NH DIVISION OF
Public Health Services
Improving health, preventing disease, reducing costs *for all*
Department of Health and Human Services

STATE OF NEW HAMPSHIRE
HEALTHCARE-ASSOCIATED INFECTIONS
2021 AMBULATORY SURGERY CENTER REPORT

November 2022

New Hampshire Department of Health and Human Services
Division of Public Health Services

TABLE OF CONTENTS

LIST OF DATA TABLES 4

LIST OF FIGURES 4

ABBREVIATIONS USED IN THIS DOCUMENT 6

CONTRIBUTORS AND ACKNOWLEDGMENTS 7

EXECUTIVE SUMMARY 8

Healthcare-Associated Infections in New Hampshire Ambulatory Surgery Centers 8

I. INTRODUCTION 11

Purpose 11

Audience 11

How to Use This Document 11

Background on Healthcare-Associated Infections 11

Healthcare-Associated Infections in Outpatient Settings 12

New Hampshire Healthcare-Associated Infections Program 12

State of New Hampshire Healthcare-Associated Infections Plan 13

Overview of Healthcare-Associated Infections Prevention Efforts 13

Healthcare-Associated Infections Technical Advisory Workgroup 14

II. SURVEILLANCE METHODS 16

2021 Healthcare-Associated Infections Reporting Requirements for New Hampshire ASC 16

Selection of Reporting Requirements 16

Accuracy of Reported Healthcare-Associated Infections Surveillance Data 17

National Healthcare Safety Network 17

Comparisons with National Data 17

Surgical Site Infections Surveillance 18

Surgical Intravenous Antimicrobial Prophylaxis Administration 20

Influenza Vaccination Percentage Monitoring 21

III. STATEWIDE DATA 22

Statewide Standardized Infection Ratios 23

Overall Statewide Standardized Infection Ratios: Comparison to 2020 Data 24

Surgical Site Infection Rates 25

Surgical Intravenous Antimicrobial Prophylaxis Administration 28

Surgical Intravenous Antimicrobial Prophylaxis Administration: Comparison to 2020 Data 30

Influenza Vaccination Percentages 32

Influenza Vaccination Percentages: Comparison to 2020-21 Data 34

Influenza Vaccination Policies for Healthcare Personnel 36

IV. CONCLUSIONS 40

V. AMBULATORY SURGERY CENTER INDIVIDUAL REPORTS 41

APPENDIX 1: Technical Notes 71

APPENDIX 2: Influenza Vaccination Survey Questions, 2020-2021 Season 74

APPENDIX 3: Understanding the Relationship between Healthcare-Associated Infection Rates and Standardized Infection Ratio Comparison Metrics 75

APPENDIX 4: Preventing Healthcare-Associated Infections 77

APPENDIX 5: Map of New Hampshire Ambulatory Surgery Centers 80

REFERENCES 81

LIST OF DATA TABLES

Table 1. Statewide ambulatory surgery center standardized infection ratios,Error! Bookmark not defined.

Table 2. Overall surgical site infection standardized infection ratios, comparison between 2021 and 2020, ... 24

Table 3. Statewide ambulatory surgical center rates by procedure 25

Table 4. Overall surgical infection rates by ASC, Jan 1-Dec 31, 2021 26

Table 5. Breast procedure-associated surgical site infection rates by ASC, Jan 1– Dec 31, 2021 .. Error! Bookmark not defined.

Table 6. Hernia procedure-associated surgical site infection rates by ASC, Jan 1– Dec 31, 2021..... 27

Table 7. Open reduction of fracture procedure-associated surgical site infection rates by ASC, Jan 1-Dec 31, 2021 28

Table 8. Performance of surigcal IV antimircobial prophylaxis by ASC, Jan 1-Dec 31, 2021 29

Table 9. Performance of surgical IV antimicrobial prophylaxis by ASC, comparison to 2020 dataError! Bookmark not defined.

Table 10. Influenza vaccination percentages for HCP by ASC, 2021–22 influenza season, Oct 1, 2021–Mar 31, 2022..... Error! Bookmark not defined.

Table 11. Influenza vaccination percentages for ASC HCP by ASC, comparison between 2021-22 and 2020-21 influenza seasons..... 35

Table 12. Influenza vaccination policies and consequences for HCP by ASC, 2021-2022 influenza season ..... Error! Bookmark not defined.

LIST OF FIGURES

Figure 1. Types of healthcare-associated infections reported to NH Department of Health and Human Services..... 15

Figure 2. Statewide performance of surgical IV antimicrobial prophylaxis by year, 2012-2021..... 30

Figure 3. Statewide influenza vaccination percentages for ASC HCP by influenza season 2014-15 through 2021-22..... 32

Figure 4. Influenza vaccination percentages for ASC with and without vaccination policies, 2021-22 influenza season..... 37

INDIVIDUAL AMBULATORY SURGERY CENTER REPORTS

Access Ambulatory Surgical Center	42
Atlantic Coast Surgical Suites	43
Atlantic Plastic Surgery	44
Barrington Surgical Care	45
Bedford ASC	46
Center for Pain Solutions	47
Concord ASC	48
Concord Endoscopy	49
Concord Eye Surgery	50
Dartmouth Manchester ASC	51
Dartmouth Nashua ASC	52
Elliot 1-Day Surgery Center at Rivers Edge	53
Granite State Surgicenter, Merrimack	54
Granite State Surgicenter, Somersworth	55
Hillside Surgical Center	56
Minimally Invasive Surgery Center	57
Nashua Ambulatory Surgical Center	58
Nashua Eye Surgery Center/Novamed	59
North Atlantic Surgical Care	60
Orchard Surgical Center	61
Orthopaedic Surgery Center Concord	62
Orthopaedic Surgery Center Derry	63
Parkland Endoscopy Center	64
Portsmouth Regional ASC	65
Rye Surgical Center	66
Stratham ASC	67
Surgery Center of Greater Nashua	68
The Surgery Center of New Hampshire at Derry	69
Wentworth Surgery Center	70

Note: In order to increase readability of tables and figures, ambulatory surgery center names have been provided in an abbreviated format. In all tables and figures, DH refers to Dartmouth-Hitchcock, PCC refers to Paincare Centers, GSP refers to Granite State Pain and ASC refers to ambulatory surgery center.

ABBREVIATIONS USED IN THIS DOCUMENT

APIC	Association for Professionals in Infection Control and Epidemiology
ASA Score	American Society of Anesthesiologists (ASA) Classification of Physical Status, a scale used by an anesthesiologist to classify the patient's physical condition prior to surgery
ASC	Ambulatory surgery center(s)
BRST	NHSN operative code for breast procedure(s)
BSI	Bloodstream infection(s)
CCN	CMS Certification Number
CDC	U.S. Centers for Disease Control and Prevention
CMS	Centers for Medicare and Medicaid Services
DH	Dartmouth-Hitchcock
DHHS	New Hampshire Department of Health and Human Services
FX	NHSN operative code for open reduction of fracture procedure(s)
HAI	Healthcare-associated infection(s)
HCP	Healthcare personnel
HER	NHSN operative code for hernia procedure(s)
HICPAC	Healthcare Infection Control Practices Advisory Committee
HHS	U.S. Department of Health and Human Services
IV	Intravenous
NH	New Hampshire
NHHCQAC	New Hampshire Health Care Quality Assurance Commission
NHSN	National Healthcare Safety Network
NQF	National Quality Forum
PCC	Paincare Centers
RSA	Revised Statutes Annotated
SIR	Standardized infection ratio(s)
SSI	Surgical site infection(s)
TAW	Healthcare-Associated Infections Technical Advisory Workgroup

CONTRIBUTORS AND ACKNOWLEDGMENTS

The following individuals contributed to analysis of data and other content provided in this report:

Madyn Kenney, Healthcare-Associated Infections Surveillance Coordinator

Annika Williams, Public Health Advisor; CDC

Trevor Bauer, MPH, Systems Development Data Scientist

Darlene Cray, Healthcare Associate Infections Program Manager

Trevor Shreeve, Antimicrobial Resistance Specialist

Abigail Dulin, Infection Prevention Liaison

Katrina E. Hansen, MPH, CPM Chief, Infectious Disease Surveillance Section

Elizabeth A. Talbot, MD, Deputy State Epidemiologist

Benjamin Chan, MD, MPH, State Epidemiologist

Tylor Young, GIS Analyst, Infectious Disease Surveillance Section

The Healthcare-Associated Infections (HAI) Program would also like to thank the Infection Prevention, Quality, and Information Technology staff at New Hampshire ambulatory surgical centers for collaborating to provide the data presented in this report. Finally, the HAI Program acknowledges the review, comments, input, and other program contributions provided by the members of the HAI Technical Advisory Workgroup as listed on page 14.

For questions about this report, please contact:

New Hampshire Healthcare-Associated Infections Program

Infectious Disease Surveillance Section

Division of Public Health Services

NH Department of Health and Human Services

29 Hazen Drive, Concord, NH 03301-6504

Phone: (603) 271-4496

Email: dhhs.hai.program@dhhs.nh.gov

Website: http://www.dhhs.nh.gov/dphs/cdcs/hai/index.htm

EXECUTIVE SUMMARY

A healthcare-associated infection (HAI) is an infection that a patient acquires during the course of receiving treatment for another condition within a healthcare setting. An estimated 722,000 HAI and 75,000 associated deaths occurred in United States (U.S.) acute care hospitals in 2011.[i] During the 2011 legislative season, the New Hampshire (NH) Legislature passed a bill amending NH Revised Statutes Annotated (RSA) 151:32-35, requiring ambulatory surgery centers (ASC) to identify, track, and report selected HAI to the NH Department of Health and Human Services (DHHS). All licensed ASC began reporting data to DHHS on one infection and two process measures in July 2011. All facilities reported in accordance to (RSA) 151:32-35. This report represents the tenth summary of HAI-related data reported by ASC in NH.

Healthcare-Associated Infections in New Hampshire Ambulatory Surgery Centers

All ambulatory surgical centers reported accordance to RSA 151:32-35. There was a statistically significant lower number of infections in NH as predicted based on national data. Thirty ASC were licensed for the 2021 calendar year, of these 11 ASC performed reportable procedures. There was zero surgical site infections (SSI), which was 100% fewer than predicted based on national data. Ten ASC with sufficiently robust data to present procedure-specific rate data had a similar rate as predicted based on national data.

Surgical Site Infections

Ten ASC reported SSI data for three surgical procedures.

- Breast Procedures (BRST): Nine ASC performed breast procedures; eight had sufficiently robust data[1] to present a facility-specific rates for SSI following breast procedures. Overall, no SSI following breast procedures were reported. Overall, SSI rates were lower compared to national data.
- Hernia Procedures (HER): Eight ASC performed hernia procedures; three had sufficiently robust data to present a facility specific rate. No SSI following hernia procedures were reported. Overall, SSI rates were similar to national data.
- Open Reduction of Fracture Procedures (FX): Eight ASC performed open reduction of fracture procedures; seven had sufficiently robust data to present a facility specific rate. No SSI following open reduction of fracture procedures were reported. Overall, SSI rates were similar to national data.

Surgical Intravenous Antimicrobial Prophylaxis Administration

Twenty Four ASC that administer intravenous (IV) surgical antimicrobial prophylaxis were licensed for the entire 2021 calendar year and therefore required to report IV surgical antimicrobial prophylaxis timing administration data. This prophylaxis was provided within the appropriate timeframe for 97.0% of reported orders. Adherence to reporting was low at only

[1] Data are not shown for facilities with less than one predicted infection or fewer than 20 procedures performed.

54.1%. This could be a result of many different circumstances such as: reopening after COVID-19 related restrictions, turnover of staff, along with other factors. One ASC observed lower adherence, three ASC observed higher adherence, and three observed similar adherence compared to the State adherence percentage, eight facilities did not perform enough procedures for robust data to be displayed. Atlantic Coast Surgical Suites, Elliot 1 Day, North Atlantic Coast Surgical Suites, Orchard Surgery Center, Orthopaedic Surgery Center Derry, Parkland Endoscopy, Portsmouth Regional ASC, Wentworth Surgical Center, failed to report their data. Bedford ASC, Nashua ASC, and Stratham ASC reported data but not for all four quarters, therefore the data was omitted from the repot.

In response to the data findings from the 2021 reporting year, the data can be considered to be skewed in favor of those reporting. Historically, New Hampshire has had robust adherence to reporting all measures under 151:32-35. In 2023, the HAI Program will actively engage facilities to improve reporting and work to alleviate barriers that ASC may be experiencing.

Influenza Vaccination Coverage in Ambulatory Surgery Center Healthcare Personnel

Twenty-Eight ASC licensed at any point during the 2021-22 influenza season were required to report healthcare personnel (HCP) influenza vaccination percentages. In the 2020-21 Flu season, due to the COVID-19 global pandemic not all ASC reported their vaccination percentages, as a result the HAI Program told facilities to prioritize COVID-19 prevention activities over reporting influenza data. While this was not explicitly repeated for the 2021-22 flu season, it is reasonable to say that ASC were still focused on these efforts during the 2021-22 season. Forty-six percent of facilities did not report.

COVID-19 Limitations

In response to the COVID-19 pandemic, many state and local health resources were reassigned to support COVID-19 containment and mitigation. The NH HAI program was also redirected and heavily involved with outbreak response in healthcare settings due to staff expertise in conducing infection control assessments. Many healthcare facilities statewide had to prioritize and reduce surveillance activities that were not related to COVID-19. Due to these factors and prioritizing COVID-19 activities, many of the standard data collection and validation activities for this report were limited, unable to be completed, or delayed. This can lead to incomplete data in some areas and potential reporting errors.

National Healthcare Safety Network (NHSN) ASC Module

NHSN implemented a module for ambulatory surgical centers (ASCs) called the Outpatient Procedure Component (OPC). The OPC allows ASCs to report mandated, as well as optional measures, by using one web-based secure reporting system. This system contains two distinct modules: Same Day Outcome Measures (OPC-SDOM) and Surgical Site Infection (OPC-SSI) surveillance.

The OPC module has some limitations when comparing data to the Patient Safety Module, which was previously used for ASC data. Only facilities with a CMS number can submit data into NHSN, this prohibits any non-CMS registered healthcare facilities from submitting data into the OPC module. There is only one ASC in New Hampshire that is a non-CMS certified healthcare facility, which could impact that facilities ability to report data in the future years. The OPC module no longer calculates a SIR or risk-adjusted rates. All ASC-specific rates and corresponding p-values in this report were generated directly by NHSN using Poisson statistical methods. State-level rates and corresponding p-values were calculated by DHHS using exact methods.

Conclusion

This is the tenth report of NH ASC data and it is an important part of continuing progress toward the goal of eliminating HAI in NH. This report provides selected HAI data that can be used by healthcare facilities in the state to identify areas for improvement as well as by healthcare consumers to make informed healthcare decisions.

I. INTRODUCTION

Purpose

This report represents the tenth summary of healthcare-associated infection (HAI)-related data reported by ambulatory surgery centers (ASC) in New Hampshire (NH) during calendar year 2021. This report can be used by healthcare facilities in the State to identify areas for improvement as well as by healthcare consumers to make informed healthcare decisions.

Audience

The intended audience may include, but is not limited to: healthcare personnel (HCP), infection control and prevention staff, facility leadership and management, clinicians, and healthcare consumers.

How to Use This Document

This document includes aggregate data reported by all licensed ASC in NH. This report also includes individual ASC reports on page 42. The document consists of six sections:

I) Introduction
II) Surveillance methods
III) Statewide data
   a. Overall NH data in ASC
   b. Surgical site infection (SSI) standardized infection ratios and rates following breast, hernia, and open reduction of fracture procedures
   c. Surgical intravenous (IV) antimicrobial prophylaxis administration
   d. Percentage of HCP receiving influenza vaccination
IV) Conclusions
V) Individual hospital reports
VI) Appendices
   a. Technical notes
   b. Influenza vaccination survey questions, 2021-2022 season
   c. Understanding the relationship between HAI comparison metrics
   d. Map of NH ASC

Please contact the NH Department of Health and Human Services (DHHS) HAI Program (603-271-4496) with any questions about the content or how to use this document.

Background on Healthcare-Associated Infections

A HAI is an infection that a patient acquires during the course of receiving treatment for another condition within a healthcare setting. An estimated 722,000 HAI and 75,000 associated deaths occurred in United States (U.S.) acute care hospitals in 2011.[ii] This may represent a decreasing tend because previous studies depict higher numbers of HAI; 1.7 million infections and 99,000

deaths each year.[iii] By these estimates, HAI are among the top 10 leading causes of death in the U.S., and 5–10% of all hospital admissions are complicated by HAI.[iv] The economic burden of HAI is substantial and increasing. The total cost of HAI has been estimated at $33 billion per year in U.S. hospitals.[v] The most common HAI are pneumonia, gastrointestinal illness, primary bloodstream infections (BSI), and SSI.[ii] SSI are estimated to cause 244,385 infections and cost between 3.45 and 10.07 billion dollars annually.[ii,iv]

Healthcare-Associated Infections in Outpatient Settings

ASC are a growing and important healthcare setting and patients are potentially, susceptible to HAI as more procedure types become available. In recent decades, healthcare delivery has shifted from acute care hospitals to a variety of outpatient and ambulatory settings. More than three quarters of all operations in the U.S. are performed on an outpatient basis.[vi] ASC provide approximately 40% of all Centers for Medicare and Medicaid Services (CMS) outpatient surgeries and perform more than 25 million procedures a year. There are more than 5,300 CMS-certified ASC in the U.S. which commonly perform cataract surgery, gastrointestinal endoscopies and pain management.[vii]

Past outbreak investigations by the Centers for Disease Control and Prevention (CDC) and other state health jurisdictions have identified poor infection control prevention practices at some ASC, including problems with injection safety, instrument reprocessing, sterilization, and disinfection.[vii] ASC often have limited numbers of dedicated infection preventionists with specialized training, no standard method for identifying infections in the 90 days following a procedure, and varying degrees of electronic medical records and information technology support. With ASC playing such an important role in the current healthcare delivery system, it is critical that they follow guidelines and take measures to minimize the risk of HAI.

New Hampshire Healthcare-Associated Infections Program

DHHS has been developing and improving a HAI surveillance program since 2007. During the 2006 legislative season, the NH Legislature passed a bill creating NH Revised Statutes Annotated (RSA) 151:32-35, which requires hospitals to identify, track, and report HAI to DHHS. The intent of the bill is to provide HAI data by hospital or ASC in a publicly accessible forum. Because the bill did not identify funding to carry out these activities, mandatory reporting was not fully implemented until January 2009.

During the 2010 legislative season, the NH Legislature passed House Bill 1548 (2010) amending RSA 151:32-35 to also require all licensed ASC to report HAI to DHHS beginning July 1, 2011.

DHHS, with consideration of the law, required that eligible ASC report the following measures:

- SSI following breast, hernia, and open reduction of fracture procedures (via National Healthcare Safety Network [NHSN]). Only those ASC that perform the selected surgical procedures enroll and report data to NHSN.
- Surgical IV antimicrobial prophylaxis administration (via DHHS template). Only those ASC

that administer IV surgical antimicrobial prophylaxis report administration data.
- Influenza vaccination in HCP (via DHHS web survey). All ASC report influenza vaccination in HCP.

All ASC required to report SSI successfully enrolled in NHSN and began reporting the required data in July 2011. See Figure 1 on page 15 regarding types of HAI reported to NH DHHS.

State of New Hampshire Healthcare-Associated Infections Plan

In response to increasing concerns about the public health impact of HAI, the U.S. Department of Health and Human Services (HHS) developed its "Action Plan to Prevent Healthcare-Associated Infections" (HHS Action Plan) in 2009. The HHS Action Plan includes recommendations for surveillance, research, communication, and metrics for measuring progress toward national goals. In a concurrent development, the 2009 Omnibus Appropriations Act required states receiving Preventive Health and Health Services Block Grant funds to certify that they would submit a plan to reduce HAI to the Secretary of HHS not later than January 1, 2010. In order to assist states in responding within the short timeline required by that language and to facilitate coordination with national HAI prevention efforts, CDC provided a template to assist state planning efforts in the prevention of HAI. The template targeted four areas: 1) Development or Enhancement of HAI Program Infrastructure; 2) Surveillance, Detection, Reporting, and Response; 3) Prevention; and 4) Evaluation, Oversight, and Communication. In 2009, DHHS drafted a State HAI Plan and submitted it to HHS.

Overview of Healthcare-Associated Infections Prevention Efforts

DHHS participates in statewide prevention activities through the NH Health Care Quality Assurance Commission (NHHCQAC), on which the Division of Public Health Services director serves. DHHS is active in various projects coordinated by the NHHCQAC and the CMS Quality Innovation Network-Quality Improvement Organization (QIN-QIO). Major statewide initiatives through these organizations have included hand hygiene campaigns, patient safety checklists, and programs to prevent bloodstream infections, antimicrobial resistance, and *Clostridium difficile*. Additionally, the Foundation for Healthy Communities received a large grant through the Partnership for Patients program to conduct additional large, statewide prevention initiatives. For additional information on these various efforts, the following websites may be helpful:

New Hampshire Health Care Quality Assurance Commission:
http://www.healthynh.org/fhc-initiatives/nh-health-care-quality-assurance-commission.html

CMS QIN-QIO for Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont:
https://ipro.org

Foundation for Healthy Communities Partnership for Patients:
http://www.healthynh.org/

In addition to supporting and engaging in prevention activities with patient safety groups, the HAI Program provides educational opportunities to healthcare facilities across the state in order to share best practices for infection prevention and ultimately reduce HAI and facilitates the NH Antimicrobial Resistance Advisory Workgroup (NH ARAW).

Healthcare-Associated Infections Technical Advisory Workgroup

In the spring of 2009, DHHS formed an HAI Technical Advisory Workgroup (TAW). The purpose of the TAW is to provide scientific and infection prevention expertise to the HAI Program. The TAW meets quarterly, and as a forum for stakeholder participation in decision-making around the HAI Program. The TAW is currently a 25-member group that includes representation from stakeholders across NH and includes representatives from various sizes and types of hospitals and ASC, infection control associations, a consumer advocate, the NH Hospital Association, the New Hampshire Healthcare Quality Assurance Commission, the New Hampshire Ambulatory Surgery Association, and the Northeast Health Care Quality Foundation. TAW was unable to meet in recent years due to increased responsibilitiesas a result of the COVID-19 pandemic. TAW is expected to reconvene starting in 2023.

