



Massachusetts Department of Public Health

Public Health Council Meeting September 13, 2023

Robert Goldstein, Commissioner

Today's presentation is available on mass.gov/dph under "Upcoming Events" by clicking on the September 13 Public Health Council listing.



Massachusetts Department of Public Health

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Robert Goldstein, Commissioner

New Blood Donation Rules

FDA NEWS RELEASE

FDA Finalizes Move to Recommend Individual Risk Assessment to Determine Eligibility for Blood Donations

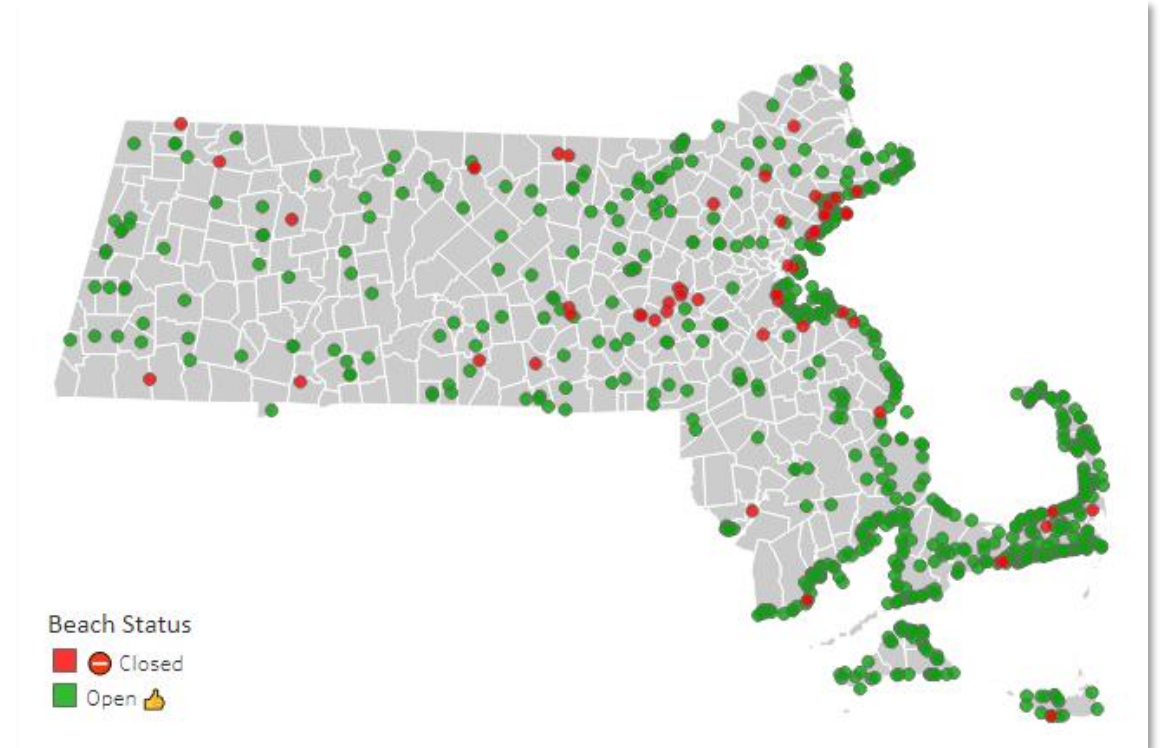
[f Share](#) [t Tweet](#) [in LinkedIn](#) [✉ Email](#) [🖨 Print](#)

For Immediate Release: May 11, 2023



Commissioner Robbie Goldstein and former CDC Director Rochelle P. Walensky donating blood at the Red Cross Dedham Donation Center.

Beach Monitoring



*Left: Commissioner Robbie Goldstein accepts \$275,000 grant from the EPA.
Right: Screenshot of the Interactive Beach Water Quality Dashboard.*

**Mass.gov/info-details/
interactive-beach-water-
quality-dashboard**

West Nile Virus/EEE

**Mass.gov/info-
details/
mosquito-borne-
disease-prevention**

 OFFERED BY [Department of Public Health](#)

PRESS RELEASE

State health officials announce first two human cases of West Nile virus in Massachusetts

Residents should take precautions to avoid mosquito bites

FOR IMMEDIATE RELEASE:

8/29/2023

Department of Public Health

 OFFERED BY [Department of Public Health](#)

PRESS RELEASE

State public health officials announce season's first EEE-positive mosquito samples

Residents urged to use bug spray when outdoors

FOR IMMEDIATE RELEASE:

9/01/2023

Department of Public Health

National Preparedness Month



Mass.gov/BePrepared

National Recovery Month



Governor Maura Healey and Commissioner Robbie Goldstein speak with Kar-Kate Parenteau and Cindy Kucich who lost their husband and brother, respectively, to overdose. Behind them are more than 22,000 purple flags planted on Boston Common to remember the lives lost to overdose in Massachusetts from 2011 through 2022.

National Suicide Prevention Month



Mass. Public Health
@MassDPH

September is [#SuicidePreventionMonth](#). All month, our Suicide Prevention Program is hosting introductory training sessions on the impact of suicide and prevention strategies. They're open to public health professionals and the general public. Learn more:

ow.ly/R6fs50PH1Rm



Mass. Public Health
@MassDPH

No matter where you are or what you're doing, a 988 Lifeline specialist is here to listen with compassion and provide the support you need, 24/7. Learn more about 988 at mass.gov/988.



Link: [Suicide Prevention Training Calendar](#)



Massachusetts Department of Public Health

Public Health Council Meeting September 13, 2023

Robert Goldstein, Commissioner



Massachusetts Department of Public Health

Post-Comment Revisions to Health Care Facility and EMS Licensing Regulations

Marita Callahan

Director of Policy and Health Communications, Bureau of
Health Care Safety and Quality

Summary of Regulations

DPH proposes revisions to the following regulations. These regulations set forth standards governing health care facilities and emergency medical services, to provide high quality of care, industry standardization, and strong consumer protection to the residents of Massachusetts.

Regulation	Description
105 CMR 130.000, <i>Hospital Licensure</i>	Sets forth standards for the maintenance and operation of hospitals
105 CMR 140.000, <i>Licensure of Clinics</i>	Sets forth standards for the licensure, maintenance and operation of clinics
105 CMR 141.000, <i>Licensure of Hospice Programs</i>	Sets forth standards for hospice services, which may be offered in multiple types of health care settings and in the community, including a patient's home, a nursing home, or a free-standing hospice facility operated by a hospice program.
105 CMR 150.000, <i>Standards for Long-Term Care Facilities</i>	Sets forth standards governing long-term care facilities, including nursing homes and rest homes
105 CMR 158.000, <i>Licensure of Adult Day Health Programs</i>	Sets forth the licensure requirements for all Adult Day Health Programs
105 CMR 170.000, <i>Emergency Medical Services System</i>	Establishes a statewide Emergency Medical Services (EMS) system to properly train and certify EMS personnel and establish standards for licensure of ambulance services.

**The Out-of-Hospital Dialysis licensure regulations (105 CMR 145.000) refer to the licensure of clinics regulation with regards to influenza vaccine requirements. While the dialysis licensure regulation is not being amended, the proposed changes will apply to out of hospital dialysis units.*

Overview of Pre-Comment Changes

As a reminder, the Department previously presented to the Public Health Council proposed revisions to these regulations:

- With these amendments, all licensees must ensure that all personnel are vaccinated with both COVID-19 and influenza vaccines, unless an individual is subject to an exemption.
- Staff may be exempt if they decline for any reason (medical contraindication, religious beliefs, personal reasons, or other).
- Staff in hospice and long-term care facilities who decline vaccination must take mitigation measures to prevent viral infection and transmission, in accordance with guidance from the Department.
- Staff in hospital, clinic, adult day health, and emergency medical services settings who decline vaccination may be required by their employer to take mitigation measures.

Public Comment Period

Following the presentation to the Public Health Council, the Department held a public comment period, including a public hearing which was held on August 1, 2023.

- The Department received comments from approximately 80 stakeholders.
- Many of the comments received were from individuals who oppose vaccine mandates.
- The Department also received comments from several stakeholder groups, with some expressing support for the proposed amendments and others expressing concerns.
- Based on the public comments received, the Department made one additional revision to the regulations.

Final Amendments: Changes based on Comments Received

ORIGINAL PROPOSED REVISION

- Aligns COVID-19 and influenza vaccination requirements across all licensed health care facility settings and Emergency Medical Service providers. Licensees must ensure that all personnel are vaccinated with both COVID-19 and influenza vaccines, unless an individual is subject to an exemption.

PROPOSED REVISION AFTER COMMENT PERIOD

- Clarifies that for both COVID-19 and influenza vaccination, licensees may establish additional policies and procedures, beyond the requirements set forth in these regulations.
- This revision addresses comments that the original proposed language could be interpreted as limiting a licensee's ability to maintain stricter vaccine exemption policies.

Next Steps

- Based on a comprehensive review of the regulations and the incorporation of comments from the public, the Department recommends Public Health Council approval of these amendments for promulgation.
- Following Public Health Council approval, the Department will file the amended regulations with the Secretary of the Commonwealth for final enactment.
- The Department will provide sub-regulatory guidance on the amended regulations to ensure awareness, consistency, and compliance.

Thank you for the opportunity to present this information today.

For more information regarding health care facility and EMS licensure requirements, please find the relevant statutory language and the full current regulations here:

Massachusetts Law:

malegislature.gov/Laws/GeneralLaws/PartI/TitleXVI/Chapter111

malegislature.gov/Laws/GeneralLaws/PartI/TitleXVI/Chapter111C

Current Regulations:

www.mass.gov/lists/health-care-facility-licensure-regulations

www.mass.gov/lists/laws-and-regulations-for-oems

Amendments:

mass.gov/dph/proposed-regulations

Appendix: Existing Requirements vs. Proposed Revisions (1 of 2)

Facility Type	Regulation	Current COVID Vaccine Requirement in Regulation – Primary Series	Current Flu Vaccine Requirement in Regulation - Seasonal	Proposed Amendments
Hospital	105 CMR 130.000	None	Yes- can exempt for any reason	Addition to flu requirement: Exempt individuals may be required to take mitigation measures New COVID requirement: Can exempt for any reason; exempt individuals may be required to take mitigation measures.
Clinic	105 CMR 140.000 <i>Note: The Out-of-Hospital Dialysis Unit regulations (105 CMR 145.000) refer to this section of the Clinic regulation regarding vaccine requirements.</i>	None	Yes- can exempt for any reason	Addition to flu requirement: Exempt individuals may be required to take mitigation measures New COVID requirement: Can exempt for any reason; exempt individuals may be required to take mitigation measures.
Hospice	105 CMR 141.000	Yes- medical or religious exemptions only; must be able to perform job with reasonable accommodations	None	New flu requirement: Can exempt for any reason; exempt individuals must take mitigation measures Updated COVID requirement: Can exempt for any reason; exempt individuals must take mitigation measures

Appendix: Existing Requirements vs. Proposed Revisions (2 of 2)

Facility Type	Regulation	Current COVID Vaccine Requirement in Regulation – Primary Series	Current Flu Vaccine Requirement in Regulation - Seasonal	Proposed Amendments
Long Term Care Facility	105 CMR 150.000	Yes- medical or religious exemptions only; must be able to perform job with reasonable accommodations	Yes- can exempt for any reason; must be able to perform job with reasonable accommodations	Updated flu requirement: Exempt individuals must take mitigation measures Updated COVID requirement: Can exempt for any reason; exempt individuals must take mitigation measures
Adult Day Health	105 CMR 158.000	None	Yes- can exempt for any reason	Addition to flu requirement: Exempt individuals may be required to take mitigation measures New COVID requirement: Can exempt for any reason; exempt individuals may be required to take mitigation measures
Emergency Medical Services	105 CMR 170.000	None	None	New flu requirement: Can exempt for any reason; exempt individuals may be required to take mitigation measures. New COVID requirement: Can exempt for any reason; exempt individuals may be required to take mitigation measures.



Massachusetts Department of Public Health

Proposed Revisions to 105 CMR 159:

COVID-19 vaccinations for certain staff providing home care services in Massachusetts

Robin Lipson

Deputy Secretary, Executive Office of Elder Affairs

Summary

- 105 CMR 159.000 sets forth requirements for COVID-19 vaccinations for certain staff providing home care and community-based services in Massachusetts.
- The Department promulgated these regulations to ensure that COVID-19 vaccination was appropriately utilized, including for entities and providers that are not generally licensed or regulated by the Department.
- Examples of providers included: home health agencies, home care agencies, adult foster care, and other home and community-based services programs.
- At the request of MassHealth/EOEA, the Department is proposing to rescind 105 CMR 159.000

Proposed Guidance

- State agencies which contract for these programs (MassHealth, Exec. Office of Elder Affairs) will set and enforce standards for their providers.
- Will require provider agencies to have policies and processes in place to educate their employees on the importance of COVID-19 vaccination, that strongly encourage their workers to remain up-to-date on vaccinations, and that provide resources and assistance to support workers in becoming vaccinated.
- Providers will continue to use all tools to manage and mitigate the spread of respiratory illness (including PPE, procedures for workers to self assess symptoms before a shift, etc.)

Next Steps

Following this presentation to the Public Health Council:

- MassHealth and the Executive Office of Elder Affairs will issue guidance.
- Department staff will hold a public hearing and as required, will provide a public comment period.
- After the close of the public comment period, staff will review public comments and then request approval of the final recission at a subsequent meeting of the Public Health Council.

Thank you for the opportunity to present this information today.

For more information, please find the full current regulation here:

[105 CMR 159, COVID-19 vaccinations for certain staff providing home care services in Massachusetts](#)



Massachusetts Department of Public Health

2022 Health Care Associated Infections:

Acute Care Hospitals

Non-Acute Care Hospitals

Dialysis

Christina Brandeburg, MPH, CIC, Senior HAI/AR Epidemiologist and Analytic Coordinator

Katherine T. Fillo, PhD, MPH, RN-BC, Deputy Bureau Director of Clinical & Health Care Systems Quality

Jessica Leaf, MPH, CIC, Senior HAI/AR Epidemiologist and MDRO Coordinator

Eileen McHale, RN, BSN, Healthcare Associated Infection Coordinator

Introduction

Healthcare-associated infections (HAIs) are infections that patients acquire during the course of receiving treatment for other conditions within a healthcare setting.

- HAIs are among the leading causes of preventable death in the United States, affecting 1 in 17 hospitalized patients, accounting for an estimated 1.7 million infections and an associated 98,000 deaths.*

The Massachusetts Department of Public Health (DPH) developed this data update as a component of the Statewide Infection Prevention and Control Program created pursuant to [Chapter 58 of the Acts of 2006](#).

- Massachusetts law provides DPH with the legal authority to conduct surveillance, and to investigate and control the spread of communicable and infectious diseases. ([MGL c. 111, sections 6 & 7](#))
- DPH implements this responsibility in hospitals through the hospital licensing regulation. (105 CMR 130.000)
- DPH implements this responsibility in dialysis centers through the out-of-hospital dialysis regulation (105 CMR 145.000)
- Section 51H of chapter 111 of the Massachusetts General Laws authorizes the Department to collect HAI data and disseminate the information publicly to encourage quality improvement. (<https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXVI/Chapter111/Section51H>)

**Haque M, Sartelli M, McKimm J, Abu Bakar M. Healthcare-associated Infections - an Overview. Infect Drug Resist. 2018;11:2321–2333.*

Purpose

This HAI presentation is the 14th annual Public Health Council update:

- An important component of larger efforts to reduce preventable infections in healthcare settings
- Presents an analysis of progress in infection prevention within Massachusetts' healthcare facilities
- Provides an overview of infection prevention and control, antibiotic resistance and stewardship activities
- Considers the impact of COVID-19 in Massachusetts healthcare settings
- Based upon work supported by funding from both the state and the Centers for Disease Control and Prevention (CDC)

Methods

The acute care hospital data summary includes the following statewide measures for the 2022 calendar year (January 1, 2022– December 31, 2022) as reported to the CDC's National Healthcare Safety Network (NHSN).

DPH-required measures are consistent with the Centers for Medicare and Medicaid Services (CMS) quality reporting measures.

