APIC GREAT LAKES

2025 EDUCATIONAL WEBINAR SERIES

NHSN Rebaseline

November 4, 2025

Housekeeping

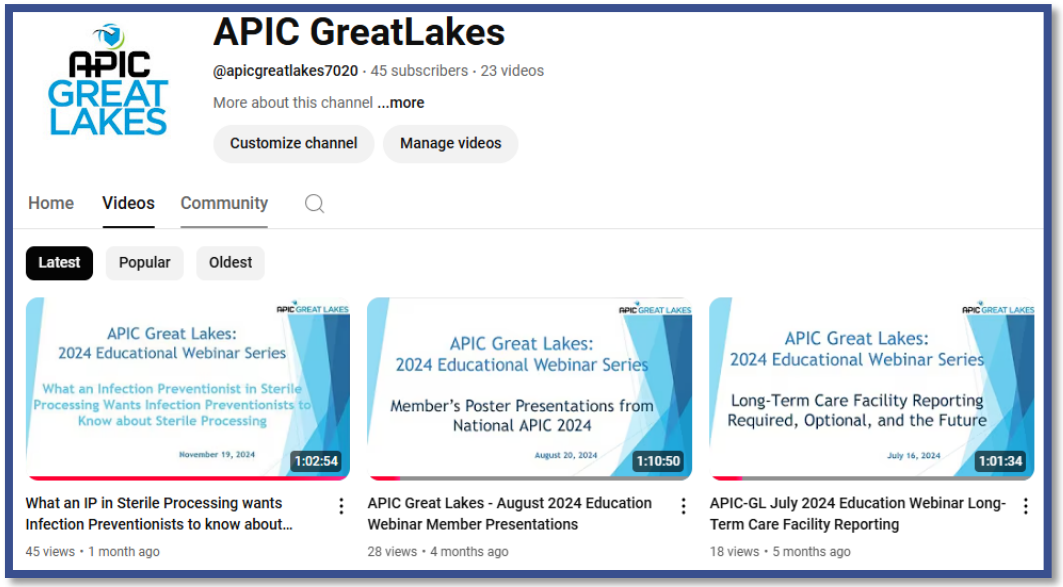
- Please mute your line
- Have questions for our speaker? Drop it in the chat to be asked!

Continuing Education (CE)

- There are no CEs available for today’s session

Missed a webinar? No worries!

- Check out the APIC- GL YouTube Channel, where you can find recordings of all prior meetings!



- Presentation slides & any supplemental materials can be found on the APIC-GL website

Job Postings

- If you have an open position you would like to post to the APIC-GL webpage, please email us at apicgreatlakes@gmail.com

- Link to job board

KYLE MUCHEZ, MPH

APIC Great Lakes: NHSN Rebaseline

November 4, 2025

MDHHS
Michigan Department of Health & Human Services

Agenda

Welcome & Housekeeping

National Healthcare Safety Network (NHSN) Rebaseline Overview

Standardized Infection Ratio (SIR) Refresher

Next Steps for Facilities

Michigan HAI Data

Resources

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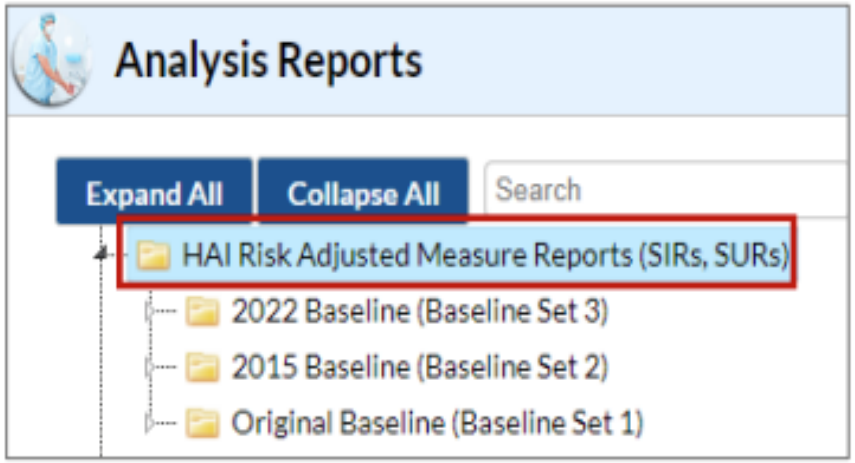
NHSN Rebaseline Overview

MDHHS
Michigan Department of Health & Human Services

NHSN Baseline History

- NHSN is updating the baseline for calculating the Standardized Infection Ratio (SIR) and Standardized Utilization Ratio (SUR) from 2015→2022.
- New analytic reports are being built in NHSN.
- Analytic reports using the 2015 baseline will remain available in NHSN.
- More information can be found here.

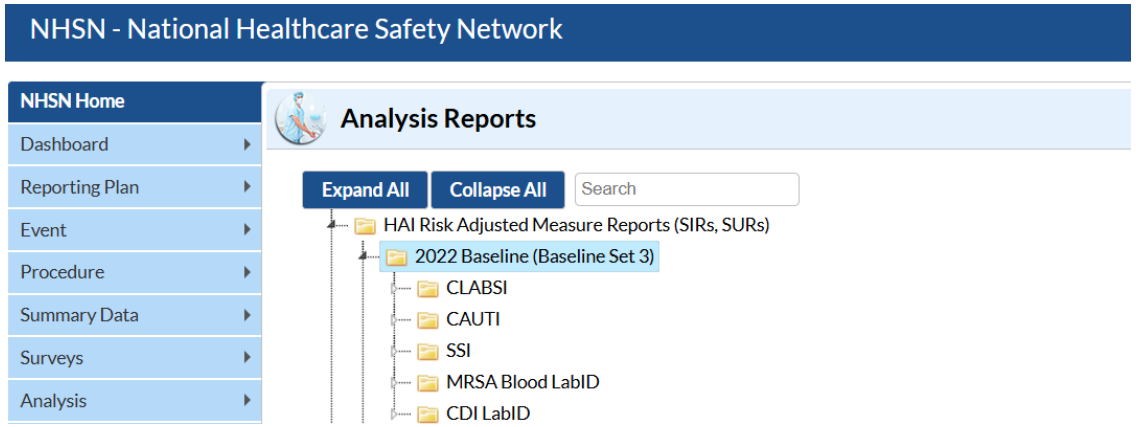


NHSN Baseline History

- 2015 baseline implemented in 2019 reporting year.
- 2022 baseline implemented in 2025, used for public reporting in 2026.
- Future cadence: ~every seven years.

2022 Baseline Data

- Now available for Acute Care Hospitals (ACHs): Catheter-Associated Urinary Tract Infection (CAUTI), Central Line-Associated Bloodstream Infection (CLABSI), Methicillin-Resistant *Staphylococcus aureus* (MRSA), *Clostridium difficile* Infection (CDI) LabID.
- Location: Healthcare-Associated Infection (HAI) Risk Adjusted Reports → 2022 Baseline (Set 3).



- Uses updated risk adjustment models.
- Centers for Medicare and Medicaid Services (CMS) provided a notice of technical updates for HAI chart-abstracted measures with the new 2022 baseline for both the HAC reduction program and hospital value-based purchasing program. These HAI measures using the 2022 update will begin to be publicly reported on the Compare tool in **Fall 2026**. CMS website.
- Refer to 'Which Baseline Should I Use?' fact sheet.