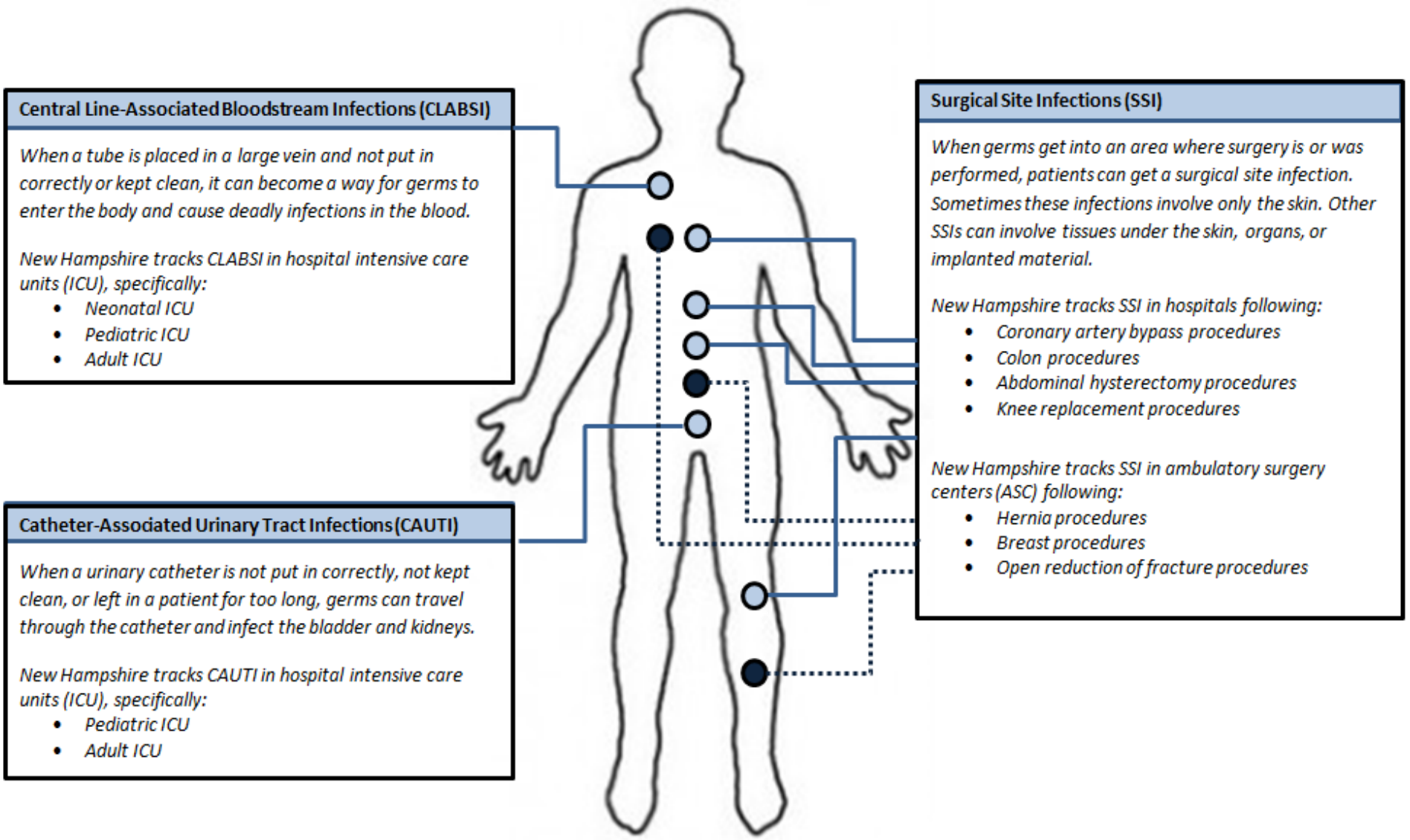
HEALTHCARE-ASSOCIATED INFECTIONS TECHNICAL ADVISORY WORKGROUP

Members	
Dr. Benjamin Chan, MD, MPH	Anne Diefendorf, MS, RD, LD
Dr. Beth Daly, MPH, DrPH	Terri E. Kangas-Feller, BS, RN-BC, CIC
Katrina Hansen, MPH	Tanya Lord MPH, PhD
Yvette Perron, MPH	Elissa Malcolm, MS
Trevor Bauer, MPH	Andria Scacheri, RN, CIC
Carly Zimmermann, MPH, MLS(ASCP)^{cm}	Donna Quinn, RN, BSN, MBA
Dr. Elizabeth Talbot, MD	Cathy Foti, BSN, RN, CNOR
Darlene Burrows, RN, BSN, CIC	Dr. Michael Calderwood, MD, MPH
Lynda Caine, RN, MPH, CIC	Dr. Antonia Altomare, DO, MPH
Ashley Conley, MS, CIC, CPH, CHEP	Nancy Gooch, RN
Gloria Thorington, RN, CPHQ, CPPS	

*Served on TAW for part of 2018

DHHS: New Hampshire Department of Health and Human Services

Figure 1. Types of healthcare-associated infections reported to NH Department of Health and Human Services



II. SURVEILLANCE METHODS

2021 Healthcare-Associated Infections Reporting Requirements for New Hampshire ASC

Reporting requirements are governed by RSA 151:33 with authority given to DHHS to develop administrative rules to provide specific reporting instructions and methodology. Administrative rules, "He-P 309 Healthcare Associated Infections," were drafted in 2010 with stakeholder input and approved January 14, 2011 by the Joint Legislative Committee on Administrative Rules. Reporting requirements for 2012-2021 included the following required measures for ASC:

- SSI following breast, hernia, and open reduction of fracture procedures
- Surgical IV antimicrobial prophylaxis administration
- Influenza vaccination in HCP

While all licensed ASC are required to report the selected measures under RSA 151:33, some ASC (endoscopy, ophthalmology, and pain centers) that do not perform the selected surgeries or provide IV antibiotic prophylaxis do not report SSI or antibiotic prophylaxis measures.

Selection of Reporting Requirements

RSA 151:33 broadly requires reporting of all SSI in ASC; however, it was not feasible to perform surveillance for all of these infections using NHSN. In order to generate infection measures for ASC and compare them with national data, infection reporting was limited to the capabilities of NHSN and measures were selected in accordance with national recommendations for HAI surveillance in the context of public reporting.

In 2005, CDC released a report titled "Guidance on Public Reporting of Healthcare-Associated Infections: Recommendations of the Healthcare Infection Control Practices Advisory Committee" (HICPAC).[viii] The group recommended selecting outcome measures for reporting based on the frequency, severity, and preventability of the outcomes and the likelihood that they can be detected and reported accurately.

In 2008, the HAI Working Group[2] of the Joint Public Policy Committee released "Essentials of Public Reporting of Healthcare-Associated Infections: A Tool Kit."[ix] The HAI Working Group agreed with most of the CDC/HICPAC document, "Guidance on Public Reporting of Healthcare-Associated Infections" (referenced above). The toolkit recommends monitoring the following measures applicable to ASC:

- Surgical procedures that are performed with adequate frequency to permit meaningful comparisons among institutions
- HCP influenza vaccination coverage

[2] The HAI Working Group of the Joint Public Policy Committee is a multi-organizational group represented by APIC, CDC, Council of State and Territorial Epidemiologists, and Society for Healthcare Epidemiology of America.

Within the context of RSA 151:33, DHHS surveyed ASC and reviewed national guidelines, including National Quality Forum (NQF)-endorsed measures and capabilities of NHSN in selecting outcome and process measures. It is expected that these reporting requirements may change in the future as we learn from public reporting, as HAI epidemiology evolves, and as new surveillance methods and reporting technologies become available.

Accuracy of Reported Healthcare-Associated Infections Surveillance Data

DHHS conducted a validation study of 2017 hospital data to assess the degree of under- and over-reporting and to provide additional training to address any common or systematic errors in reporting processes. DHHS could not validate ASC data due to limited resources, including lack of nationally-developed guidance toward validating outpatient surgery data. The 2020 and 2021 data presented in this report must therefore be interpreted with the understanding that, in general, there is potential for both under- and over-reporting of infections. The HAI Program is currently exploring options to validate ASC data on a rolling basis.

Despite lack of external data validation, several processes were implemented to ensure that the data are as accurate as possible. First, DHHS selected NHSN for mandatory reporting, which requires the use of standardized infection definitions and reporting methods. Second, DHHS analyzed and reviewed all data reported for 2020 and 2021 for each ASC. This review identified any obvious reporting errors or internal inconsistencies that suggested errors. Third, DHHS provided data reports to each ASC asking the facility to confirm that the data reported to DHHS was accurate. This reconciliation process was iterative until all ASC made corrections and agreed to the reported data.

While definitions for classifying an infection as healthcare-associated are standardized through the use of NHSN, methods to identify the infection in each ASC are not. Identifying patients who develop SSI after discharge from the ASC can be difficult, and each ASC may use a different method of post-discharge surveillance (e.g., letters to surgeons, chart reviews for surgical patients, post-operative office visits, etc.). These different approaches vary in sensitivity.

National Healthcare Safety Network

NHSN is a voluntary, secure, internet-based surveillance system for healthcare facilities to monitor patient safety and infection prevention measures. Enrollment is open to all types of healthcare facilities in the U.S. DHHS selected NHSN because it is widely used across the U.S., offers already developed and accepted surveillance definitions and methods, provides national comparison data, and there is no cost to use or join the system.

More information about NHSN is available at: http://www.cdc.gov/nhsn/index.html.

Comparisons with National Data

All SSI comparisons with national data use 2006-2008 NHSN data published in the "National Healthcare Safety Network (NHSN) report: Data summary for 2006 through 2008, issued

December 2009."[x] This report is available at:
http://www.cdc.gov/nhsn/PDFs/dataStat/2009NHSNReport.PDF.

Surgical Site Infections Surveillance

A SSI is an infection that develops at the site of a surgical procedure. There are different ways to classify a SSI, such as whether it is superficial, in deep tissue, or in the organ/space. Monitoring for a SSI may continue for as little as 30 days after the procedure or as long as 90 days based on depth and procedure type. In 2021, ASC were required to monitor and report SSI for three procedures:

- Breast procedures (excision of lesion or tissue of breast including radical, modified, or quadrant resection, lumpectomy, incisional biopsy, or mammoplasty)
    - NHSN Operative Procedure BRST
- Hernia procedures (repair of inguinal, femoral, umbilical, or anterior abdominal wall hernia; does not include repair of diaphragmatic or hiatal hernia or hernias at other body sites)
    - NHSN Operative Procedure HER
- Open reduction of fracture procedures (open reduction of fracture or dislocation of long bones with internal or external fixation; does not include placement of joint prosthesis)
    - NHSN Operative Procedure FX

The Current Procedural Terminology (CPT) operative procedure codes are listed with the accompanying operative procedure code descriptions at
https://www.cdc.gov/nhsn/xls/opc/opc-cpt-pcm-nhsn.xlsx

SSI monitoring includes total counts as well as patient-level information for all patients undergoing the same procedure. This allows for appropriate risk adjustment, because risk for development of an SSI can be influenced by patient- and procedure-specific factors. NSHN did not offer capacity for DHHS to calculate the standardized infection ratio (SIR) for ASC, allowing for more robust risk factor adjustment. Instead, DHHS used more limited risk categories (SSI risk index) to manually calculate SSI SIR by ASC. The basic SSI risk index assigns surgical patients into categories based on the presence of three major risk factors:

- Operation lasting more than the duration of cut point hours[3]
- Contaminated (Class III) or Dirty/infected (Class IV) surgical wound class
- American Society of Anesthesiologists (ASA) Classification of Physical Status score of 3, 4, or 5 (see below)

The wound class is a way of determining how clean or dirty the operative body site was at the time of the operation. Operation body sites are divided into four classes:

[3] Cut points are assigned based upon the time that the majority (75%) of a specific procedure takes to perform. The duration cut point is measured in minutes and is the time between the skin incision and skin closure. For example: The duration cut point for an abdominal hysterectomy is two hours and twenty three minutes.

Class I/Clean: An uninfected operation body site is encountered and the respiratory, digestive, genital, or uninfected urinary tracts are not entered.
Class II/Clean-Contaminated: Operation body sites in which the respiratory, digestive, genital, or urinary tracts are entered under controlled conditions and without unusual contamination.
Class III/Contaminated: Operation body sites that have recently undergone trauma, operations with major breaks in sterile technique (e.g., open cardiac massage), or gross spillage from the gastrointestinal tract.
Class IV/Dirty or Infected: Includes old traumatic wounds with retained dead tissue and those that involve existing infection or perforated intestines.

The ASA score is a scale used by the anesthesiologist to classify the patient's physical condition prior to surgery. It is one of the factors that help determine a patient's risk of possibly developing an SSI.

The ASA score scale is:

1. Normally healthy patient
2. Patient with mild systemic disease
3. Patient with severe systemic disease
4. Patient with an incapacitating systemic disease that is a constant threat to life
5. A patient who is not predicted to survive with or without the operation
6. A patient declared braindead whose organs are being removed for donor purposes)

All SSI metrics are monitored following NHSN protocols and definitions and reported in NHSN. The NHSN SSI protocols are available at:
http://www.cdc.gov/nhsn/PDFs/pscManual/9pscSSIcurrent.pdf.

Limitations of SSI surveillance:

- ASC do not use a standard method of post-discharge surveillance to identify infections. This may make data interpretation difficult because a higher SSI rate (for example) at an ASC could be a reflection of poor infection prevention practices or perhaps a more comprehensive system for identifying infections.
- SSI reporting only includes a subset of procedures. DHHS elected this subset based on national recommendations because it would not be feasible for ASC to report information on every patient receiving any surgical procedure due to the burden of reporting through NHSN.
- Some procedures require monitoring for SSI for 90 days after the procedure depending on the depth of infection (in NH, this includes breast, hernia, and open reduction of fracture procedures). This is challenging in the outpatient setting when ASC rely on post-discharge surveillance.
- The SSI data presented in this report include all types of infections, including superficial SSI, which can occur as a result of care in the ASC but also as a result of the patient's care of the surgical site once discharged.

- Some procedures may be excluded from SIR analysis due to incomplete information.
- NHSN implemented a new module for ambulatory surgical centers called Outpatient Procedure Component (OPC). This module went live on November 1, 2018. The OPC contains two distinct modules: Same Day Outcome Measures (OPC-SDOM) and Surgical Site Infection (OPC-SSI) surveillance.
- The OPC module no longer uses the SSI risk index.
- The OPC module no longer calculates a SIR. DHHS calculated rates. For more information on DHHS rate calculation, please see the technical notes below, page 71.
- The SSI data presented in this report have not been validated and must be interpreted with the understanding that in general there are both under- and over-reporting of infections. For example, bilateral procedures, such as breast or open reduction of fracture procedures, should be reported as two separate procedures, however it is likely that some facilities under-reported procedures by reporting bilateral procedures as only one procedure. This could potentially increase or decrease the rate and/or SIR.

Surgical Intravenous Antimicrobial Prophylaxis Administration

New Hampshire ASC reported surgical IV antimicrobial prophylaxis data following NQF-endorsed protocols to DHHS, specifically:

- Procedure type, date and time of procedure, time of antibiotic administration, and antibiotic administered for all pre-operative orders of selected IV antibiotics intended for the prevention of SSI.

An antibiotic is considered administered on time when antibiotic infusion is initiated within one hour prior to the time of the initial surgical incision or the beginning of a procedure, or two hours prior if vancomycin or selected fluoroquinolones are administered.

This process measure shows an ASC adherence rate to best practices designed to reduce SSI. ASC follow the NQF specification manual located at: http://ascquality.org/documents/ASCQualityCollaborationImplementationGuide.1.7.pdf.

Limitations for surgical intravenous antimicrobial prophylaxis administration:

- Data collection and documentation techniques at ASC vary, which may affect how necessary data elements are reported (e.g., antibiotic administration or procedure start time) and ultimately impact facilities' overall adherence percentage.
- Surgical IV antimicrobial prophylaxis data are reported using time from infusion to start of procedure. There are some rare instances when administrations of surgical antimicrobial prophylaxis are recorded as having an interval of 00:00 and/or 1:00 between administration and procedure start time, or, alternatively, of 00:00 and/or 2:00 for antibiotics that may be administered up to two hours prior to the procedure start. These cases were excluded from analysis.

Influenza Vaccination Percentage Monitoring

HCP can become infected with the influenza virus through contact with infected patients and can transmit influenza to patients and other HCP. Despite documented benefits of HCP influenza vaccination on patient outcomes and HCP absenteeism, vaccination coverage among HCP remains low nationally. In a CDC survey, influenza vaccination coverage in HCP nationally was 78.8% during the 2017-18 influenza season.[xi] Because HCP provide care to patients at high risk for complications of influenza, they should be offered influenza vaccine each year. Currently there are no regulations requiring vaccination in NH, and HCP are free to decline vaccination for any reason. However, some ASC do have policies requiring mandatory HCP vaccination.

All ASC are required to report HCP vaccination aggregate data directly to DHHS via an online survey that is provided to facilities. See Appendix 2 for the 2020-2021 survey questions regarding influenza vaccination. Submission of these data meets the requirements of both the HAI law (RSA 151:32-35) and the healthcare immunization law (RSA 151:9-b).

HCP influenza vaccination percentages were calculated by dividing the total number of HCP that worked or volunteered in each facility for at least one working day between October 1, 2020 and March 31, 2021 by the total number of HCP immunized against influenza for the 2020-21 influenza season.

<u>Limitations for influenza vaccination monitoring:</u>

- The survey asks for the total number of HCP vaccinated. This may not reflect the number of HCP to whom the vaccine was offered. ASC may vary in the refusal rate for vaccination among HCP and the reasons for such refusal. Additionally, some HCP may not be eligible to receive the vaccine. The survey attempted to assess why unvaccinated HCP did not receive the vaccine, however, not all ASC were able to report this information.
- Because the survey did not include options for facilities to report unknown vaccination status, patients and HCP with unknown vaccination status were analyzed as though they were not vaccinated. This results in a conservative estimate of vaccination status (e.g., lower than in reality).
- Vaccination status is not available by location where the vaccination was received (e.g., at the reporting facility or elsewhere).
- Data collection techniques at ASC may vary from season to season, potentially affecting comparison of data. DHHS continues to work towards improving the validity and utility of this measure in order to eliminate issues that pose problems for such comparison.
- Some ASC have very few HCP and may never be able to achieve a vaccination percentage significantly higher than the State percentage due to sparse data.
- For the 2020-21 influenza season, CMS required all facilities sharing the same CMS Certification Number (CCN) to report this measure in aggregate via NHSN. Because some ASC and hospitals may share the same CCN, it is possible that HCP influenza vaccination data contain more duplicate data than in prior influenza seasons.

III. STATEWIDE DATA

HAI data are presented throughout this report as both SIR and rates as appropriate. Presenting data as a SIR allows for aggregating data across risk group, procedure, and healthcare facility to gain a better understanding of the incidence of HAI while still adjusting for underlying patient or healthcare facility factors that may affect the occurrence of infections. The SIR allows comparison between how many infections actually occurred and how many were predicted to occur based on national data. Specific rate information is also provided where possible, which represents the number of infections that occurred, taking into account the number of procedures that were performed. Rate data are limited by the requirement to only calculate rates that are broken down by certain factors. See technical notes for additional information on rates and the SIR.

Because a SIR is a comparison of the number of actual observed infections to the number predicted based on national data, a SIR of 1.0 means that exactly the same number of infections were observed than were predicted. A SIR of less than one means that fewer infections were observed than were predicted (for example, SIR = 0.70 would be interpreted as 30% fewer infections observed than predicted). A SIR of more than one means that more infections were observed than were predicted (for example, SIR = 1.30 would be interpreted as 30% more infections observed than predicted). A confidence interval is calculated to determine whether the difference between observed and predicted infections is statistically significant. If the difference is not statistically significant, the observed and predicted numbers of infections are considered similar. See technical notes for additional information on confidence intervals.

This report provides comparisons with national and State data where appropriate. Comparisons are color coded consistently throughout. For infections, yellow represents infection rates or SIR that are similar to national data, red represents infection rates or SIR that are significantly higher than national data, and green represents infection rates or SIR that are significantly lower than national data.

SIR or rate: fewer than predicted SIR or rate: similar to predicted SIR or rate: more than predicted

For process measures, yellow represents rates that are similar to the State percentage, red represents rates that are significantly lower than the State percentage, and green represents rates that are significantly higher than the State percentage.

higher than State similar to State lower than State

Statistical significance is affected by sample size. If a value is almost or just barely significant, just a few additional observations can push significance one way or the other (i.e., not significant or significant).

Statewide Standardized Infection Ratios

Table 1 below shows the number of SSI following the three monitored procedures reported by ASC in NH. In 2021, there were zero SSI reported by the 13 ASC in NH licensed for the entire 2021 calendar year and were required to report these data. The infections represent SSI following breast, hernia, and open reduction of fracture procedures. Based on national data, 7.52 infections were predicted. The overall observed number of SSI was 100% fewer than predicted based on national data. Looking individually at the specific procedures, there were 100% fewer breast infections, 100% fewer hernia infections, and 100% fewer than predicted open reduction of fracture infections. The observed number of infections following open reduction of fracture and hernia procedures were not statistically significant and are considered similar to national data. The observed number of infections following breast procedures are statistically significant and are considered lower to national data.

Table 1. Statewide ambulatory surgery center standardized infection ratios, Jan 1–Dec 31, 2021

	Observed Infections	Predicted Infections	Standardized Infection Ratio (SIR)	95% Confidence Interval	Comparison to Predicted Number of Infections
Overall SSI SIR	0	7.52	0.00	- , 0.49	Lower
	The overall observed number of SSI in New Hampshire ASC was 100% fewer than predicted based on national data. This difference is statistically significant, which means the overall number of SSI in the state is LOWER to the number seen nationally.				
BRST SIR	0	5.97	0.00	- , 0.61	Lower
	The overall observed number of BRST infections in New Hampshire ASC was 100% fewer than predicted based on national data. This difference is not statistically significant, which means the overall number of BRST infections in the state is LOWER to the number seen nationally.				
HER SIR	0	1.34	0.00	- , 2.73	Similar
	The overall observed number of HER infections in New Hampshire ASC was 100% fewer than predicted based on national data. This difference is not statistically significant, which means the overall number of HER infections in the state is SIMILAR to the number seen nationally.				
FX SIR	0	1.09	0.00	- , 3.38	Similar
	The overall observed number of FX infections in New Hampshire ASC was 100% fewer than predicated based on national data. This difference is not statistically significant, which means the overall number of FX infections in the state is SIMILAR to the number seen nationally.				

HAI: Healthcare-associated infection
SSI: Surgical site infections
BRST: Surgical site infections associated with breast procedures
HER: Surgical site infections associated with hernia procedures

FX: Surgical site infections associated with open reduction of fracture procedures

Overall Statewide Standardized Infection Ratios: Comparison to 2020 Data

The statewide SIR in 2021 is similar compared to 2020; however, this difference was not statistically significant. Between 2021 and 2020 a total of one SSI were reported. See table 3 below.

Table 2. Overall surgical site infection standardized infection ratios, comparison between 2021 and 2020

ASC	Standardized Infection Ratio (SIR) 2021	95% Confidence Interval 2021	Standardized Infection Ratio (SIR) 2020	95% Confidence Interval 2020	2021 Compared to 2020
Overall SSI SIR	0.00	- , 0.49	0.00	- , 0.49	Similar
BREAST SIR	0.00	- , 0.61	0.00	- , 0.71	Similar
HER SIR	0.00	- , 2.73	0.00	- , 2.41	Similar
FX SIR	0.00	- , 3.38	0.00	- , 4.41	Similar

Surgical Site Infection Rates

The statewide rate for infections following hernia, and open reduction of fracture procedures for patients were similar to national rates; statewide rate for infections following breast procedures were statistically significantly lower to national rates (Table 3). Tables 3 through 6 provide rates of SSI per 100 procedures by ASC. All ASC had a rate similar to national data for all procedure categories selected. Note that rates are calculated individually for type of procedure.

Table 3. Statewide ambulatory surgery center rates by procedure, Jan 1–Dec 31, 2021

	Observed Infections	Total Procedures	Rate by Procedure*	P-Value	State Rate Compared to National Rate
Overall SSI SIR	0	1,614	0.00	0.00	Lower
	The overall rate of SSI in New Hampshire ASC was 0.00 per 100 procedures. This difference is statistically significant, which means the overall number of SSI in the state is Lower when compared to the number seen nationally.				
BRST SIR	0	963	0.00	0.00	Lower
	The overall rate of BRST in New Hampshire ASC was 0.00 per 100 procedures. This difference is statistically significant, which means the overall number of BRST infections in the state is Lower when compared to the number seen nationally.				
HER SIR	0	263	0.00	0.26	Similar
	The overall rate of HER in New Hampshire ASC was 0.00 per 100 procedures. This difference is not statistically significant, which means the overall number of HER infections in the state is Similar to the number seen nationally.				
FX SIR	0	388	0.00	0.14	Similar
	The overall rate of FX in New Hampshire ASC was 0.00 per 100 procedures. This difference is not statistically significant, which means the overall number of FX infections in the state is Similar to the number seen nationally.				

*rates shown are per 100 procedures performed.
HAI: Healthcare-associated infection
SSI: Surgical site infections
BRST: Surgical site infections associated with breast procedures
HER: Surgical site infections associated with hernia procedures
FX: Surgical site infections associated with open reduction of fracture procedures

Table 4. Overall surgical infection rates by ASC, Jan 1–Dec 31, 2021

ASC	Infections	Procedures	ASC rate*	National Rate*	P-value	ASC rate Compared to the National Rate
Atlantic Plastic Surgery	-	-	-	-	-	-
Bedford ASC	0	340	0.0	0.51	0.17	Similar
Concord ASC	0	143	0.0	0.51	0.48	Similar
Elliot 1-Day Surgery Center	0	541	0.0	0.51	0.06	Similar
Nashua ASC	0	64	0.0	0.51	0.72	Similar
Orchard Surgical Center	0	225	0.0	0.51	0.31	Similar
Orthopaedic Surgery Center, Concord	0	136	0.0	0.51	0.50	Similar
Orthopaedic Surgery Center, Derry	0	26	0.0	0.51	0.87	Similar
Portsmouth Regional ASC	0	59	0.0	0.51	0.74	Similar
Stratham ASC	0	64	0.0	0.51	0.72	Similar
The Surgery Center of Greater Nashua	0	16	0.0	0.51	0.92	Similar
State Total	**0**	**1,614**	**0.0**	**0.51**	**<0.01**	**Lower**

*rates shown are per 100 procedures performed.

Note: Facilities that did not perform breast, hernia and fracture procedures in 2021 are not included in this table.

† Data are not shown for ASC with less than 20 procedures performed.

