where Can I Find the TAS Reports in NHSN?

1. Analysis → Generate data sets
   a) Leave beginning and ending dates blank
2. Analysis → Reports
   a) AUR Module → TAS Reports



How to generate datasets:
https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/generatedatasets-psc-508.pdf

2022 WRMC SAAR Data

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
WASHINGTON REGIONAL	ALL	1	48032	VANC(19); CEFTRX(12); CEFEP(9);	48032	55735.259	89624	0.862	0.854, 0.870
	CDI	2	13541	CEFTRX(43); CEFEP(33); LEVO(14);	13541	17119.769	89624	0.791	0.778, 0.804
	BSHO	3	11168	CEFEP(40); PIPERWT(30); MERO(20);	11168	13222.222	89624	0.845	0.829, 0.860
	BSCA	4	10079	CEFTRX(58); LEVO(19); CEFUR(12);	10079	12803.561	89624	0.787	0.772, 0.803
	GRAMPOS	5	9424	VANC(91); DAPTO(7); LNZ(1);	9424	9216.370	89624	1.023	1.002, 1.043
	NSBL	6	7760	CEFAZ(57); AMPIWS(21); AMOXWC(9);	7760	7750.232	89624	1.001	0.979, 1.024
	ANTIFGL	7	1726	FLUCO(67); MICA(20); ANID(13);	1726	2122.411	89624	0.813	0.776, 0.852

TAS Dashboard

Population: Adult

All Antibacterials 0.85

BSHO 0.9

BSCA 0.9

GramPos 1

NSBL 1.1

CDI 0.8

Antifungal 1.0

Export PDF

Generate New

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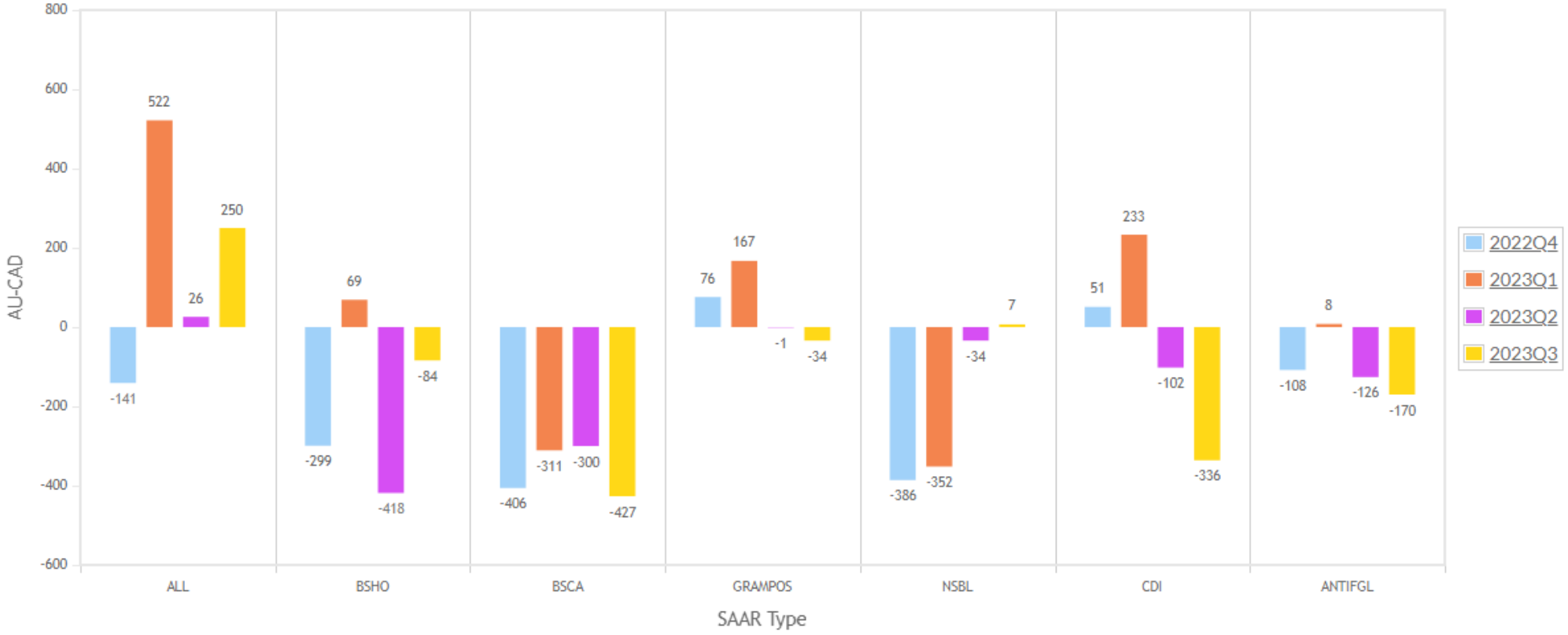
Refresh Reset Save