- Central line-associated bloodstream infections (CLABSI) in intensive care units and wards
- Catheter-associated urinary tract infections (CAUTI) in intensive care units and wards
- Specific surgical site infections (SSI)
- Specific facility-wide laboratory identified events (LabID)

National baseline data for each measure are based on a statistical risk model derived from 2015 national data

^ All data were extracted from NHSN on August 1, 2023

Measures

Standardized Infection Ratio (SIR)

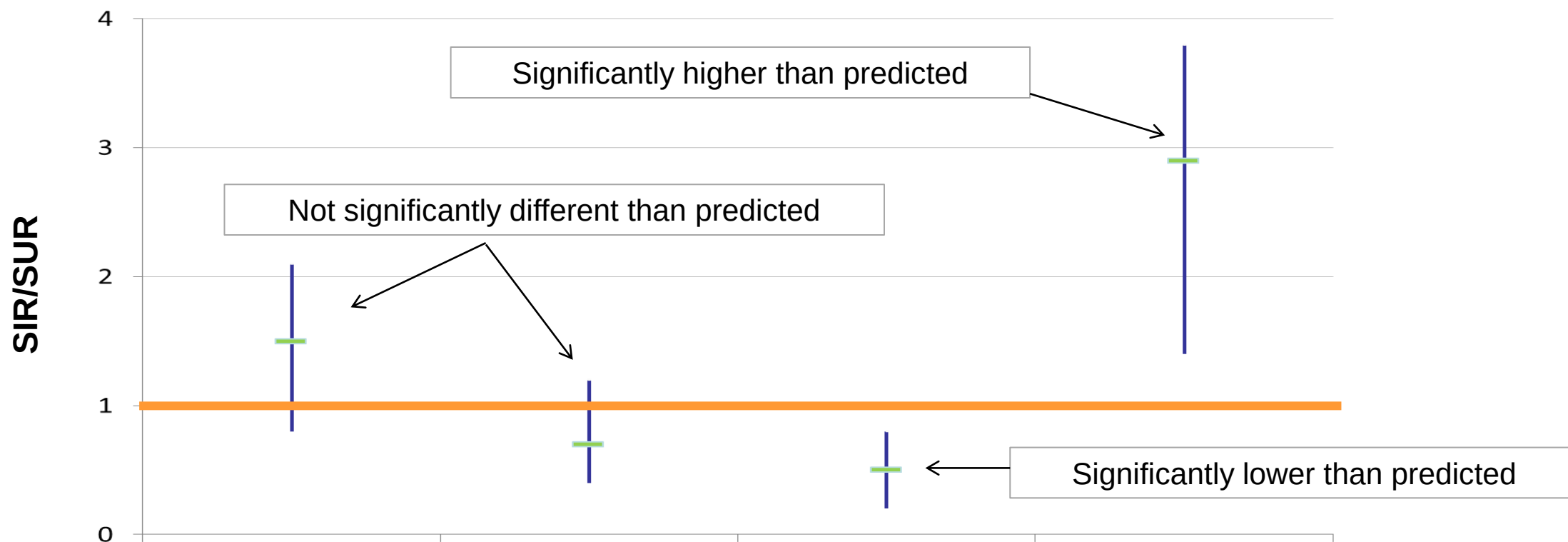
$$\text{Standardized Infection Ratio (SIR)} = \frac{\text{Actual Number of Infections}}{\text{Predicted Number of Infections}}$$

Standard Utilization Ratio (SUR)

$$\text{Standard Utilization Ratio} = \frac{\text{Number of Device Days}}{\text{Predicted Number of Device Days}}$$

- If the SIR/SUR > 1.0, more infections/device days were reported than predicted
- If the SIR/SUR = 1.0, the number of infections/number of device days is equal to the predicted number
- If the SIR/SUR < 1.0, fewer infections/device days were reported than predicted

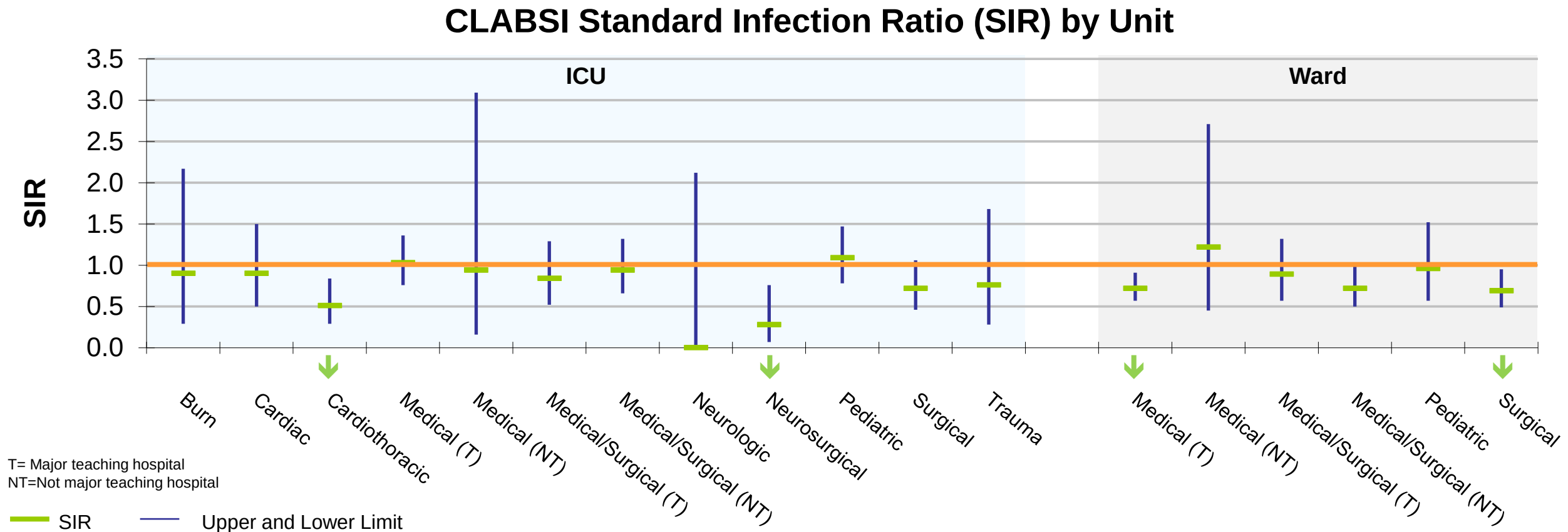
How to Interpret SIRs/SURs and 95% Confidence Intervals (CIs)



The **green** horizontal bar represents the SIR/SUR, and the **blue** vertical bar represents the 95% confidence interval (CI). The 95% CI measures the probability that the true SIR/SUR falls between the two parameters.

- If the blue vertical bar crosses 1.0 (highlighted in **orange**), then the actual rate is not statistically significantly different from the predicted rate.
- If the blue vertical bar is completely above or below 1.0, then the actual is statistically significantly different from the predicted rate.

Central Line-Associated Bloodstream Infections (CLABSI): Standard Infection Ratio in Adult and Pediatric ICUs and Wards



Key Findings

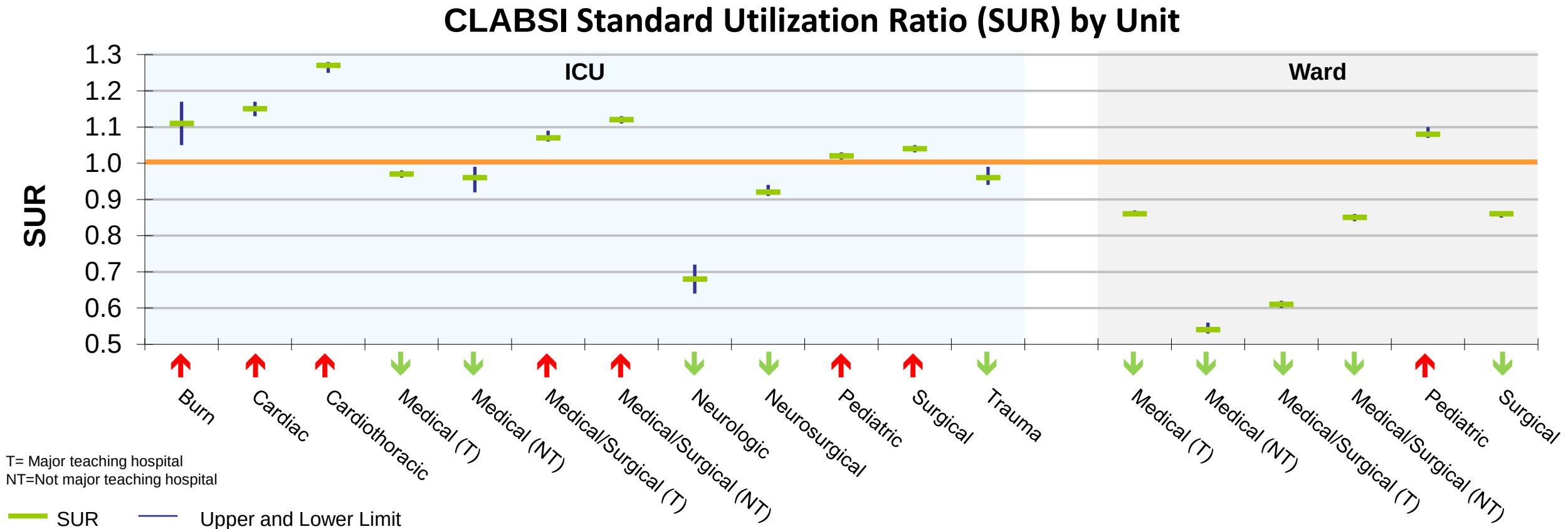


Four unit types experienced a significantly lower number of infections than predicted, based on 2015 national aggregate data.

There were no unit types that experienced a significantly higher number of infections than predicted, based on 2015 national aggregate data.



Central Line-Associated Bloodstream Infections (CLABSI): Standard Utilization Ratio in Adult and Pediatric ICUs and Wards



Key Findings



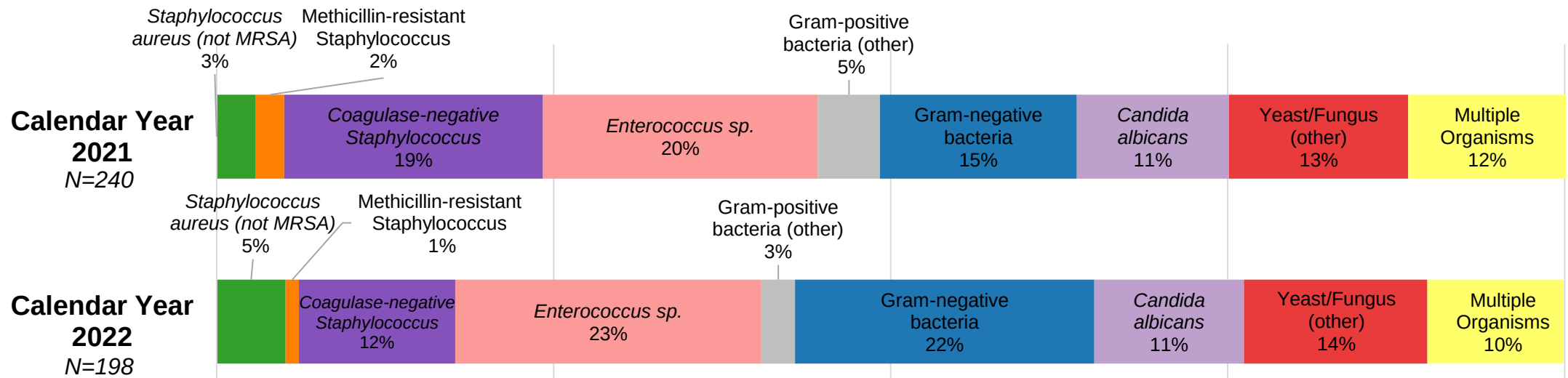
Ten unit types experienced a significantly lower number of device days than predicted, based on 2015 national aggregate data.

Eight unit types experienced a significantly higher number of device days than predicted, based on 2015 national aggregate data.

