

Hospital Infections Disclosure Act (HIDA) 2016 Annual Report to the General Assembly September 2017

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2016 Hospital Infections Disclosure Act Annual Report to the General Assembly

DHEC submits the 2016 Hospital Infections Disclosure Act Annual (HIDA) Report, which reflects the progress of implementing the South Carolina Hospital Infection Disclosure Act. This report is submitted in compliance with S.C. Code Section 44-7-2440.

Acknowledgements: The South Carolina Department of Health and Environmental Control (DHEC) gratefully acknowledges that the HIDA achievements are made possible by the combined efforts of hospital infection prevention staff, DHEC staff, and the active participation of the HIDA Advisory Committee and subcommittees.

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Abbreviations

ASA- American Society of Anesthesiologists
AR- Admission- readmission
CBGB-Coronary artery bypass graft (chest and donor site incisions)
BSI-Blood stream infection
CBGC- Coronary artery bypass graft (chest incision only)
CCU – Critical care unit (used interchangeably with intensive care unit (ICU))
CDC – Centers for Disease Control and Prevention
CDI – C. difficile infection
CLABSI – central line-associated bloodstream infection
CMS – Centers for Medicare and Medicaid Services
CO – Community onset
COLO – Colon surgery
DHHS - Department of Health and Human Services
HAI – Healthcare-associated infection
HIDA- Hospital Infections Disclosure Act
HO – Healthcare facility onset
HPRO-Hip Prosthesis Procedure
HYST – abdominal hysterectomy
IP – Infection preventionist
ICU – Intensive Care Unit (use interchangeably with critical care unit (CCU))
IRF- Inpatient Rehabilitation Facility
IVAC- Infection-Related Ventilator-Associated Complication
KPRO-Knee Prosthesis Procedure
LTAC- Long-term acute care
MRSA – Methicillin-resistant Staphylococcus aureus
NHSN – National Healthcare Safety Network
NICU – Neonatal intensive care unit
SSI – Surgical site infection

SIR- Standardized Infection Ratio

VAE- Ventilator – Associated Events

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Executive Summary

Healthcare-associated infections (HAIs) are infections that patients acquire in healthcare settings or as a result of medical procedures. In an effort to address HAIs and promote healthcare transparency in South Carolina, the South Carolina Department of Health and Environmental Control (DHEC), with the support of an advisory committee, has enforced HAI reporting through a law known as the Hospital Infections Disclosure Act (HIDA) since 2006. This law requires reporting of HAI data from acute care hospitals, critical access hospitals, long-term acute care hospitals, and inpatient rehabilitation facilities to the public. HAI monitoring promotes infection prevention activities within healthcare facilities to improve patient safety.

The 2016 HIDA Annual Report is the 9th annual report of HAI statistics in South Carolina. This report contains data from January 2016 through December 2016 for the following infections:

Central Line-Associated Bloodstream Infections (CLABSI) data for inpatient locations:

- Adult and Pediatric Critical Care Locations
- Adult and Pediatric Ward Locations
- Adult and Pediatric Specialty Care Area Locations (i.e., hematology/oncology, bone marrow transplant, leukemia/lymphoma units)
- Adult and Pediatric Step-down Locations
- Neonatal Critical Care Locations- Levels II/III, III
- Rehabilitation Ward Locations

Surgical Site Infections (SSIs) for the following surgical procedure types:

- Colon surgeries (COLO)
- Hip arthroplasties (HPRO), commonly known as hip replacements
- Knee arthroplasties (KPRO), commonly known as knee replacements
- Abdominal hysterectomies (HYST)
- Coronary artery bypass grafts, chest incision only (CBGC)
- Coronary artery bypass grafts, chest and donor incisions (CBGB)

Ventilator-Associated Events (VAE) for patients receiving critical care within:

- Acute Care Hospitals
- Long-term Acute Care Hospitals
- Inpatient Rehabilitation Locations

Laboratory identified (LabID) events for:

- Methicillin-resistant Staphylococcus aureus (MRSA) bloodstream infections (BSI)
- *Clostridium difficile* infections (CDI)

In 2016, all seventy-seven South Carolina healthcare facilities reported HAI information to the National Healthcare Safety Network (NHSN). Because NHSN is maintained by the Centers for Disease Control and Prevention (CDC), each healthcare facility must grant permission to DHEC to access their respective HAI-related data. HIDA gives DHEC the legal authority to view and publish this information.

The overall CLABSI standardized infection ratio (SIR) for acute care hospitals in South Carolina is 0.96. The overall South Carolina CLABSI SIR is not significantly different compared to the new national baseline.

The overall SSI complex admission readmission (AR) SIR for reportable procedures in South Carolina is 1.10. The overall South Carolina SSI complex AR SIR is not significantly different compared to the new national baseline.