Table 5. Breast procedure-associated surgical site infection rates by ASC, Jan 1– Dec 31, 2021

ASC	Infections	Procedures	ASC Rate*	National Rate*	P-value	ASC Rate Compared to National Rate
Atlantic Plastic Surgery	-	-	-	-	-	-
Bedford ASC	0	294	0.00	0.62	0.19	Similar
Concord ASC	0	111	0.00	0.62	0.51	Similar
Elliot 1-Day Surgery Center	0	295	0.00	0.62	0.19	Similar
Nashua ASC	0	24	0.00	0.62	0.86	Similar
Orchard Surgical Center	0	136	0.00	0.62	0.44	Similar
Portsmouth Regional ASC	0	26	0.00	0.62	0.85	Similar
Stratham ASC	0	63	0.00	0.62	0.68	Similar
The Surgery Center of Greater Nashua	0	14	0.00	0.62	0.92	Similar
State Total	**0**	**963**	**0.00**	**0.62**	**0.01**	**Lower**

*rates shown are per 100 procedures performed.
Note: Facilities that did not perform this procedure in 2021 are not included in this table.
† Data are not shown when fewer than 20 procedures were performed.

Table 6. Hernia procedure-associated surgical site infection rates by ASC, Jan 1– Dec 31, 2021

ASC	Infections	Procedures	ASC Rate*	National Rate*	P-value	ASC Rate Compared to National Rate
Bedford ASC	†	†	†	†	†	†
Concord ASC	0	32	0.00	0.51	0.85	Similar
Elliot 1-Day Surgery Center	0	198	0.00	0.51	0.37	Similar
Nashua ASC	†	†	†	†	†	†
Orchard Surgery Center	0	21	0.00	0.51	0.90	Similar
Portsmouth Regional ASC	†	†	†	†	†	†
Stratham ASC	†	†	†	†	†	†
The Surgery Center of Greater Nashua	†	†	†	†	†	†
State Total	**0**	**263**	**0.00**	**0.51**	**0.22**	**Similar**

*rates shown are per 100 procedures performed.
Note: Facilities that did not perform this procedure in 2021 are not included in this table.
† Data are not shown when fewer than 20 procedures were performed.

Table 7. Open reduction of fracture procedure-associated surgical site infection rates by ASC, Jan 1– Dec 31, 2021

ASC	Infections	Procedures	ASC Rate*	National Rate*	p-value	ASC Rate Compared to National Rate
Bedford ASC	0	41	0.00	0.28	0.89	Similar
Elliot 1-Day Surgery Center	0	48	0.00	0.28	0.88	Similar
Nashua ASC	0	37	0.00	0.28	0.90	Similar
Orchard Surgical Center	0	68	0.00	0.28	0.83	Similar
Orthopaedic Surgery Center, Concord	0	136	0.00	0.28	0.71	Similar
Orthopaedic Surgery Center, Derry	0	26	0.00	0.28	0.93	Similar
Portsmouth Regional ASC	0	32	0.00	0.28	0.92	Similar
The Surgery Center of Greater Nashua	-	-	-	-	-	-
State Total	0	388	0.00	**0.28**	**0.42**	**Similar**

*rates shown are per 100 procedures performed.
Note: Facilities that did not perform this procedure in 2021 are not included in this table.
† Data are not shown when fewer than 20 procedures were performed.

Surgical Intravenous Antimicrobial Prophylaxis Administration

Twenty Four ASC were eligible to report surgical IV antimicrobial administration data. In NH ASC, 97.0% of 4,404 preoperative orders for IV antibiotics prescribed for the purpose of preventing SSI were administered in 2020 on time, compared to 97.6% of 11,362. The analysis presented in Table 8 shows that, of the seven facilities with sufficiently robust data to present, one ASC observed lower adherence, three ASC observed higher adherence, and three observed similar adherence compared to the State adherence percentage. During the 2021 calendar year, one facility closed permanently and one was opened.

Table 8. Performance of surgical IV antimicrobial prophylaxis by ASC, Jan 1-Dec 31, 2021

ASC	Number of Patients that Received IV Antibiotic on Time*	Total Number of Patients that Received IV Antibiotic	% Adherence	95% Confidence Interval	ASC % Compared to State %
Atlantic Coast Surgical Suites	-	-	-	-	-
Atlantic Plastic Surgery	210	211	99.5%	97.69 , 99.98	Higher
Barrington Surgical Care	†	†	†	†	†
Bedford ASC	†	†	†	†	†
Concord ASC	323	324	99.7%	98.49 , 99.98	Higher
Elliot 1-Day Surgery Center	-	-	-	-	-
Dartmouth – Nashua	†	†	†		†
Granite State Pain Associates, Merrimack	†	†	†		†
Granite State Pain Associates, Somersworth	†	†	†		†
Minimally Invasive Surgical Center	442	448	98.7%	97.24 , 99.46	Similar
Manchester ASC - DH	357	387	92.2%	89.25 , 94.61	Lower
Nashua ASC	†	†	†	†	†
North Atlantic Coast Surgical Suites	-	-	-	-	-
Northeast Surgical Care	-	-	-	-	-
Orchard Surgery Center	-	-	-	-	-
Orthopaedic Surgery Center, Concord	2,622	2,716	96.5%	95.80 , 97.18	Similar
Orthopaedic Surgery Center, Derry	-	-	-	-	-
Parkland Endoscopy Center	-	-	-	-	-
Portsmouth Regional ASC	-	-	-	-	-
Rye Surgical Center	†	†	†	†	†
Stratham ASC	†	†	†	†	†
The Surgery Center of Greater Nashua	161	163	98.8%	96.01, 99.79	Similar
Surgical Center of New Hampshire	137	137	100.0%	97.80 , 100	Higher
Wentworth Surgery Center	-	-	-	-	-
State Total	**4,270**	**4,404**	**97.0%**	**96.42 , 97.43**	

* Antibiotic administered on time: Antibiotic infusion is initiated within one hour prior to; the time of the initial surgical incision, or the start of a procedure, or two hours prior if vancomycin or selected fluoroquinolones are ordered.

- Facility closed within the 2021 calendar year, facility failed to report data, or data that was reported was incomplete.

† Data are not shown when fewer than 20 preoperative IV antibiotics were ordered. Note: Centers of Pain Solutions, Concord Endoscopy Center, Concord Eye Surgery LLC, Elliot Endoscopy at River's Edge, Nashua Eye Surgery, and reported no preoperative orders for IV antibiotic in 2021

Surgical Intravenous Antimicrobial Prophylaxis Administration: Comparison to 2020 Data

The statewide ASC adherence to surgical antimicrobial prophylaxis administration has remained above 95.0% since these data were first collected (Figure 2). Overall, in 2021 ASC adherence to surgical antimicrobial prophylaxis administration was similar when compared to 2020 for those that reported. Analysis showed that during 2021 one facility had lower adherence, three facilities had similar adherence and three facilities had higher adherence when compared to the state overall adherence (Table 8). Further analysis showed that, of the five ASC with sufficiently robust data to present, four had similar adherence, one had lower adherence and no ASC had higher adherence in 2021 when compared with 2020. (Table 9).

Figure 2. Statewide performance of surgical IV antimicrobial prophylaxis by year, 2021-2022

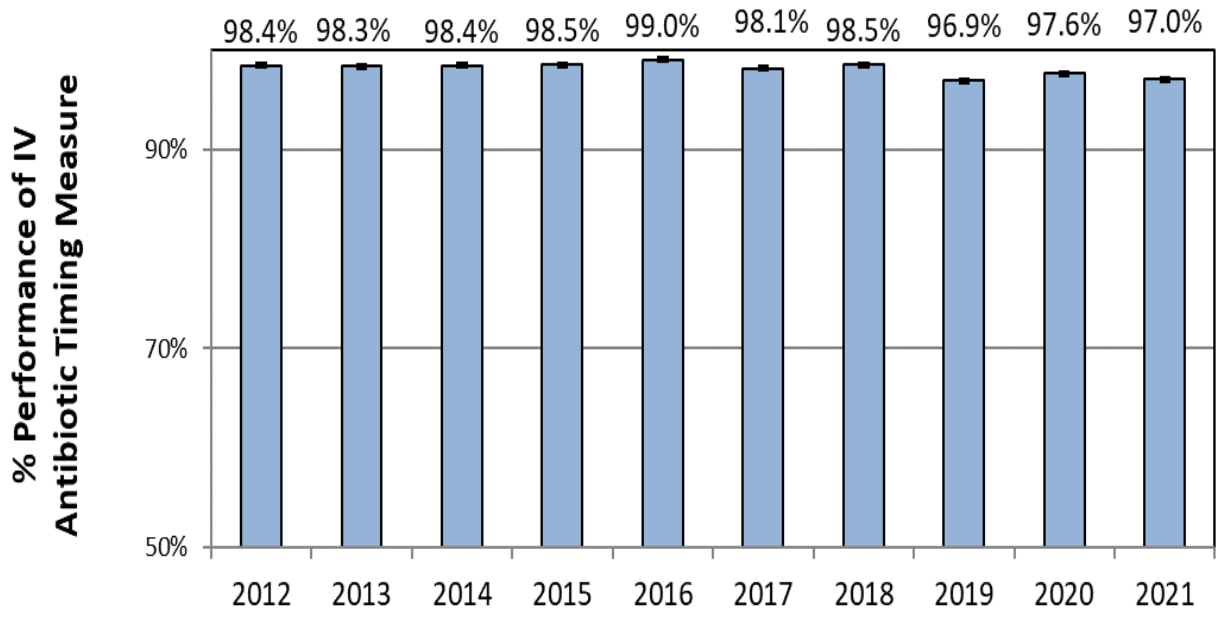


Table 9. Performance of surgical IV antimicrobial prophylaxis by ASC, comparison to 2020 data

ASC	% Adherence 2021	95% Confidence Interval 2021	% Adherence 2020	95% Confidence Interval 2020	2021 Compared to 2020
Atlantic Coast Surgical Suites	-	-	-	-	N/A
Atlantic Plastic Surgery	99.5	97.7 , 100.0	100.0	98.8 , -	Similar
Barrington Surgical Care, LLC	†	†	†	†	†
Bedford Ambulatory Surgical Center	†	†	99.5	99.1 , 99.8	N/A
Concord Ambulatory Surgical Center	99.7	98.5 , 100.0	97.0	95.0, 98.4	Higher
Elliot 1-Day Surgery Center at Rivers Edge	-	-	98.7	97.9 , 99.3	N/A
Dartmouth- Nashua ASC	†	†	†	†	N/A
Granite State Pain Associates, Merrimack	†	†	†	†	N/A
Granite State Pain Associates, Somersworth	†	†	†	†	N/A
Minimally Invasive Surgical Center	98.7	97.2 , 99.5	99.5	98.3 , 99.9	Similar
Manchester ASC	92.2	89.3 , 94.6	-	-	N/A
Nashua ASC	†	†	99.1	98.2 , 99.6	N/A
North Atlantic Coast Surgical Suites	-	-	95.2	93.6 , 96.5	N/A
Northeast Surgical Care	-	-	-	-	N/A
Orchard Surgery Center	-	-	98.5	97.8 , 98.9	N/A
Orthopaedic Surgery Center, Concord	96.5	95.8 , 97.2	95.7	94.7 , 96.5	Similar
Orthopaedic Surgery Center, Derry	-	-	96.6	94.7 , 98.0	N/A
Parkland Endoscopy Center	-	-	98.7	93.8 , 99.9	N/A
Portsmouth Regional Ambulatory Surgical Center	-	-	96.6	94.8 , 97.9	N/A
Rye Surgical Center	†	†	-	-	N/A
Stratham Ambulatory Surgery Center	†	†	96.2	93.7 , 97.9	N/A
Surgical Center of New Hampshire at Derry	100.0	97.8 , 100.0	-	-	N/A
The Surgery Center of Greater Nashua	98.8	96.0 , 99.8	99.0	96.8 , 99.8	Similar
Wentworth Surgery Center	-	-	95.6	93.5 , 97.2	N/A
State Total	**97.0**	**96.4 , 97.4**	**97.6**	**97.3 , 97.9**	**Similar**

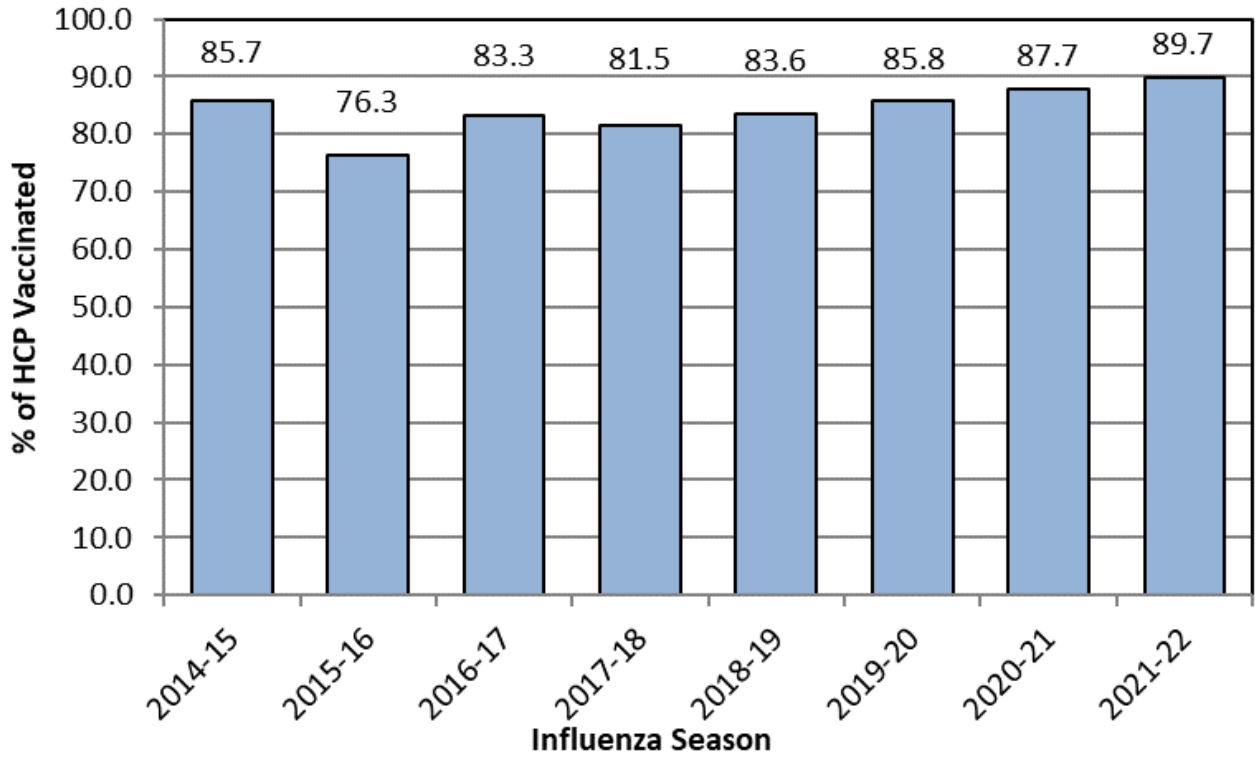
† Data are not shown when fewer than 20 preoperative IV antibiotics were ordered.

N/A or not applicable: Comparison between two years of data at a given facility is not applicable if no data were reported by that facility and/or if data must be censored for one or more of the years presented.

- Facility was either closed, recently open, or did not administer any IV antibiotics during 2021.

Note: ASC, DH Manchester, Centers of Pain Solutions, Concord Endoscopy Center, Concord Eye Surgery LLC, DH Nashua Endoscopy Center, Elliot Endoscopy at River's Edge, Nashua Eye Surgery, and Rye Surgical Center reported no preoperative orders for IV antibiotic in 2021.

Figure 3. Statewide influenza vaccination percentages for ASC HCP by influenza season 2014-15 through 2021-22



Note: Influenza season represents data for HCP between October 1st and March 31st the following calendar year.

Influenza Vaccination Percentages

Figure 3 above depicts HCP influenza vaccination percentages since fall 2011. ASC coverage has varied since 2011-12 when these data were first reported to NH DHHS. Table 10 below shows the total number of HCP and the number of HCP vaccinated against seasonal influenza at each ASC during the 2021-22 influenza season. Vaccination coverage by ASC ranged from 52.1% to 100.0%, and the overall State vaccination percentage was 89.7% (Table 10). The analysis presented in Table 10 shows that three ASC reported vaccination percentages that were significantly lower than the overall State vaccination percentage, three reported vaccination percentages that were significantly higher than the overall State vaccination percentage, and eight ASC reported vaccination percentages similar to the overall State vaccination percentage. Thirteen ASC did not report their influenza vaccination percentages.

Table 10. Influenza vaccination percentages for HCP by ASC, 2021–22 influenza season, Oct 1, 2021–Mar 31, 2022

ASC	HCP Vaccinated	Total HCP	% HCP Vaccinated	95% Confidence Interval	ASC % Compared to State %
Access Ambulatory Surgery Center	-	-	-	-	-
Atlantic Coast Surgical Suite	-	-	-	-	-
Atlantic Plastic Surgery	15	23	65.2	44.5 , 82.4	Lower
Barrington Surgical Care, LLC	-	-	-	-	-
Bedford ASC	244	263	92.8	89.2 , 95.5	Similar
Centers for Pain Solutions	-	-		-	-
Concord ASC	79	79	100.0	96.3 , 100.0	Higher
Concord Endoscopy Center	39	42	92.9	81.8 , 98.2	Similar
Concord Eye Surgery LLC	-	-	-	-	-
DHMC, Manchester ASC	189	195	96.9	93.7 , 98.7	Higher
DHMC Nashua Endo	35	38	92.1	80.0 , 97.5	Similar
Elliot 1-Day Surgery Center	-	-	-	-	-
GSPS* Surgicenter, Merrimack	-	-	-	-	-
GSPS* Surgicenter, Somersworth	-	-	-	-	-
Minimally Invasive Surgical Center	49	51	96.1	87.6 , 99.3	Similar
Nashua ASC	105	114	92.1	86.0 , 96.1	Similar
Nashua Eye Surgery Center	15	19	78.9	56.7 , 92.9	Similar
North Atlantic Coast Surgical Suites	-	-	-	-	-
Orchard Surgical Center	-	-	-	-	-
Orthopaedic Surgery Center, Concord	151	166	91.0	85.9 , 94.7	Similar
Orthopaedic Surgery Center, Derry	68	77	88.3	76.6 , 94.2	Similar
Parkland Endoscopy Center	-	-	-	-	-
Portsmouth Regional ASC	69	103	67.0	57.5 , 75.6	Lower
Rye Surgical Center	-	-	-	-	-
Stratham ASC	25	48	52.1	38.0 , 65.9	Lower
The Surgery Center of Greater Nashua	90	90	100.0	96.7 , 100.0	Higher
Wentworth Surgery Center, LLC	-	-	-	-	-
State Total	**1,173**	**1,308**	**89.7**	**87.9 , 91.2**	

-Facility data unavailable during this influenza season.
*GSPS is Granite State Pain Solutions

Influenza Vaccination Percentages: Comparison to 2020-21 Data

The overall statewide ASC HCP vaccination percentage was similar between the 2020-21 and 2021-22 influenza seasons (see Table 11). The analysis presented in Table 11 shows that, overall, one ASC had a higher HCP influenza vaccination rate, twelve ASC had similar HCP influenza vaccination rate in the 2021-22 influenza season compared to the 2020-21 influenza season. Sixteen ASC could not be compared to previous seasons due to having no data reported in one of the years of comparison or closure of the facility.

Table 11. Influenza vaccination percentages for ASC HCP by ASC, comparison between 2021-22 and 2020-21 influenza seasons

ASC	% HCP Vaccinated 2021-22	95% Confidence Interval 2021-22	% HCP Vaccinated 2020-21	95% Confidence Interval 2020-21	2021-22 Compared to 2020-21
Access Ambulatory Surgery Center	-	-	-	-	N/A
Atlantic Coast Surgical Suite	-	-	-	-	N/A
Atlantic Plastic Surgery	65.2	44.5 , 82.4	60.0	34.5 , 81.9	Similar
Barrington Surgical Care, LLC	-	-	60.5	44.5 , 75.0	N/A
Bedford Ambulatory Surgical Center	92.8	89.2 , 95.5	93.1	88.9 , 96.0	Similar
Centers for Pain Solutions	-	-	72.7	42.2 , 92.6	N/A
Concord Ambulatory Surgical Center	100.0	96.3 , 100.0	93.2	86.4 , 97.2	Similar
Concord Endoscopy Center	92.9	81.8 , 98.2	98.3	91.8 , 99.9	Similar
Concord Eye Surgery LLC	-	-	87.7	77.2 , 94.5	N/A
DHMC, Manchester ASC	96.9	93.7 , 98.7	100.0	95.6 , -	Similar
DHMC, Nashua Endo	92.1	80.0 , 97.5	97.7	89.3 , 99.9	Similar
Elliot 1-Day Surgery Center at Rivers Edge	-	-	96.2	93.3 , 98.1	N/A
Granite State Pain Solutions, Merrimack	-	-	46.7	23.2 , 71.3	N/A
Granite State Pain Solutions, Somersworth	-	-	100.0	65.2 , -	N/A
Hillside Surgical Center	-	-	92.3	80.5 , 98.0	N/A
Minimally Invasive Surgical Center	96.1	87.6 , 99.3	98.1	90.9 , 99.9	Similar
Nashua ASC	92.1	86.0 , 96.1	74.8	65.7 , 82.4	Higher
Nashua Eye Surgery Center (Novamed)	78.9	56.7 , 92.9	88.6	74.7 , 96.3	Similar
North Atlantic Coast Surgical Suites	-	-	95.1	88.5 , 98.4	N/A
Northeast Surgical Care	-	-	-	-	-
Orchard Surgical Center	-	-	100.0	97.0 , -	Similar
Orthopaedic Surgery Center, Concord	91.0	85.9 , 94.7	90.3	84.9 , 94.3	Similar
Orthopaedic Surgery Center, Derry	88.3	76.6 , 94.2	89.2	81.7 , 94.4	Similar
Parkland Endoscopy Center	-	-	-	-	-
Portsmouth Regional ASC	67.0	57.5 , 75.6	-	-	N/A
Rye Surgical Center	-	-	60.5	44.5 , 75.0	N/A
Stratham Ambulatory Surgery Center	52.1	38.0 , 65.9	78.6	52.1 , 94.2	N/A
The Surgery Center of Greater Nashua	100.0	96.7 , 100.0	100.0	96.0 , -	Similar
Wentworth Surgery Center, LLC	-	-	36.0	26.5 , 46.3	N/A
State Total	**89.7**	**87.9 , 91.2**	**88.0**	**86.5 , 89.5**	**Similar**

N/A or not applicable: Comparison between two years of data at a given facility is not applicable if no data were reported by that facility and/or if data must be censored for one or more of the years presented.
- Facility closed or data unavailable during this influenza season

Influenza Vaccination Policies for Healthcare Personnel

During the 2021-22 influenza season, 19 (66.0%) of 29 ASC had a HCP vaccination policy in place, and 10 (34.5%) did not have one in place (Table 12). Among the 19 ASC with a policy, 4 (21.1%) allowed for only medical and religious exemptions, and 14 (73.7%) allowed for medical, religious, and personal/philosophical exemptions, and 1 (5.3%) allowed for medical only exemption. Eleven (57.9%) ASC required unvaccinated HCP with an approved exemption to wear a mask, 4 (21.1%) stated that unvaccinated HCP without an acceptable reason for exemption would be subject to progressive discipline, potentially including termination, 5 (26.3%) receive verbal or written education, and 3 (15.8%) have no consequences for unvaccinated HCP. ASC with vaccination policies had significantly higher percentages of influenza vaccination as a whole (93.1%) than ASC without policies (86.2%). ASC that utilized progressive discipline, potentially including termination, as a consequence for their unvaccinated HCP without an acceptable reason for exemption had a higher vaccination percentage (91.9%) than ASC that did not (86.4%); this difference was not statistically significant.