2022 Baseline Data

New NHSN reports have been added. Users can now generate SIRs meeting CMS reporting requirements for the following data:

- **Acute Care Hospitals (ACH) and Critical Access Hospital (CAH)** - CLABSI, CAUTI, MRSA, CDI and Surgical Site Infection (SSI) data using the updated 2022 national baseline.
- **Long Term Acute Care Hospitals (LTACH)** - CLABSI, CAUTI and CDI CMS reports.
- **Inpatient Rehabilitation Facilities (IRF)** - CAUTI and CDI CMS reports.
- **PPS-Exempt Cancer Hospitals (PCH)** - SSI using the complex 30-day data model and MRSA reports.
- Follow the NHSN Rebaseline Tracker to stay up to date.

2022 Baseline Data

New NHSN reports have been added. Users can now generate SIRs meeting CMS reporting requirements for the following data:

HAI Type	Acute Care Hospitals (ACHs)	Critical Access Hospitals (CAHs)**	Long-Term Acute Care Hospitals (LTACHs)	Inpatient Rehabilitation Facilities (IRFs)	PPS Exempt Cancer Hospitals (PCH)
SSI (COLO and HYST; Complex 30-day)	X	X	*	*	X
MRSA Blood LabID Event	X	X	*	*	X
CLABSI	X	X	X	*	Coming soon***
CAUTI	X	X	X	X	Coming soon***
CDI LabID Event	X	X	X	X	Coming soon***

*Grayed out boxes indicate no CMS report will be created.

**CAH reports are not mandated by CMS but available for facilities to track data.

***The PCH reports for CLABSI, CAUTI, CDI LabID Event are coming soon and will be available in the NHSN application upon release.

Why Rebaseline?

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Rebaselining

Why is it important to Rebaseline?

- As a nation, we are getting better at surveillance and prevention of HAIs, and creating a new baseline, also called rebaseline, is a way to incorporate changes in detection practices and establish an updated national standard to continue prevention and reduction of Healthcare Associated Infections (HAIs).

What is Rebaselining?

- The process of updating the national incidence data that are best captured in an array of models. These models allow efficient estimation of predicted events that are required as the denominator and used to calculate NHSN's Standardized Infection Ratio (SIR) and Standardized Utilization Ratio (SUR) metrics. This next rebaseline will enable facility HAI and device utilization incidence data to be compared to 2022 NHSN data as the newest baseline year.

What Changed?

- Broader national data: more hospitals (including smaller and critical access) reporting to NHSN.
- Enhanced risk adjustment: bed size, ICU type, teaching status and location-specific factors now included.
- Improved electronic surveillance means more complete reporting.
- Definition changes: e.g., CAUTI and C. diff LabID criteria updated.

https://www.cdc.gov/nhsn/pdfs/rebaseline/22-Rebaseline-FAQs-Final-Version.pdf

SIR Refresher

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Standardized Infection Ratio (SIR)

Just a quick refresher.

$$SIR = \frac{Observed\ (O)\ HAIs}{Predicted\ (P)\ HAIs}$$

- If SIR = 1.0 → Observed infections match national expectations.
- If SIR > 1.0 → More infections than predicted.
- If SIR < 1.0 → Fewer infections than predicted.
- Predicted infections depend on national data from the baseline year.

Why SIRs are Changing

- Observed infections may stay the same.
- Predicted infections drop due to national prevention success and lower device use.
- This leads to a what appears to be a higher SIR, when compared to 2015 benchmarks, even if performance didn't decline.
- Example:
  - **Observed = 6, Predicted (2015) = 10 → SIR = 0.60.**
  - **Observed = 6, Predicted (2022) = 4.5 → SIR = 1.33.**
- Hospitals with strong data submission may see larger shifts in SIRs due to stronger benchmarks.
- Small rural/critical access hospitals may be affected by new model stratifications.