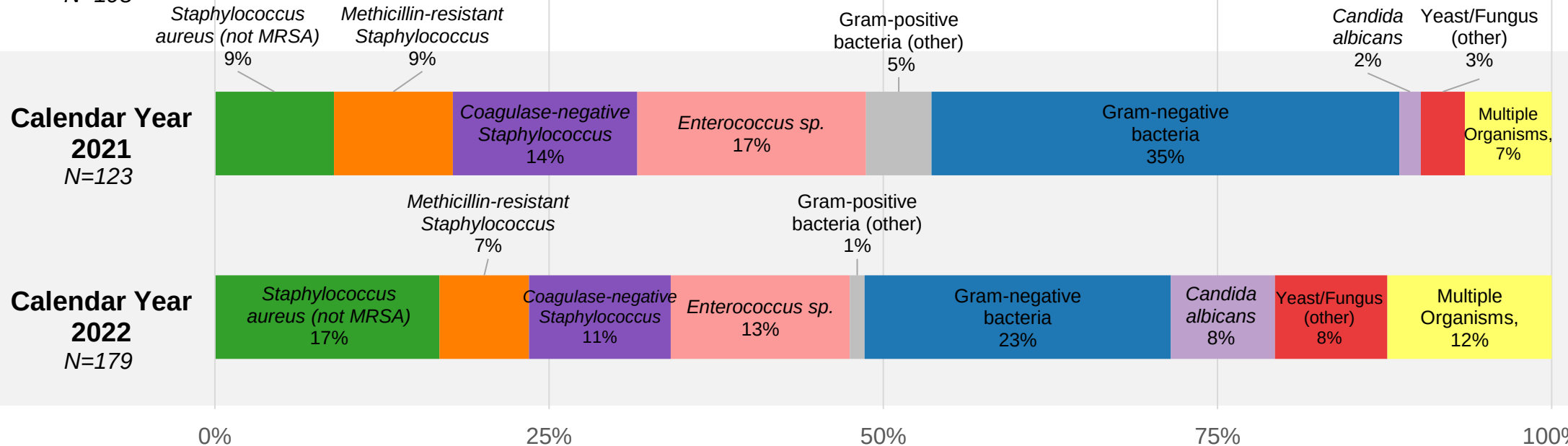


CLABSI Adult and Pediatric Pathogens for 2021 and 2022

ICU Pathogens



Ward Pathogens

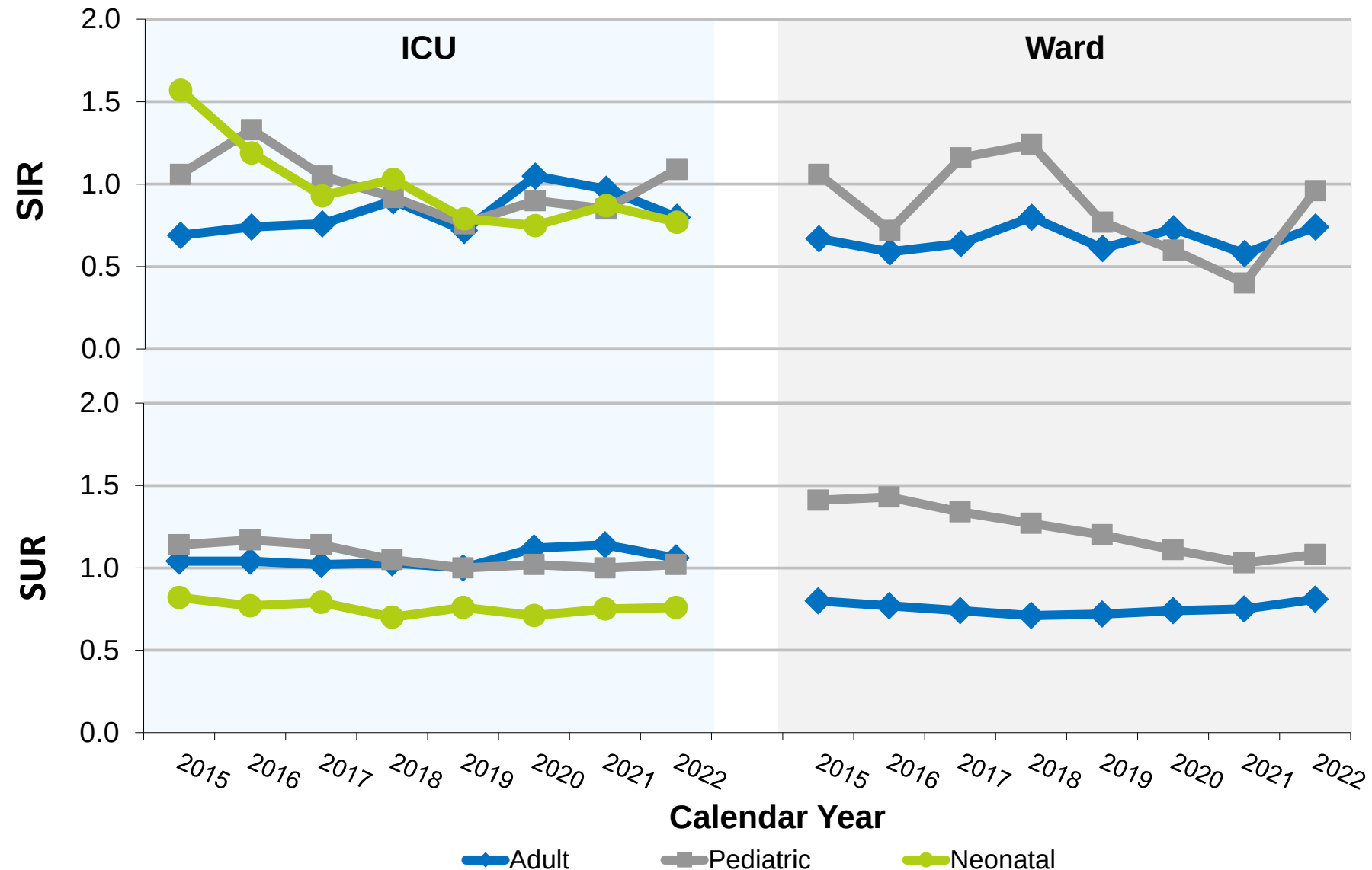


State CLABSI SIR and SUR in ICU and Wards

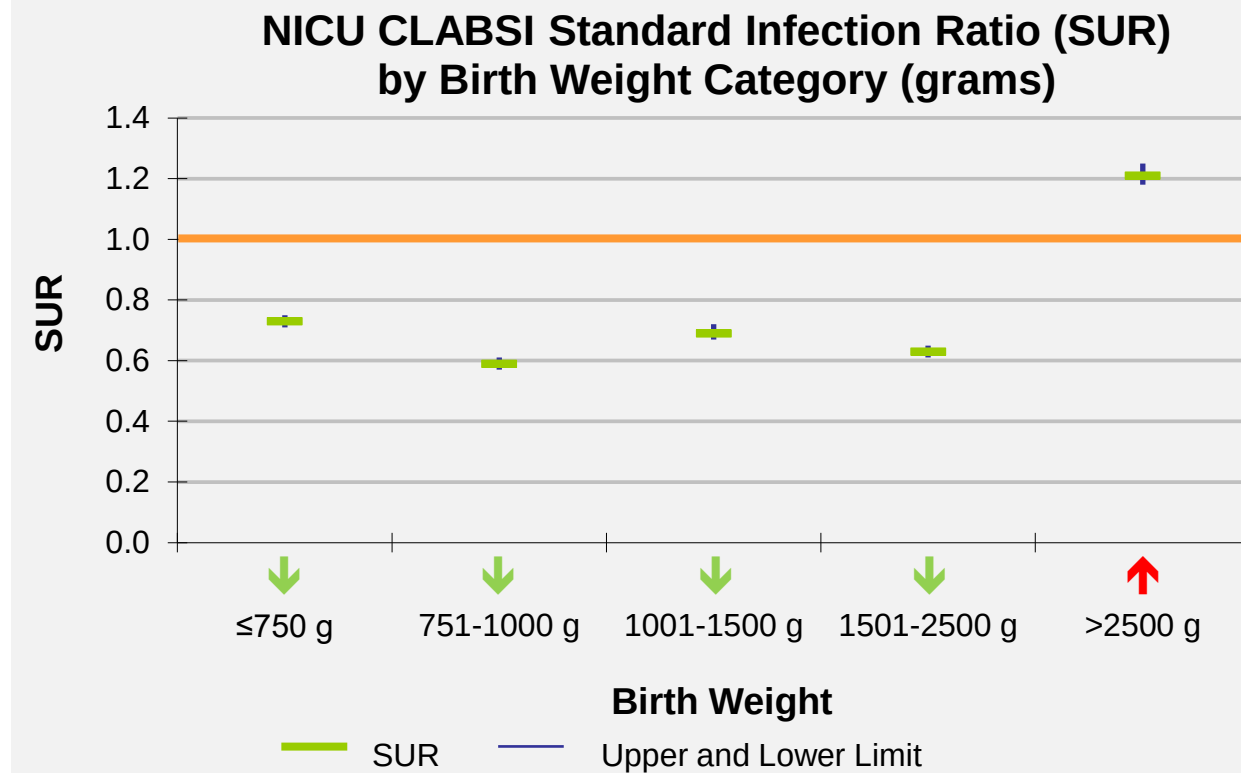
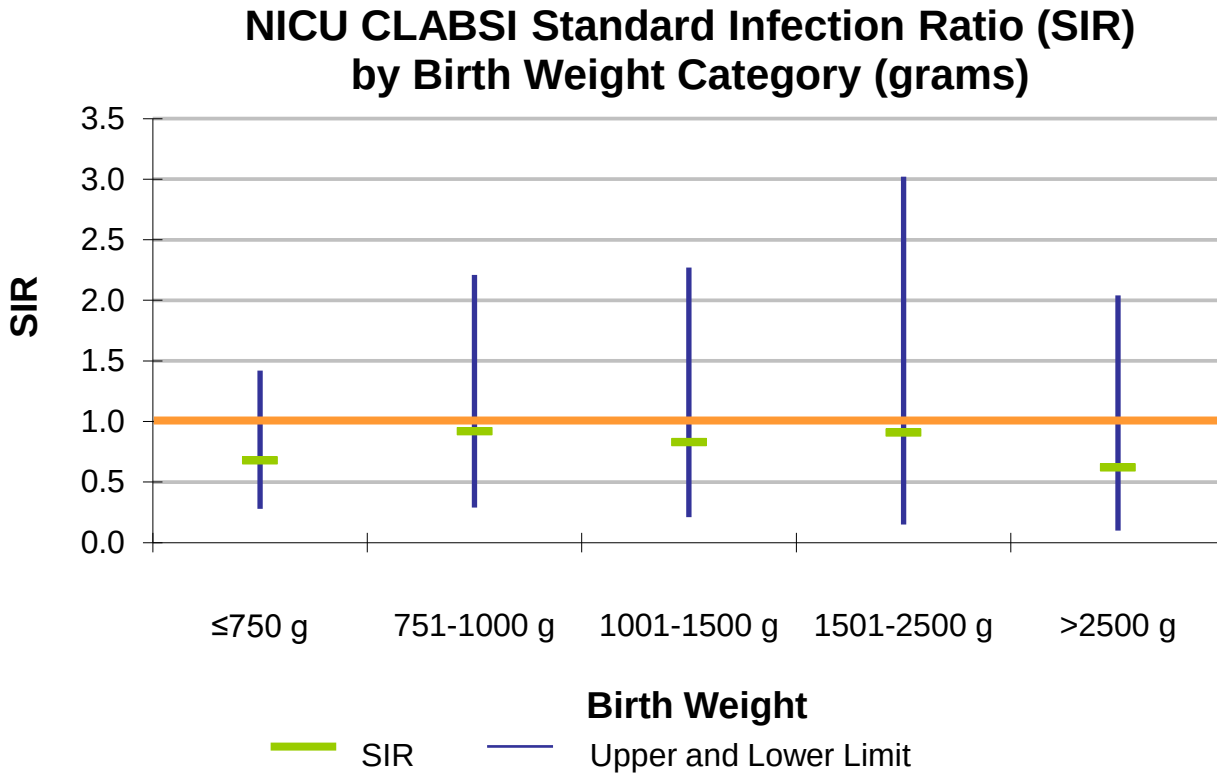
Key Findings

In 2022, adult ICUs and wards experienced a significantly lower number of infections than predicted, based on 2015 national aggregate data.

In 2022, adult ICUs, pediatric ICUs, and pediatric Wards experienced a significantly higher number of device days than predicted, based on 2015 national aggregate data.



Central Line-Associated Bloodstream Infections (CLABSI): Neonatal ICUs by Birth Weight Category



Key Findings

There were 17 CLABSIs reported in Neonatal ICUs in 2022.

There were no birthweight categories experiencing a significantly higher or lower number of infections than predicted, based on 2015 national aggregate data.

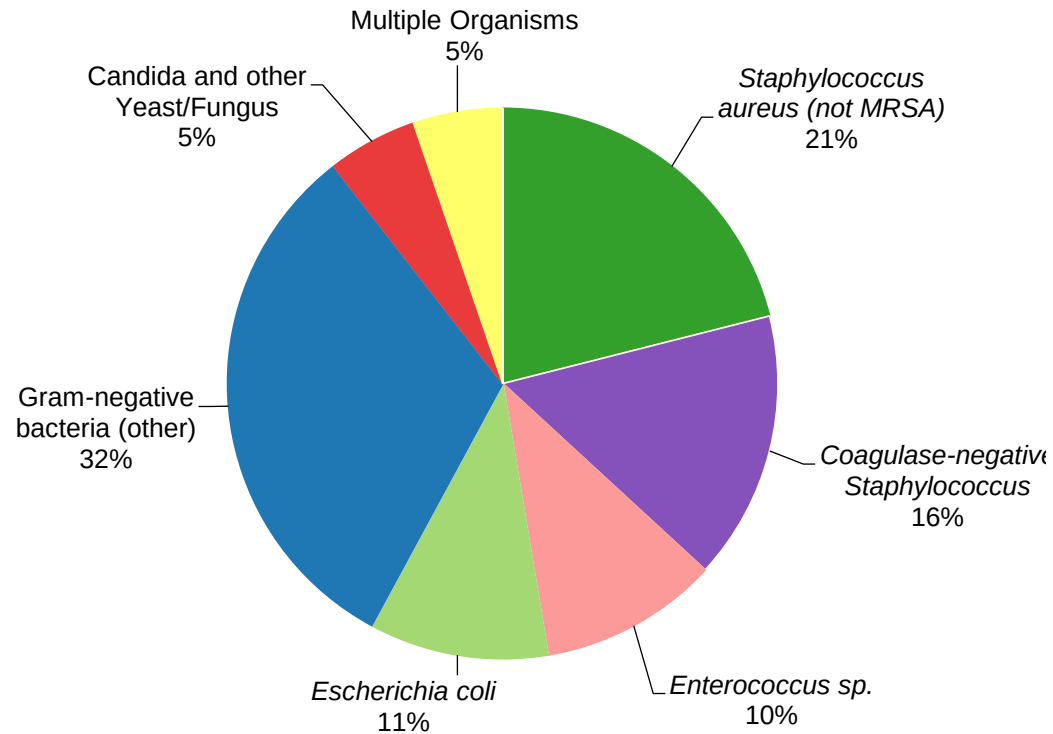
Four birthweight categories experienced a significantly lower number of device days than predicted, based on 2015 national aggregate data.

CLABSI NICU Pathogens for 2021 and 2022

Calendar Year 2021

January 1, 2021 – December 31, 2021

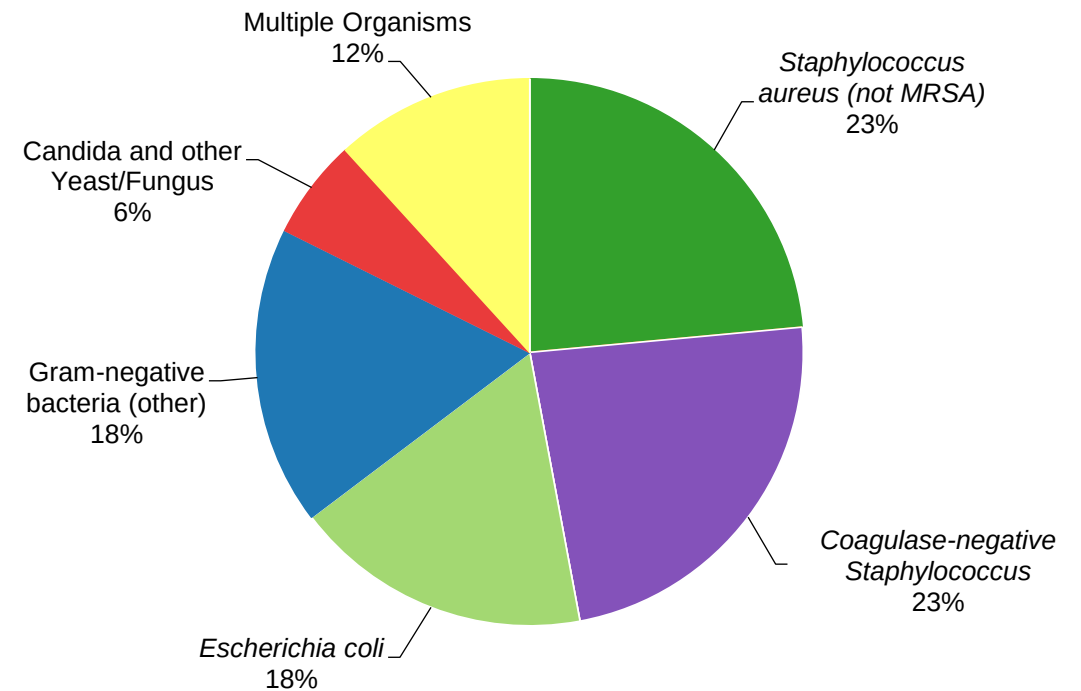
N=19



Calendar Year 2022

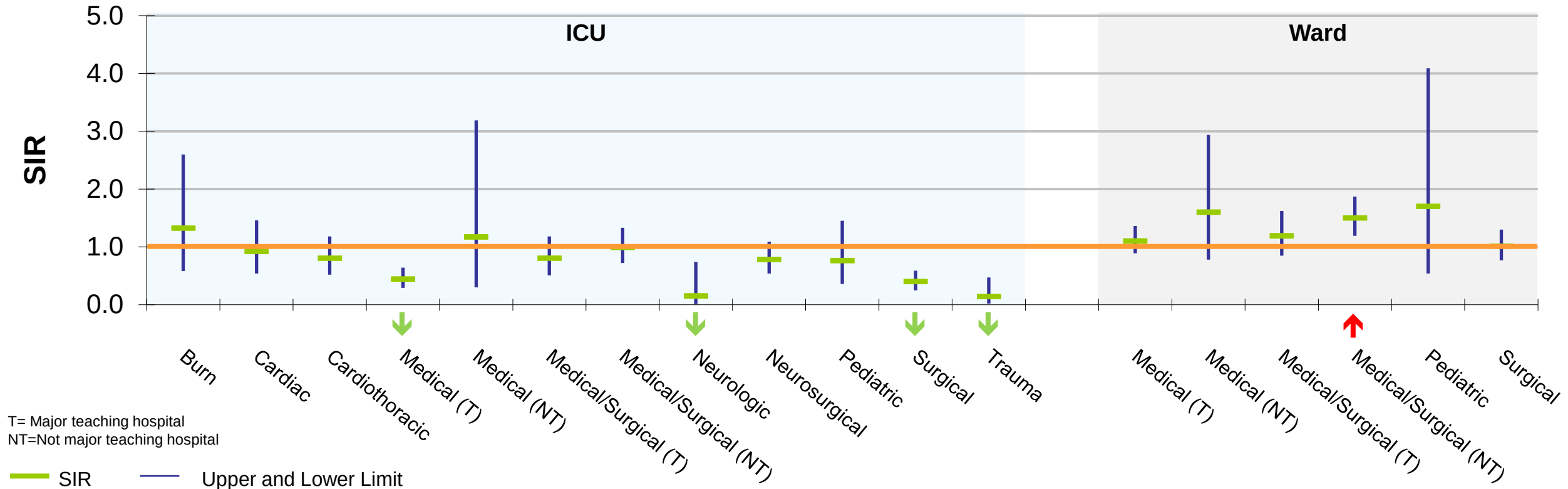
January 1, 2022 – December 31, 2022

N=17



Catheter-Associated Urinary Tract Infections (CAUTI): Standard Infection Ratio in Adult and Pediatric ICUs and Wards

CAUTI Standard Infection Ratio (SIR) by Unit



Key Findings



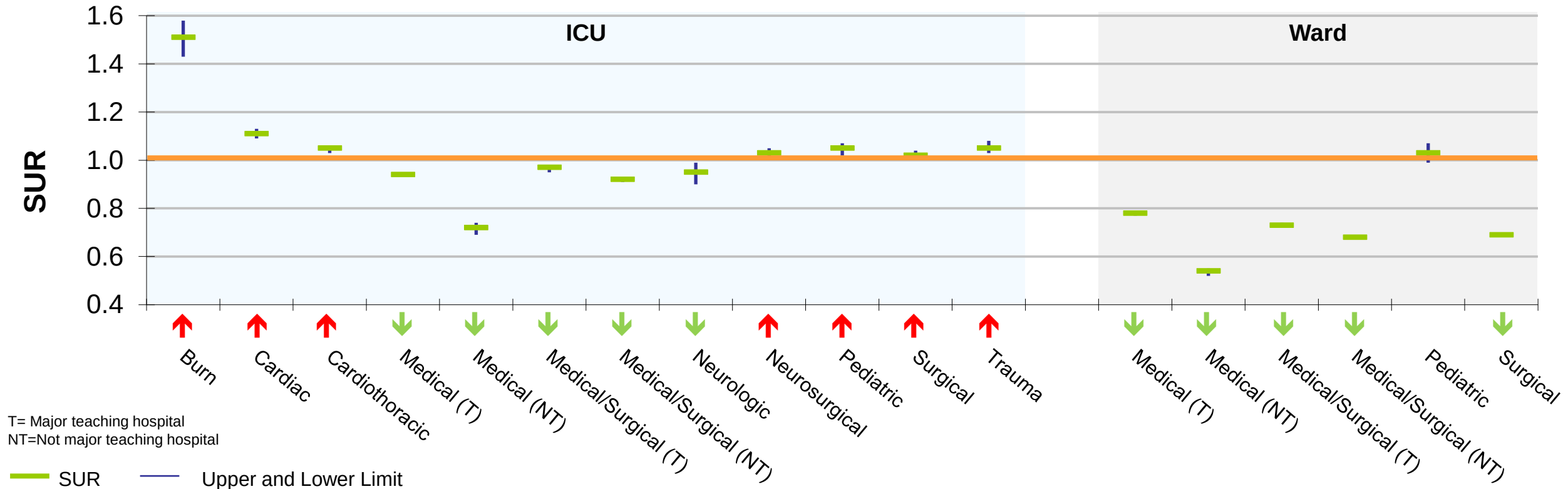
Four unit types experienced a significantly lower number of infections than predicted, based on 2015 national aggregate data.

One unit type experienced a significantly higher number of infections than predicted, based on 2015 national aggregate data.



Catheter-Associated Urinary Tract Infections (CAUTI): Standard Utilization Ratio in Adult and Pediatric ICUs and Wards

CAUTI Standard Utilization Ratio (SUR) by Unit



Key Findings



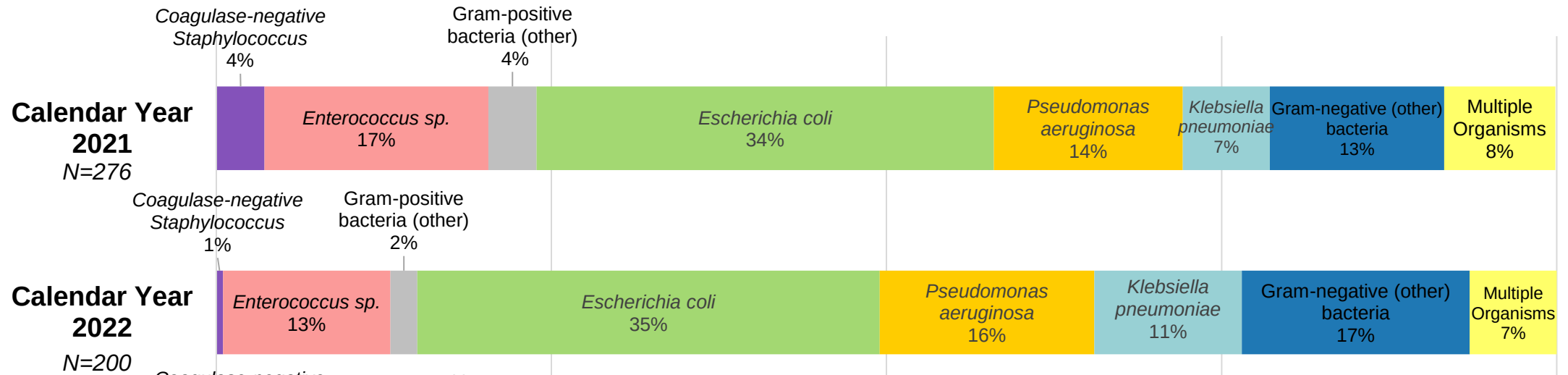
Ten unit types experienced a significantly lower number of device days than predicted, based on 2015 national aggregate data.