Figure 4. Influenza vaccination percentages for ASC with and without vaccination policies, 2021-22 influenza season

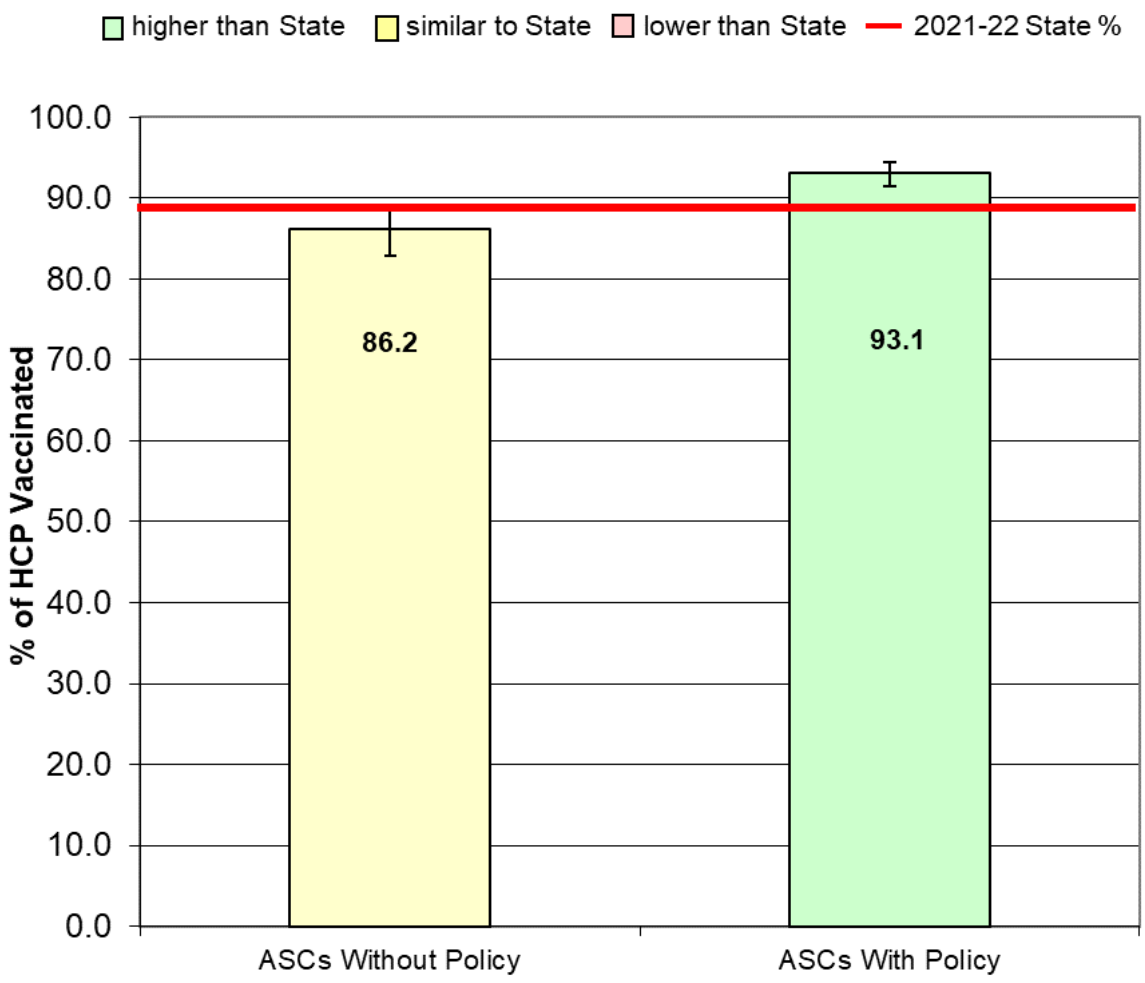


Table 12. Influenza vaccination policies and consequences for HCP by ASC, 2021-2022 influenza season

ASC	Exemptions Allowed in Policy*	Requirements for Unvaccinated HCP with Accepted Exemption	Consequences for Unvaccinated HCP without Accepted Exemption
Access Ambulatory Surgery Center	Medical	Wear a mask	Wear a mask
Atlantic Coast Surgical Suites, LLC	Medical, Religious, Personal/philosophical	Receive Verbal and/or written education	None
Barrington Surgical Care, LLC	Medical, Religious, Personal/philosophical	Receive Verbal and/or written education	Receive verbal and/or written education
Concord Ambulatory Surgery Center	Medical, Religious, Personal/philosophical	Wear a mask	Wear a mask
Concord Endoscopy Center	Medical, Religious, Personal/philosophical	Receive Verbal and/or written education	Receive verbal and/or written education
DHMC, Manchester ASC	Medical, Religious	Wear a mask	Progressive Discipline, potentially including termination
DHMC, Nashua Endo	Medical, Religious	Wear a mask	Progressive Discipline, potentially including termination
Elliot 1 Day Surgery Center	Medical, Religious	Wear a mask	Progressive Discipline, potentially including termination
Hillside Surgery Center	Medical, Religious, Personal/philosophical	Wear a mask, Receive verbal and/or written education	Wear a mask, Receive verbal and/or written education
Minimally Invasive Surgery Center of NE, LLC	Medical, Religious	Wear a mask, Receive verbal and/or written education	Wear a mask
Nashua Ambulatory Surgical Center	Medical, Religious, Personal/philosophical	Wear a mask, Receive verbal and/or written education	Wear a mask
Orthopedic Surgery Concord	Medical, Religious, Personal/philosophical	None	None
Orthopedic Surgery Derry	Medical, Religious, Personal/philosophical	None	None
Orchard Surgical Center	Medical, Religious, Personal/philosophical	Wear a mask, Receive verbal and/or written education	Wear a mask, Progressive discipline, potentially including termination, Receive education
Parkland Medical Center	Medical, Religious, Personal/philosophical	Wear a mask	Wear a mask

Portsmouth Regional Ambulatory Surgery Center	Medical, Religious, Personal/philosophical	Wear a mask	Wear a mask
ASC	**Exemptions Allowed in Policy***	**Requirements for Unvaccinated HCP with Accepted Exemption**	**Consequences for Unvaccinated HCP without Accepted Exemption**
Rye Surgery Center, LLC	Medical, Religious, Personal/philosophical	Receive Verbal and/or written education	Progressive Discipline, potentially including termination
Stratham Ambulatory Surgery Center	Medical, Religious, Personal/philosophical	Wear a mask	Wear a mask
Nashua Eye Surgery/Novamed	Medical, Religious, Personal/philosophical	Receive Verbal and/or written education	Receive Verbal and/or written education
The Surgery Center of Greater Nashua	Medical, Religious, Personal/philosophical	None	Progressive Discipline, potentially including termination

* Exemptions include Medical, Religious, Personal/philosophical, and Other.

Note: Eleven ASC (Atlantic Plastic Surgery, Bedford Ambulatory Surgery, Center of Pain Solutions, Concord Eye Surgery, Granite State Pain Associates-Somersworth, Granite State Pain Associates-Merrimack, Northeast Surgery Center, North Atlantic Surgical Suites, LLC and Wentworth Surgery Center) did not have mandatory vaccination policies during 2021-22 Influenza season.

IV. CONCLUSIONS

This tenth report of ASC HAI data is an important part of continuing progress toward the goal of eliminating HAI in NH. This report provides a picture of selected HAI data, which can be used by healthcare facilities in the state to identify areas for improvement and prevention as well as healthcare consumers to make informed healthcare decisions.

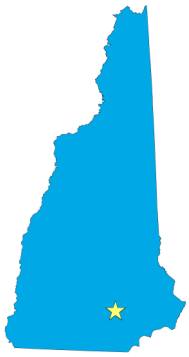
Key findings described in this report include the following:

- Compliance in reporting in accordance with (RSA) 151:32-35 was lower than previous reporting years.
- NH ASC reported lower infection rates following selected surgeries (breast, hernia, and open reduction of fracture procedures) as predicted based on national data.
- All 10 ASC reporting SSI with sufficiently robust data to present have rates that are similar to national data and are maintaining a goal of zero infections.
- Among the facilities that provided data to the state the overall state rate of infection was significantly lower than the national rate.
- The percentage of orders for surgical IV antibiotic prophylaxis administered for the prevention of SSI that were delivered within the appropriate timeframe prior to surgery was 97.0%. Six ASC had a significantly higher adherence rate for this measure than the State adherence percentage, with rates ranging from 98.7% to 100.0%.
- Vaccination coverage by ASC during the 2021-22 influenza season ranged from 52.1% to 100.0%. The overall State percentage was 89.7%, which is higher than the 2020-21 influenza season when the statewide vaccination rate was 87.7%. This is similar to the 2020-21 influenza season.
- Nineteen NH ASC had mandatory influenza vaccination policies for HCP during the 2021-22 season. Overall, ASC with vaccination policies had significantly higher percentage of influenza vaccination as a whole (93.1%) than ASC without mandatory policies (86.2%).

While this report only includes information on a subset of HAI, the information provided can be used as an important indicator of healthcare quality and infection prevention efforts in NH ASC.

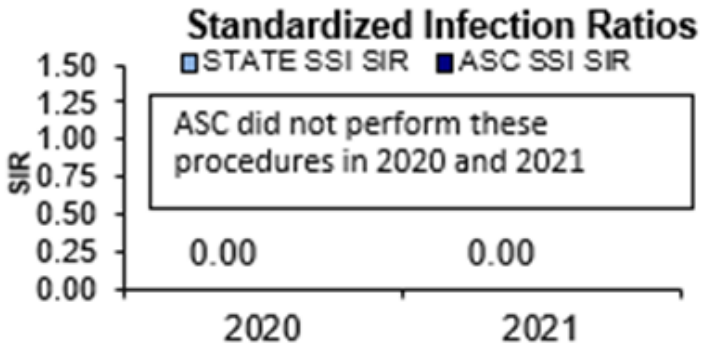
V. AMBULATORY SURGERY CENTER INDIVIDUAL REPORTS

Because data must be broken down into categories for risk adjustment and because rates must be suppressed if data are too sparse, data that can be presented for NH facilities may be limited. Due to restrictions on presenting data, there are several ASC for which facility-specific infections data for specific measures cannot be presented. See technical notes for additional information on data restriction and presentation.



ACCESS ASC
Auburn, NH
For-profit
Medical Group
# of Admissions: Data Unavailable

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	Facility did not perform any of these procedures in 2021					

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

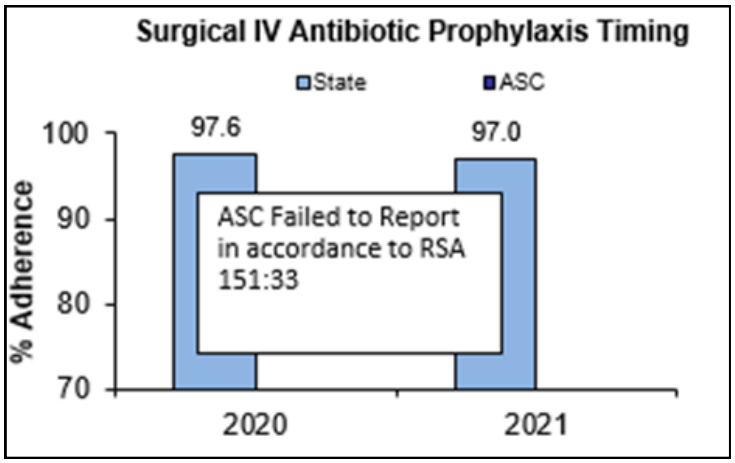
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-

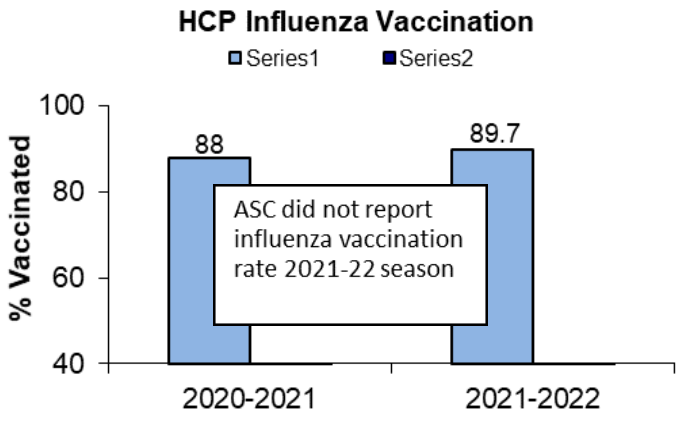
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	Data Unavailable	97.0	Data Unavailable
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	-	89.7	-

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



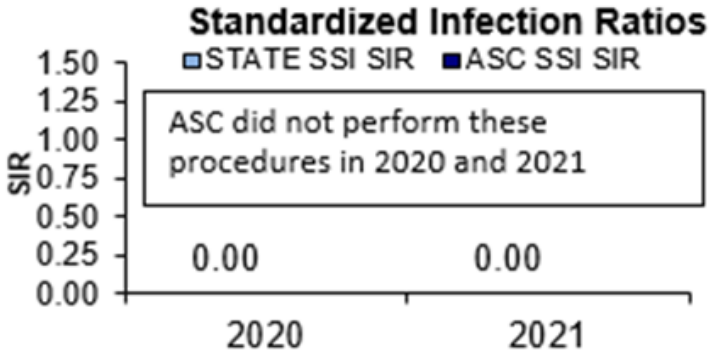


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



ATLANTIC COAST SURGICAL SUITES
Seabrook, NH
For-profit
Medical Group
# of Admissions: Data Unavailable

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	Facility did not perform any of these procedures in 2021					

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

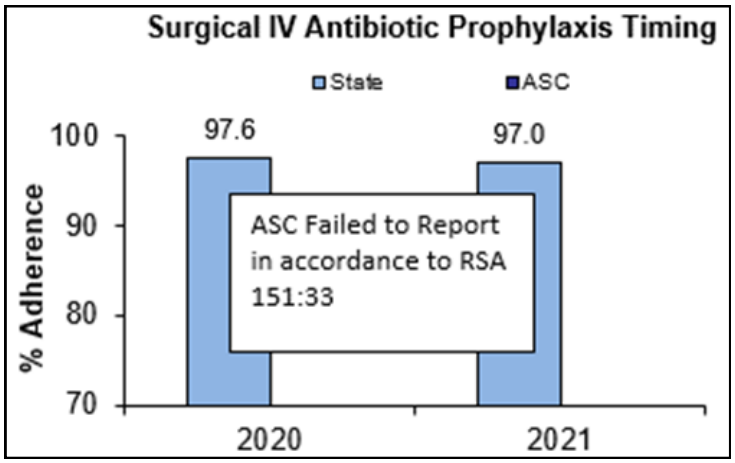
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-

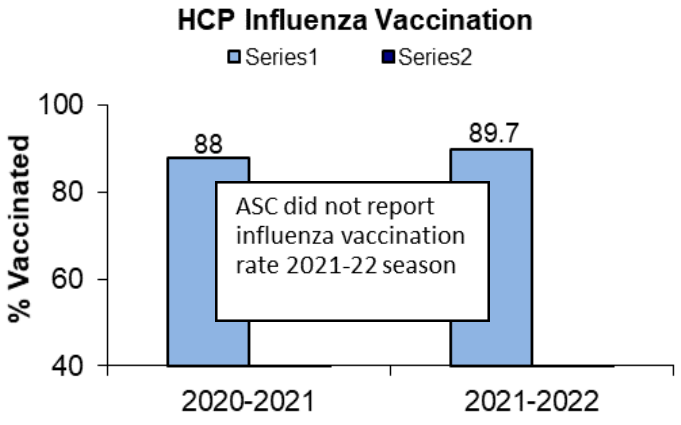
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	-	97.0	-
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	-	89.7	-

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



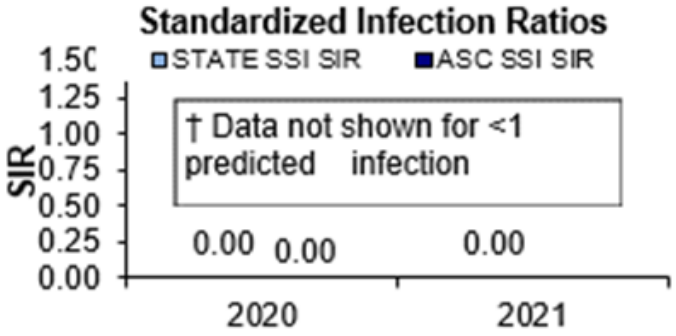


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection



ATLANTIC PLASTIC SURGERY
Portsmouth, NH
For-profit
Free-standing
# of Admissions: 304

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	-	-	-	-	-	-

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

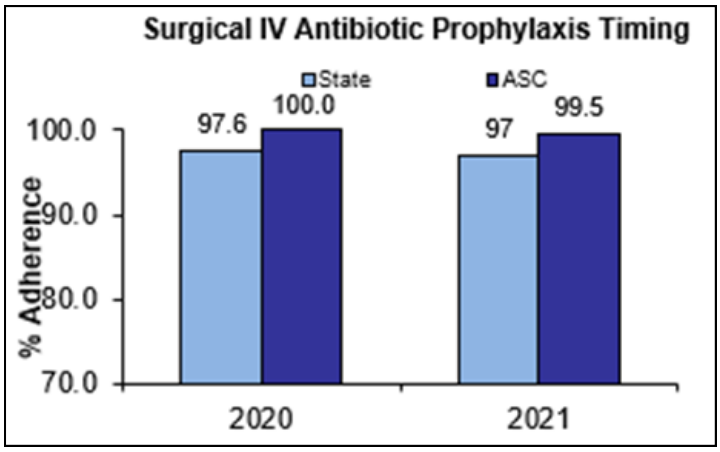
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-

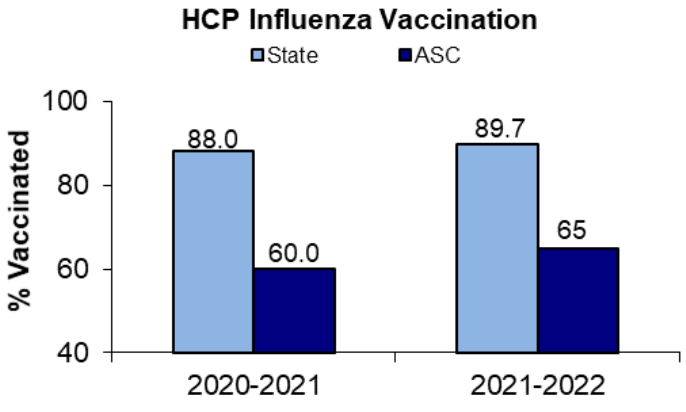
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	99.5	97.0	Higher
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	65.0	89.7	Lower

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



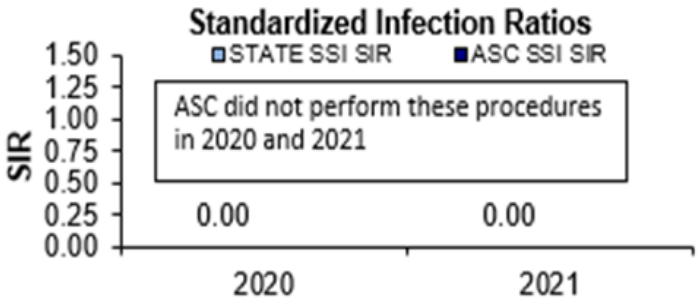


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



BARRINGTON SURGICAL CARE
Barrington, NH
Private
Free-standing
# of Admissions: Data Unavailable

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	Facility did not perform any of these procedures in 2021					

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

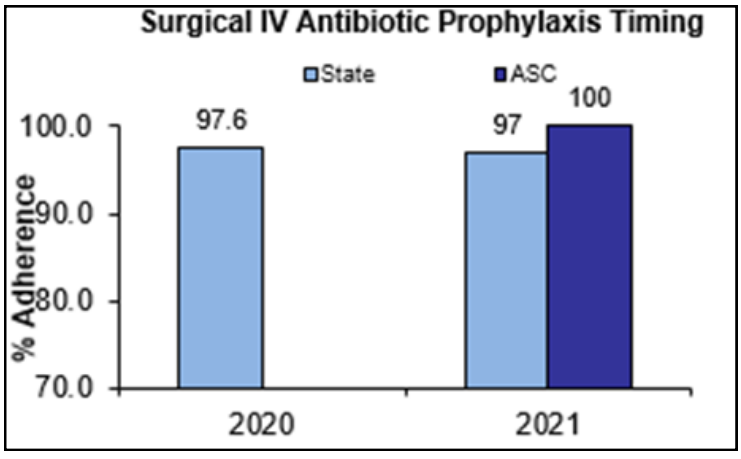
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-

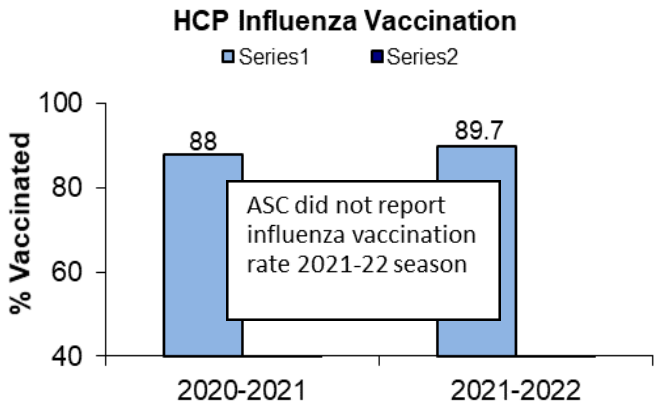
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	†	97.0	†
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	-	89.7	-

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



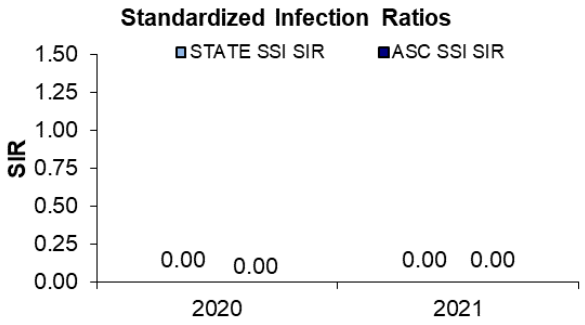


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



BEDFORD ASC
Bedford, NH
Physician-owned
Free-standing
# of Admissions: 13,026

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	0	340	0.0	0.51	0.17	Similar

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

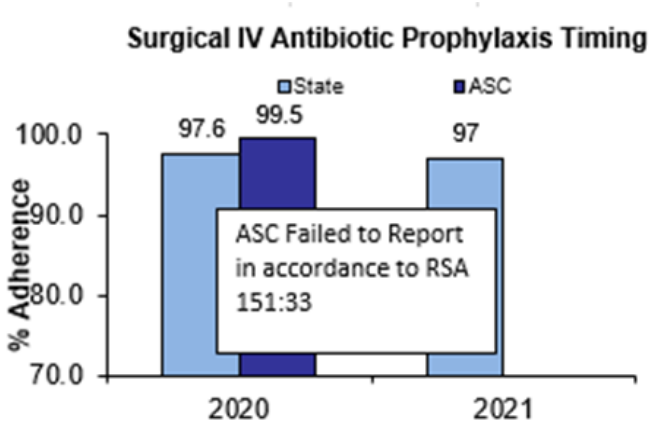
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	0	294	0.00	0.62	0.19	Similar
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	†	†	†	†	†	†
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	0	41	0.00	0.28	0.89	Similar

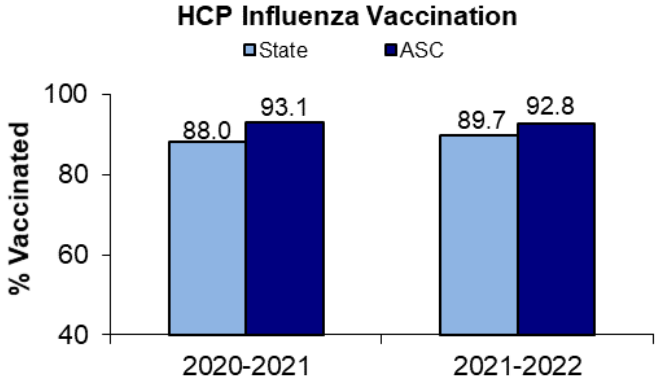
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	-	97.0	-
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	92.8	89.7	Similar

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



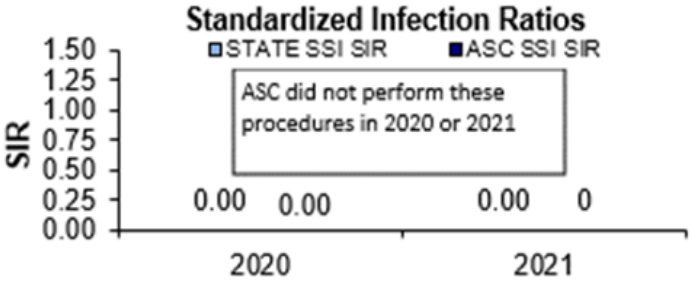


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



CENTER FOR PAIN SOLUTIONS
Nashua, NH
Physician-owned
Free-standing
# of Admissions: Data Unavailable

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	Facility did not perform any of these procedures in 2021					

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

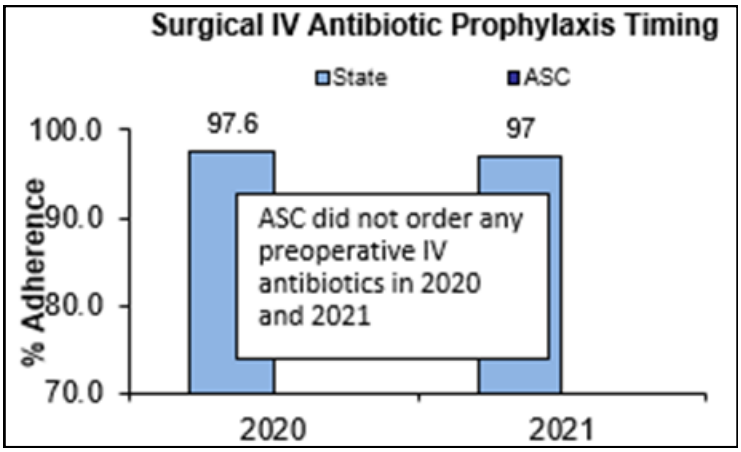
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-