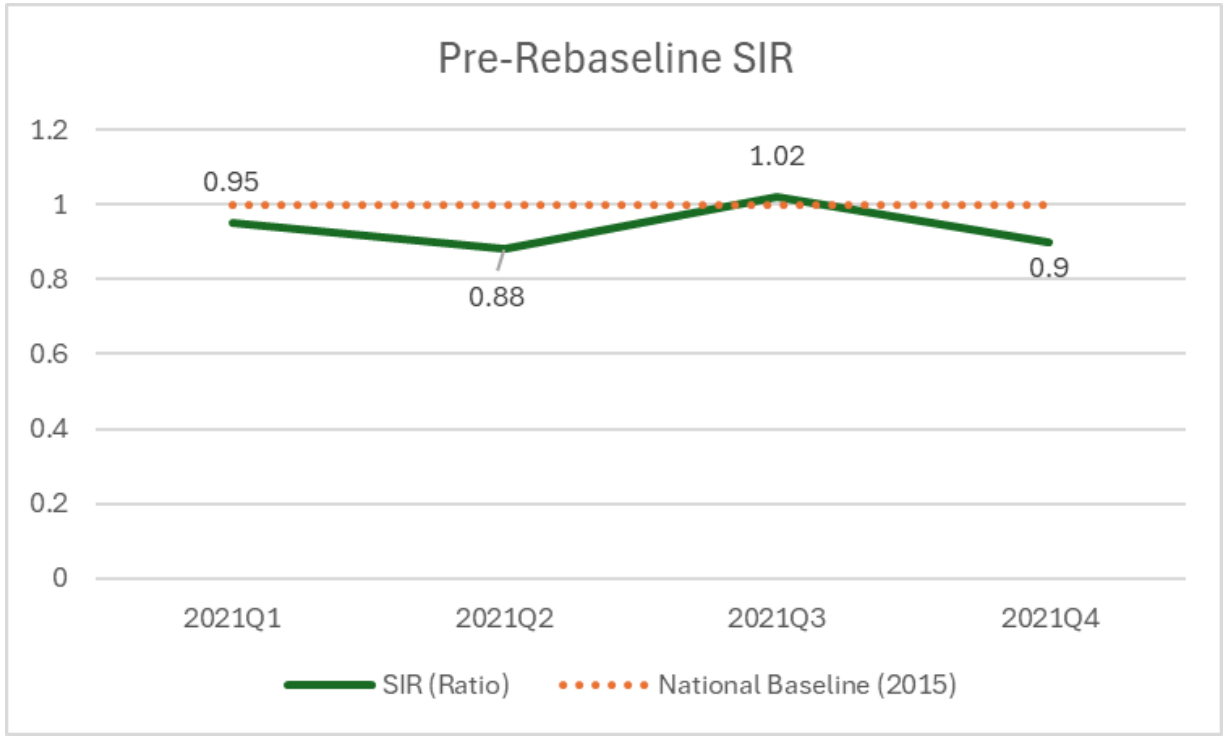
How This Affects Hospitals

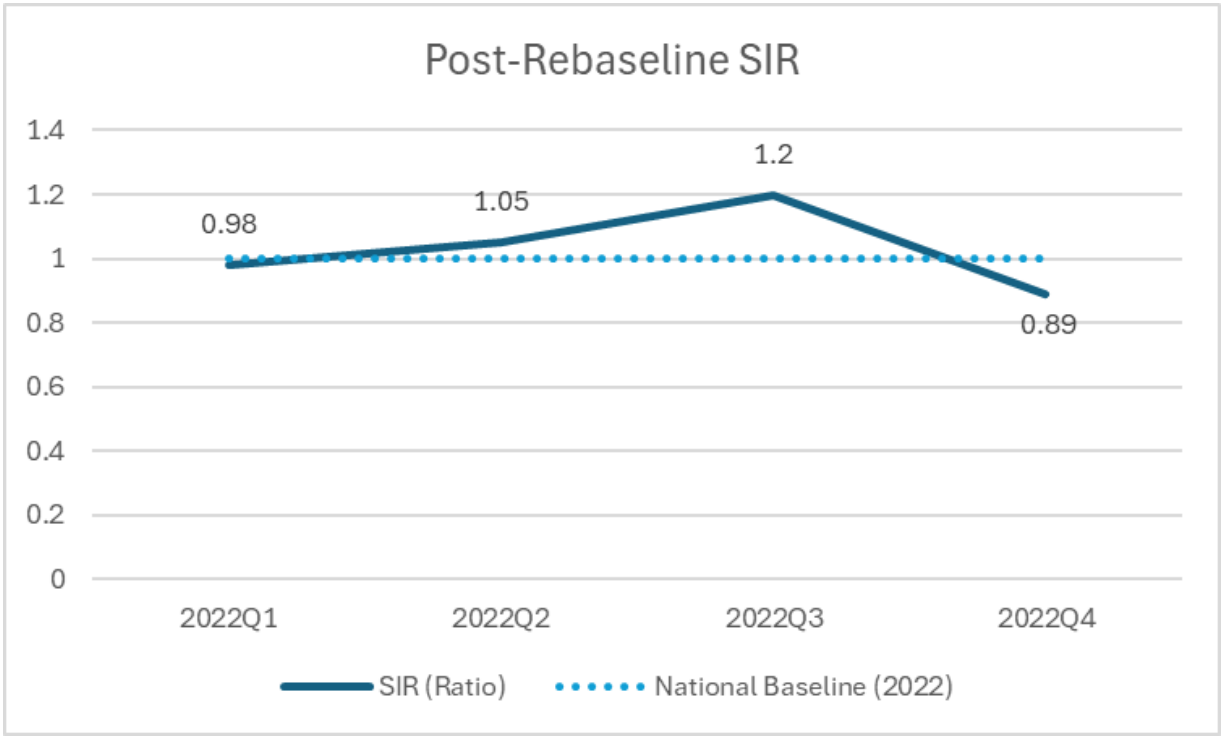
- Hospitals likely to see changes to SIR, infection counts will remain stable.
- Smaller and community hospitals may see larger shifts due to model changes.
- Consider focusing on SIR **trends** when reviewing data from both baselines, not single-year SIR comparisons.
- SIR may shift downward: facilities appear closer to national average.
- Targets may be harder to exceed.

Analyzing SIRs from Different Baselines

- Your facility may want to look at SIRs under both baselines side-by-side.
  - Do not plot them together, as SIRs from different baselines **are not comparable.**
- The SIRs from the 2022 baseline must be interpreted under different context.
  - Clearly label SIRs with the baseline year.
  - No statistical testing between SIRs from different baselines should be conducted.

Scenario: SIR Reset





Next Steps for Your Facility

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Tips for communicating changes to hospital leadership

- A new National baseline using data from 2022 has been added for NHSN SIR calculations to provide a more recent comparison benchmark.
  - *"The SIR is a risk-adjusted summary measure that compares our hospital to the 2022 national experience. This measure allows us to monitor progress over time."*
- SIRs created using the 2022 baseline may be higher than those created using the 2015 baseline because the SIRs have been recalibrated.
  - All facilities were subject to the same recalibration.
  - SIRs from the 2022 baseline should not be compared to those from the 2015 baseline.
  - SIRs under either baseline should be analyzed and assessed independently of the other baseline.
  - *"Our infection counts are stable. The change you see in our SIR reflects a recalibration by the CDC nationwide, not a decline in performance."*

Next Steps for Your Facility

REVIEW YOUR DATA USING THE 2022 BASELINE.

REVIEW INFECTION COUNTS AND DEVICE UTILIZATION RATES REGULARLY.

ENSURE SURVEILLANCE DEFINITIONS AND MAPPING ARE UP TO DATE.

USE NHSN TOOLS FOR SIR TRENDS, DUR/SUR, AND PEER COMPARISON.

CONNECT WITH HAI EPIDEMIOLOGY UNIT FOR REGIONAL INSIGHTS AND RECALIBRATED GOALS.

CMS Program Implications

- Hospital-Acquired Condition (HAC) Reduction Program.
  - Updated SIRs (CLABSI, CAUTI, CDI, SSI).
  - Applied starting FY 2026, with public display in Fall 2026.
- Hospital Value-Based Purchasing (VBP) Program.
  - New SIR baselines in Infection Prevention Domain.
  - May shift scores & reimbursement.
- Hospital Compare/Care Compare.
  - Public-facing infection metrics use 2022 baseline.
  - Expect higher SIRs nationally.

CMS Programs & NHSN 2022 Baseline Timeline

Program	Baseline Status	Effective Date	Notes
HAC Reduction Program (HACRP)	✅ Final	FY 2026 (data from 2023-2024)	NHSN HAI measures (CLABSI, CAUTI, CDI, SSI) updated to 2022 baseline.
Hospital Value-Based Purchasing (VBP)	⏳ Pending	FY 2029	CMS finalized shift to 2022 baseline starting with FY 2029 program year.
Hospital Compare / Care Compare	⚠️ Likely Fall 2026	Fall 2026	Public display of hospital HAI data under 2022 baseline, aligned with HACRP.
SNF Value-Based Purchasing (SNF VBP)	🔹 Different HAI Measure	Baseline FY 2022; Performance FY 2024	Uses claims-based SNF HAI measure, not NHSN chart-abstracted.