Seven unit types experienced a significantly higher number of device days than predicted, based on 2015 national aggregate data.

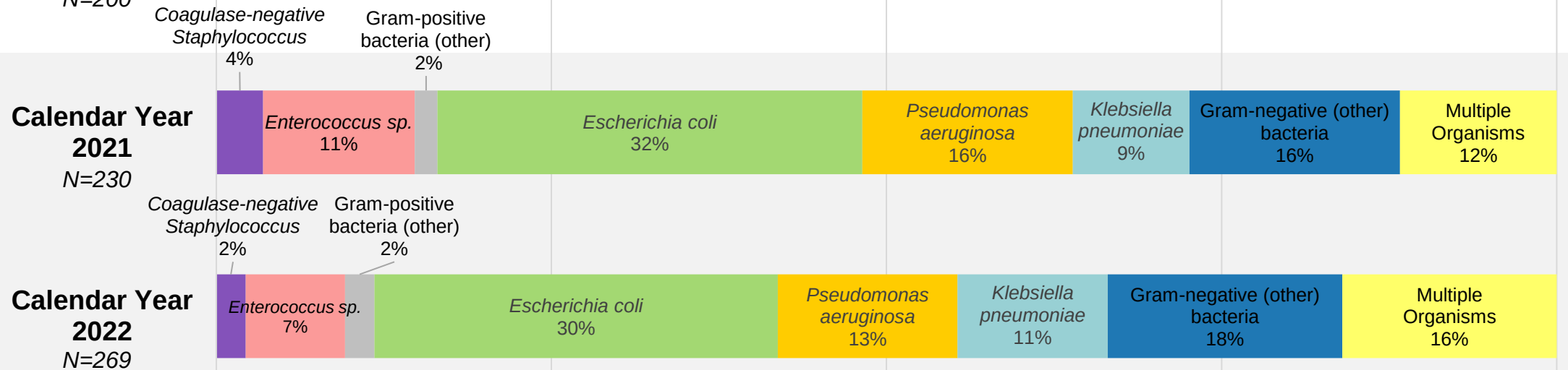


CAUTI Adult and Pediatric Pathogens for 2021 and 2022

ICU Pathogens



Ward Pathogens



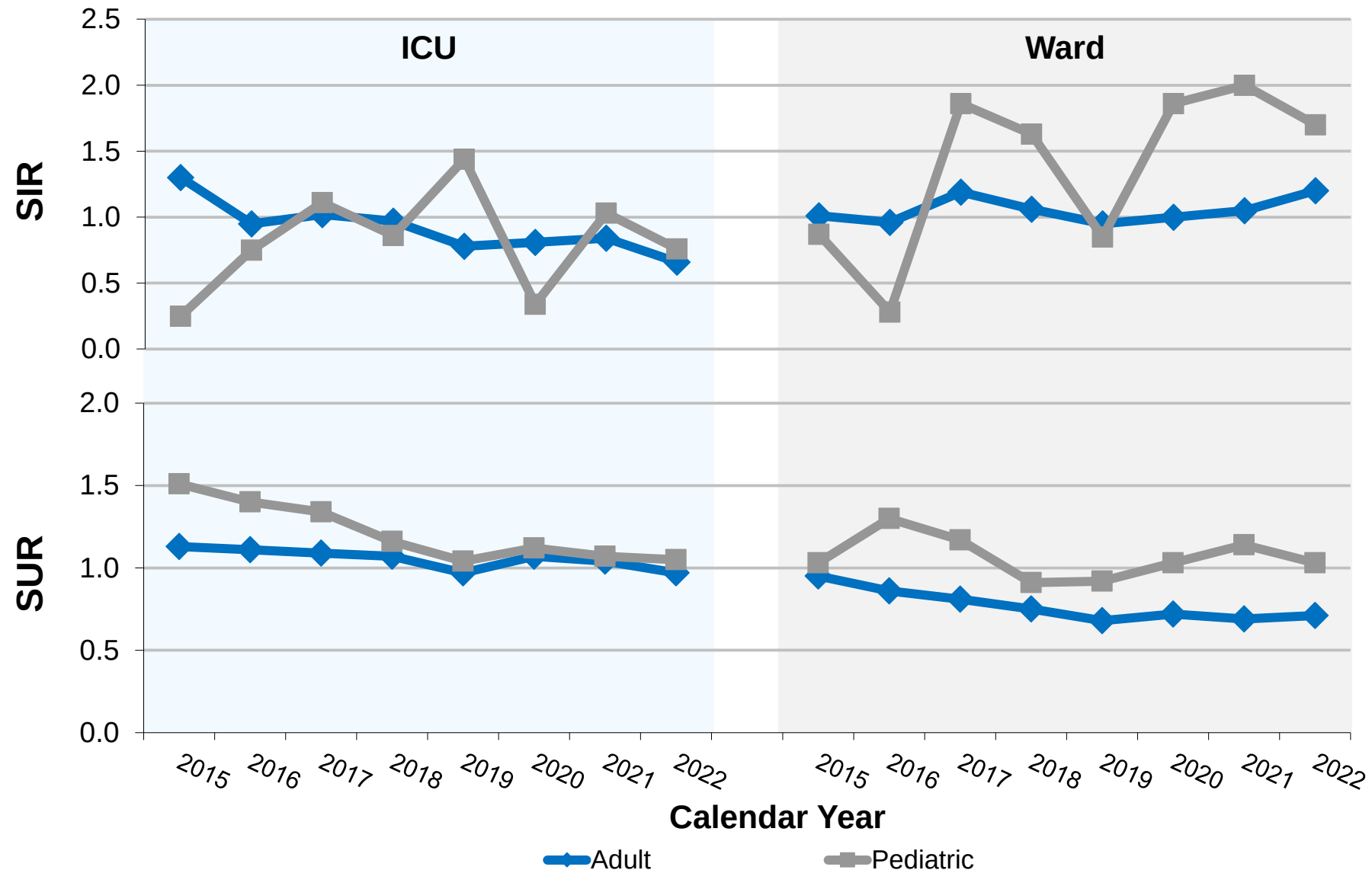
0% 25% 50% 75% 100%

State CAUTI SIR and SUR in ICU and Wards

Key Findings

In 2022, adult ICUs experienced a significantly lower number of infections and adult Wards experience a significantly higher number of infections than predicted, based on 2015 national aggregate data.

In 2022, pediatric ICUs experienced a significantly higher number of device days than predicted, based on 2015 national aggregate data.



Surgical Site Infections (SSI)

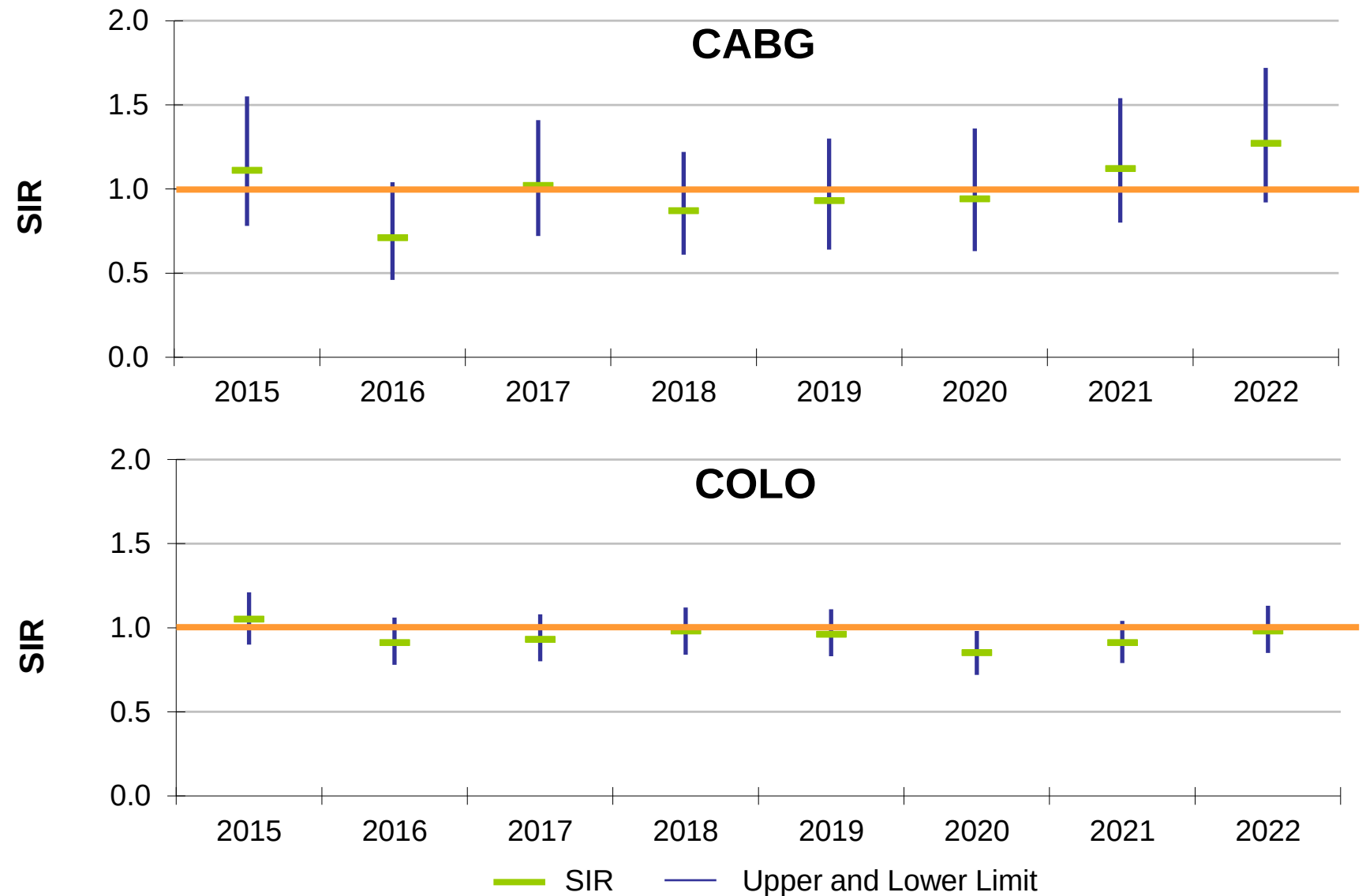
Coronary Artery Bypass Graft (CABG) SIR and Colon Procedure (COLO) SIR

Key Findings

In 2022, MA acute care hospitals performing coronary artery bypass graft (CABG) and colon (COLO) surgeries experienced the same number of infections as predicted, based on 2015 national aggregate data.

There were 40 CABG SSIs reported in 2022.

There were 195 COLO SSIs reported in 2022.



Surgical Site Infections (SSI)

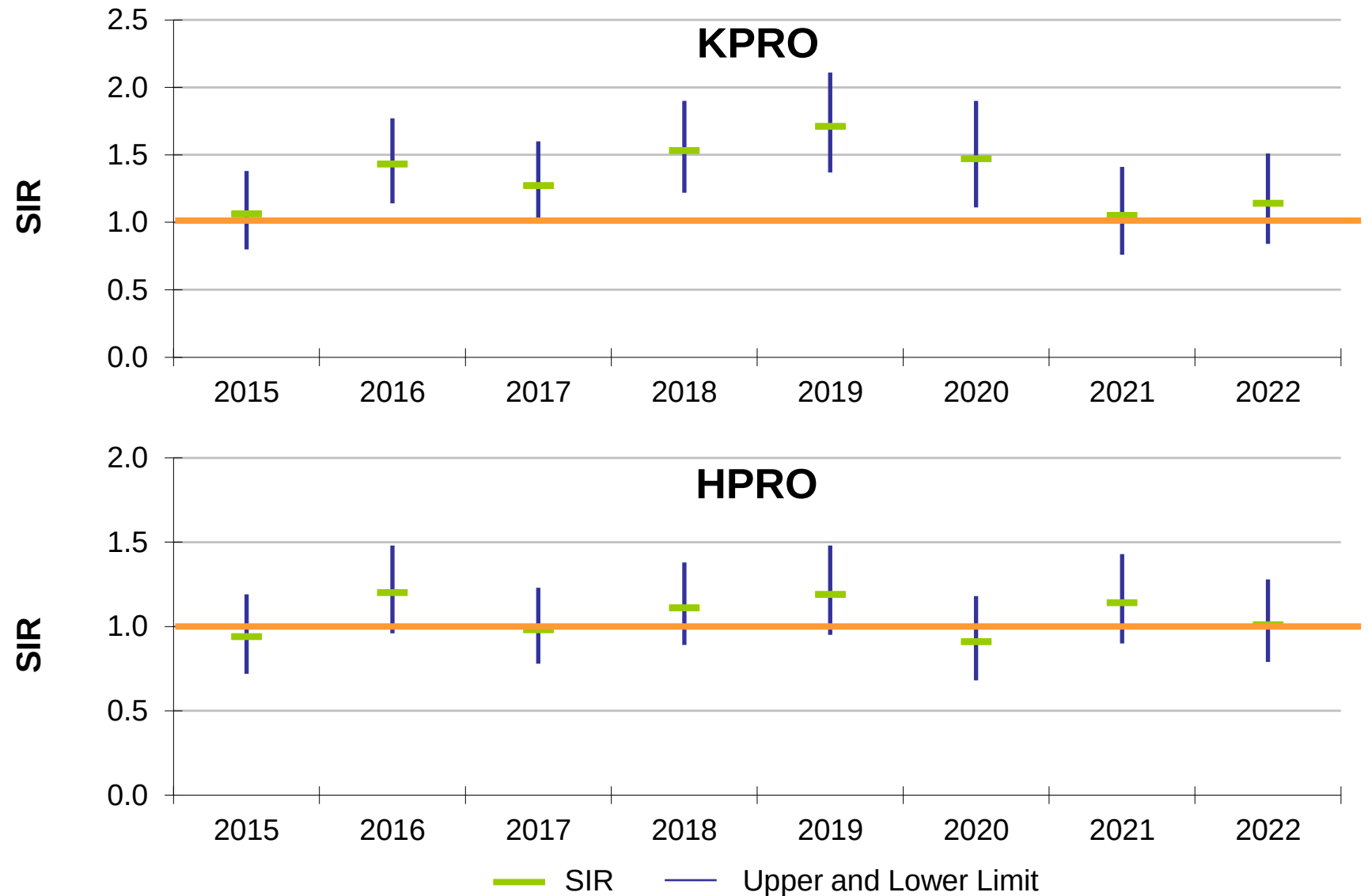
Knee Prosthesis (KPRO) SIR and Hip Prosthesis (HPRO) SIR

Key Findings

In 2022, MA acute care hospitals performing knee (KPRO) and hip (HPRO) prosthesis procedures experienced the same number of infections as predicted, based on 2015 national aggregate data.

There were 45 KPRO SSIs reported in 2022, with one facility accounting for over 20% of the reported events.

There were 65 HPRO SSIs reported in 2022.



Surgical Site Infections (SSI)

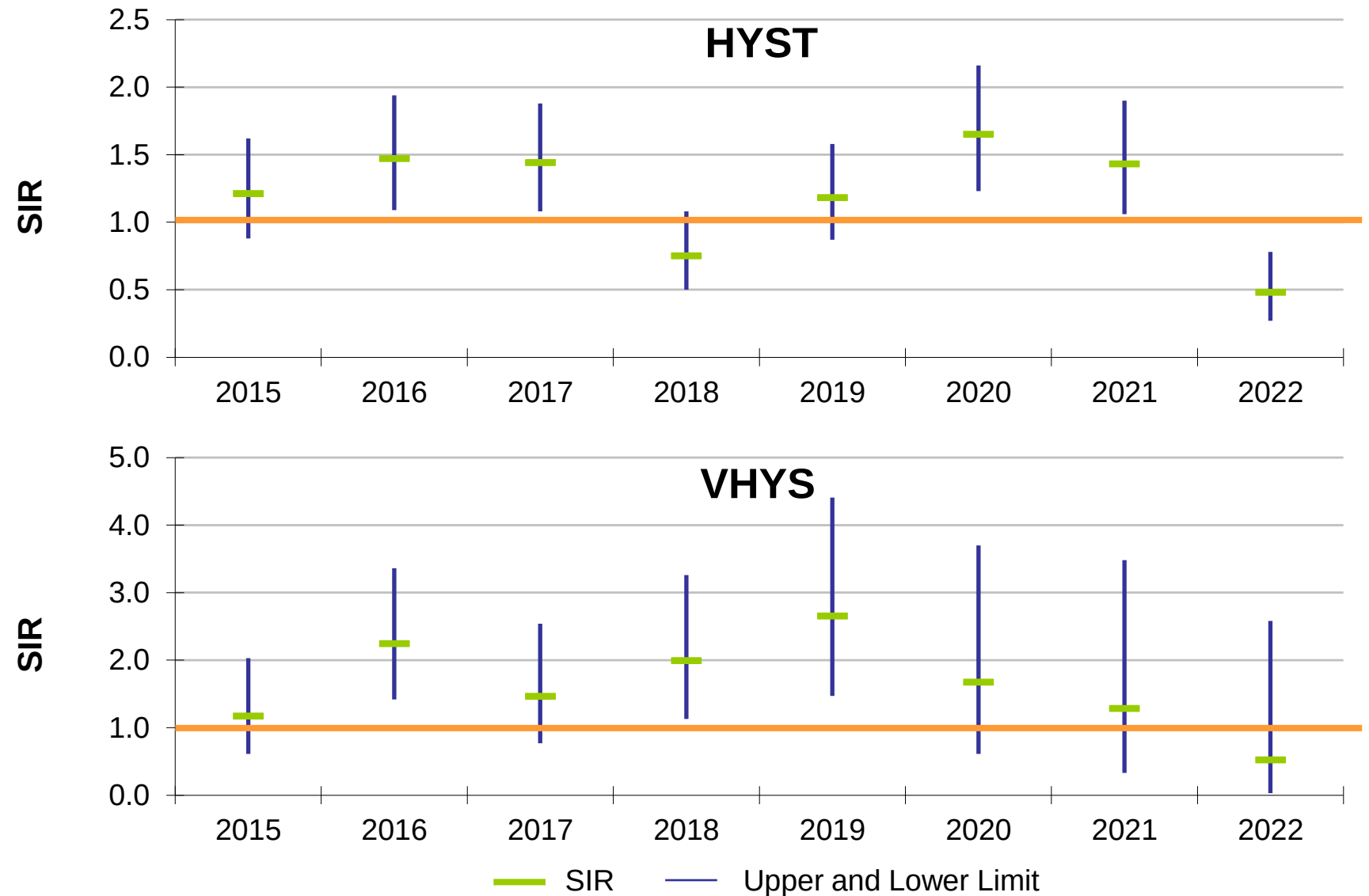
Abdominal Hysterectomy (HYST) SIR and Vaginal Hysterectomy (VHYS) SIR

Key Findings

In 2022, MA acute care hospitals performing abdominal hysterectomy (HYST) procedures experienced a significantly lower number of infections than predicted, based on 2015 national aggregate data.