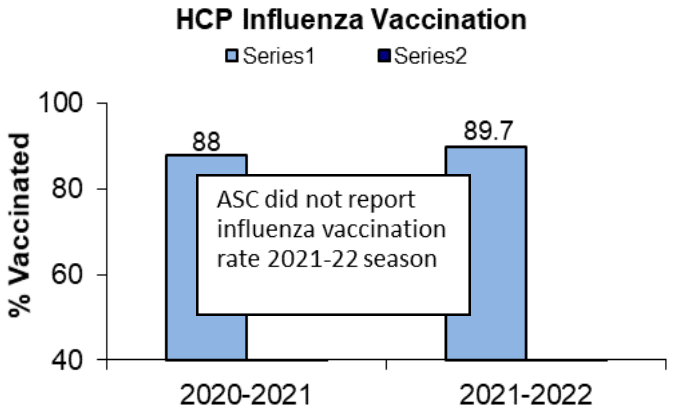
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	Data Unavailable	97.0	Data Unavailable
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	-	89.7	-

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



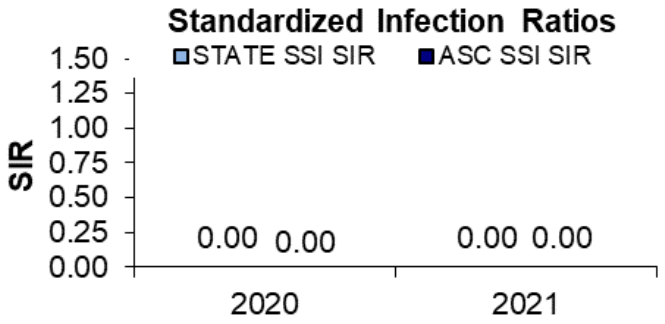


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



CONCORD ASC
Concord, NH
Not-for-profit
Free-standing
# of Admissions: 1,311

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	0	143	0.0	0.51	0.48	Similar

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

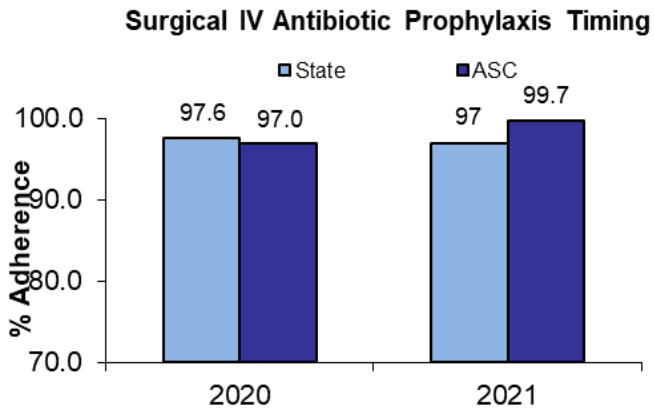
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	0	111	0.00	0.62	0.51	Similar
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	0	32	0.00	0.51	0.85	Similar
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-

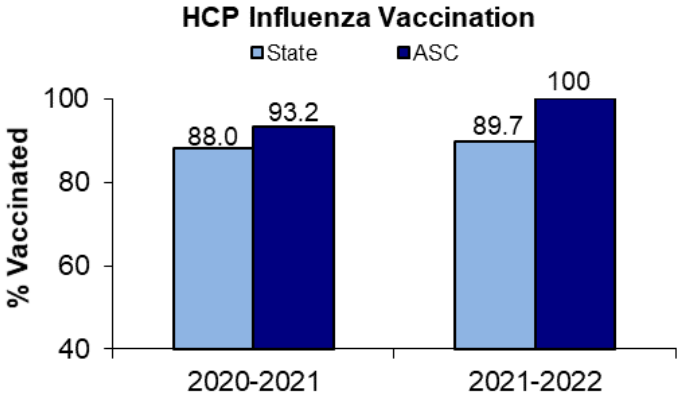
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	99.7	97.0	Higher
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	100	89.7	Higher

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



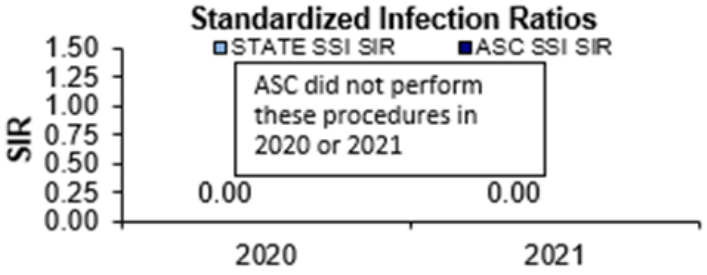


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



CONCORD ENDOSCOPY
Concord, NH
Joint venture
Free-standing
# of Admissions: 6,324

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	Facility did not perform any of these procedures in 2021					

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

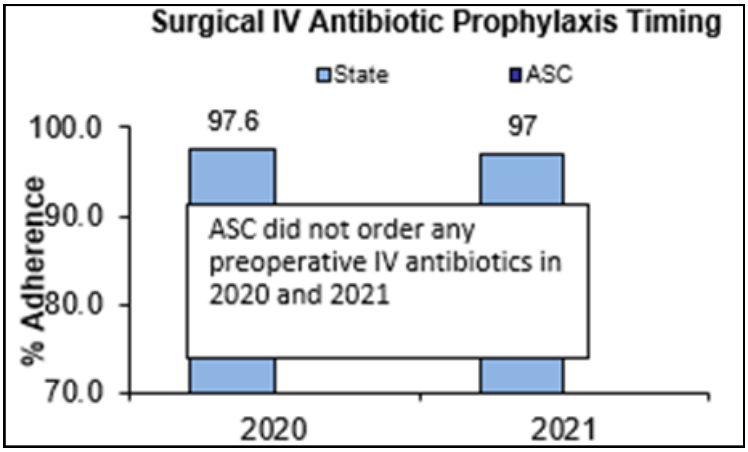
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-

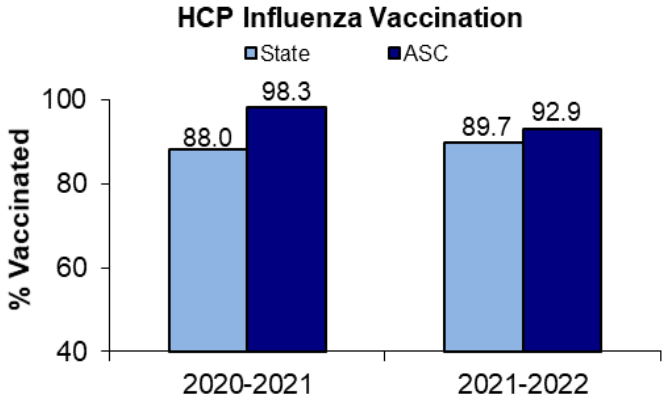
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	Data Unavailable	97.0	Data Unavailable
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	92.9	89.7	Similar

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



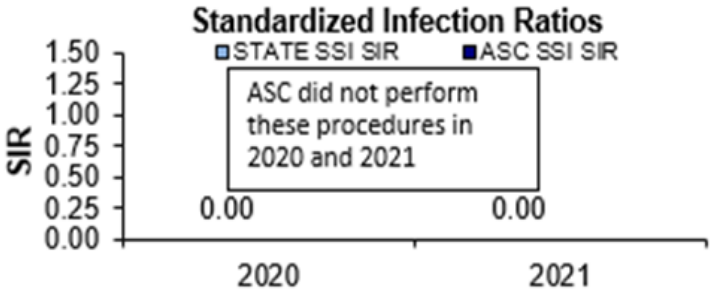


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



CONCORD EYE SURGERY
Concord, NH
Medical group
Free-standing
# of Admissions: Data Unavailable

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	Facility did not perform any of these procedures in 2021					

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

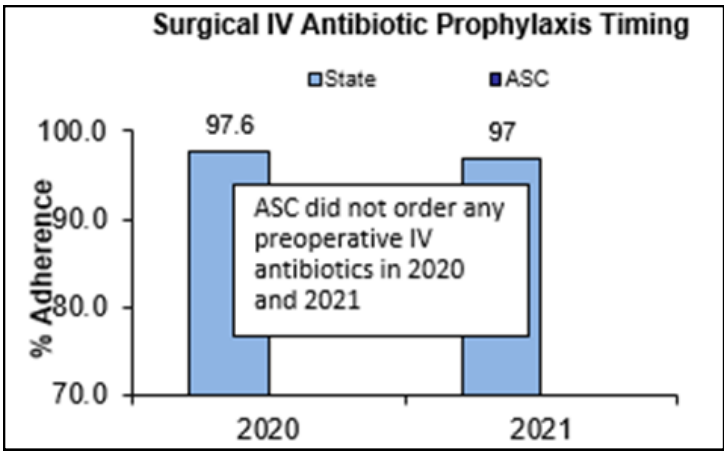
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-

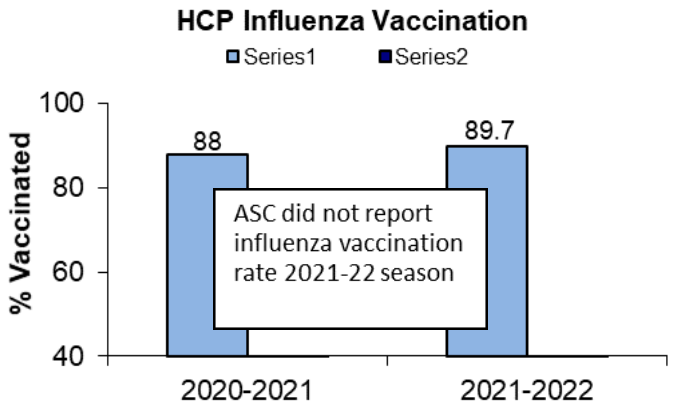
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

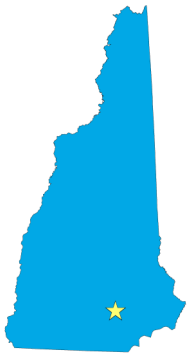
Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	Data Unavailable	97.0	Data Unavailable
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	-	89.7	-

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



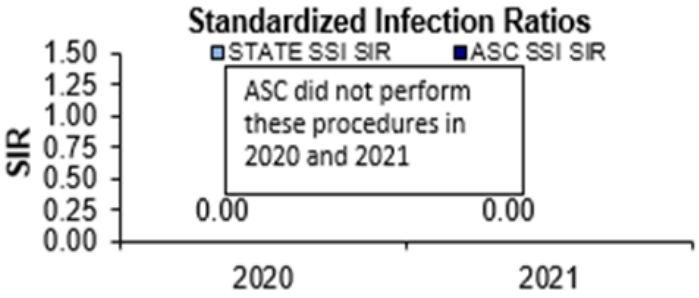


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



DARTMOUTH MANCHESTER ASC
Manchester, NH
Not-for-profit
Free-standing
# of Admissions: 3,841

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	Facility did not perform any of these procedures in 2021					

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

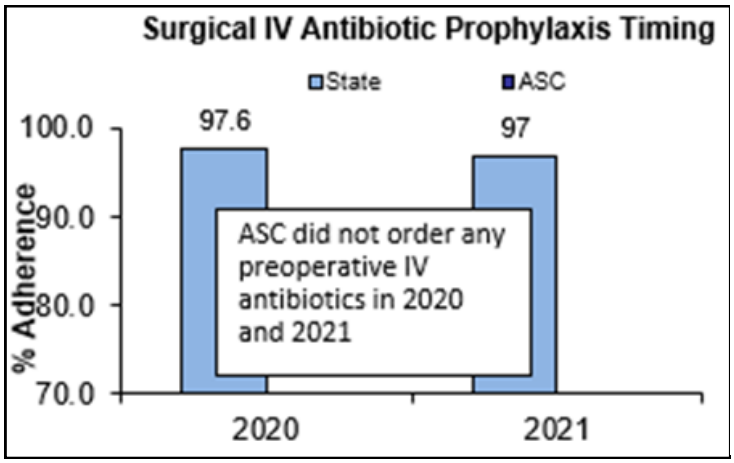
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-

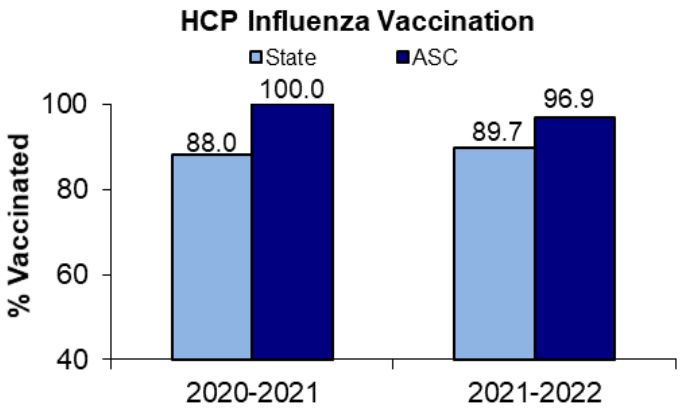
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	92.2	97.0	Lower
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	96.9	89.7	Higher

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



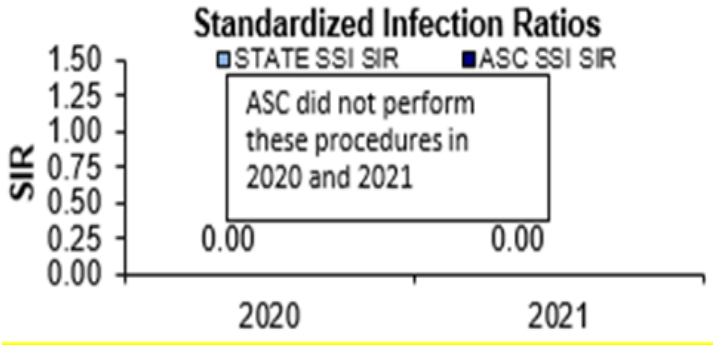


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



DARTMOUTH NASHUA ASC
Nashua, NH
Not-for-profit
Free-standing
# of Admissions: 5,285

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	Facility did not perform any of these procedures in 2021					

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

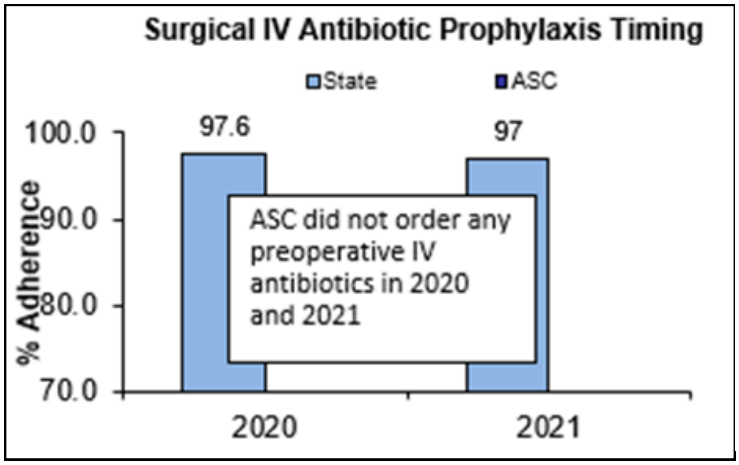
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-

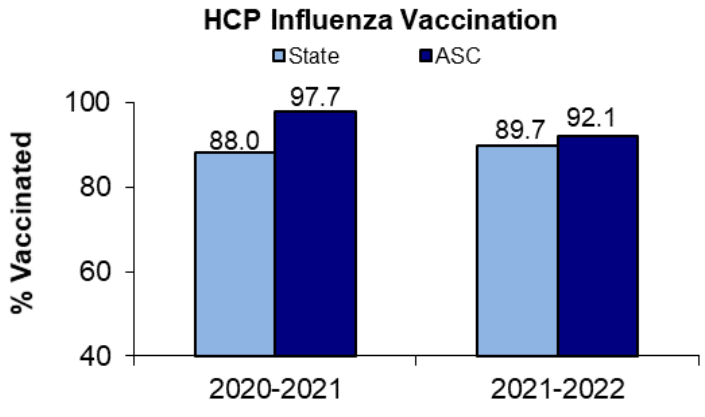
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	†	97.0	†
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	92.1	89.7	Similar

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



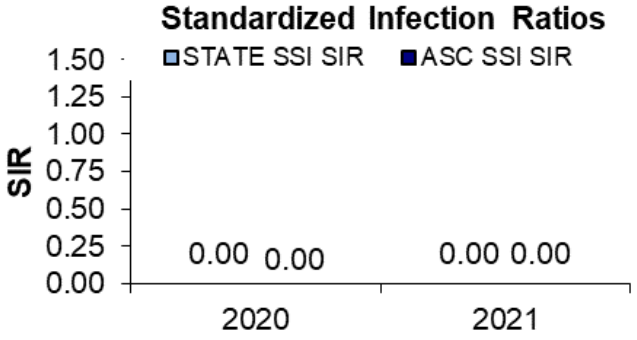


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



ELLIOT 1-DAY SURGERY CENTER, RIVERS EDGE
Manchester, NH
For-profit
Free-standing
# of Admissions: 7,515

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	0	541	0.0	0.51	0.06	Similar

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

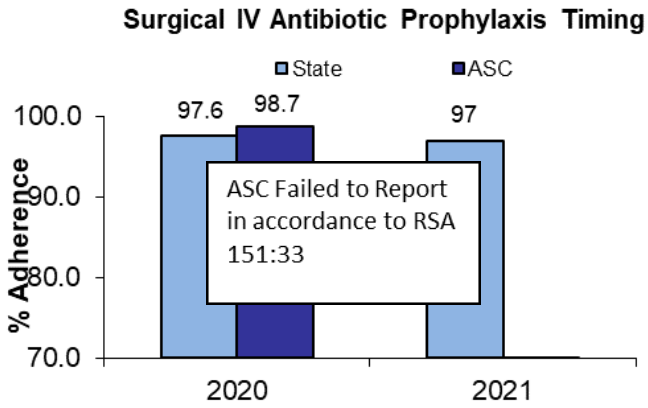
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	0	295	0.00	0.62	0.19	Similar
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	0	198	0.00	0.51	0.37	Similar
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	0	48	0.00	0.28	0.88	Similar

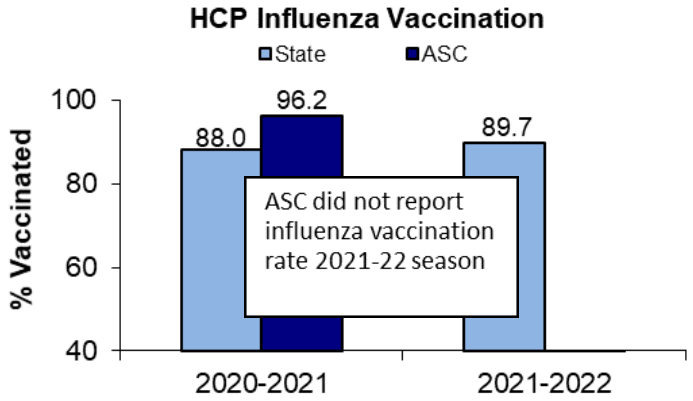
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	-	97.0	-
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	-	89.7	-

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



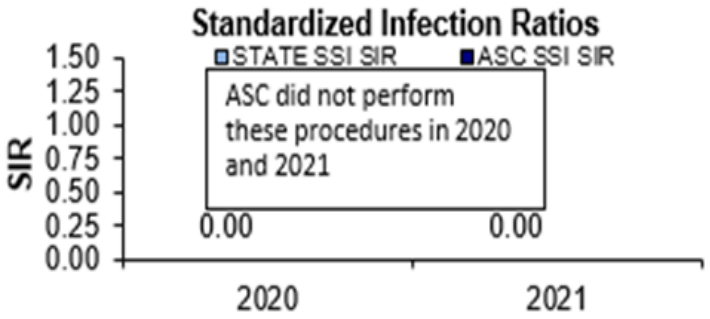


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



GRANITE STATE SURGICENTER, MERRIMACK
Merrimack, NH
For-profit
Free-standing
# of Admissions (2015): 1,014

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	Facility did not perform any of these procedures in 2021					

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

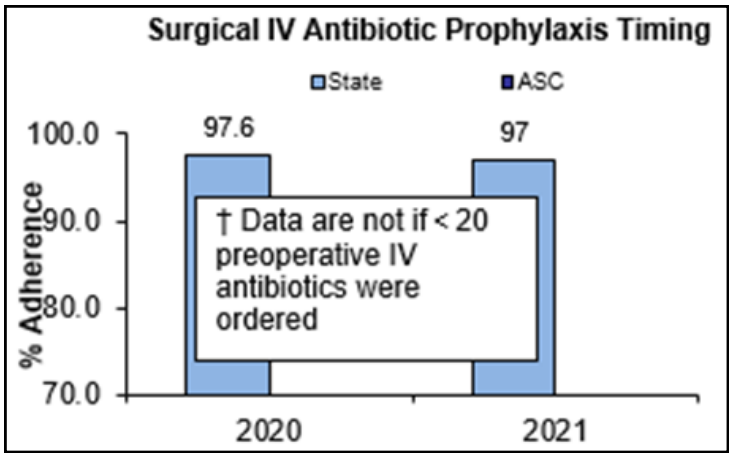
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-

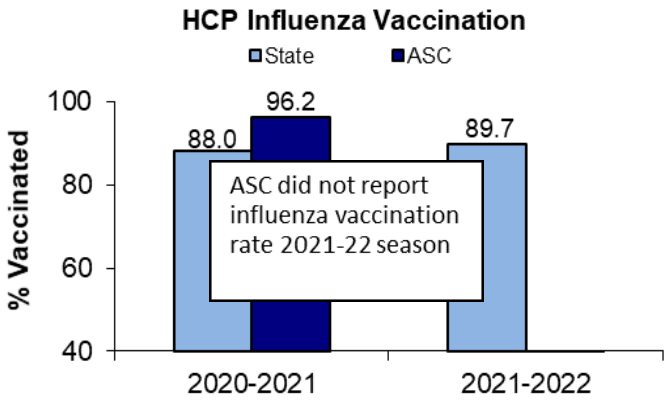
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	†	97.0	†
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	-	89.7	-

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



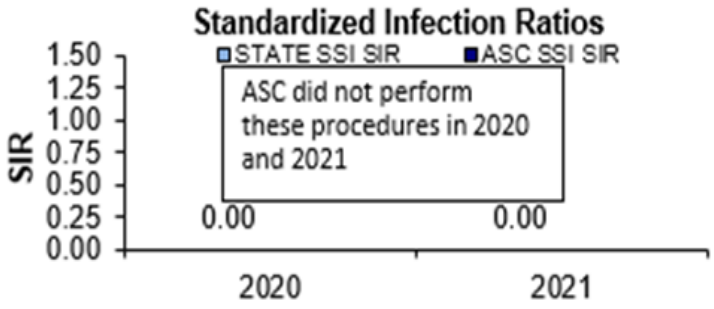


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



GRANITE STATE SURGICENTER, SOMERSWORTH
Somersworth, NH
For-profit
Free-standing
# of Admissions: Data Unavailable

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	Facility did not perform any of these procedures in 2021					

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

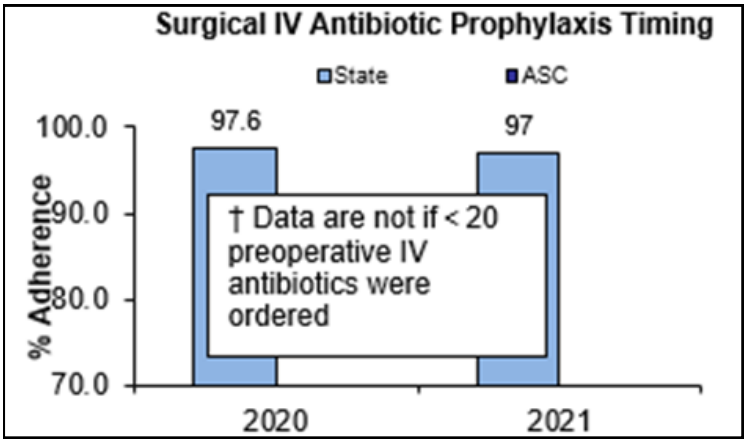
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-