NHSN Michigan HAI Data

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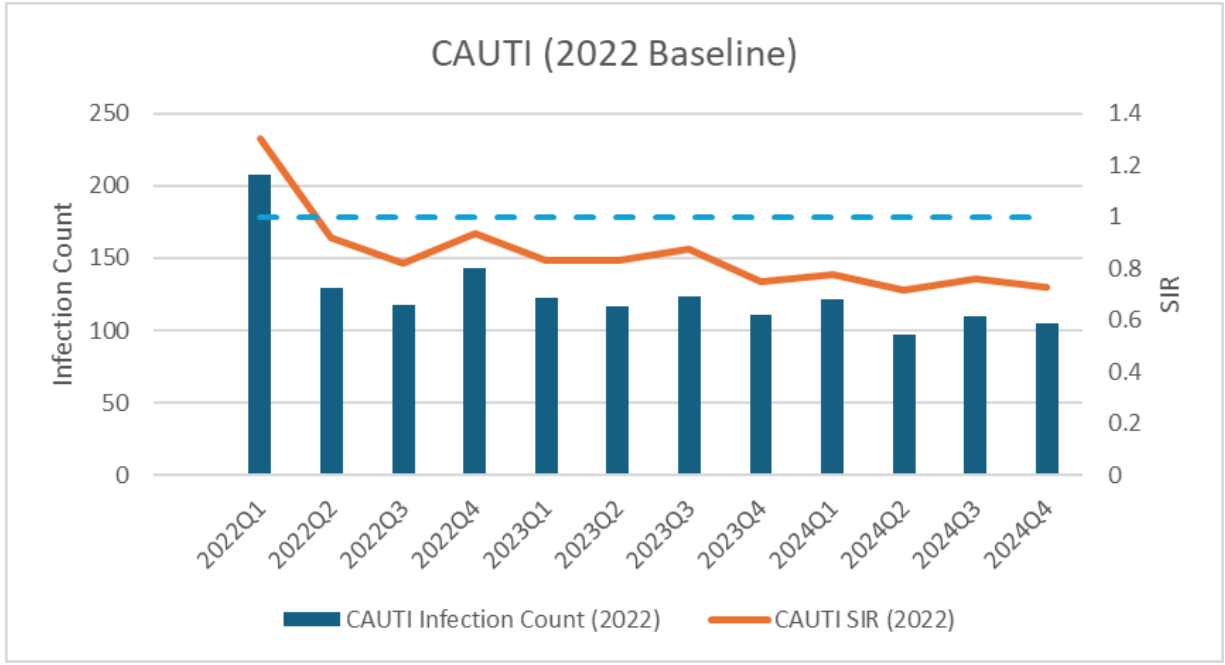
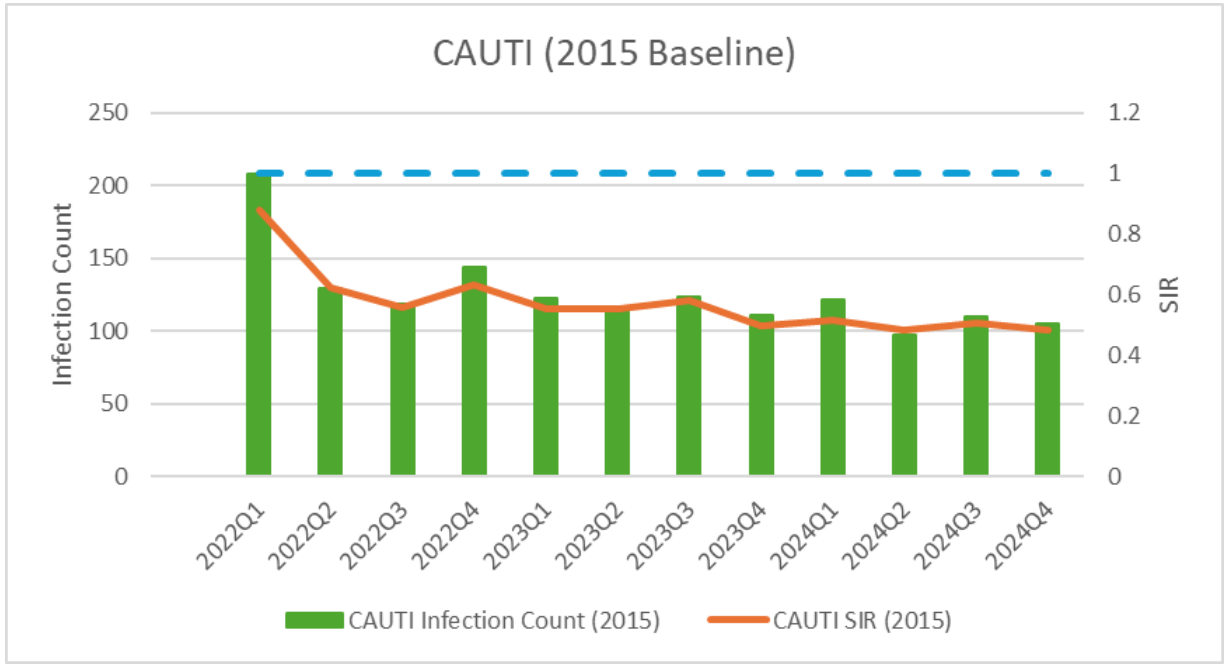
NHSN Surveillance Data: Device-Associated Events

Year-Quarter	CAUTI Infection Count (2022)	CAUTI SIR (2022)	CAUTI Infection Count (2015)	CAUTI SIR (2015)
2022Q1	208	1.303	208	0.882
2022Q2	129	0.921	129	0.623
2022Q3	118	0.823	119	0.559
2022Q4	143	0.933	144	0.635
2023Q1	123	0.834	123	0.556
2023Q2	117	0.832	117	0.555
2023Q3	124	0.875	124	0.581
2023Q4	111	0.747	111	0.497
2024Q1	122	0.777	122	0.518
2024Q2	97	0.718	97	0.483
2024Q3	110	0.760	110	0.506
2024Q4	105	0.726	105	0.484

Data for Acute Care Hospitals only. Data are subject to change. Data current as of August 18, 2025.





NHSN Surveillance Data: Device-Associated Events

Year-Quarter	CLABSI Infection Count (2022)	CLABSI SIR (2022)	CLABSI Infection Count (2015)	CLABSI SIR (2015)
2022Q1	194	1.158	195	1.041
2022Q2	142	0.906	142	0.804
2022Q3	172	1.084	172	0.959
2022Q4	159	0.977	159	0.866
2023Q1	141	0.889	141	0.772
2023Q2	164	1.073	164	0.933
2023Q3	147	0.949	147	0.820
2023Q4	132	0.832	132	0.721
2024Q1	154	0.957	154	0.83
2024Q2	132	0.884	132	0.768
2024Q3	146	0.960	146	0.827
2024Q4	123	0.808	123	0.700