There were 14 HYST SSIs reported in 2022.

There was 1 VHYS SSI reported in 2022.



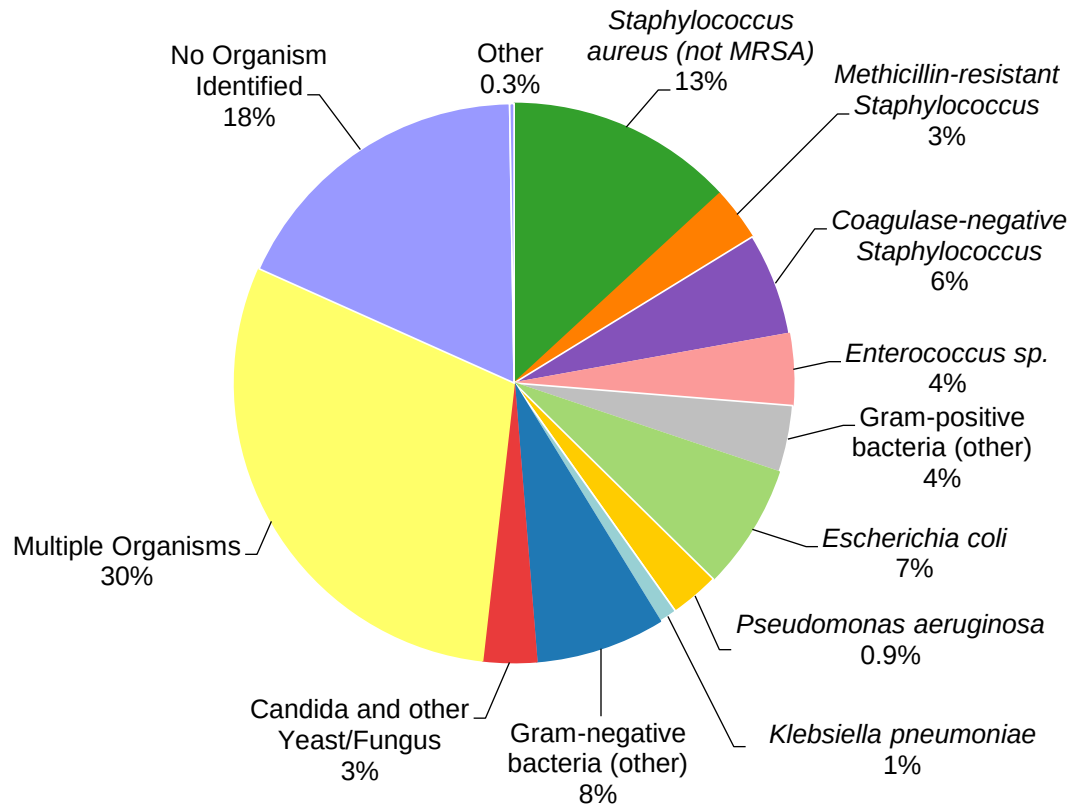
SSI Pathogens for 2021-2022

CABG, KPRO, HPRO, HYST, VHYS, COLO

Calendar Year 2021

January 1, 2021 – December 31, 2021

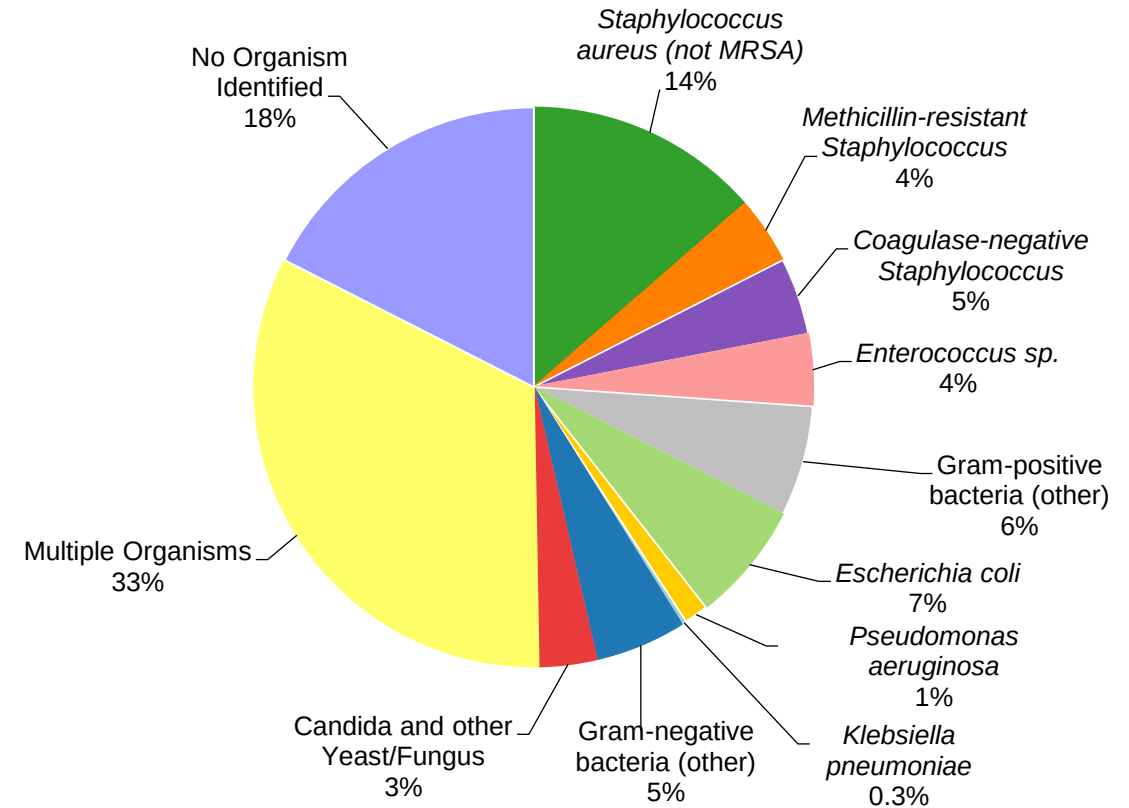
N=388



Calendar Year 2022

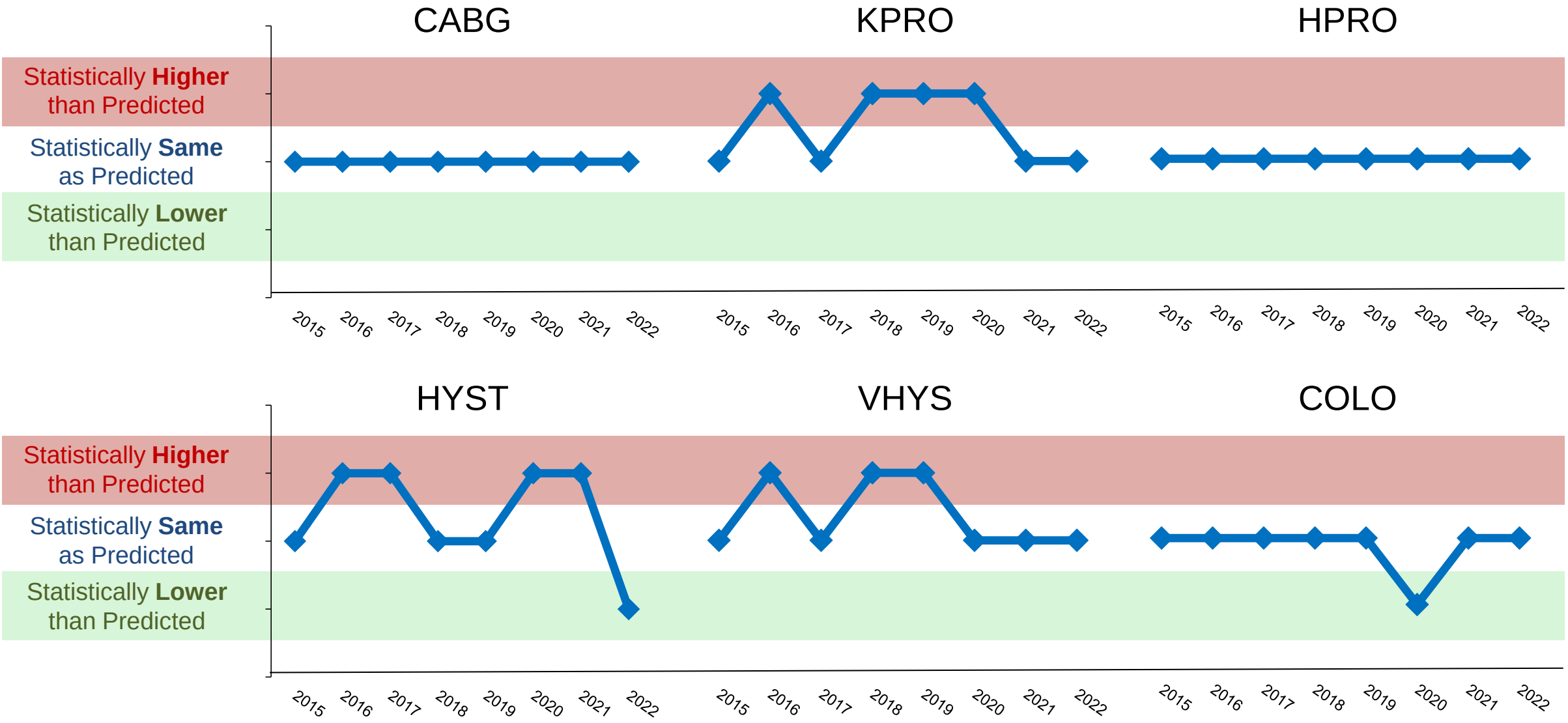
January 1, 2022 – December 31, 2022

N=360



Statewide SSI Trends by Year

2015-2022



Laboratory Identified Events (LabID)

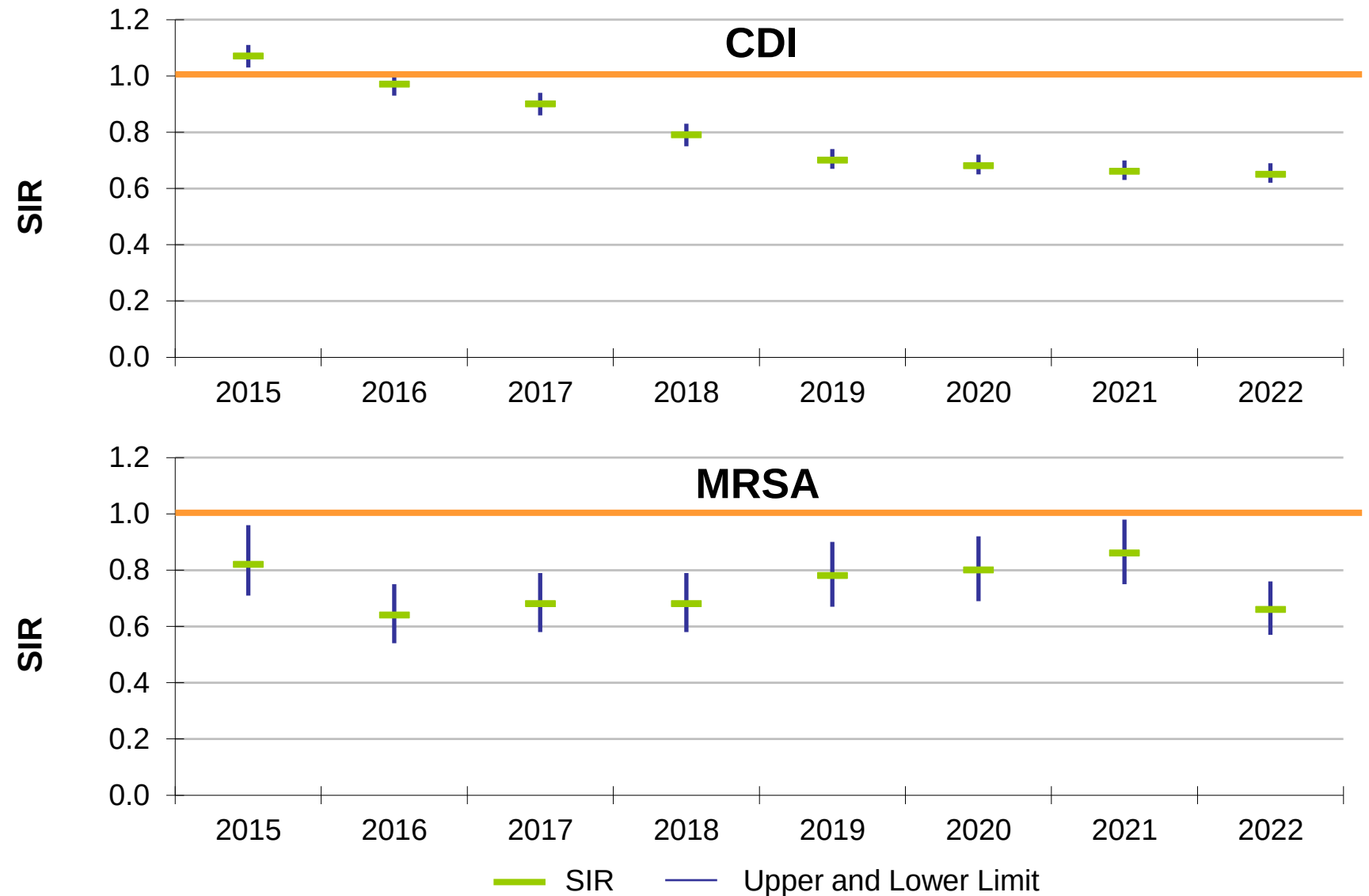
Clostridioides difficile (CDI) SIR and Methicillin-resistant *Staphylococcus aureus* (MRSA) SIR

Key Findings

For the past six years, MA hospitals reporting CDI and MRSA events experienced significantly lower number of infections than predicted, based on 2015 national aggregate data.

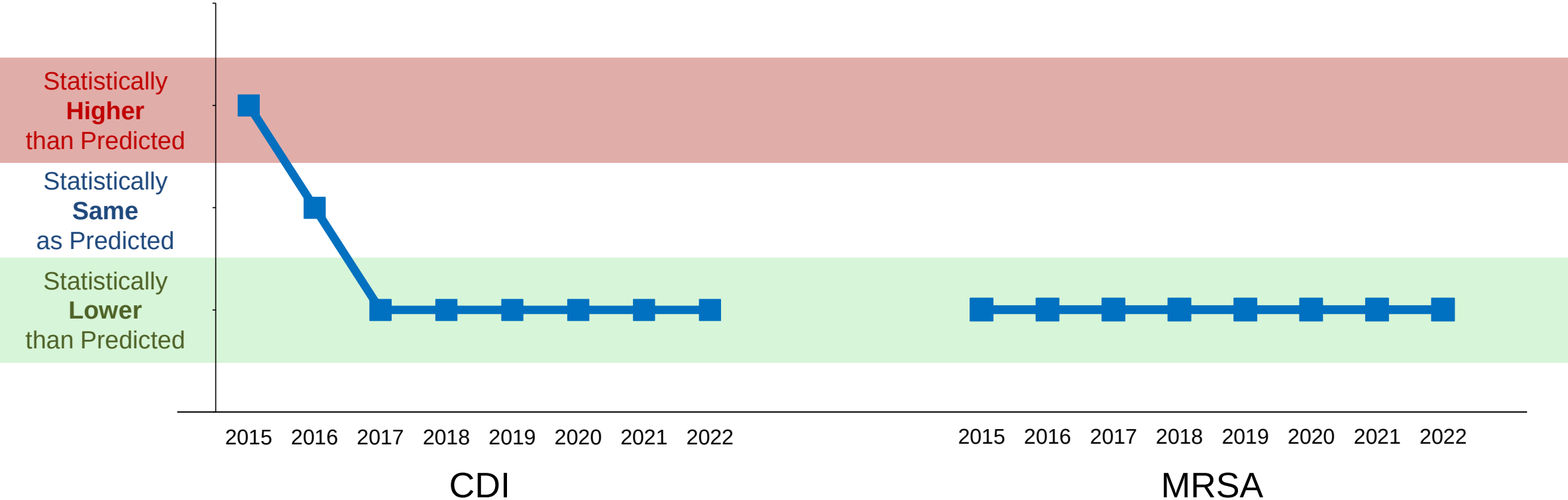
There were 1,423 CDI events reported in 2022.