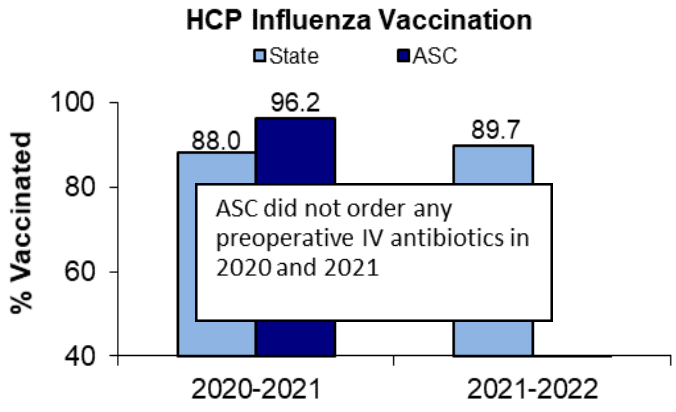
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

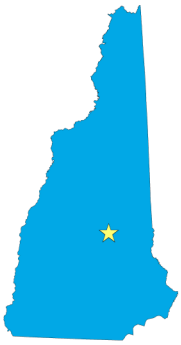
Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	†	97.0	†
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	-	89.7	-

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



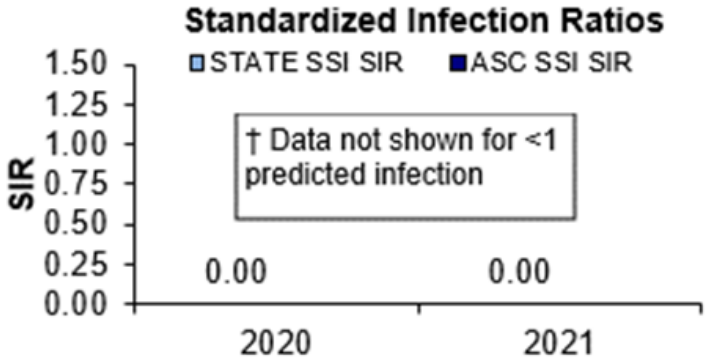


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



HILLSIDE SURGICAL CENTER
Gilford, NH
For-profit
Free-standing
# of Admissions: Permanently Closed

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	-	-	-	-	-	-

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

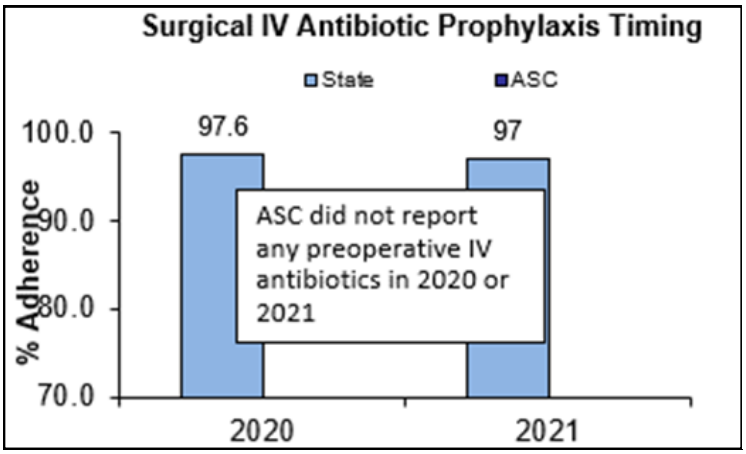
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-

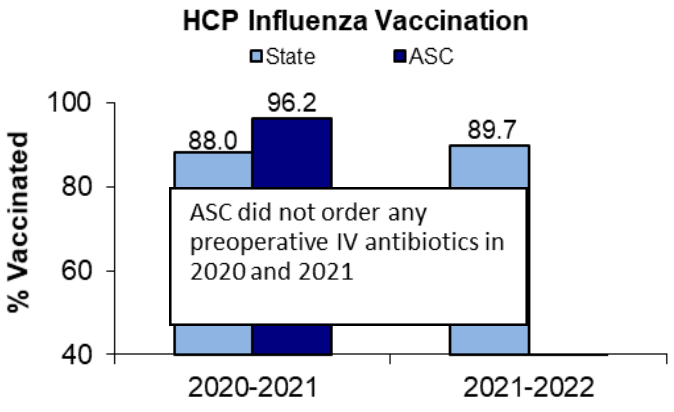
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	Data Unavailable	97.0	Data Unavailable
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	Data Unavailable	89.7	Data Unavailable

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



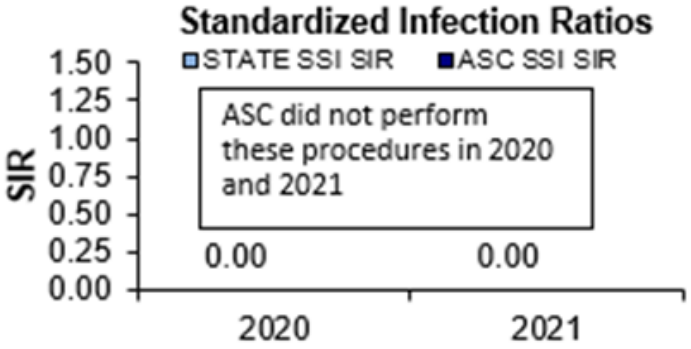


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



MINIMALLY INVASIVE SURGERY CENTER
Bedford, NH
For-profit
Free-standing
# of Admissions: 5,846

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	Facility did not perform any of these procedures in 2021					

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

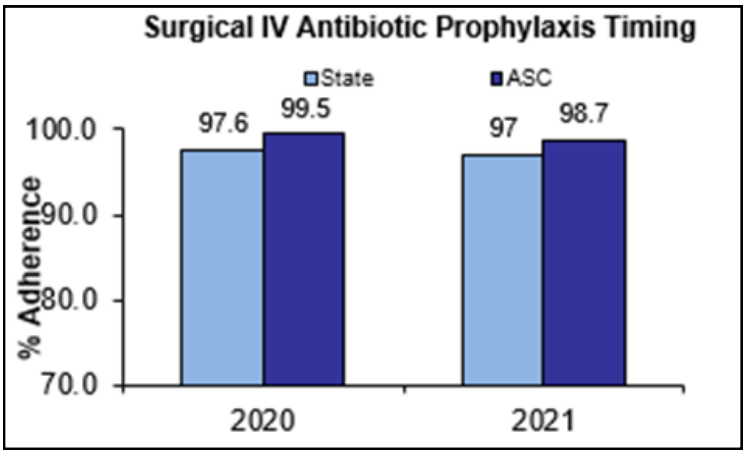
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-

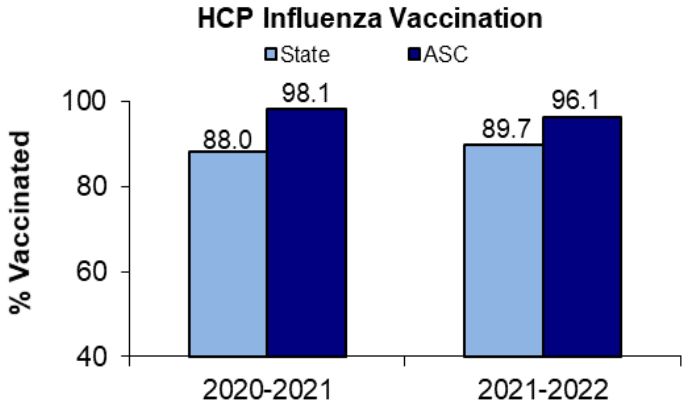
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	98.7	97.0	Similar
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	96.1	89.7	Similar

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



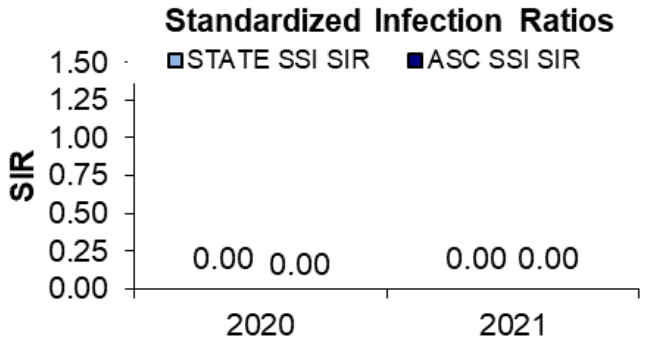


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



NASHUA ASC
Nashua, NH
Physician-owned
Free-standing
# of Admissions: 1,267

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	0	64	0.0	0.51	0.72	Similar

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

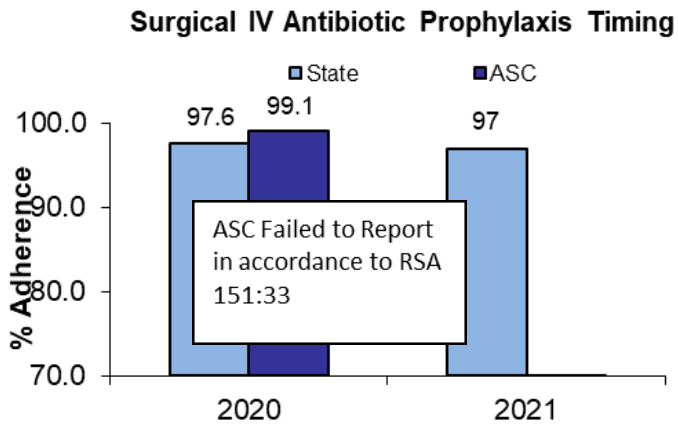
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	0	24	0.00	0.62	0.86	Similar
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	†	†	†	†	†	†
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	0	37	0.00	0.28	0.90	Similar

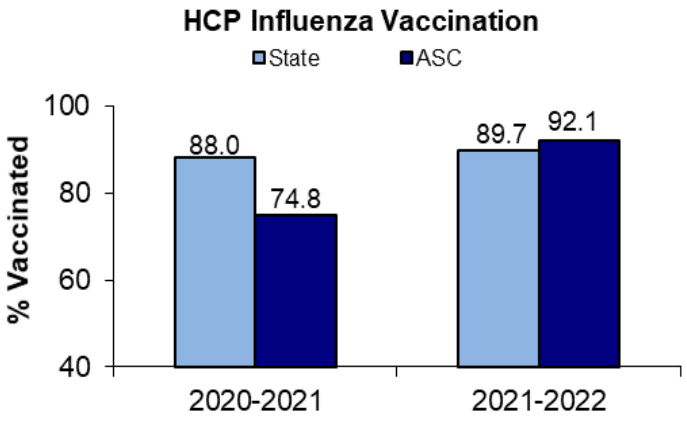
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	-	97.0	-
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	92.1	89.7	Similar

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



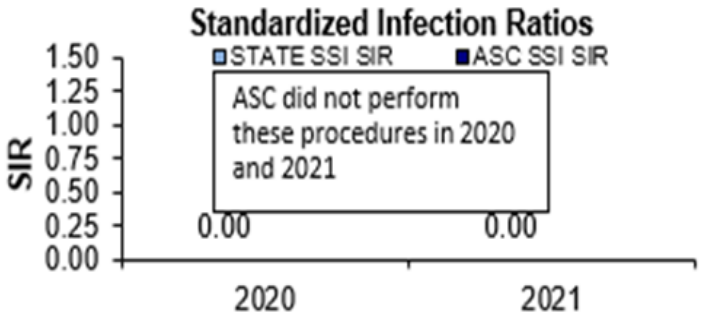


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



NASHUA EYE SURGERY CENTER / NOVAMED
Nashua, NH
Corporate/Physician-owned
Free-standing
# of Admissions: 3,889

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	Facility did not perform any of these procedures in 2021					

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

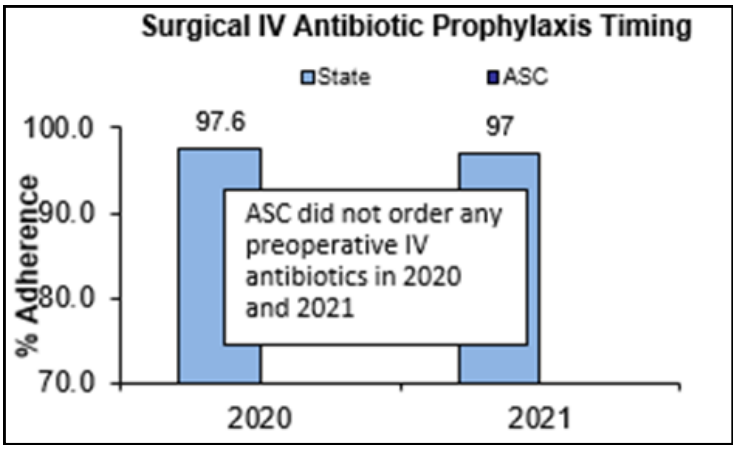
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-

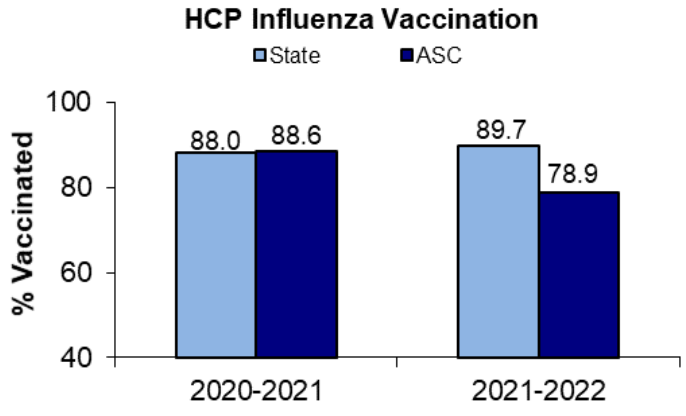
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	Data Unavailable	97.0	Data Unavailable
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	78.9	89.7	Similar

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



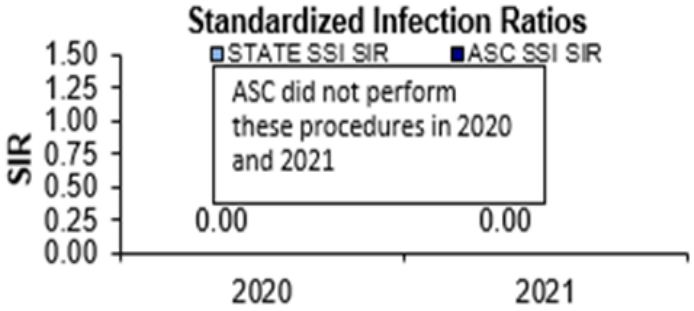


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



NORTH ATLANTIC SURGICAL CARE
Salem, NH
For-profit
Free Standing
# of Admissions: Data Unavailable

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	Facility did not perform any of these procedures in 2021					

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

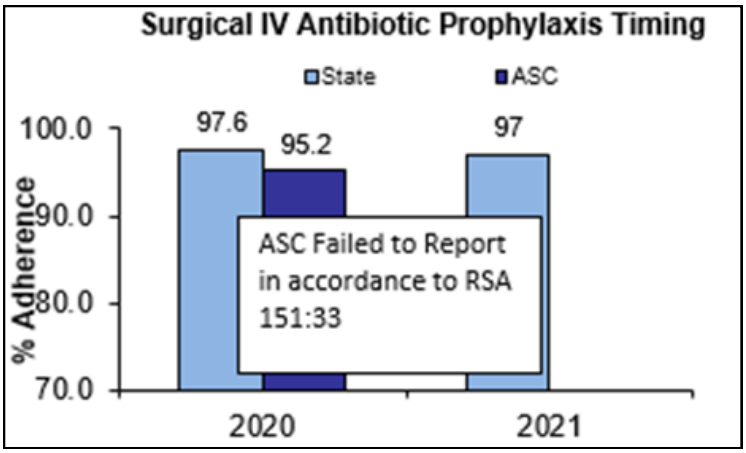
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-

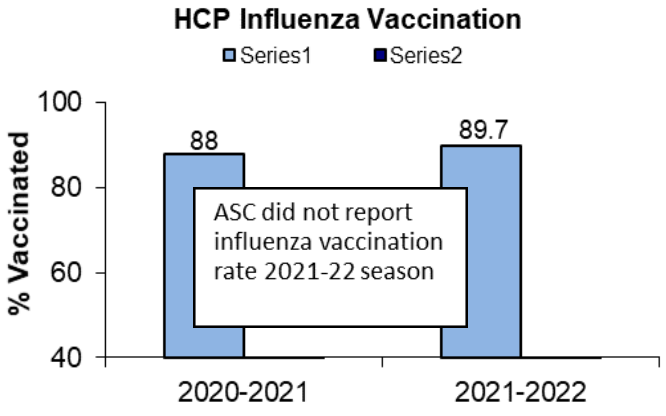
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	Data Unavailable	97.0	Data Unavailable
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	-	89.7	-

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



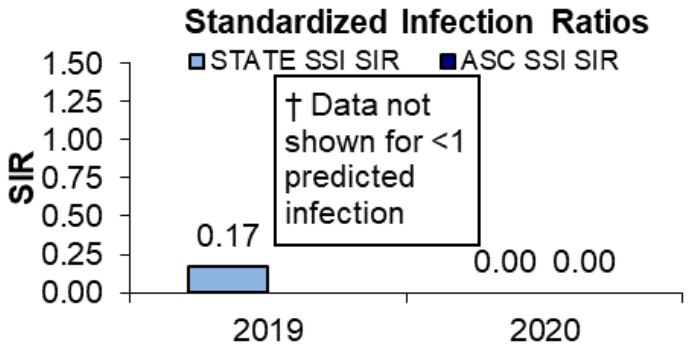


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



ORCHARD SURGICAL CENTER
Salem, NH
For-profit
Free-standing
# of Admissions: 5,660

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	0	225	0.0	0.51	0.31	Similar

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

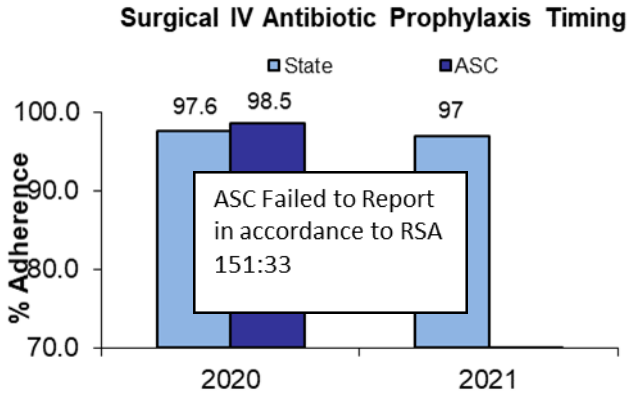
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	0	136	0.00	0.62	0.44	Similar
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	0	21	0.00	0.51	0.90	Similar
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	0	68	0.00	0.28	0.83	Similar

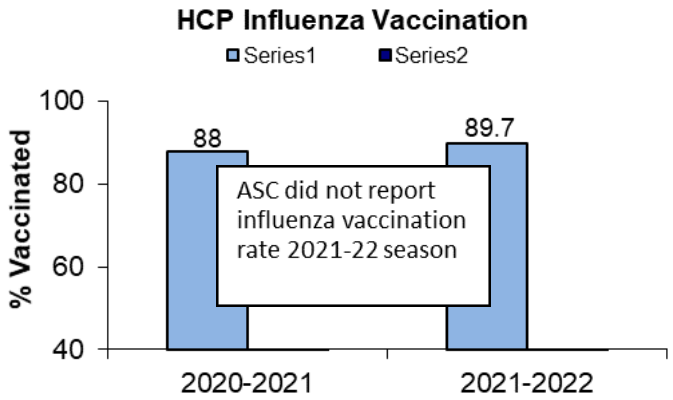
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	-	97.0	-
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	-	89.7	-

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



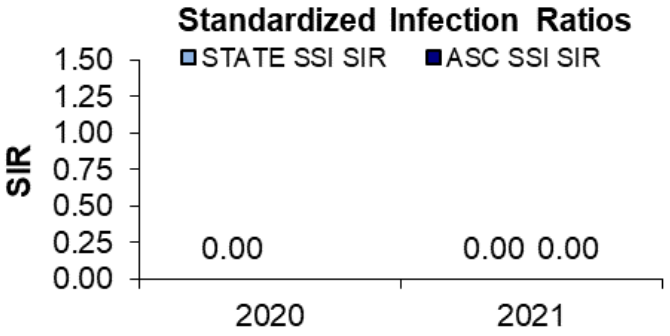


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection



ORTHOPAEDIC SURGERY CENTER, CONCORD
Concord, NH
Not-for-profit
Free-standing
# of Admissions: 5,972

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	0	136	0.0	0.51	0.50	Similar

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

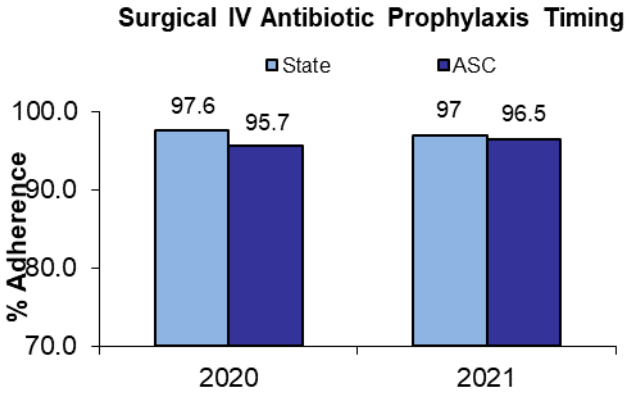
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	0	136	0.00	0.28	0.71	Similar

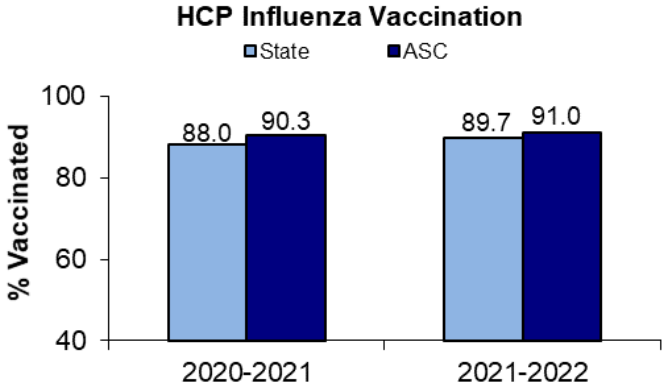
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	96.5	97.0	Similar
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	91.0	89.7	Similar

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



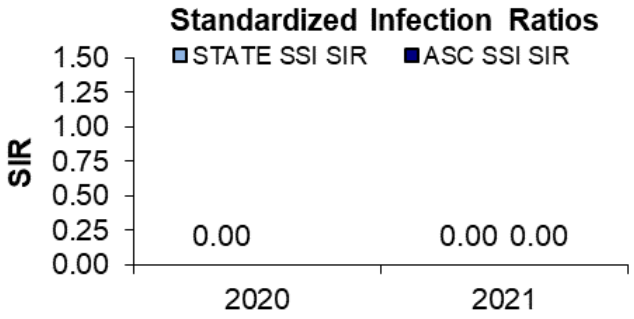


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



ORTHOPAEDIC SURGERY CENTER, DERRY
Derry, NH
Not-for-profit
Free-standing
# of Admissions: 1,291

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	0	26	0.0	0.51	0.87	Similar

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

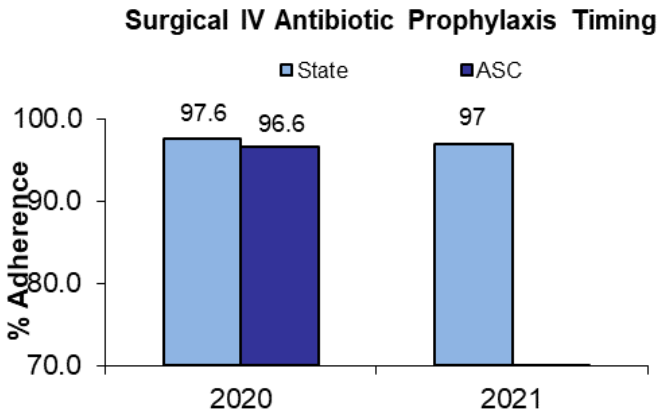
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	0	26	0.00	0.28	0.93	Similar

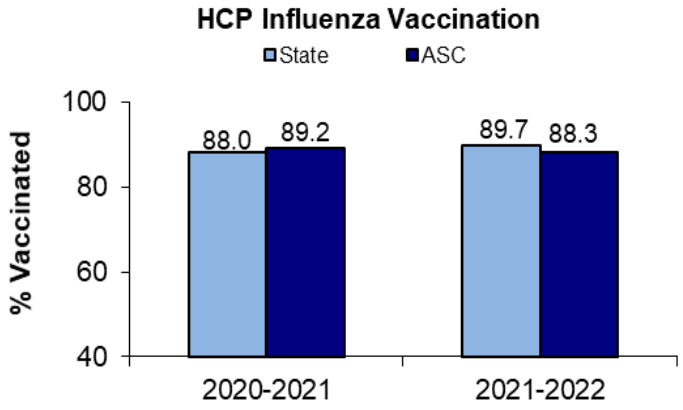
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	-	97.0	-
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	88.3	89.7	Similar