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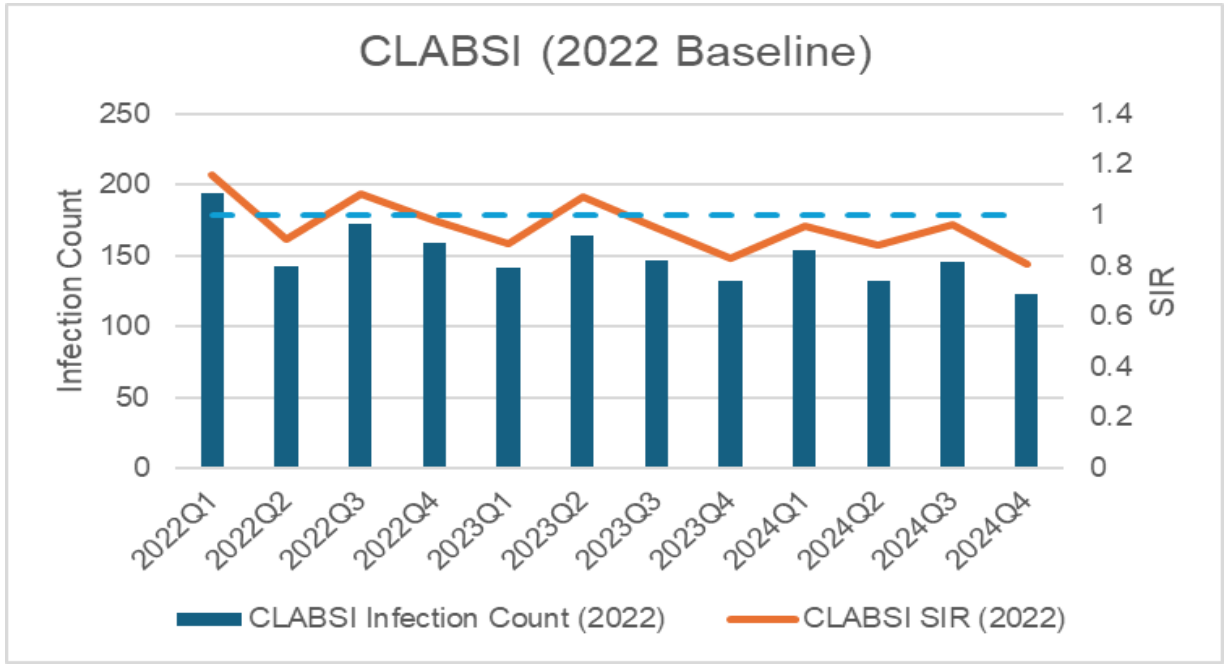
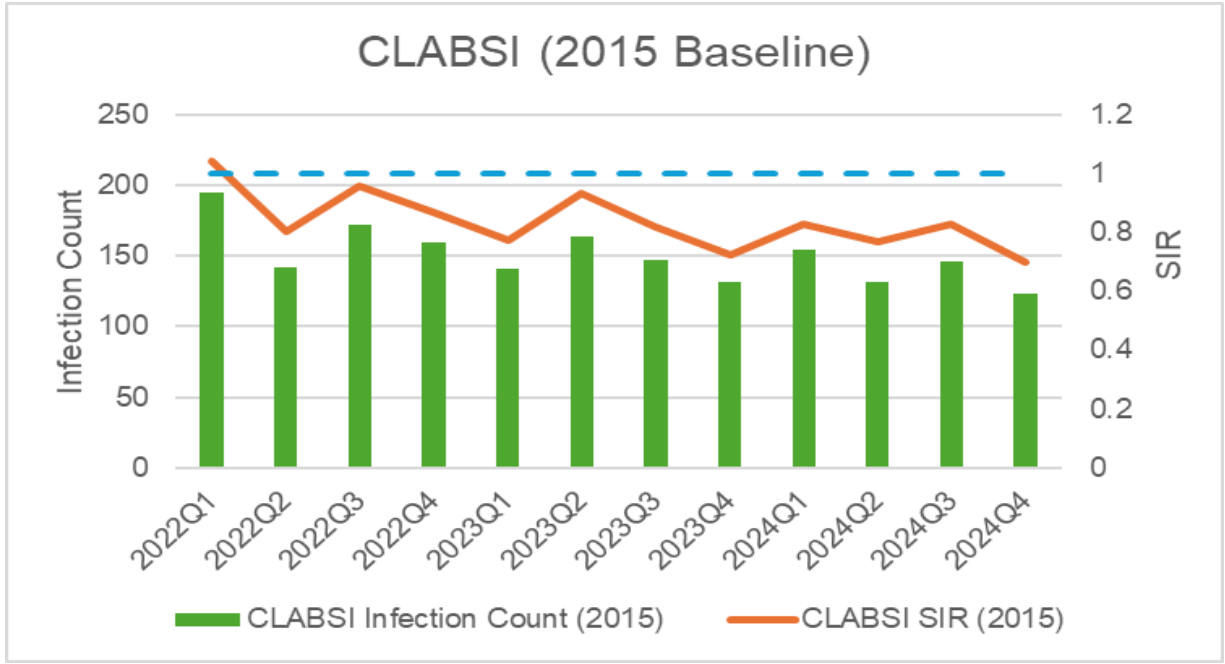
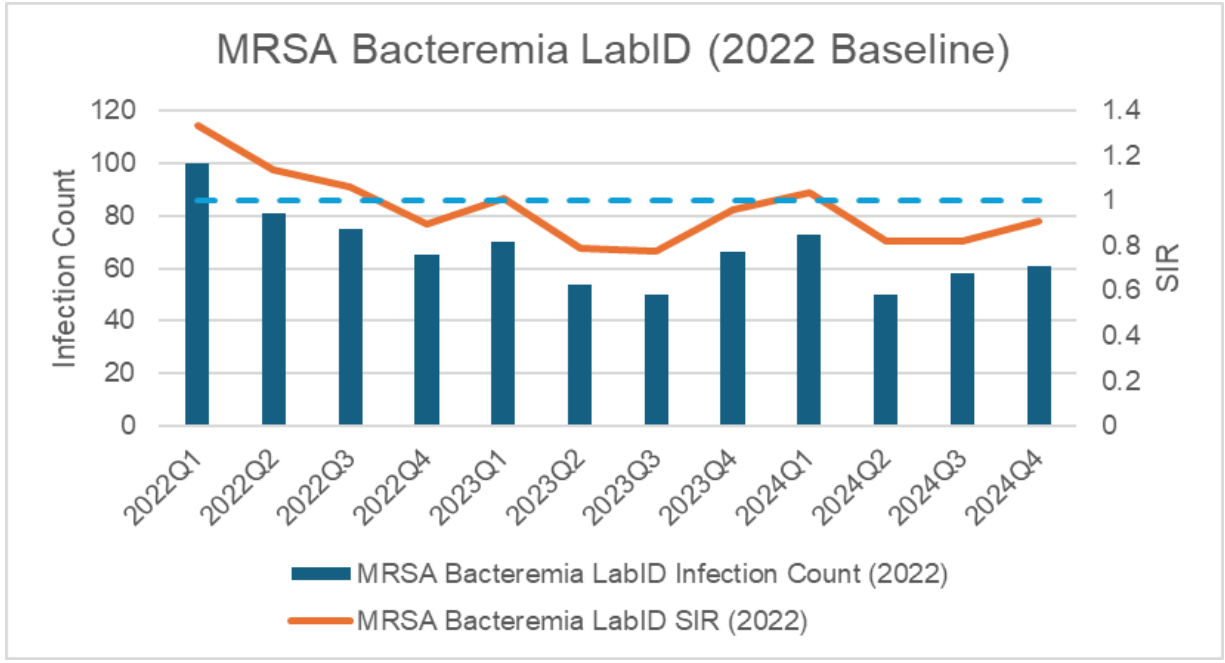