There were 177 MRSA events reported in 2022.



Statewide LabID Trends by Year

2015-2022

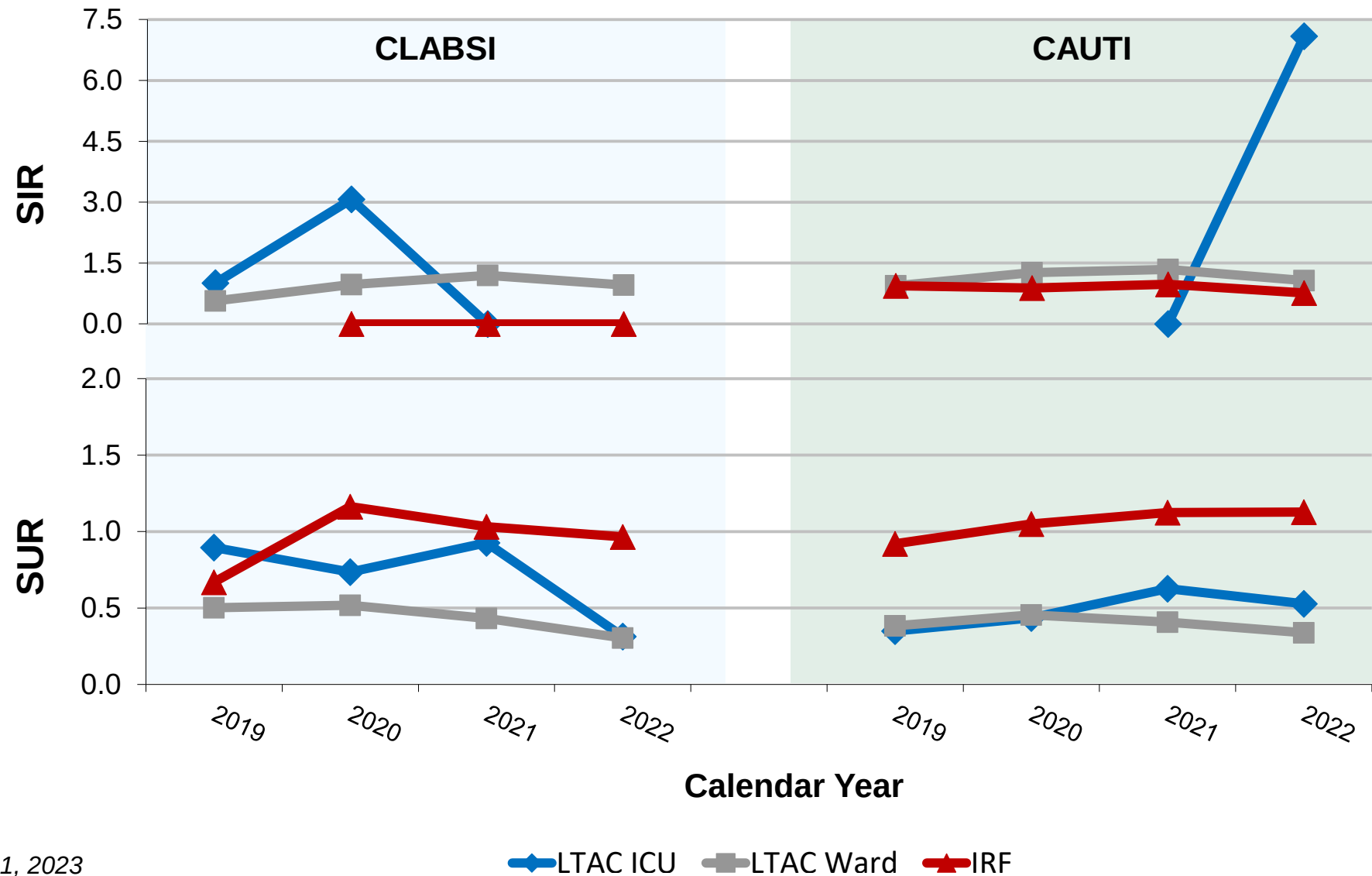


Non-Acute Care Hospitals State CLABSI and CAUTI SIR and SUR

Key Findings

In 2022, Long-Term Acute Care (LTAC) Hospital ICUs and Wards experienced a significantly lower number of central line days than predicted, based on 2015 national aggregate data.

In 2022, Long-Term Acute Care Hospital ICUs experienced a significantly higher number of catheter-associated infections and Inpatient Rehab Facilities (IRFs) experienced a significantly higher number of catheter days than predicted, based on 2015 national aggregate data.



Data were extracted from NHSN on August 1, 2023

Non-Acute Care Hospitals

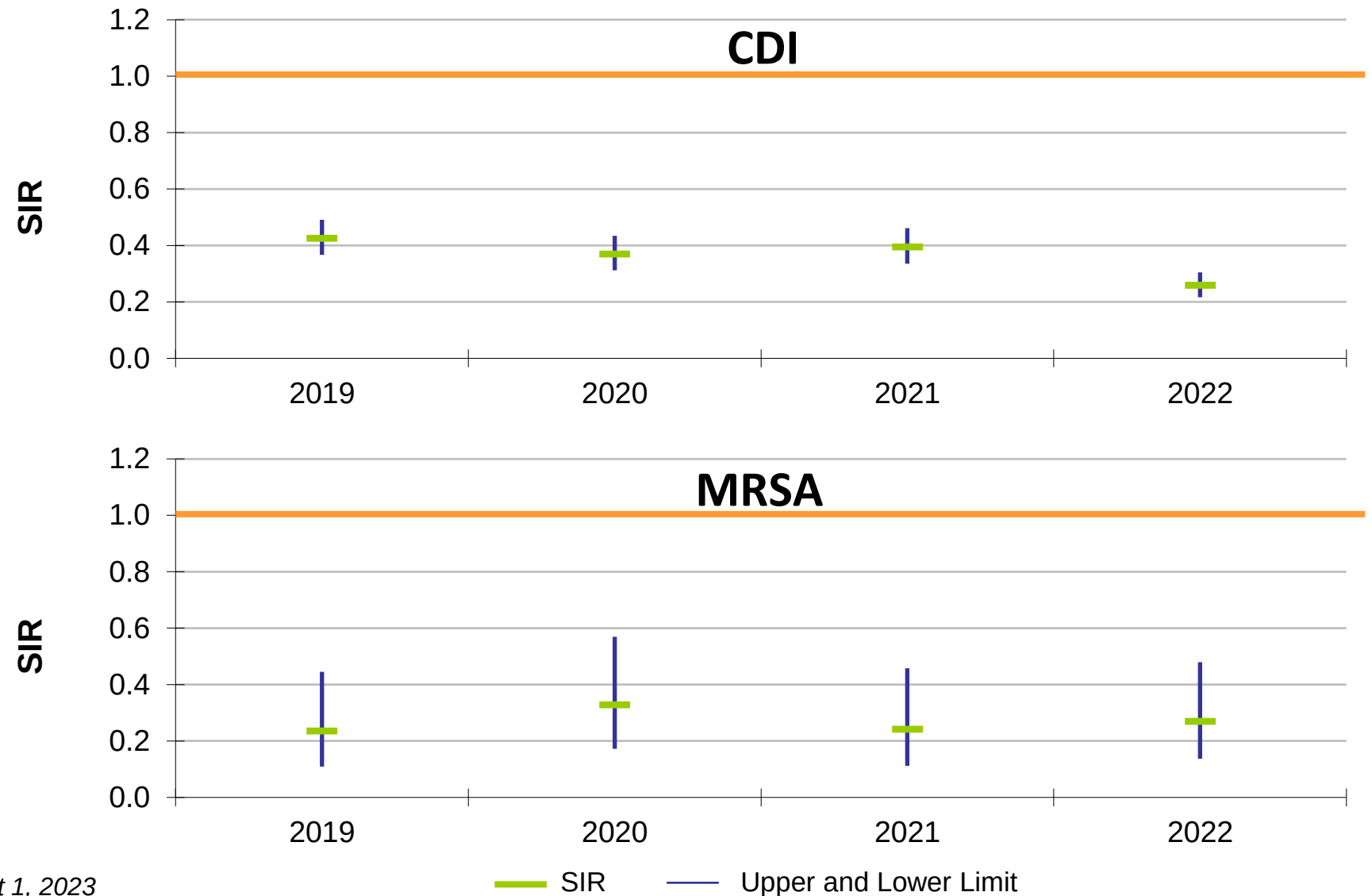
Clostridioides difficile (CDI) SIR and Methicillin-resistant Staphylococcus aureus (MRSA) SIR

Key Findings

For the past four years, MA non-acute care hospitals reporting CDI and MRSA events experienced significantly lower number of infections than predicted, based on 2015 national aggregate data.

There were 128 CDI events reported in 2022.

There were 10 MRSA events reported in 2022.

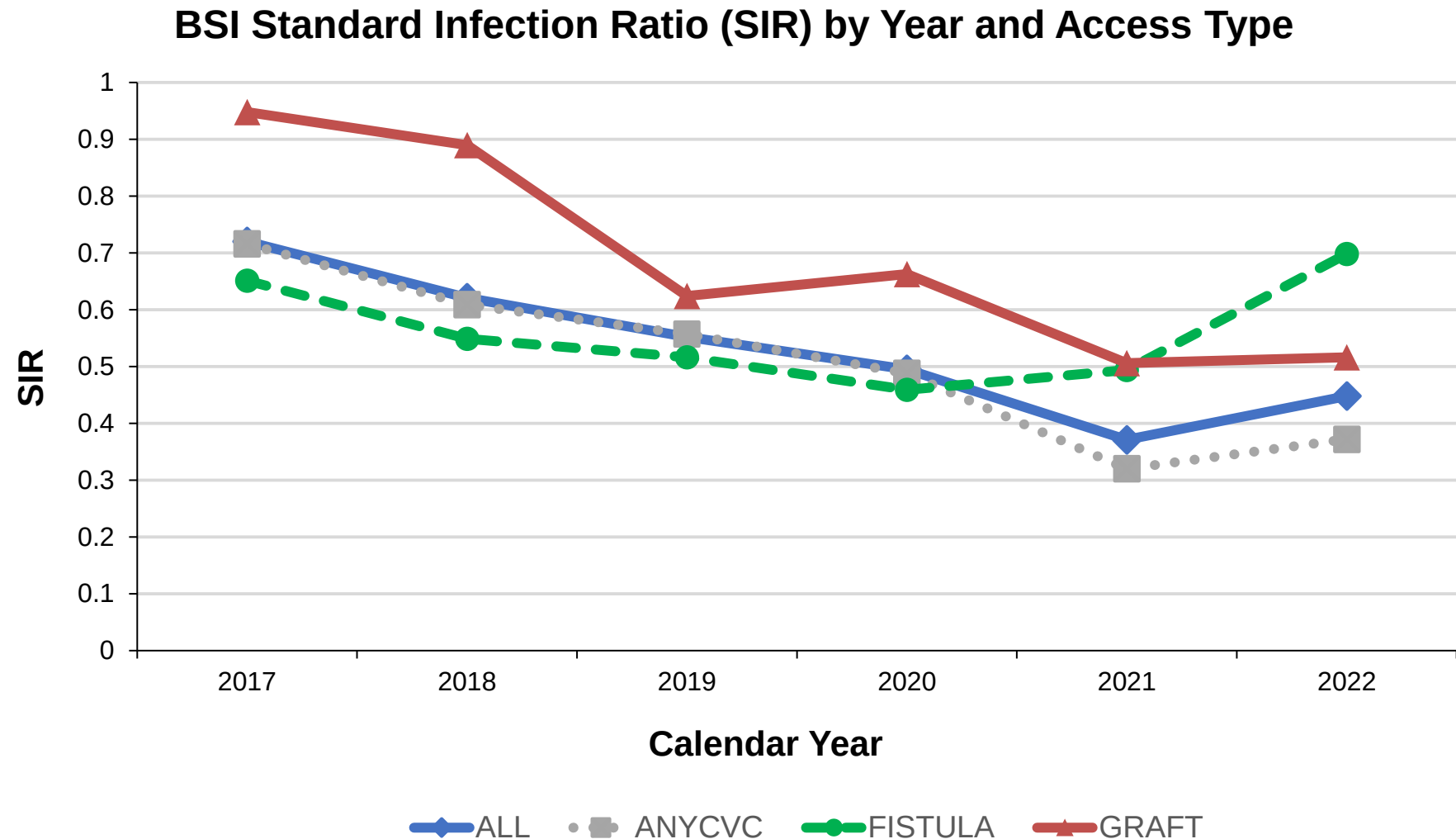


Data were extracted from NHSN on August 1, 2023

Dialysis Bloodstream Infections (BSI): Standard Infection Ratio by Year and Access Type

Key Findings

For the past three years, all access types of access for hemodialysis (central venous catheters (CVC), arteriovenous fistulas and arteriovenous grafts, experienced a significantly lower number of infections than predicted, based on 2014 national aggregate data.



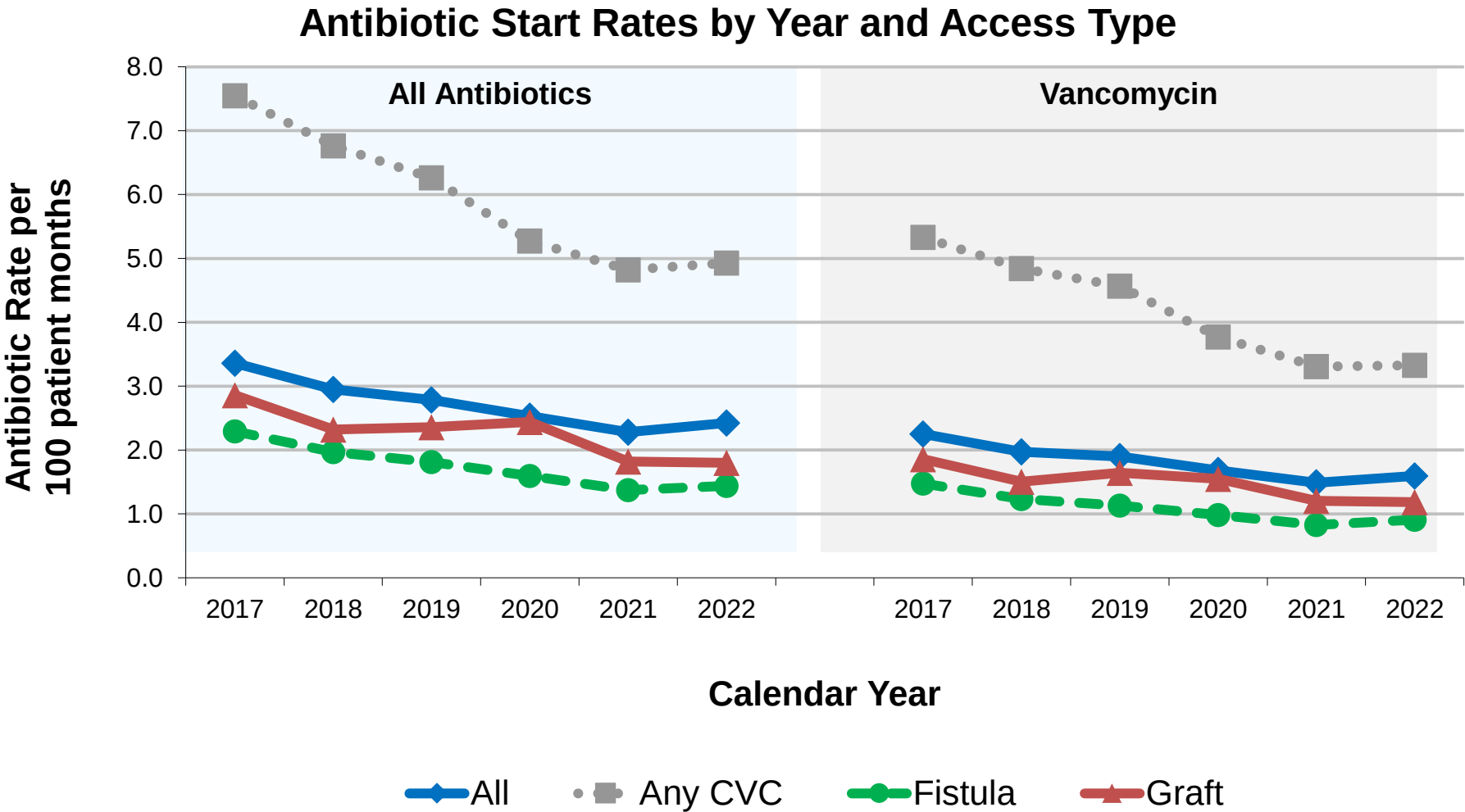
Data were extracted from NHSN on May 24, 2023

Dialysis Antibiotic Start Rates by Year and Access Type

2017-2022

Key Findings

Antibiotic and vancomycin start rates are highest in those with any kind of central venous catheter.