Facility AU TAS Report Dashboard by Quarter

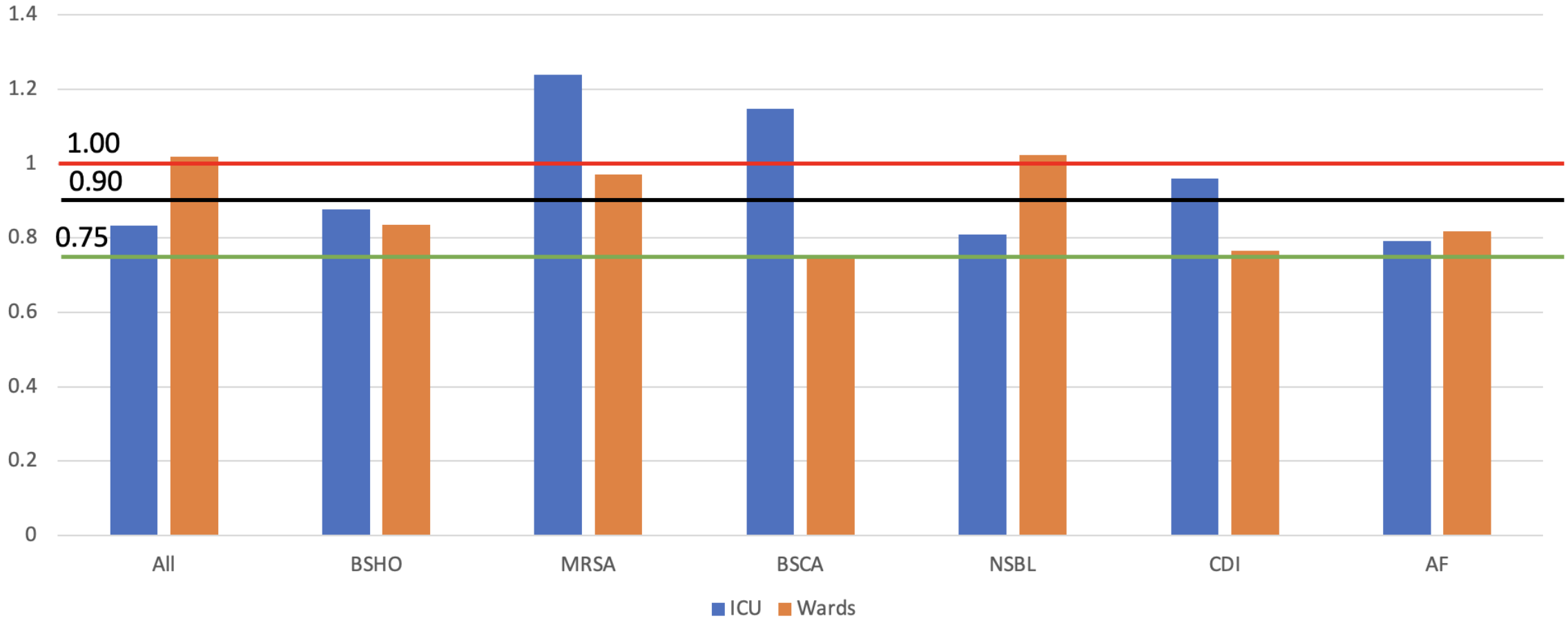


Facility AU-CAD				
SAAR Type	2022Q4	2023Q1	2023Q2	2023Q3
ALL	-141	522	26	250
BSHO	-299	69	-418	-84
BSCA	-406	-311	-300	-427
GRAMPOS	76	167	-1	-34

SAAR Categories

- **Broad Spectrum Hospital Organisms (BSHO)**
  - Cefepime (39%)
  - Pip/tazo (27%-31%)
  - Meropenem (18%-27%)
- **MRSA**
  - Vanco (90%-95%)
  - Dapto (2%-8%)
  - Ceftaroline/Zyvox (1%-2%)
- **Broad Spectrum Community Organisms (BSCA)**
  - Ceftriaxone (40%-61%)
  - Cefuroxime (37%)
  - Levaquin (20%)
  - Invanz (10%)
- **CDI**
  - Cefepime (30%-48%)
  - Ceftriaxone (29%-46%)
  - Levaquin (15%)
- **Narrow Spectrum Beta-lactams (NSBL)**
  - Unasyn (18%-47%)
  - Cefazolin (34%-60%)
  - Augmentin (10%)
  - Ampicillin (6%)
- **Antifungals**
  - Fluconazole (44%-73%)
  - Anidulafungin (8%-28%)
  - Micafungin (18%-28%)

WRMC SAARs 2022



Reduction in Annual ABX days to Achieve SAAR

Site	Actual Days	Predicted Days	2022 SAAR	Day Reduction SAAR=1.0	% Reduction SAAR=1.0	Day Reduction SAAR=0.9	% Reduction SAAR=0.9	Day Reduction SAAR=0.8	% Reduction SAAR=0.8	Day Reduction SAAR=0.7	% Reduction SAAR=0.7
BSHO ICU	2576	2936	0.877	-360	-12%	-66	-2%	237	8%	521	18%
BSHO Wards	8592	10,286	0.835	-1694	-16%	-665	-6%	384	4%	1392	14%
MRSA ICU	2183	1762	1.239	421	19%	597	34%	773	44%	950	54%