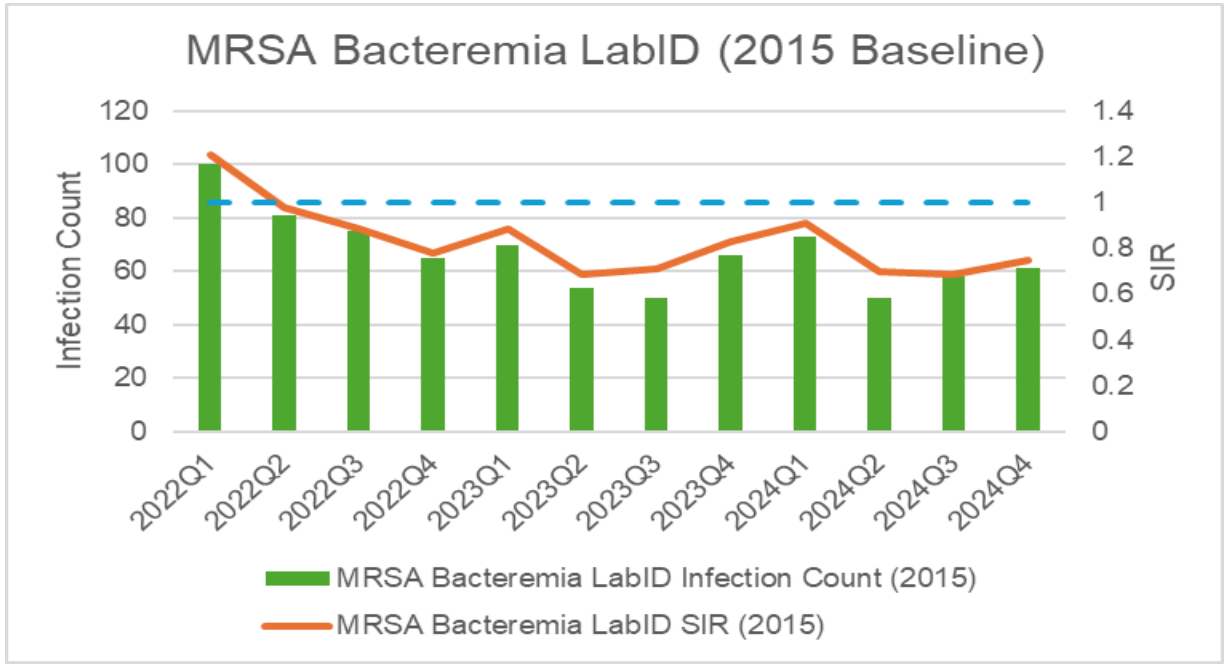


NHSN Surveillance Data: MRSA Bacteremia LabID Events

Year-Quarter	MRSA Bacteremia LabID Infection Count (2022)	MRSA Bacteremia LabID SIR (2022)	MRSA Bacteremia LabID Infection Count (2015)	MRSA Bacteremia LabID SIR (2015)
2022Q1	100	1.332	100	1.211
2022Q2	81	1.135	81	0.980
2022Q3	75	1.061	75	0.889
2022Q4	65	0.899	65	0.778
2023Q1	70	1.013	70	0.883
2023Q2	54	0.790	54	0.684
2023Q3	50	0.776	50	0.711
2023Q4	66	0.962	66	0.827
2024Q1	73	1.038	73	0.908
2024Q2	50	0.820	50	0.699
2024Q3	58	0.819	58	0.684
2024Q4	61	0.910	61	0.747

Data for Acute Care Hospitals only. Data are subject to change. Data current as of August 18, 2025.





NHSN Surveillance Data: CDI LabID Events

Year-Quarter	CDI LabID Infection Count (2022)	CDI LabID SIR (2022)	CDI LabID Infection Count (2015)	CDI LabID SIR (2015)
2022Q1	362	1.124	361	0.546
2022Q2	327	1.075	327	0.513
2022Q3	302	0.978	302	0.464
2022Q4	315	1.014	315	0.480
2023Q1	297	1.040	297	0.475
2023Q2	274	1.014	274	0.455
2023Q3	253	0.919	253	0.426
2023Q4	267	0.919	267	0.431
2024Q1	264	0.913	264	0.428
2024Q2	224	0.878	224	0.411
2024Q3	217	0.759	217	0.354
2024Q4	206	0.754	206	0.339

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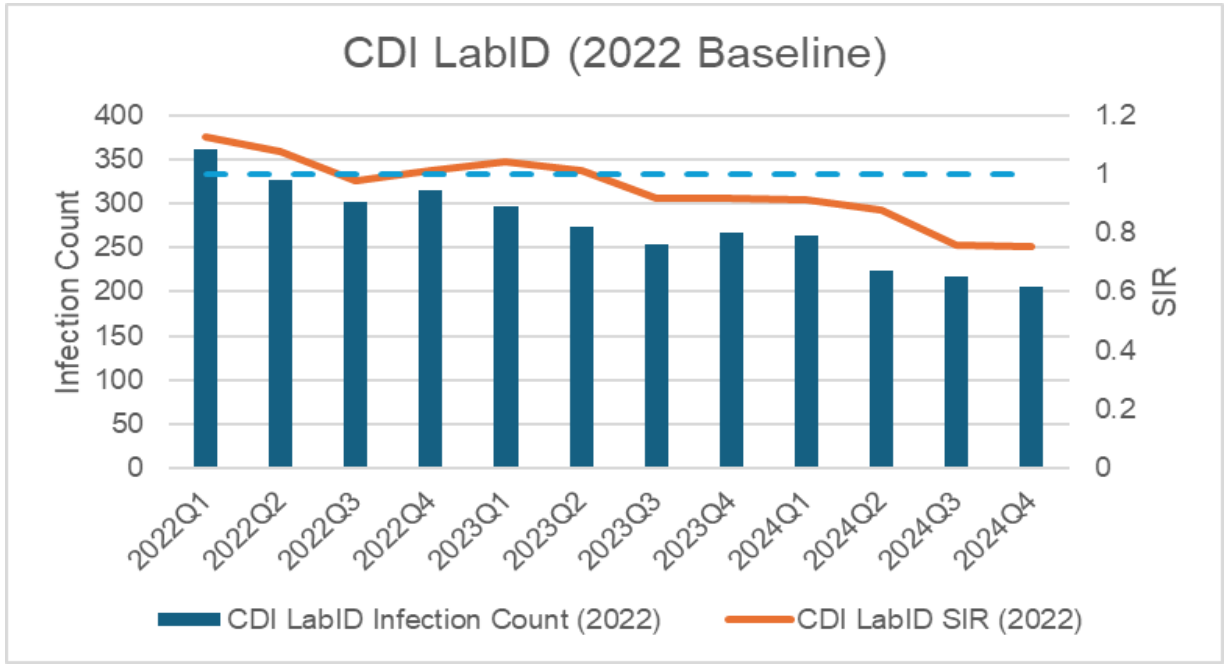