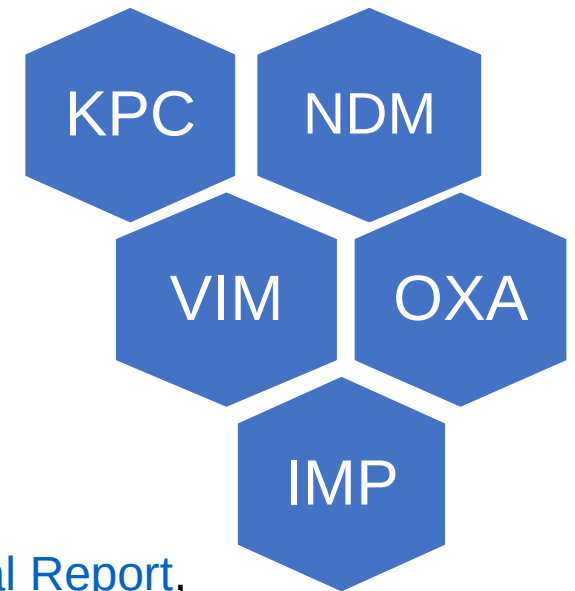
Data were extracted from NHSN on May 24, 2023

DPH HAI Prevention and Response Activities

- Comprehensive proactive and responsive on-site Infection Control Assessment and Response (ICAR) visits are conducted at a variety of healthcare facilities. During these visits, an epidemiologist and public health nurse:
 - Discuss facility infection prevention and control policies and practices;
 - Observe hand hygiene, PPE use, environmental cleaning and disinfection, wound care, point of care blood glucose testing, vaccine storage, and provide feedback and coaching to the facility staff;
 - A comprehensive report is provided to facility leadership with resources and recommendations for improvement.
- Conducted webinars for nursing home staff on topics such as:
 - Enhanced barrier precautions to protect at-risk residents
 - Invasive group A streptococcus due to an increase in cases and clusters
- Promote CDC's National Training Collaborative, Project Firstline, and develop MA-specific infection control training content and learning programs for frontline healthcare workers.
- Conducted three in-person simulation trainings for dialysis nurses, technicians and infection preventionists on CDC's dialysis evidence-based best practice recommendations.
 - Program content and materials shared with multiple state health departments to promote dialysis training nationwide.
- NEW Developed and distributed quarterly dialysis and non-acute hospital data cleaning reports sharing summary statistics using data submitted to NHSN.

Antibiotic Resistance: Targeting Carbapenemase-producing Organisms (CPO) in MA

- **Carbapenems are a class of antibiotics often considered a “last resort” to treat infections caused by Enterobacterales, *Pseudomonas*, and *Acinetobacter***
- One way these organisms are resistant to carbapenems is by producing carbapenemases
- A carbapenemase is an enzyme that can break down (and thus resist) many classes of antibiotics, including carbapenems, making infections with these organisms harder to treat
- Genes that program the organism to produce a carbapenemase can be shared between bacteria
- **Carbapenemase gene targets:** KPC, NDM, VIM, OXA and IMP
- CDC’s July 2022 [COVID-19: U.S. Impact on Antimicrobial Resistance, Special Report](#), concluded that the threat of antimicrobial-resistant infections worsened—with resistant hospital-onset infections and deaths both increasing at least 15% during the first year of the COVID-19 pandemic.

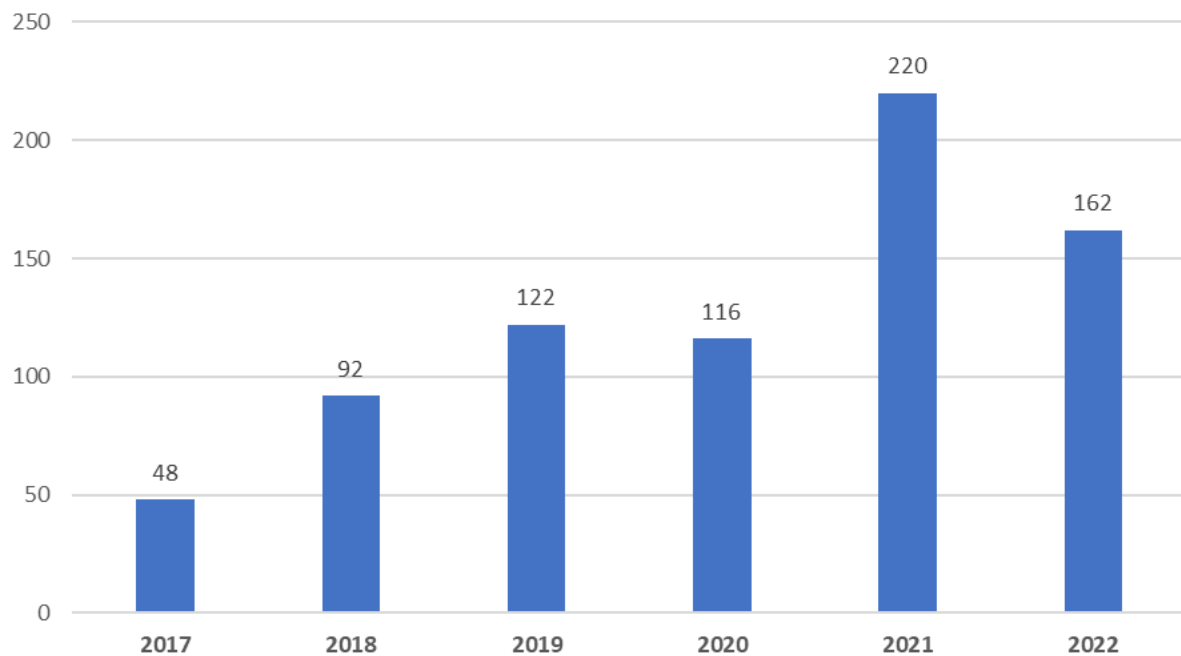


Antibiotic Resistance Surveillance: Reporting and Laboratory Testing Methods

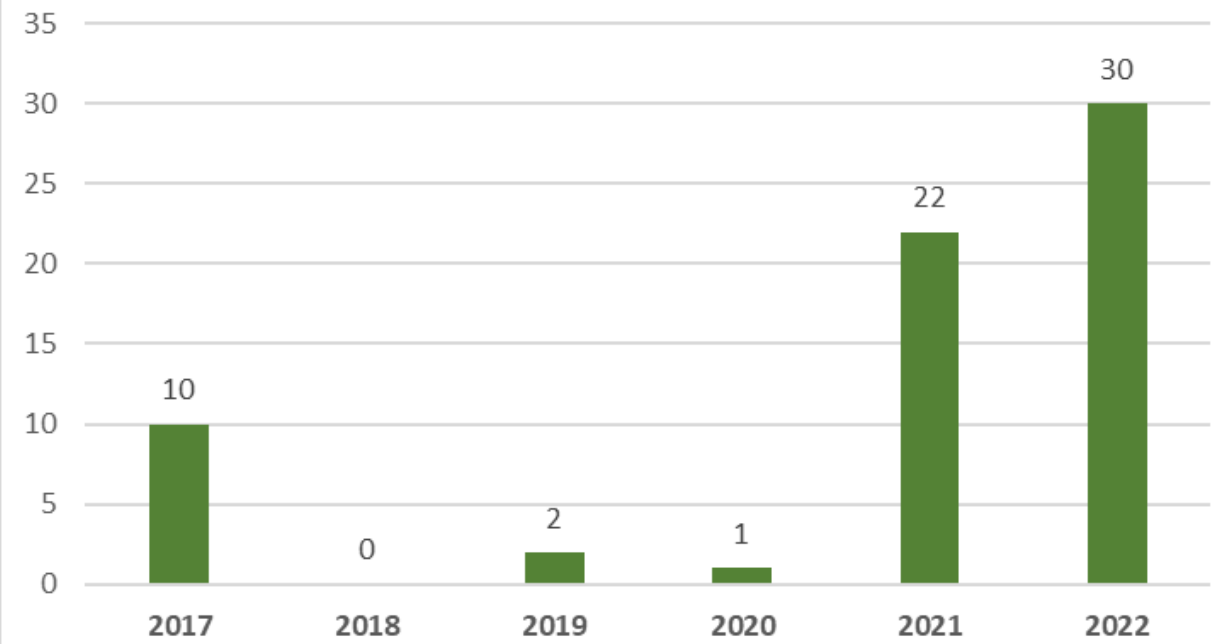
- Electronic laboratory reporting (ELR) of multidrug-resistant organisms (MDROs) of concern into the Massachusetts Virtual Epidemiologic Network (MAVEN) is mandatory for clinical laboratories
- Mandatory submission of selected MDRO isolates to the Massachusetts State Public Health Laboratory (MA SPHL) for advanced testing at MA SPHL and at our regional Antimicrobial Resistant Laboratory Network (ARLN), the Wadsworth Center in New York:
 - Identify novel resistance mechanisms such as genes that code for carbapenemase production or colistin resistance
 - Identify *Candida auris*
 - Test swabs to identify colonization with target organisms to detect transmission within a healthcare facility
 - Conduct whole-genome sequencing to determine relatedness of organisms to identify transmission pathways within and across healthcare facilities

Antibiotic Resistance Surveillance: Increasing *Candida auris* and Carbapenemase-producing Organism (CPO) Cases in MA

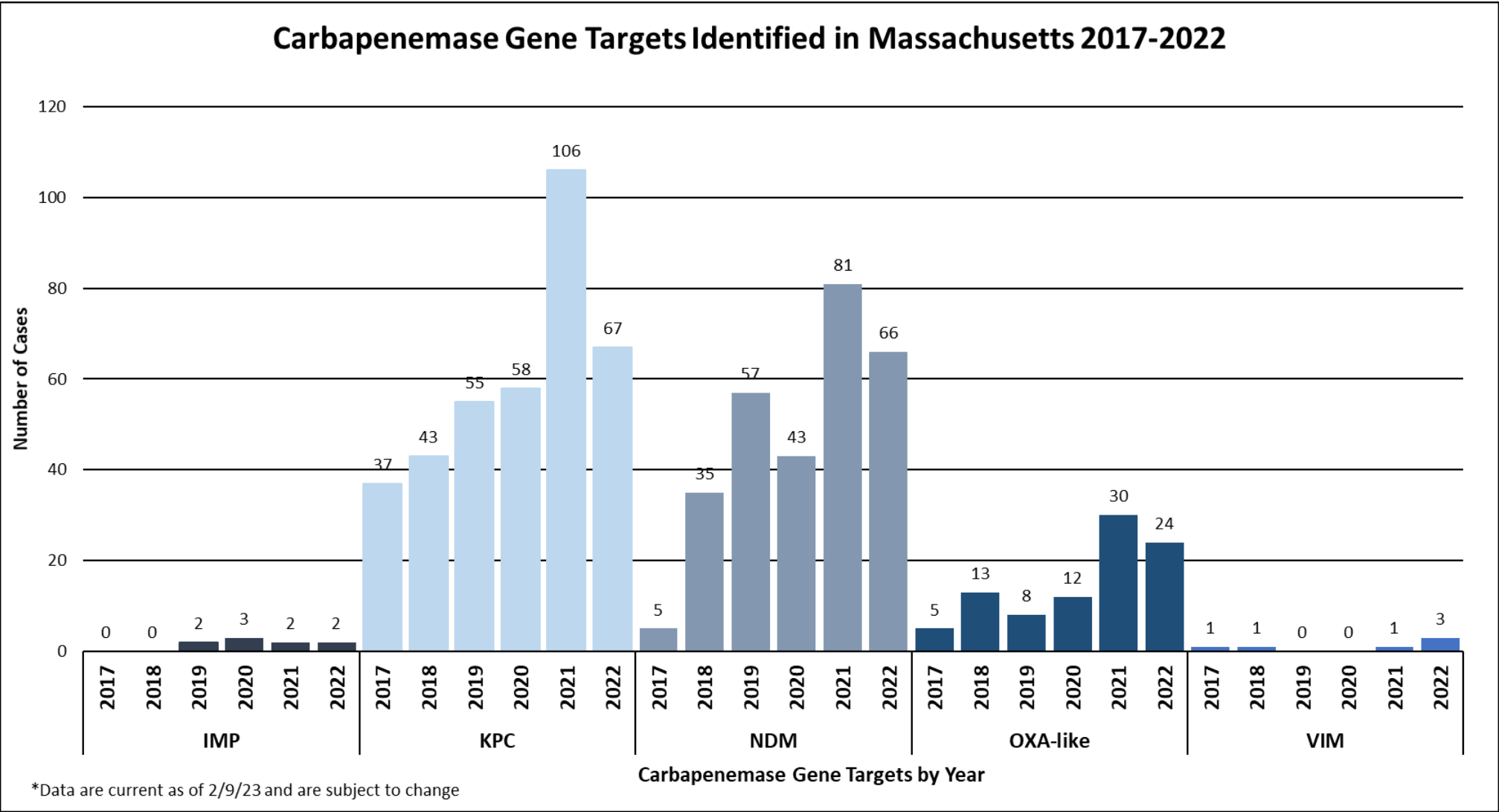
CPO Cases Identified in Massachusetts 2017-2022



***C. auris* Cases Identified in Massachusetts 2017-2022**



Antibiotic Resistance Surveillance: Carbapenemase-producing Organisms (CPOs) in MA

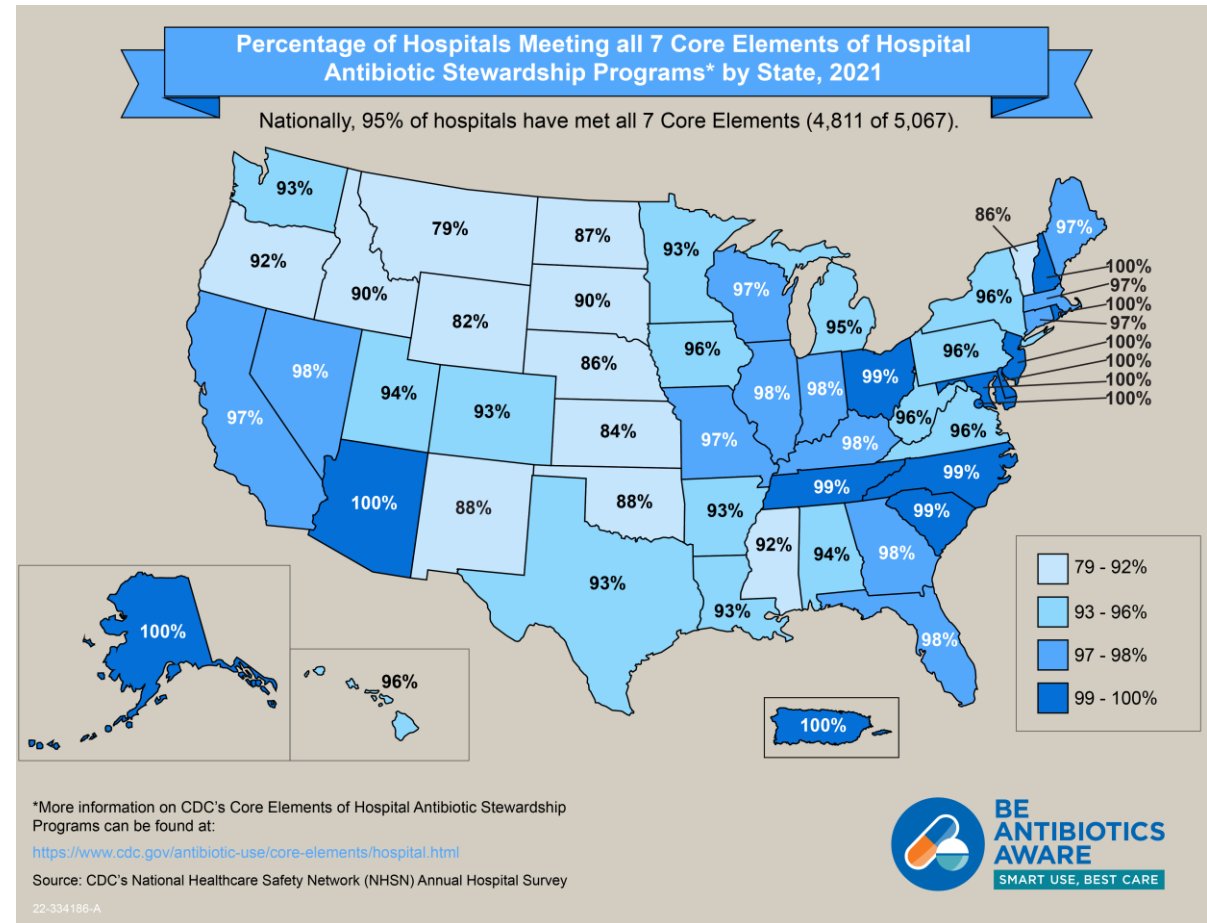


Antibiotic Stewardship

- Studies indicate that between 30-50% of antibiotics prescribed in hospitals and between 40-75% of antibiotics prescribed in nursing homes are unnecessary*
- Improved prescribing practices can help reduce rates of *Clostridioides difficile* and antibiotic resistance
- Appropriate antibiotic prescribing can improve patient outcomes and reduce healthcare costs

<https://www.cdc.gov/antibiotic-use/healthcare/>

<https://www.cdc.gov/longtermcare/prevention/antibiotic-stewardship.html>



Antibiotic Stewardship: Prevention and Educational Activities

- This year, DPH is host health department to one of four [IDSA/SHEA Leadership in Epidemiology, Antimicrobial Stewardship, and Public Health Fellows](#).
 - In addition to collaborating with the health department, Dr. Kap Sum Foong of Tufts Medical Center will pilot a program to remove unnecessary antibiotic allergy labels in long term care facilities.
- Continued collection and analysis of facility-level antibiotic use data voluntarily submitted by long-term care facilities.
 - 76 facilities reported at least one month of data in 2022, on average 43 facilities reported each month.
 - Updated AS Honor Roll highlighting facilities with consistent participation:
<https://maininfectioncontrol.populationhealthexchange.org/lcf-as/antibiotic-stewardship-honor-roll/>
- Ongoing collaboration with antibiotic stewardship (AS) experts from Tufts Medical Center to enhance AS support and activities in long-term care facilities, including monthly office hours.
- Re-established the Antimicrobial Use (AU) Subcommittee of the statewide HAI/AR Technical Advisory Group to provide guidance on how to best leverage NHSN AU module data for understanding trends in antibiotic use, monitoring stewardship activities, and obtaining a comprehensive, statewide picture of antibiotic use in the acute care setting.
 - Currently, DPH has access to NHSN AU data for 34 acute care hospitals.
 - Hospitals participating in the CMS Promoting Interoperability (PI) Program must begin reporting AUR Surveillance data in calendar year 2024.