The overall hospital-onset MRSA BSI LabID event SIR for acute care facilities in South Carolina is 1.05. The overall South Carolina MRSA LabID event SIR for acute care facilities is not significantly different compared to the new national baseline.

The overall hospital-onset CDI LabID event SIR for acute care facilities in South Carolina is 0.80. The overall South Carolina CDI LabID event SIR for acute care facilities is not significantly different compared to the new national baseline.

Introduction

Healthcare-associated infections (HAIs) are a major public health concern. With the use of national data from 2011, a survey conducted by CDC estimated that 722,000 HAIs occurred each year in U.S. acute care hospitals, contributing to about 75,000 patient deaths during hospitalization. Roughly 1 in every 25 patients develops at least one HAI, and more than half of all HAIs occur outside of intensive care units (Magill SS, 2014). Healthcare-associated infections are also a financial burden, causing healthcare facilities in the United States to absorb between \$28 to \$48 billion dollars in additional costs each year (US Department of Health and Human Services, 2010).

Increased public awareness and understanding that healthcare-associated infections are preventable has prompted consumers and policy makers to take action. In 2006, South Carolina lawmakers passed the Hospital Infections Disclosure Act (HIDA) with the goal to provide fair, accurate, and comparable information about hospital infection rates to consumers. HIDA was an important step toward promoting HAI prevention and measuring the progress toward the ultimate goal of eliminating HAIs in South Carolina.

With the passing of HIDA, DHEC established a multidisciplinary advisory panel to study and make recommendations for the surveillance and reporting of HAIs. The panel is comprised of healthcare consumer advocates, infection preventionists, hospital leaders, infectious disease physicians, healthcare quality improvement organizations, and DHEC representatives. A current list of HIDA advisory committee members is available in appendix A.

HIDA Advisory Committee Recommendations for Reporting Requirements and Public Reports

Using CDC's NHSN HAI surveillance definitions, the advisory panel recommends that all acute care, long term acute care, and inpatient rehabilitation hospitals licensed by DHEC report central-line associated blood stream infections (CLABSI), surgical site infections (SSI) associated with specific high-volume and high-risk surgical procedures and specific multidrug resistant organisms. HIDA allows for some flexibility in reporting requirements, at the recommendation of the HIDA advisory committee. The complete HIDA statute can be found on the DHEC HAI webpage at:

 $\underline{http://www.scdhec.gov/Health/FindingQualityHealthcare/CompareHospitalInfectionRates/LawsRegulations/.}$

The HIDA Annual Report is normally published each April¹ and contains data from the previous calendar year, including facility-specific HAI reports. Facility-specific HIDA interim reports are also published on October 15, containing data from the first six months of the year. All reports are made available to the public on DHEC's website. The public availability of reports assists consumers in making informed choices about their own healthcare and incentivizes facilities to reduce their infection rates.

¹This year there is a delay in the publication of the report due to technical issues with CDC's HAI surveillance system, NHSN. The delayed release of the NHSN Version 8.6, the recognition of many errors in the program, and the eventual release of a corrected version of NHSN led to unforeseen obstacles in compiling the annual report. This year, CDC also updated national Standard Infection Ration (SIR) risk models for various HAIs, based upon 2015 data. This update is referred to as the 2015 NHSN Re-baseline.

2016 HIDA Reporting Requirements

Central Line-Associated Bloodstream Infections (CLABSI) data for the following inpatient locations:

- Adult and Pediatric Critical Care Locations
- Adult and Pediatric Ward Locations
- Adult and Pediatric Specialty Care Area Locations (i.e., hematology/oncology, bone marrow transplant, leukemia/lymphoma units)
- Adult and Pediatric Step Down Locations
- Neonatal Critical Care Locations- Levels II/III, III
- Rehabilitation Ward Locations

Surgical Site Infections (SSIs) for the following surgical procedure types:

- Colon surgeries (COLO)
- Hip arthroplasties (HPRO)
- Knee arthroplasties (KPRO)
- Abdominal hysterectomies (HYST)
- Coronary artery bypass grafts, chest incision only (CBGC)
- Coronary artery bypass grafts, chest and donor incisions (CBGB)

Ventilator-Associated Events (VAE) within the following location types:

- Adult Critical Care Locations
- Adult Critical Long Term Acute Care Locations
- Adult Critical Care Inpatient Rehabilitation Locations

Laboratory identified (LabID) events for:

- Methicillin-resistant Staphylococcus aureus (MRSA) bloodstream infections (BSI)
- Clostridium difficile infections (CDI)
- Carbapenem-resistant Enterobacteriacea (CRE) infections, specifically Escherichia coli and Klebsiella species¹

Healthcare worker influenza vaccination summary data²

¹Carbapenem-resistant Enterobacteriaceae (CRE) infection surveillance is currently in the early stage of implementation and validation; therefore CRE infection data is not published in this report

Healthcare worker influenza vaccination summary data for the 2016/2017 influenza season will be published on December 15, 2017.