MRSA Wards	7241	7454	0.971	-213	-3%	532	7%	1278	17%	2023	27%
BSCA ICU	1552	1352	1.148	199	15%	335	25%	470	35%	605	45%
BSCA Wards	8527	11451	0.745	-2924	-26%	-1783	-16%	-634	-6%	511	5%
CDI ICU	2112	2203	0.959	-91	-4%	129	6%	350	16%	570	26%
CDI Wards	11429	14917	0.766	-3488	-23%	-1996	-13%	-505	-4%	987	8%
NSBL ICU	662	819	0.809	-157	-19%	-75	-9%	7	1%	89	11%
NSBL Wards	7098	6932	1.024	166	2%	859	12%	1552	22%	2246	32%
AF ICU	378	478	0.792	-100	-21%	-52	-11%	-4	-1%	43	9%
AF Wards	1348	1645	0.819	-297	-18%	-133	-8%	32	2%	196	12%

Realistic ABX changes to Hit SAAR Goals

	Annual ABX days reduction	Weekly ABX Days Reduction	Daily ABX Day Reduction
MRSA ICU SAAR=1.0	421	8.7	1.15
MRSA ICU SAAR=0.9	597	11.5	1.64
BSCA ICU SAAR=1.0	199	3.8	0.55
BSCA ICU SAAR=0.9	335	6.4	0.92
NSBL ICU SAAR=1.0	157 (increase)	3.2 (increase)	0.43 (increase)
NSBL ICU SAAR=1.1	239 (increase)	4.6 (increase)	0.65 (increase)

Order Set with a Vanco-saving Solution

Non-Severe Hospital Acquired *(all non-linked options, only thing linked in this non severe section should be vancomycin, Staph Screen)*

- ☐ piperacillin-tazobactam
  = 4.5 Gm, IV Piggyback, q8hr, Respiratory Infection, NOW, Duration = 7 day(s), Infuse over 4 hour(s), Kit
  Comments: INFUSE OVER 4 HOURS. First dose now unless previous dose given within the last 4 hours.