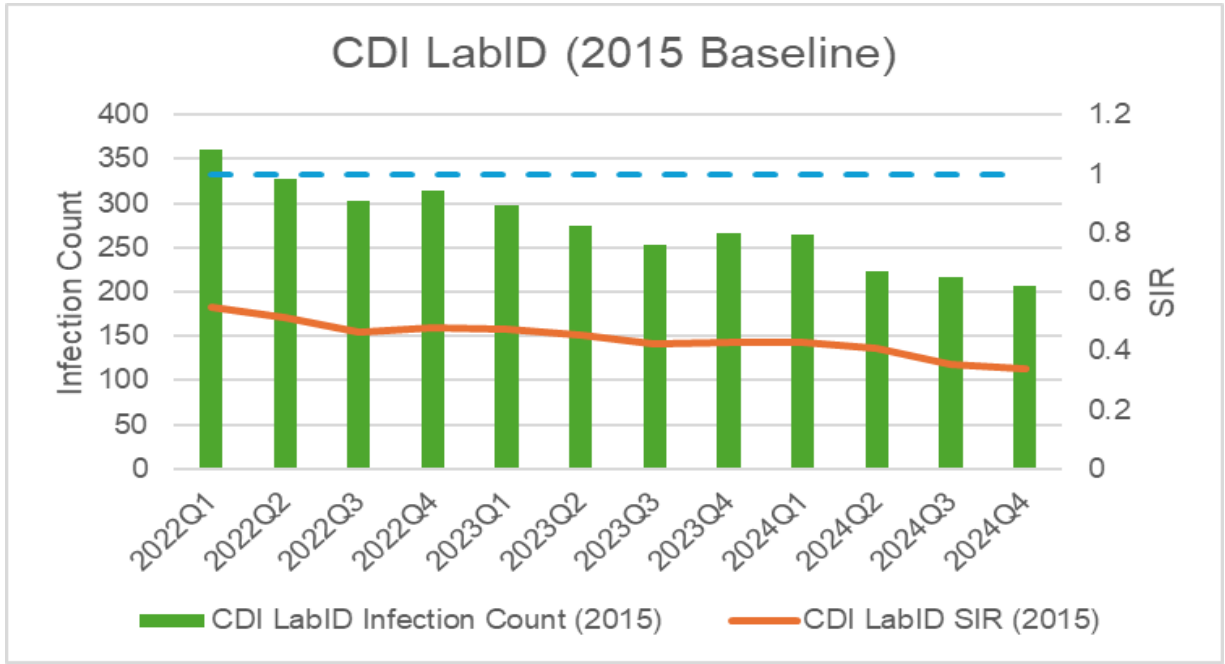

NHSN Surveillance Data: Procedure-Associated Events

Year-Quarter	COLO Infection Count (2022)	COLO SIR (2022)	COLO Infection Count (2015)	COLO SIR (2015)
2022Q1	77	1.086	68	1.080
2022Q2	91	1.367	86	1.351
2022Q3	80	1.138	73	1.131
2022Q4	58	0.860	55	0.854
2023Q1	90	1.287	84	1.295
2023Q2	82	1.179	76	1.173
2023Q3	96	1.459	93	1.462
2023Q4	90	1.242	83	1.253
2024Q1	78	1.281	91	1.402
2024Q2	75	1.126	73	1.152
2024Q3	64	0.968	62	0.946
2024Q4	68	1.035	62	0.885

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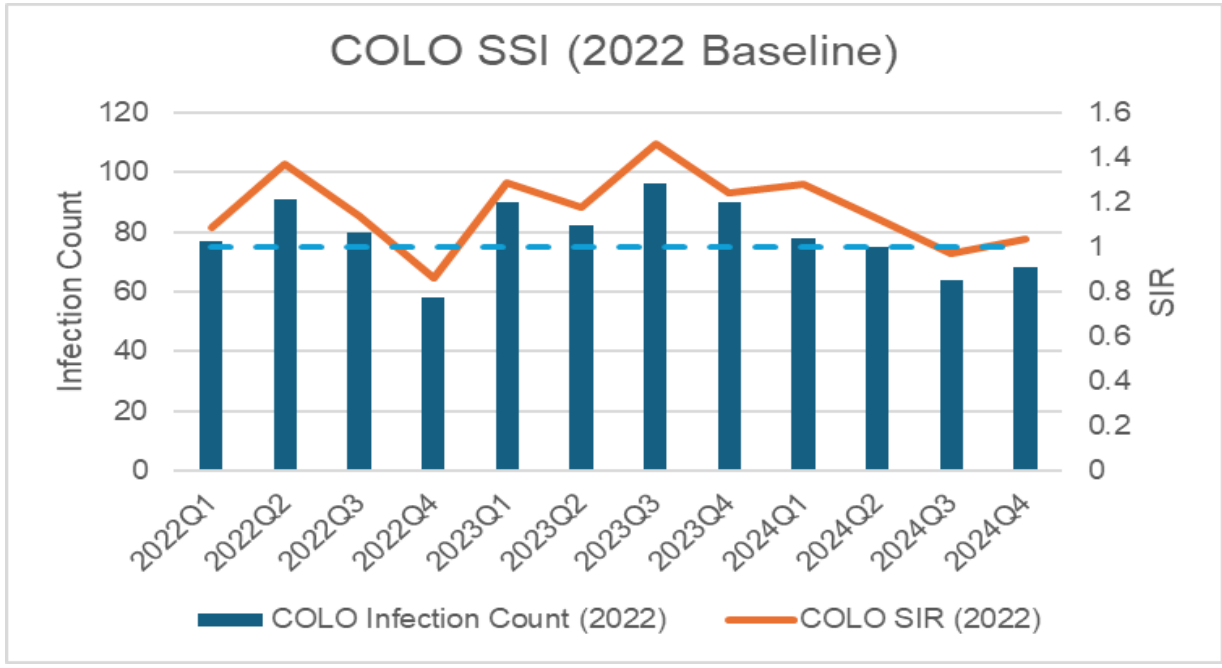

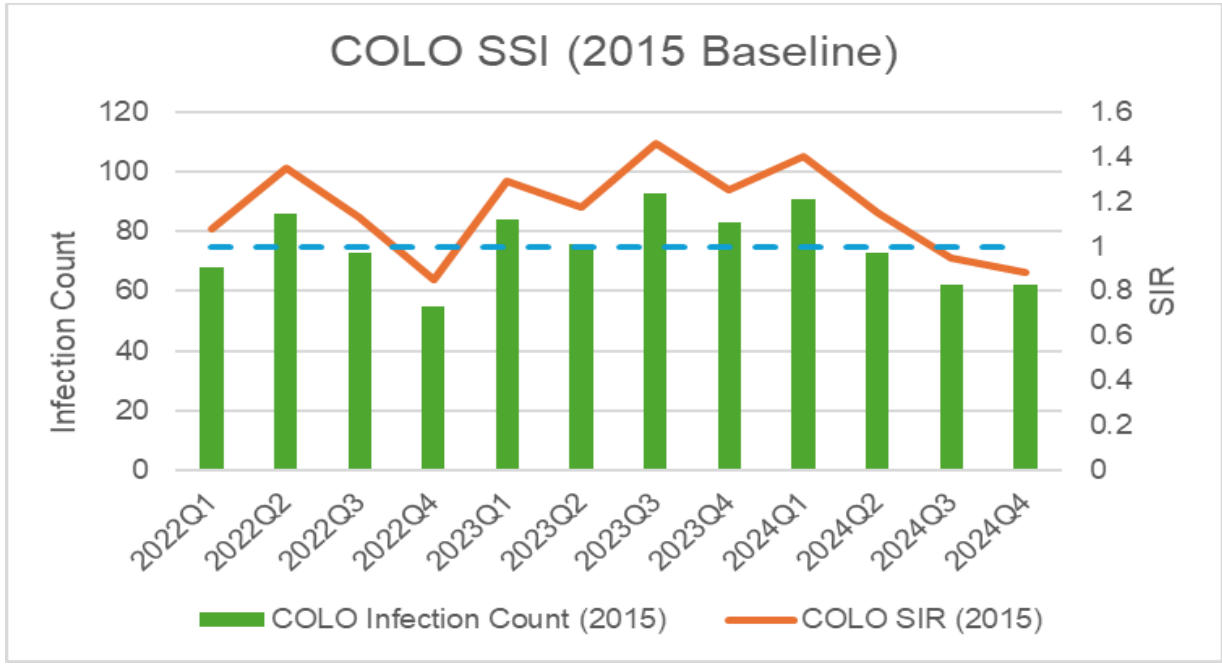

NHSN Surveillance Data: Procedure-Associated Events

Year-Quarter	HYST Infection Count (2022)	HYST SIR (2022)	HYST Infection Count (2015)	HYST SIR (2015)
2022Q1	13	0.85	11	0.848
2022Q2	20	1.472	19	1.468
2022Q3	16	0.959	12	0.957
2022Q4	19	1.305	17	1.298
2023Q1	18	1.27	16	1.267
2023Q2	21	1.264	17	1.263
2023Q3	15	0.954	13	0.949
2023Q4	15	1.091	15	1.087
2024Q1	15	1.061	12	0.935
2024Q2	15	1.255	13	1.139
2024Q3	20	1.695	20	1.656
2024Q4	20	1.363	13	0.991