Methods

This report contains data entered from each of the seventy-seven South Carolina healthcare facilities that are regulated under HIDA. The Annual HIDA Report includes information regarding infections that occurred from January 1, 2016 through December 31, 2016. The data was downloaded from NHSN on August 31, 2017. Any changes or updates to the data after this date will not be reflected in this report.

National Healthcare Safety Network (NHSN)

All data is reported through the NHSN database, a secure, internet-based surveillance system that is maintained by the Division of Healthcare Quality Promotion (DHQP) at CDC. To fulfill HIDA reporting requirements for the 2016 reporting period, seventy-seven SC healthcare facilities granted access to DHEC through NHSN. To fulfill HIDA reporting requirements, hospitals must follow NHSN reporting definitions and procedures for all reportable HAIs.

In addition to HIDA reporting, SC healthcare facilities also report into NHSN to fulfill the requirements of the Centers for Medicare and Medicaid Services (CMS) Hospital Inpatient Quality Reporting Program. The data is posted for public reporting on the Department of Health and Human Services (DHHS) Hospital Compare Website available at: http://www.medicare.gov/hospitalcompare/search.html.

It is important to note that the data presented on the CMS Hospital Compare website may differ from SC HIDA data reports as the reporting requirements and data submission deadlines are different for CMS as compared to HIDA.

Data Quality Assurance

Reporting hospitals are responsible for ensuring that the data they submit is consistently and accurately reported in accordance with NHSN protocols. In addition, NHSN and DHEC have implemented regular data checks to identify data quality and completeness issues that require reconciliation by the reporting hospital. Prior to publication, hospitals have several opportunities to review and correct reporting lapses and/or discrepancies in their data:

- NHSN contains internal data logic checks built into the web interface that helps reduce data entry
 error. These checks are designed to reduce manual data entry errors and improve the validity of
 data entered into the system.
- The NHSN Action List is another tool that is built into the NHSN system that improves data completeness and accuracy. The list shows hospital users whether they have any missing or incomplete records entered into the system and requires user action in order to resolve the issues.
- Biannually, prior to the publication of the HIDA annual and interim facility-specific reports, all reporting facilities are provided with preliminary reports showing the number of CLABSI, SSI,VAE, CDI LabID Event, and MRSA LabID Event data records that were downloaded from NHSN for the given reporting period. Facilities are asked to compare their preliminary report provided by DHEC to their internal HAI record numbers to determine if all records were entered into NHSN. Facilities are given two weeks to review their facility-specific preliminary reports and to make necessary changes in their reported data within NHSN. All hospitals are expected to sign a standard attestation letter of data completeness and accuracy and submit the document to DHEC prior to the publication of the HIDA annual and interim reports. An example of the attestation letter can be found in appendix B.

2016 HIDA Reporting Schedule and Data Deadlines

DHEC publishes data from NHSN biannually – once for the HIDA interim report and once for the HIDA annual report. The last facility-specific HIDA interim report was published on October 15, 2016 and contains data from the first half of 2016.

This year, DHEC notified HIDA reporting facilities electronically of strict data submission and reconciliation deadlines. Facility specific HIDA interim reports and annual reports are published on the DHEC HAI website:

http://www.scdhec.gov/Health/FindingQualityHealthcare/CompareHospitalInfectionRates/ComparisonToolReports/

Standardized Infection Ratio (SIR) and 95% Confidence Interval Calculations

The standardized infection ratio (SIR) is a summary measure to track HAIs at a national, state, or local level over time. The SIR adjusts for various facility and/or patient-level factors that contribute to HAI risk within each facility. It is an indirect standardization method of summarizing the HAI experience across any number of stratified groups of data (e.g., healthcare facilities or unit types). The SIR is used to compare South Carolina hospitals' HAI incidence to national baseline HAI data, adjusting for several risk factors shown to be significantly associated with difference in infection incidence (Edwards J, 2009). In this annual report, the SIR metric will be presented for CLABSI, SSI, VAE, CDI LabID Event, and MRSA LabID Event data.

The SIR is derived by dividing the total number of observed HAIs for a specific category by the total number of predicted HAIs based on national benchmark data.

$$SIR = \frac{Observed\ number\ of\ HAI\ infections}{Predicted\ number\ of\ HAI\ infections}$$

In order to maintain statistical precision, SIRs are not calculated when the number of predicted infections is less than 1.0.