Thank you for the opportunity to present this information today.

Please direct any questions to:

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Healthcare Associated Infection Coordinator

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Massachusetts Department of Public Health

Massachusetts Healthcare Personnel Influenza Vaccination in Health Care Facilities: *Season 2022-2023*

Katherine T. Fillo, PhD, MPH, RN-BC, Deputy Bureau Director of Clinical & Health Care Systems Quality

Fareesa Hasan, MPH, MS, Epidemiologist

Eileen McHale, RN, BSN, Healthcare Associated Infection Coordinator

Background

- Health care personnel (HCP) are at high risk for influenza exposure and illness, and may be a source of influenza virus transmission in health care settings
- Annual immunization is the best method of reducing risk to patients of COVID-19 and influenza infection and potential serious complications*
- The Massachusetts Department of Public Health (DPH) considers the prevention of COVID-19 and influenza by promoting vaccination an organizational priority that should be part of the overall institutional commitment to improvement for licensed healthcare facilities

* <https://www.cdc.gov/flu/prevent/keyfacts.htm>

Background

As a condition of licensure, current DPH regulations require health care facilities including hospitals, ambulatory surgical centers, dialysis centers, clinics, nursing homes, rest homes, and adult day health programs to:

- Offer free-of-charge, annual influenza vaccine to all personnel (full and part-time employees, contracted employees, volunteers, house staff and students)
- Document receipt of influenza vaccine administered within and outside the facility or document the declination of immunization for HCP
- Report information to DPH documenting compliance with the vaccination requirement, in accordance with reporting and data collection guidelines of the Commissioner (105 CMR.)
 - 105 CMR 130.325, 105 CMR 140.150, 105 CMR 150.002(D)(8), 105 CMR 158.030(L)(8)

Vaccination Expectations

DPH expects an overall minimum influenza vaccination rate of 90% or greater for eligible HCP at all licensed healthcare facilities.

This performance benchmark is intended to advance patient and HCP health and safety by ensuring optimal HCP influenza vaccination coverage and was originally established based on the National Healthy People 2020 target of achieving 90% influenza coverage of HCP.

The Advisory Committee on Immunization Practices (ACIP) recommends that HCP receive an annual influenza vaccination to reduce influenza related morbidity and mortality among HCP and their patients as well as reduce absenteeism among HCP.

https://www.healthypeople.gov/node/4668/data_details

Methodology

Health Care Facilities report HCP influenza vaccination rates to DPH in three ways:

1. **National Healthcare Safety Network (NHSN) at the Centers for Disease Control and Prevention (CDC):** Acute care hospitals, non-acute hospitals, ambulatory surgical centers, dialysis centers, and nursing homes
2. **Health Care Facility Reporting System (HCFRS):** Rest homes, and adult day health programs
3. **Online survey:** Clinics

This was the first year that nursing homes were required to submit their data through NHSN. DPH aligned state reporting with federal requirements.

Reporting Requirements

All facilities were required to submit the following data elements by May 15, 2023 for the period October 1, 2022 to March 31, 2023:

- Total number of HCP who worked at least one day in the reporting period
- HCP vaccinated at the facility
- HCP vaccinated elsewhere (PCP office, pharmacy, etc.)
- HCP that declined vaccine
- HCP with a medical contraindication to the vaccine
- HCP with unknown vaccine status (only allowed in NHSN reporting)

Facilities that reported data to NHSN were required to stratify this data by HCP type.

Measures and Calculations

Percentage HCP vaccinated in each season

$$\text{Vaccine Coverage} = \frac{\text{HCP Vaccinated at Facility} + \text{HCP Vaccinated}}{\text{Total \# HCP at Facility}}$$

Percentage HCP in facility that declined vaccine in each season

$$\text{Vaccine Declination} = \frac{\text{\# HCP Declined Vaccine}}{\text{Total \# HCP at Facility}}$$

Percentage HCP in facility with a medical contraindication to vaccine in each season

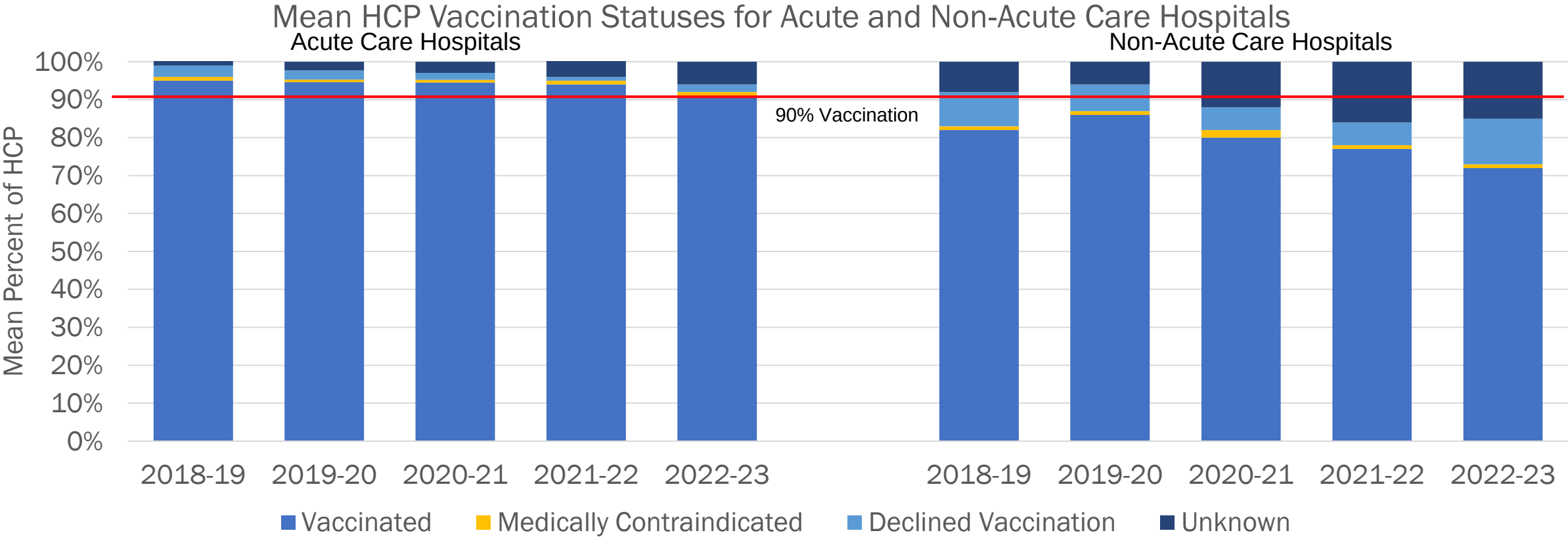
$$\text{Medical Contraindication} = \frac{\text{\# HCP with Medical Contraindication}}{\text{Total \# HCP at Facility}}$$

Percentage HCP in facility with unknown influenza vaccine status in each season

$$\text{Unknown Vaccine Status} = \frac{\text{\# HCP with Unknown Vaccine Status}}{\text{Total \# HCP at Facility}}$$

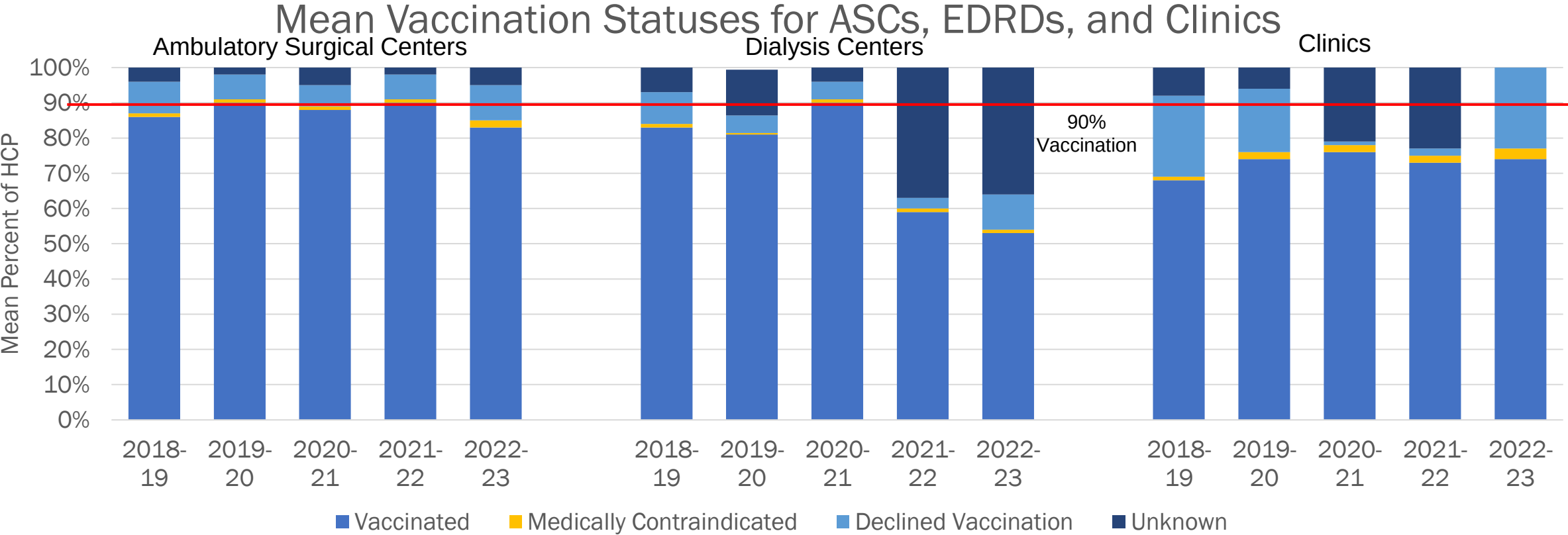
5-Year Trends: Hospitals

HCP Data 2022-2023	Mean Vaccination Rate
Acute Care Hospitals	91.0%
Non-Acute Care Hospitals	72.0%



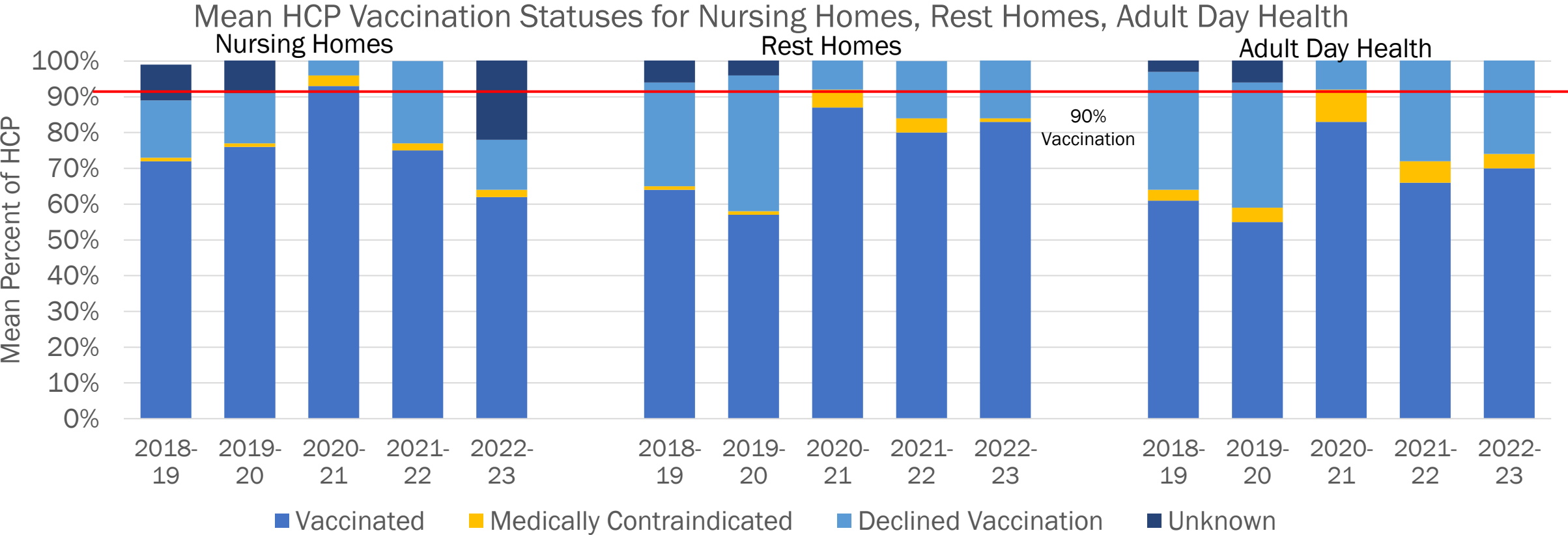
5-Year Trends: Ambulatory Surgical Centers (ASC), Dialysis Centers, and Clinics

HCP Data 2022-2023	Mean Vaccination Rate
Ambulatory Surgical Centers	83.0%
Dialysis Centers	53.0%
Clinics	74.0%



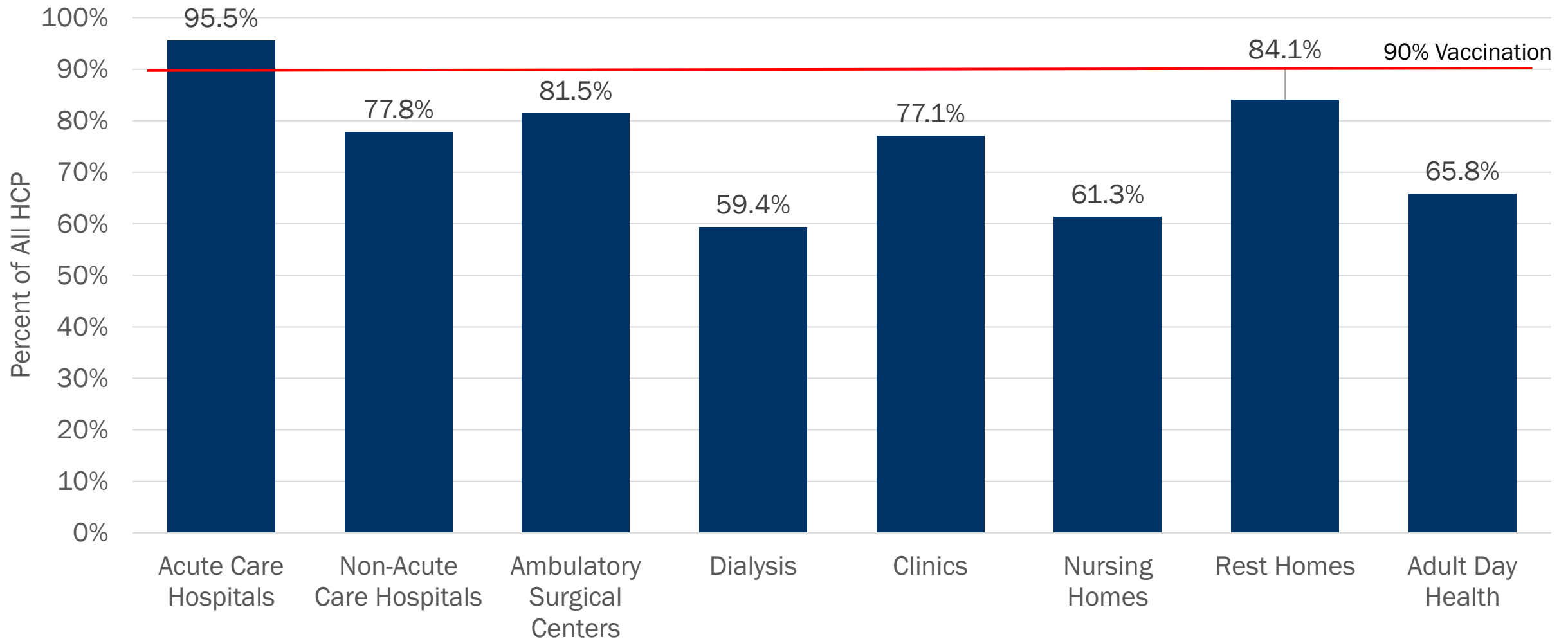
5-Year Trends: Nursing Homes, Rest Homes, and Adult Day Health Centers

HCP Data 2022-2023	Mean Vaccination Rate
Nursing Homes	62.0%
Rest Homes	83.0%
Adult Day Health	70.0%



Statewide HCP Vaccination Rates by Facility Type

Statewide HCP Vaccination Rates by Facility Type, 2022-2023



DPH Engagement

- DPH will update state data collection tools, trainings, and supporting documentation in alignment with new regulations and recommendations for vaccinations against influenza and COVID-19 and best practices for Respiratory Syncytial Virus (RSV)
- DPH will continue hosting webinars to provide updated information for each influenza season. The first webinar is scheduled for October 17th.
 - Topics to include information on National and Massachusetts infection activity; best practices to promote HCP vaccination; and guidance on data submission
- DPH will continue promotion of continuous quality improvement by recommending licensed facilities share vaccination rates with all staff, including administrators, boards of directors, practice managers, ombudspersons and patient/family councils
- DPH will continue to provide useful resources educational materials, strategies and interventions to promote increasing vaccination coverage among HCP

DPH Engagement

- DPH will conduct focused outreach to dialysis centers to request plans for improvement
- DPH will do additional training and outreach with nursing homes around reporting to NHSN
- DPH will continue distribution of job aids to assist clinics, adult day health centers, and rest homes in tracking and monitoring HCP vaccination progress.
- DPH will share this update with all licensed healthcare facilities with recommendations to distribute broadly within each facility and to use the reported data to drive improvement.
- This update and facility specific results will be available on the MDPH website:
<https://www.mass.gov/info-details/flu-vaccination-reports-for-healthcare-personnel>

Thank you for the opportunity to present this information today.

Please direct any questions to:

Division of Quality Improvement

Bureau of Health Care Safety and Quality

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Massachusetts Department of Public Health

**Next Meeting:
October 11, 2023**