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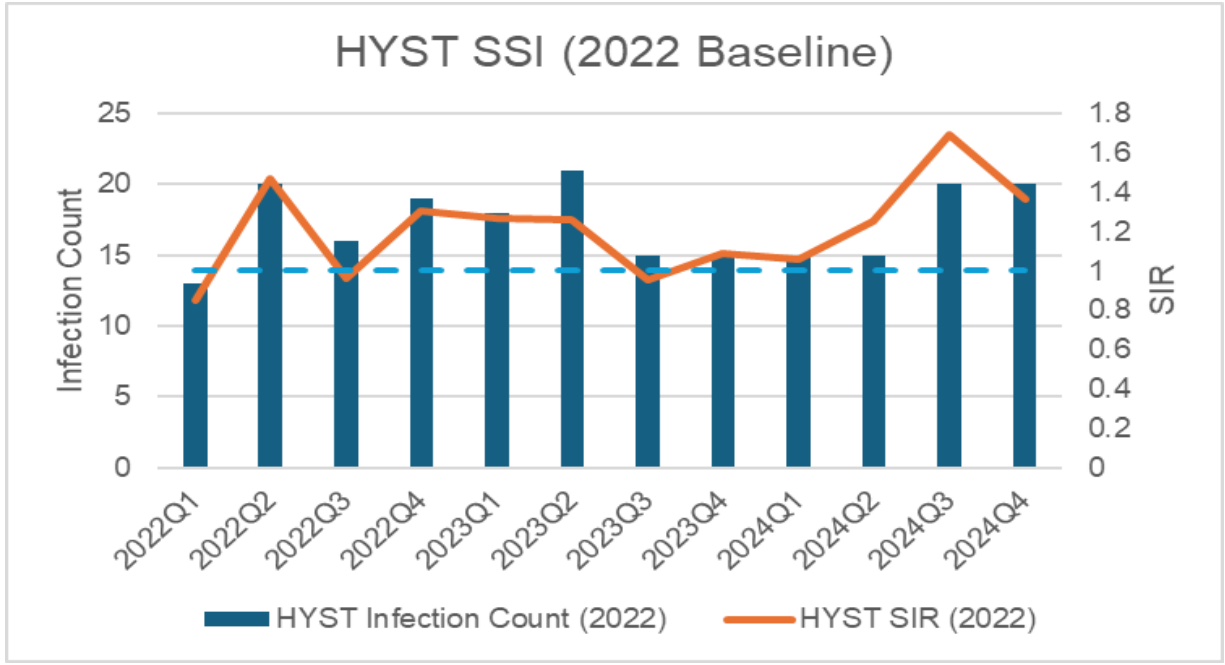

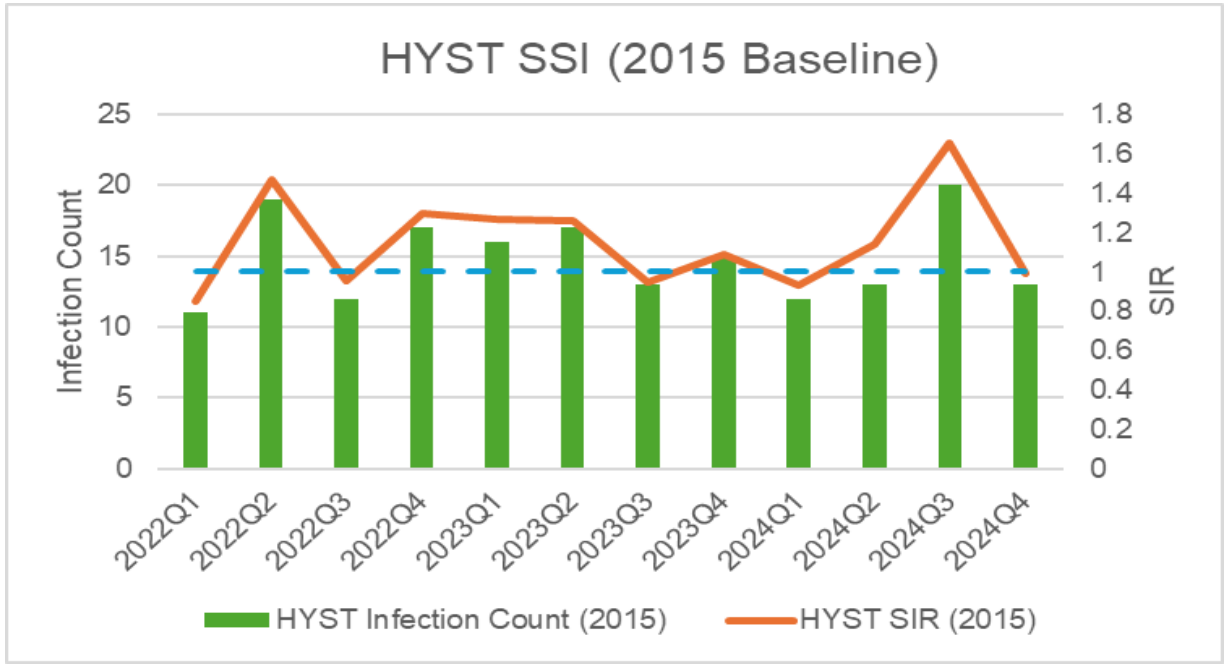

Michigan HAI Data Summary

- Overall infection counts remain stable.
- SIRs appear ‘higher’ with the 2022 rebaseline.
- HAI trends remain relatively steady under the new baseline.
- Biggest recalibrations will be apparent in smaller and community hospitals.
- Track infection counts and device utilization locally.
- Don’t get discouraged if SIR appears higher under the 2022 baseline.

Resources

- 2022 NHSN Rebaseline webpage and resources.
- 2022 HAI Rebaseline FAQs.
- Education and Analysis Resources.
- Which Baseline Should I Use for Analyses?.
- Rebaseline Progress Tracker.
- Video: Prep Like a Pro: What to Expect.

- NHSN Helpdesk: NHSN@cdc.gov.

Q&A

Are there any questions after today's presentation?

Thank you!

Next meeting: TBD
Check APIC GL Events Calendar for more details

MDHHS
Michigan Department of Health & Human Services

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Q+A

Watch for updates!

Monitor the APIC Great Lakes website for our future events.

- 2025 Winter Social
- 2026 Webinar series

Thank you for joining us today!

APIC GREAT LAKES

PEER MENTORSHIP ROUNDTABLE