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



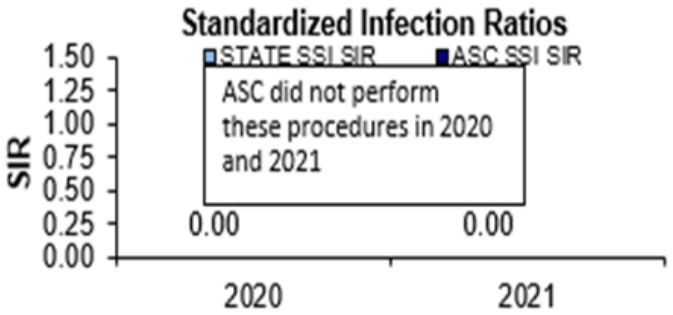


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



PARKLAND ENDOSCOPY CENTER
Derry, NH
For-profit
Free-standing
# of Admissions: Data Unavailable

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	Facility did not report any of these procedures in 2021					

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

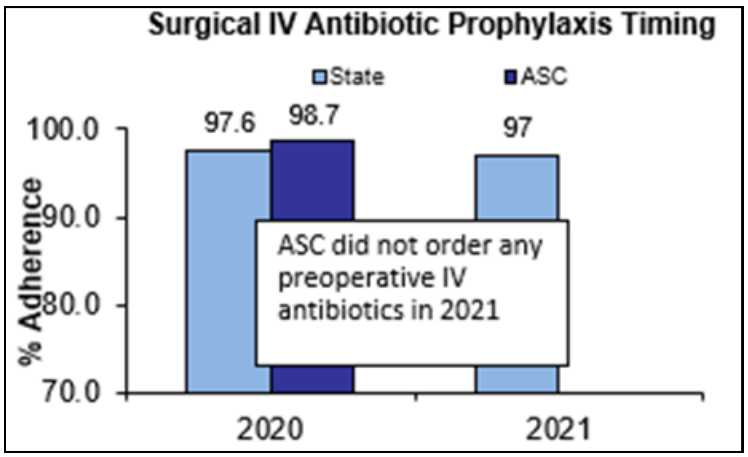
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-

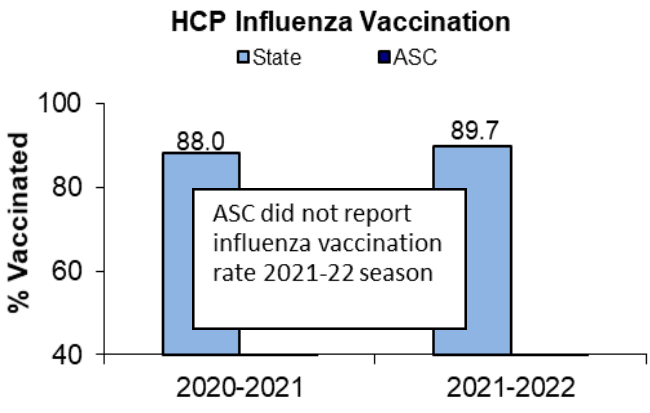
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	-	97.0	-
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	-	89.7	-

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



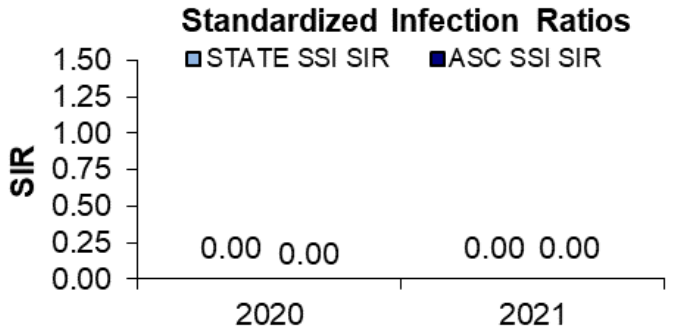


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



PORTSMOUTH REGIONAL ASC
Portsmouth, NH
Physician-owned
Free-standing
# of Admissions: 3,036

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	0	59	0.0	0.51	0.74	Similar

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

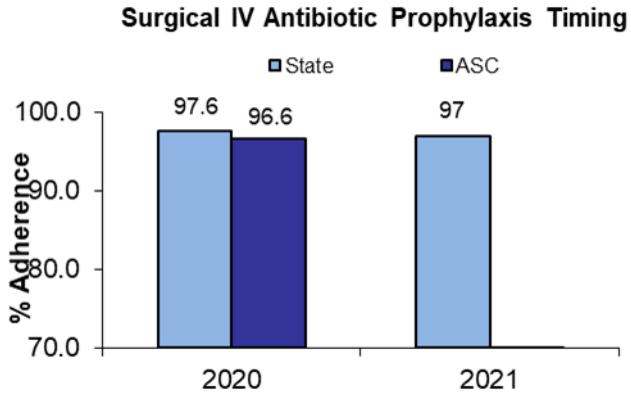
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	0.00	26	0.00	0.62	0.85	Similar
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	†	†	†	†	†	†
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	0	32	0.00	0.28	0.92	Similar

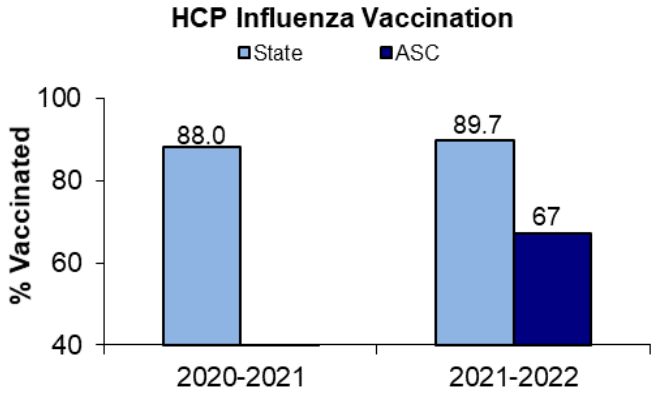
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	-	97.0	-
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	-	89.7	-

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



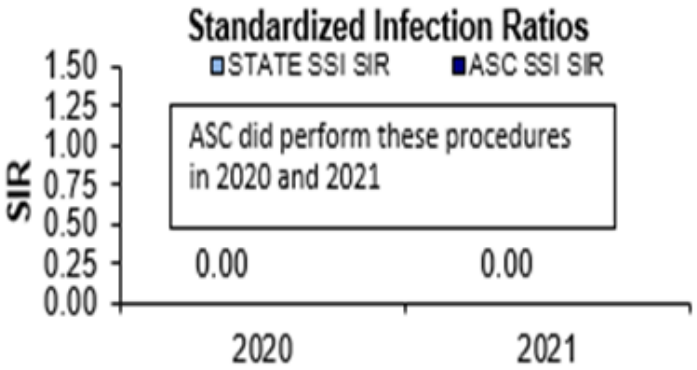


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



RYE SURGICAL CENTER
Rye, NH
For-profit
Free-standing
# of Admissions: Data Unavailable

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	Facility did not report any of these procedures in 2021					

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

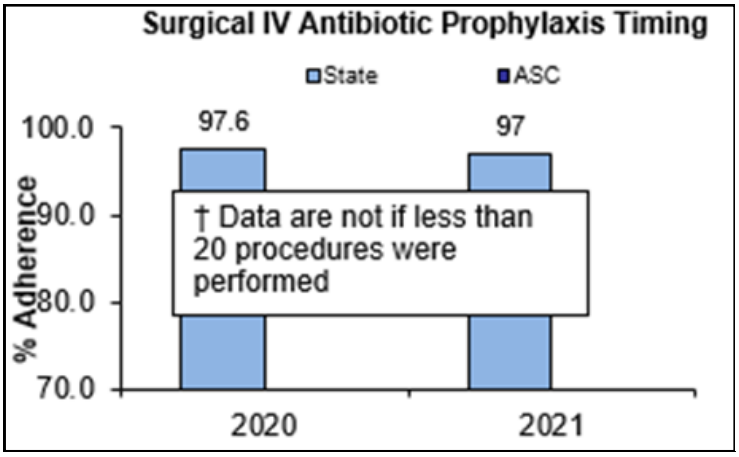
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-

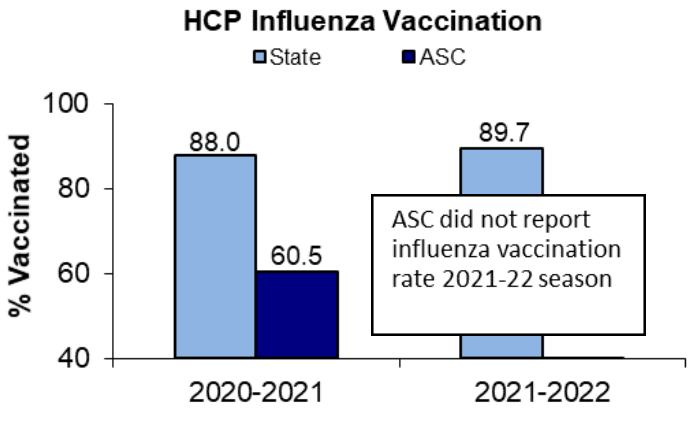
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	†	97.0	†
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	-	89.7	-

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



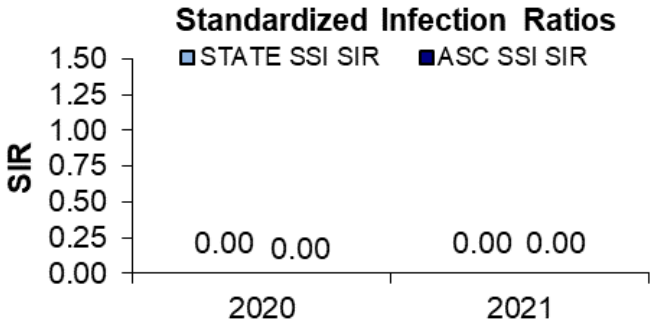


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



STRATHAM ASC
Stratham, NH
Physician-owned
Free-standing
# of Admissions: Data Unavailable

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	0	64	0.0	0.51	0.72	Similar

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

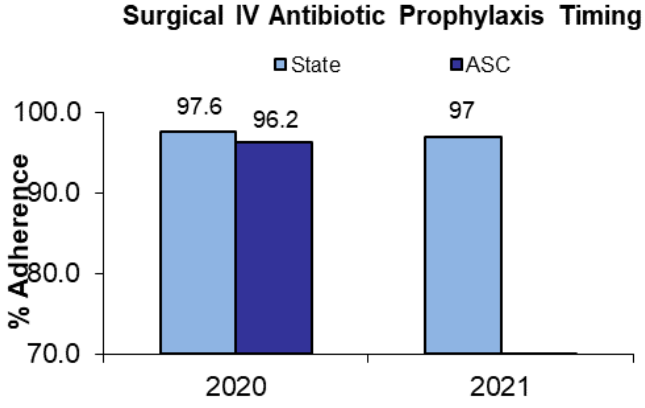
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	0	63	0.00	0.62	0.68	Similar
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	†	†	†	†	†	†
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-

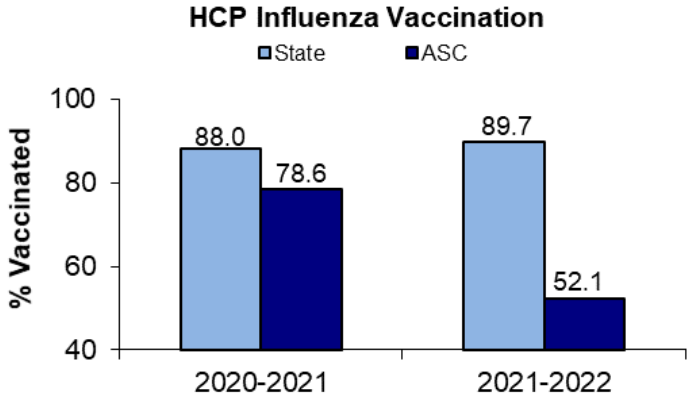
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	†	97.0	†
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	52.1	89.7	Lower

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021



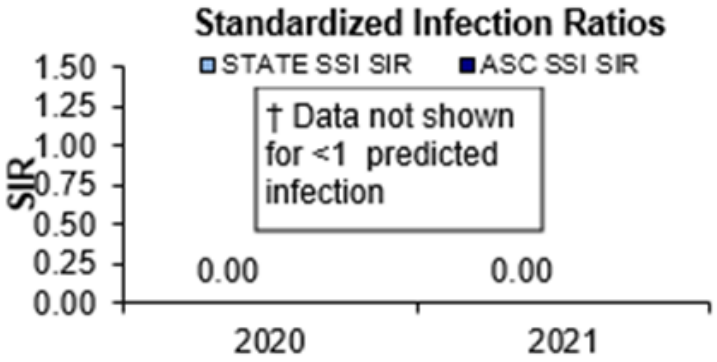


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



THE SURGERY CENTER OF GREATER NASHUA
Nashua, NH
Not-for-profit
Free-standing
# of Admissions: 2,301

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	0	16	0.0	0.51	0.92	Similar

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

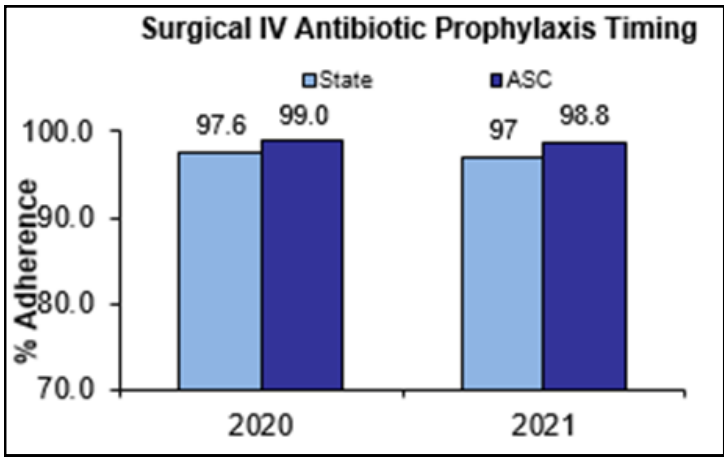
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	0	14	0.00	0.62	0.92	Similar
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	†	†	†	†	†	†
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-

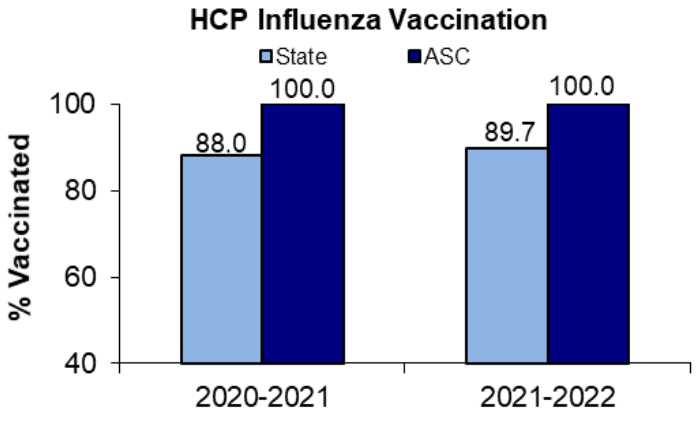
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

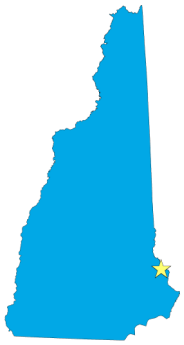
Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	98.8	97.0	Similar
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	100.0	89.7	Higher

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021



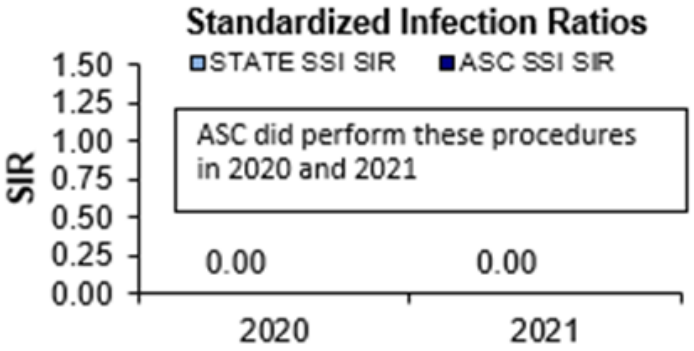


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



The Surgery Center of New Hampshire at Derry
Derry, NH
# of Admissions: Data Unavailable
*Opened in 2021

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	Facility did not report any of these procedures in 2021					

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

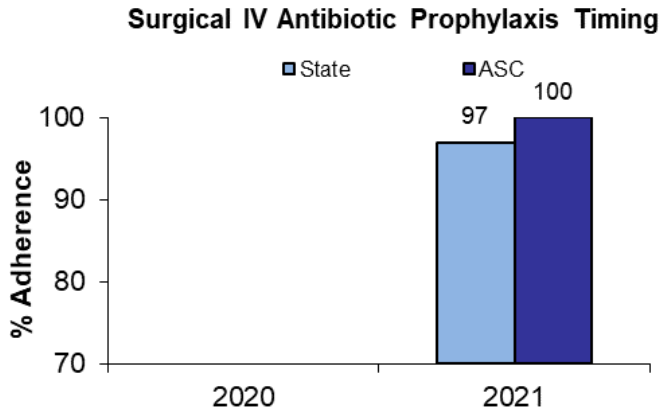
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-

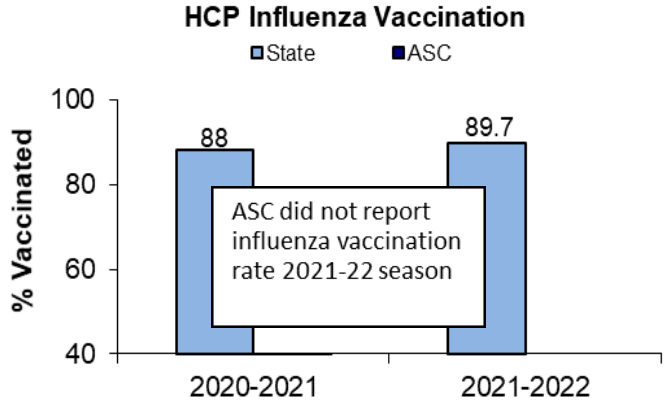
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

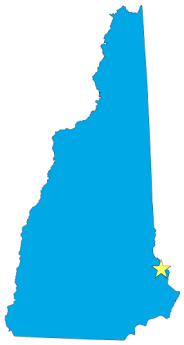
Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	100	97.0	Higher
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	-	89.7	-

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021



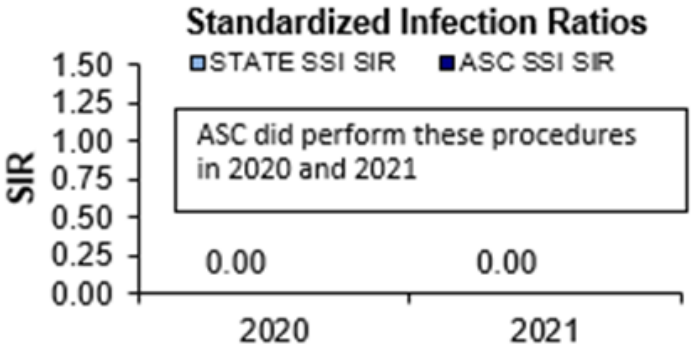


ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures



WENTWORTH SURGERY CENTER
Somersworth, NH
For-profit
Free-standing
# of Admissions: Data Unavailable

2021 HAI ASC DATA REPORT



STANDARDIZED INFECTION RATIOS (SIR)

Measure	Infections	Procedures	ASC Rate	National Rate	P-value	Comparison to Expected
Overall SSI	Facility did not report any of these procedures in 2021					

PROCEDURE-SPECIFIC RATES BY RISK CATEGORY

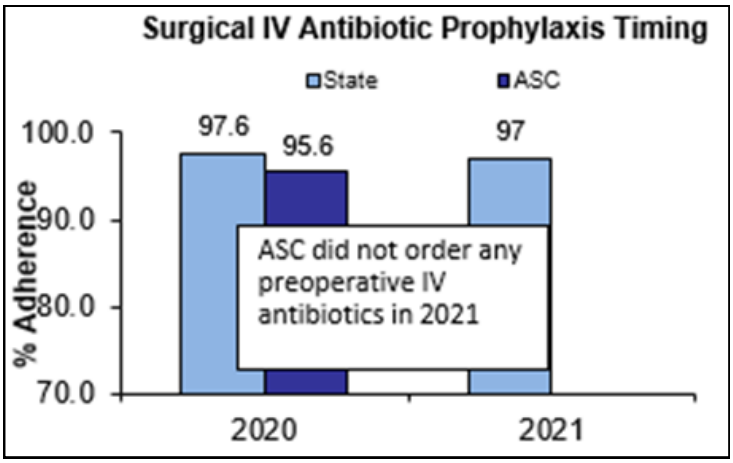
Risk Category	Infections	Procedures	ASC Rate	National Rate	P-Value	ASC Rate Compared to National Rate
Breast Procedures (BRST)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Hernia Procedures (HER)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-
Open Reduction of Fracture Procedures (FX)						
Risk Category 0, 1, 2, 3	-	-	-	-	-	-

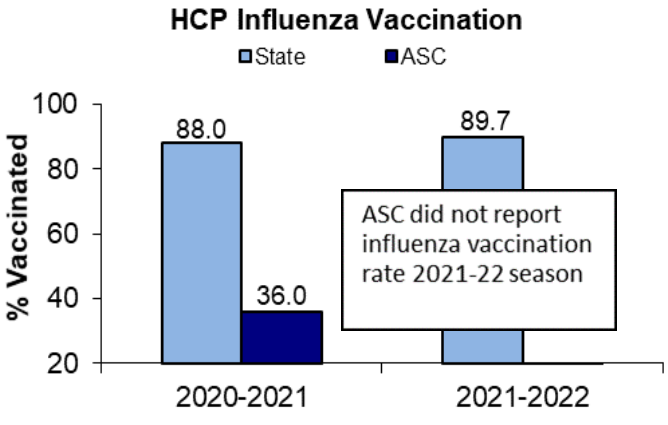
†Data are not shown when fewer than 20 procedures were performed - Facility did not perform any procedures in this category in 2021

PROCESS MEASURES

Measure	Percent Adherence	State Percentage	Comparison to State Percentage
IV Antibiotic Prophylaxis Timing	-	97.0	-
	Percent Vaccinated	**State Percentage**	**Comparison to State Percentage**
HCP Influenza Vaccination	-	89.7	-

†Data are not shown when fewer than 20 orders of IV prophylaxis were made in 2021 - Facility did not provide IV prophylaxis in 2021





ASC: Ambulatory surgery center IV: Intravenous SSI: Surgical site infection
BRST: Breast procedures HER: Hernia procedures FX: Open reduction of fracture procedures

APPENDIX 1: Technical Notes

1. The majority of data in this report were extracted from NHSN on 10/5/2022; influenza vaccination data and surgical antimicrobial prophylaxis data were extracted from other data sources on the same date. Changes or new infections reported by ASC after this date are not reflected in this report.
2. The SSI national comparison data used in this report come from the 2009 NHSN Report. The 2009 NHSN report summarizes data reported to NHSN from 2006-2008. This report is available at: http://www.cdc.gov/nhsn/PDFs/dataStat/2009NHSNReport.pdf.
3. Rates for any grouping were not presented if data were insufficient to generate a stable rate.
    a. SSI: There must be at least 20 procedures in the denominator to present a rate.
4. All confidence intervals presented in this report are 95% confidence intervals. A confidence interval is a measure of certainty (usually with 95% confidence) of an estimate (such as a percentage). Because we can never obtain a facility's true "population" data (e.g., all patients for all time), we use statistical procedures to estimate various measurements using "sample" data. Since estimates are variable, we use 95% confidence limits to describe the variability around the estimate. The confidence interval gives us the range within which the TRUE value will fall 95% of the time, assuming that the sample data are reflective of the true population. If the confidence intervals for the two rates overlap, then it is reasonably possible that the REAL rates are not different from one another.
5. Statistical significance is affected by sample size. Small sample sizes are more prone to fluctuations in the data.