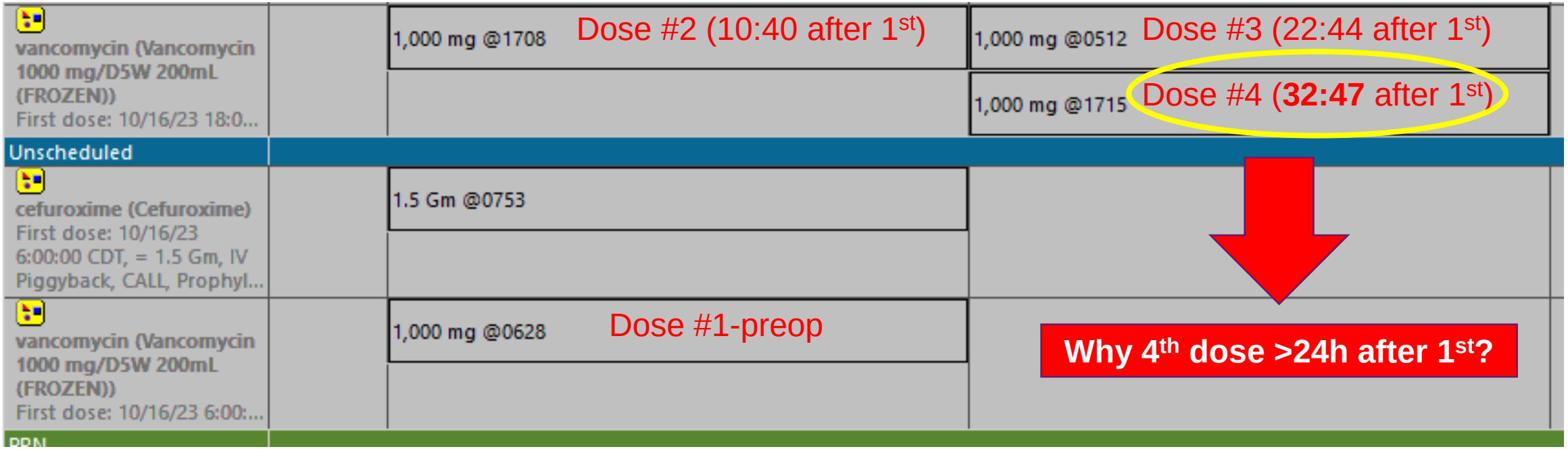
- ☐ Vancomycin Dosing Consult (Consult and Screen linked)
  Dose: 1 EA, Misc, Daily, Respiratory Infection, Duration = 7 day(s), NOW
- ☐ Staph Culture Screen
  Nasal, Nasal Passage

OR

- ☐ cefepime
  = 2 Gm, IV Piggyback, q8hr, Respiratory Infection, NOW, Duration = 7 day(s), Infuse over 30 minute(s), Inj recon (DEF)*
  Comments: First dose now, unless previous dose given within last 4 hours.
- ☐ Vancomycin Dosing Consult (Consult and Screen linked)
  Dose: 1 EA, Misc, Daily, Respiratory Infection, Duration = 7 day(s), NOW
- ☐ Staph Culture Screen
  Nasal, Nasal Passage

Opportunities to Avoid Extra Doses!

Surgery start time: 0805
Surgery completion 1147



Summary

Every day matters!

Every dose matters!

"If you ask me the right questions,
I know some good answers."