Standardized Infection Ratios

6. Calculating a SIR: The SIR is the number of observed infections divided by the number of predicted infections based on most recent national data. In order to calculate an SIR, it is recommended that there be at least one predicted infection. See Appendix 3 for more information on the SIR.
7. Interpreting a SIR: The resulting SIR is a comparison between the number of observed infections and the number predicted.
    a. An SIR of 1.0 means that exactly the same number of infections was observed as was predicted.
    b. An SIR of less than one means that fewer infections were observed than were predicted (for example, SIR = 0.70 would be interpreted as 30% fewer infections observed than predicted).
    c. An SIR of more than one means that fewer infections were observed than were predicted (for example, SIR = 1.30 would be interpreted as 30% more infections observed than predicted).
8. Calculating a corresponding confidence interval for a SIR: The calculations for determining the 95% confidence interval for SIRs in this report are taken from: Liddell FD. Simple exact analysis of the standardized mortality ratio. Journal of Epidemiology and Community Health, 1984; 38:85-88. [xii]

9. Interpreting a SIR confidence interval: A confidence interval is a measure of certainty (usually with 95% confidence) of an estimate (such as a SIR). Confidence intervals can be used to assess whether differences in the number of observed and predicted infections are statistically significant (different or similar).
    a. For confidence intervals that contain the value 1.0, the observed number of infections will be considered "Similar" to the predicted number of infections based on national data (e.g., 0.27 , 1.49).
    b. For confidence intervals that are lower than and do not contain the value 1.0, the observed number of infections will be considered "Lower" than the predicted number of infections based on national data (e.g., 0.13 , 0.74).
    c. For confidence intervals that are higher than and do not contain the value 1.0, the observed number of infections will be considered "Higher" than the predicted number of infections based on national data (e.g., 1.09 , 2.63).

Infection Rates

10. Calculating a SSI rate and associated p-value: SSI rates are presented as the number of infections per 100 procedures.

    SSI rate = (number of infections / number of procedures) x 100

11. Interpreting a p-value: All ASC-specific rates and corresponding p-values in this report were generated directly by NHSN using Poisson statistical methods. State-level rates and corresponding p-values were calculated by DHHS using exact methods. A p-value provides a statistical comparison of two values in order to determine whether those values are statistically different or similar. In this report, p-values are used to assess whether ASC infection rates are similar or different to national infection rates. A p-value of <0.05 would indicate the ASC rate is significantly different than the national rate.
    a. If the p-value is ≥0.05, then the ASC rate would be considered statistically "Similar" to the national rate.
    b. If the ASC rate is lower than the national rate and the p-value is <0.05, then the ASC rate would be considered significantly "Lower" than the national rate.
    c. If the ASC rate is higher than the national rate and the p-value is <0.05, then the ASC rate would be considered significantly "Higher" than the national rate.

Process Measure Percentages

12. Calculating an influenza vaccination percentage: Influenza vaccination percentages are presented as the number of HCP vaccinated divided by the total number of HCP expressed as a percent.

    Influenza vaccination (%) = (number of HCP vaccinated / total number of HCP) x 100

13. A. Calculating a surgical IV antimicrobial prophylaxis adherence percentage: Surgical IV antimicrobial prophylaxis adherence percentages are presented as the number of orders for

which administration adhered to the measure divided by the total number of orders expressed as a percent.

Surgical antimicrobial prophylaxis adherence (%) = (number of orders administered on time / total number of orders) x 100

Note: Administrations of surgical antimicrobial prophylaxis recorded as having an interval of 0:00, 1:00, or 2:00 (for select antibiotics) between administration and procedure start were excluded from the analysis. This is because time in minutes, not seconds, from administration to procedure start are documented and it is impossible to determine if antibiotic was administered exactly within one or two hours (depending on the antibiotic).

B. Calculating a corresponding confidence interval for an influenza vaccination percentage: Confidence intervals for influenza vaccination data presented in this report are mid-p exact 95% confidence intervals, which were calculated using a statistical software program.

14. Calculating a corresponding confidence interval for a surgical IV antimicrobial prophylaxis adherence percentage: Confidence intervals calculated for IV antimicrobial prophylaxis data presented in this report are mid-p exact 95% confidence intervals, which were calculated using a statistical software program.

15. Interpreting a proportion confidence interval for vaccination data: A confidence interval is a measure of certainty (usually with 95% confidence) of an estimate (such as a percentage). Confidence intervals can be used to assess whether differences in the percentages observed for each group (for example, ASC vs. State) are statistically significant.

    a. Confidence intervals that overlap the State confidence interval are considered "Similar" to the overall State percentage.
    b. Confidence intervals that are lower than and do not overlap the State confidence interval are considered "Lower" than the overall State percentage.
    c. Confidence intervals that are higher than and do not overlap the State confidence interval are considered "Higher" than the overall State percentage.

APPENDIX 2: Influenza Vaccination Survey Questions, 2021-2022 Season

1. Background information (facility and survey respondent)
2. How many HCP worked or volunteered in your facility for at least one working day between October 1, 2021 and March 31, 2022?
3. How many HCP received a seasonal influenza vaccination (at your facility or elsewhere) for the 2021-22 season? Influenza vaccine for a given influenza season may be available as early as July or August. Include all immunized HCP that received the 2021-22 vaccine product, even if administered prior to October 1, 2022.
   3a. Total number of HCP immunized against influenza for the 2021-22 season:
   3b. Total number of HCP not immunized against influenza for the 2021-22 season:
4. Of the HCP not immunized against influenza for the 2021-22 influenza season, how many HCP did not receive the seasonal influenza vaccine for each of the following reasons (medical contraindications, religious, other (e.g., personal/philosophical), unknown)?
5. Does your facility have a seasonal influenza vaccination policy? Such a policy means that the facility requires all or some portion of HCP working at that facility to receive a seasonal influenza vaccine. If NO, skip to item 10.
   5a. Yes, there is a policy currently in place
   5b. No, but we are considering a policy
   5c. No, and we are not considering a policy
   5d. Other
6. If your facility has a seasonal influenza vaccination policy, what reasons for exemption are acceptable (medical, religious, personal/philosophical, other)? Check all that apply.
7. If your facility has a seasonal influenza vaccination policy, what do you require of unvaccinated HCP with an acceptable reason for exemption (wear a mask, receive verbal and/or written education, other)? Check all that apply.
8. If your facility has a seasonal influenza vaccination policy, what are the potential consequences for unvaccinated HCP without an acceptable reason for exemption (wear a mask, progressive discipline, potentially including termination, receive verbal and/or written education, other)? Check all that apply.
9. If your facility has a seasonal influenza vaccination policy, how many people were terminated, suspended, resigned, or dismissed as a result of noncompliance with the policy during the 2021-22 influenza season?
   9a. Terminated:
   9b. Temporarily suspended:
   9c. Resigned:
   9d: Dismissed permanently:
10. Please enter any comments you would like to share.

APPENDIX 3: Understanding the Relationship between Healthcare-Associated Infection Rates and Standardized Infection Ratio Comparison Metrics

HAI Elimination Metrics are very useful for performing evaluations.[xiii] Several metrics are based on the science employed in NHSN. While national aggregate SSI data are published in the annual NHSN reports, these rates must be stratified by types of risk category and procedure-specific factors. This scientifically sound risk-adjustment strategy creates a practical challenge to summarizing this information nationally, regionally, or even for an individual healthcare facility.

A SIR can be used as an indirect standardization method for summarizing HAI experienced across any number of stratified groups of data. To illustrate the method for using an SIR as an HAI comparison metric, the following example data are displayed below:

Risk Group Stratifier	Observed SSI Rates			NHSN SSI Rates for Outpatient Breast Procedures (Standard Population)		
Procedure Risk Category	#SSI	#Breast Procedures	SSI Rate*	#SSI	#Breast Procedures	SSI Rate*
Risk Category 0	8	6,589	0.1	3	944	0.32
Risk Category 1-3	21	7,652	0.3	7	659	1.06

$$\text{SIR} = \frac{\text{observed}}{\text{predicted}} = \frac{8+21}{6{,}589\times\left(\frac{0.32}{100}\right)+7{,}652\times\left(\frac{1.06}{100}\right)} = \frac{29}{21+81} = \frac{29}{102} = 0.28$$

95% CI = (0.190 , 0.408)

*Defined as the number of SSI per 100 associated procedures

In the table above, there are two strata to illustrate risk-adjustment by risk category for which national data exist from NHSN. The SIR calculation is based on dividing the total number of observed SSI events by a "predicted" number using the SSI rates from the outpatient breast procedures. This "predicted" number is calculated by multiplying the national SSI rate from the standard population by the observed number of procedures for each stratum, which can also be understood as a prediction or projection. If the observed data represented a follow-up period, such as 2017, one would state that an SIR of 0.28 indicates that there were 72% fewer infections for the facility than were predicted.

The SIR concept and calculation is completely based on the underlying rate data that exist across a potentially large group of strata. Thus, the SIR provides a single metric for performing comparisons rather than attempting to perform multiple comparisons across many strata

which makes the task cumbersome. The SIR concept and calculation can be applied equitably to other HAI metrics. This is especially true for HAI metrics for which national data are available and reasonably precise using a measurement system such as NHSN. The SIR calculation methods differ in the risk group stratification only. See the following example data and SIR calculation.

Risk Group Stratifiers		Observed SSI Rates			NHSN SSI Rates for 2008 (Standard Population)		
Procedure Code	**Risk Index Category**	**#SSI†**	**#Procedures**	**SSI Rate***	**#SSI†**	**#Procedures**	**SSI Rate***
CBGB	1	315	12,600	2.5	2100	70,000	3.0
CBGB	2,3	210	7,000	3.0	1000	20,000	5.0
HPRO	1	111	7,400	1.5	1020	60,000	1.7

$$\text{SIR} = \frac{\text{observed}}{\text{expected}} = \frac{315+210+111}{12600\times\left(\frac{3.0}{100}\right)+7000\times\left(\frac{5.0}{100}\right)+7400\left(\frac{1.7}{100}\right)} = \frac{636}{378+350+125.8} = \frac{636}{853.8} = 0.74$$

95% CI = (0.649 , 0.851)

† SSI: Surgical site infection * Defined as the number of deep incisional or organ/space SSI per 100 procedures HPRO: Arthroplasty of hip
CBGB: Coronary artery bypass graft

This example uses SSI rate data stratified by procedure and risk index category. The SIR for this set of observed data is 0.74, which indicates there is a 26% reduction in the number of SSI events based on the baseline NHSN SSI rates as representing the standard population.

APPENDIX 4: Preventing Healthcare-Associated Infections

What You Can Do to Prevent Healthcare-Associated Infections

There are several prevention tips you can follow all the time to reduce your chance of getting an infection or spreading your infection to others.

1. Clean your hands.
   - Use soap and warm water. Rub your hands for at least 20 seconds. Rub your palms, fingernails, in between your fingers, and the backs of your hands.
   - If your hands do not look dirty, you can clean them with alcohol-based hand rub. Rub the gel all over your hands, especially under your nails and between your fingers, until your hands are dry.
   - Clean your hands before touching or eating food. Clean them after you use the bathroom, take out the trash, change a diaper, visit someone who is ill, or play with a pet.

2. Make sure healthcare providers clean their hands first, even if they wear gloves, before touching you or performing any procedure.
   - Doctors, nurses, dentists, and other healthcare providers come into contact with many bacteria and viruses. If you do not see your healthcare provider wash their hands or use an alcohol-based hand rub before they treat you, ask them if they have cleaned their hands.
   - Healthcare providers should wear clean gloves when they perform tasks such as taking throat cultures, pulling teeth, taking blood, touching wounds or body fluids, while suctioning tubes, and examining your mouth or genitalia. Don't be afraid to ask if they should wear gloves.

3. Cover your mouth and nose.
   - Many diseases are spread through sneezes and coughs. When you sneeze or cough, the germs can travel three feet or more. Cover your mouth and nose to prevent the spread of infection to others.
   - Use a tissue. Keep tissues handy at home, at work, and in your pocket. Be sure to throw away used tissues and clean your hands after coughing or sneezing.
   - If you don't have a tissue, cover your mouth and nose with the bend of your elbow or hands. If you use your hands, clean them right away.

4. If you are sick, avoid close contact with others.
   - If you are sick, stay away from other people or stay home. Don't shake hands or touch others.
   - When you go for medical treatment, call ahead and ask if there is anything you can do to avoid infecting people in the waiting room.

5. Get shots to avoid disease and fight the spread of infection.
   - Make sure that your vaccinations are current—even for adults. Check with your doctor about shots you may need.

6. If you are prescribed an antibiotic for an illness, take them exactly as directed by your doctor.

- Don't take half-doses or stop before you complete your prescribed course even if you feel better. Not taking them as directed can lead to infections that become resistant to antibiotics, making them more difficult to treat.

What You Can Do to Help Prevent Surgical Site Infections

- Tell your doctor about other medical problems you may have. Health problems such as allergies, diabetes, and obesity could affect your surgery and your treatment.
- Quit smoking. Patients who smoke get more infections. Talk to your doctor about how you can quit before your surgery.
- Do not shave near where you will have surgery. Shaving with a razor can irritate your skin and make it easier to develop an infection.
- You may have some of your hair removed immediately before your surgery using electric clippers if the hair is in the same area where the procedure will occur, however you should not be shaved with a razor. Speak up if someone tries to shave you with a razor before surgery. Ask why you need to be shaved and talk with your surgeon if you have any concerns.
- Ask if you will get antibiotics before surgery.
- After your surgery, make sure that your healthcare providers clean their hands before examining you, either with soap and water or an alcohol-based hand rub. If you do not see your providers clean their hands, please ask them to do so.
- Family and friends who visit you should not touch the surgical wound or dressings and prevent pets from coming into contact with your wound.
- Family and friends should clean their hands with soap and water or an alcohol-based hand rub before and after visiting you. If you do not see them clean their hands, ask them to do so.
- Before you go home, your doctor or nurse should explain everything you need to know about taking care of your wound. Make sure you understand how to care for your wound before you leave the healthcare facility. If you do develop an infection at the healthcare facility, be sure to ask what type of infection you have, whether you need antibiotics for it, what steps you should take to prevent it from spreading, and make plans for follow up care for the infection.
- Always clean your hands before and after caring for your wound.
- Before you go home, make sure you know who to contact if you have questions or problems after you get home.
- If you have any symptoms of an infection, such as redness and pain at the surgery site, drainage, or fever, call your doctor immediately.

What Healthcare Facilities Can Do to Prevent Surgical Site Infections

To prevent surgical site infections, doctors, nurses, and other healthcare providers:

- Clean their hands and arms up to their elbows with an antiseptic agent before the surgery.
- Clean their hands with soap and water or an alcohol-based hand rub before and after caring for each patient.
- May remove some of your hair immediately before your surgery using electric clippers if the hair is in the same area where the procedure will occur. They should not shave you with a razor.
- Wear special hair covers, masks, gowns, and gloves during surgery to keep the surgery area clean.
- Give you antibiotics before your surgery starts. In most cases, you should get antibiotics within 60 minutes before the surgery starts and the antibiotics should be stopped within 24 hours after surgery.
- Clean the skin at the site of your surgery with a special soap that kills germs.

This information was adapted from materials developed by the Centers for Disease Control and Prevention (CDC), the Association for Professionals in Infection Control and Epidemiology (APIC), the Joint Commission, and Society of Healthcare Epidemiology of America (SHEA).

Other Useful Resources

Access the New Hampshire Healthcare-Associated Infections (HAI) Program website for public reports, guidelines, and other materials at: http://www.dhhs.nh.gov/dphs/cdcs/hai/index.htm.

For more information about HAI nationally and patient safety, visit the Centers for Disease Control and Prevention (CDC) website at: http://www.cdc.gov/HAI/ and http://www.cdc.gov/HAI/patientSafety/patient-safety.html.

The Agency for Healthcare Quality and Research (AHRQ) has information for patients including care planning, diagnosis and treatment, and patient engagement. Visit their website at: http://www.ahrq.gov/patients-consumers/index.html.

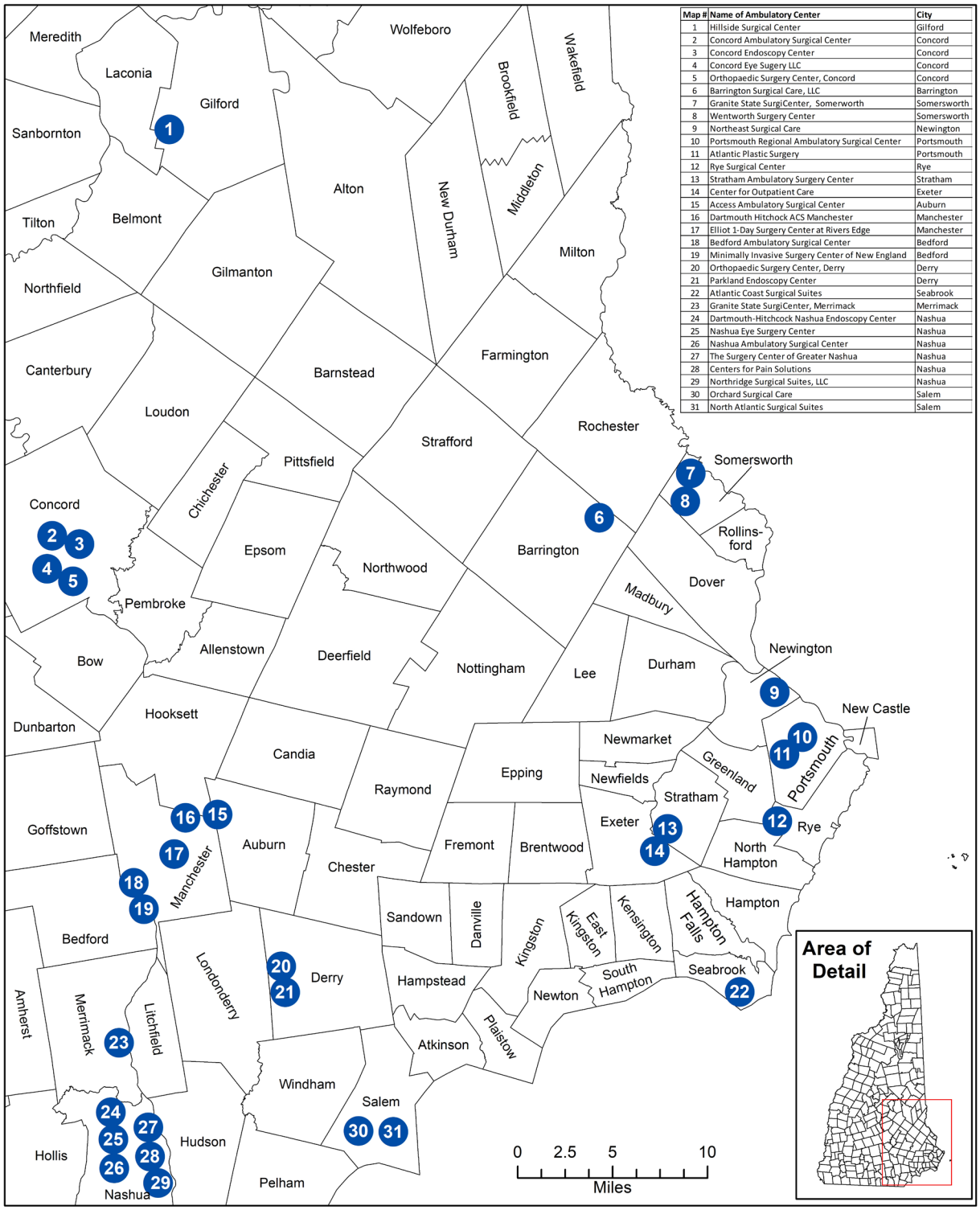
The Society for Healthcare Epidemiology of America (SHEA) has several patient resources and guides. Visit their website at:
https://www.shea-online.org/index.php/practice-resources/patients

The Association of Professionals in Infection Control and Epidemiology (APIC) have infection prevention updates, materials for healthcare facilities, and information about HAI. Visit their website to learn more: https://apic.org/consumers/patient-safety-resources/

To learn more about accreditation, certification and standards, visit the Joint Commission Website at: http://www.jointcommission.org/.

APPENDIX 5: Map of New Hampshire Ambulatory Surgery Centers 2021

Ambulatory Surgery Centers (ASC) in New Hampshire



Map #	Name of Ambulatory Center	City
1	Hillside Surgical Center	Gilford
2	Concord Ambulatory Surgical Center	Concord
3	Concord Endoscopy Center	Concord
4	Concord Eye Sugery LLC	Concord
5	Orthopaedic Surgery Center, Concord	Concord
6	Barrington Surgical Care, LLC	Barrington
7	Granite State SurgiCenter, Somerworth	Somersworth
8	Wentworth Surgery Center	Somersworth
9	Northeast Surgical Care	Newington
10	Portsmouth Regional Ambulatory Surgical Center	Portsmouth
11	Atlantic Plastic Surgery	Portsmouth
12	Rye Surgical Center	Rye
13	Stratham Ambulatory Surgery Center	Stratham
14	Center for Outpatient Care	Exeter
15	Access Ambulatory Surgical Center	Auburn
16	Dartmouth Hitchock ACS Manchester	Manchester
17	Elliot 1-Day Surgery Center at Rivers Edge	Manchester
18	Bedford Ambulatory Surgical Center	Bedford
19	Minimally Invasive Surgery Center of New England	Bedford
20	Orthopaedic Surgery Center, Derry	Derry
21	Parkland Endoscopy Center	Derry
22	Atlantic Coast Surgical Suites	Seabrook
23	Granite State SurgiCenter, Merrimack	Merrimack
24	Dartmouth-Hitchcock Nashua Endoscopy Center	Nashua
25	Nashua Eye Surgery Center	Nashua
26	Nashua Ambulatory Surgical Center	Nashua
27	The Surgery Center of Greater Nashua	Nashua
28	Centers for Pain Solutions	Nashua
29	Northridge Surgical Suites, LLC	Nashua
30	Orchard Surgical Care	Salem
31	North Atlantic Surgical Suites	Salem

REFERENCES

[i] The Centers for Disease Control and Prevention (CDC). Healthcare-Associated Infections Progress Report. March 33, 2016. Accessed online from: http://www.cdc.gov/HAI/progress-report/index.html.

[ii] Magill SS, Edwards JR, Bamberg W, et al. Multistate point-prevalence survey of health care–associated infections. New England Journal of Medicine. 2016; 370: 1198-208.

[iii] Klevens, RM, Edwards RJ, Richards CL, Jr, et al. Estimating health care-associated infections and deaths in U.S. Hospitals, 2002. Public Health Reports. 2007; 122(2):160-166. Accessed online from: http://www.cdc.gov/ncidod/dhqp/pdf/hicpac/infections_deaths.pdf

[iv] Humphreys, H, Newcombe RG, Enstone J et al. Four Country Healthcare Associated Infection Prevalence Survey 2006: Risk Factor Analysis. Journal of Hospital Infection 2008; 69(3) 249-257.

[v] Scott R, Douglas. The Direct Medical Costs of Healthcare-Associated Infections in US hospitals and the Benefits of Prevention. March 2009. Accessed online from: http://www.cdc.gov/HAI/pdfs/hai/Scott_CostPaper.pdf

[vi] CDC. Guide to Infection Prevention for Outpatient Settings: Minimum Expectations for Safe Care. Accessed online from: http://www.cdc.gov/HAI/settings/outpatient/outpatient-care-guidelines.html

[vii] Ambulatory Surgery Center Association. What is an ASC? Accessed online from: http://www.ascassociation.org/ASCA/AboutUs/WhatisanASC

[viii] Linda McKibben, MD, Teresa Horan, MPH, Jerome I. Tokars. Guidance on Public Reporting of Healthcare-Associated Infections: Recommendations of the Healthcare Infection Control Practices Advisory Committee. American Journal of Infection Control. 2005;33:217-26. Accessed online from: http://www.cdc.gov/ncidod/dhqp/pdf/hicpac/PublicReportingGuide.pdf

[ix] The Healthcare-Associated Infection Working Group of the Joint Public Policy Committee. Essentials of public reporting of healthcare-associated infections: A tool kit. Accessed online from: http://www.cdc.gov/ncidod/dhqp/pdf/ar/06_107498_Essentials_Tool_Kit.pdf

[x] Edwards JR, Peterson KD, Mu Y, et al. National Healthcare Safety Network (NHSN) report: Data summary for 2006 through 2008, issued December 2009. American Journal of Infection Control. 2009; 37:783-805. Accessed online from: http://www.cdc.gov/nhsn/PDFs/dataStat/2009NHSNReport.pdf

[xi] CDC. Influenza Vaccination Coverage Among Health-Care Personnel – United States, 2017-18 Influenza Season. Morbidity and Mortality Weekly Report September 2018; 67(38);1050-1054. Accessed online from: https://www.cdc.gov/nhsn/pdfs/datastat/hcp-flu-vax-data-tables-asc-2018-508.pdf

[xii] Liddell FD. Simple Exact Analysis of the Standardised Mortality Ratio. Journal of Epidemiology and Community Health, 1984; 38:85-88.

[xiii] CDC. Template for State Healthcare Associated Infections Plans. Accessed online from: http://www.cdc.gov/HAI/pdfs/stateplans/del.pdf

Note: referenced according to citation order of appearance within the report.