Interpreting the SIR:

- SIR is equal to 1: the observed number of infections is equal to the expected number of infections
- SIR is greater than 1: more infections were observed than expected
- SIR is less than 1: fewer infections were observed than expected

New Baseline (2015)

"Re-baseline" is a term that CDC's National Healthcare Safety Network (NHSN) staff is using to describe updates to original HAI baselines. The 2015 Re-baseline updates both the source of aggregate data and the risk adjustment methodology used to create the original baselines. Risk adjustment refers to the processes used to account for the differences in risk that may impact the number of infections reported

by a hospital. When the data are risk-adjusted, it makes it possible to fairly compare hospital performance. In this report, the SIRs are adjusted for risk factors such as type of patient care location, bed size of the hospital, patient age, and other factors (2017 CDC).

Calculating SIRs for Central Line Associated Blood Stream Infections (CLABSI):

The CLABSI SIR is derived by dividing the total number of observed CLABSI occurrences by the total number of predicted CLABSI occurrences based on 2015 national HAI aggregate data. To calculate the number of "predicted" CLABSI for a particular unit type, the national CLABSI rate is multiplied by the number of central line days observed for a given time period in that particular location. The CLABSI SIR is then calculated by dividing the number of observed CLABSI by the number of expected CLABSI.

To demonstrate how a CLABSI SIR is calculated for a particular unit type, an example is provided below:

		Observed	National Benchmark Data
Location Type	# CLABSI	# Central Line (CL) Days	CLABSI Rate
Medical Cardiac Unit	2	578	2 per 1,000 central line days

The formula for calculating the "predicted" number of CLABSI for the Medical Cardiac Unit is:

Predicted CLABSI = (Observed CL Days) x (National CLABSI Rate)

 $(578 \text{ CL days}) \times (2.0 \text{ CLABSI} / 1,000 \text{ CL days}) = 1.156$

The formula for calculating the SIR for Medical Cardiac Unit is:

SIR = (Observed CLABSI) / (Predicted CLABSI)

$$(2) / (1.156) = 1.7$$

CLABSI data from multiple locations can be "rolled up" into a single risk-adjusted SIR by summing the total number of CLABSIs observed across the locations and then dividing that number by the total number of CLABSIs predicted for the locations.

Calculating SIRs for Surgical Site Infections (SSIs):

The SSI SIR is derived by dividing the total number of observed SSI occurrences by the total number of predicted SSI occurrences. Logistic regression models are used to determine how one or more independent variables (such as the American Society of Anesthesiologists (ASA) classification¹, patient's age, and surgery duration) are related to the risk or probability of developing an infection. The logistic regression models are procedure-specific, allowing for risk adjustment to occur based on the risk factors of both the patient and the procedure type. To determine the total number of predicted infections for a procedure type, the risks of infection for each procedure performed at the facility are added together for the time period of interest.

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¹ ASA scale is attached as Appendix D

Calculating SIRs for Facility-wide Inpatient Hospital-onset Methicillin-resistant Staphylococcus aureus Blood Stream Infection (MRSA) and Clostridium difficile (CDI) LabID Events:

The facility-wide inpatient MRSA LabID event SIR is derived by dividing the total number of observed MRSA LabID events at a hospital by the total number of predicted MRSA LabID events for the hospital. Logistic regression models are used to calculate the number of predicted MRSA LabID events for a hospital by adjusting for one or more independent variables (such as a hospital's total number of patient days, community-onset MRSA prevalence rate and medical school affiliation) that are related to the risk or probability of MRSA LabID events. The same method is applied for calculating the facility-wide inpatient CDI LabID event SIR.

For each SIR, a 95% confidence interval was calculated. A confidence interval is a range of values that quantifies the random variation of a ratio. The wider the confidence interval, the greater the uncertainty associated with the ratio. The width of the confidence interval is partly related to the size of expected HAI occurrence. Smaller facilities with fewer predicated HAIs have the least precision associated with their SIRs and thus the widest confidence intervals. For the summary tables the 95% confidence interval was calculated by NHSN. However, NHSN does not calculate a SIR and confidence interval when the number of expected infections is less than one. Thus, for the facility specific comparison tables the SIR and 95% confidence interval was calculated using the Poisson distribution.

Statistical Interpretation of SIR 95% Confidence Intervals:

- If the confidence interval does not include 1, then the SIR is significantly different than 1 (i.e., the number of observed infections is significantly different than the number predicted).
 - Example: 95% confidence interval= (0.85, 0.92)
- If the confidence interval includes the value of 1, then the SIR is not significantly different than 1 (i.e., the number of observed infections is not significantly different than the number predicted).

 Example: 95% confidence interval= (0.85, 1.24)
- If the SIR is 0.000 (i.e., the infection count is 0 and the number of predicted infections is ≥ 1.0), the lower bound of the 95% confidence interval will not be calculated.

Calculating the SIR for Ventilator Associated Events (VAE)

An Infection-Related Ventilator-Associated Complication (IVAC) plus events are defined as all ventilator associated events meeting the infection related ventilator associated complications (IVAC) and possible ventilator-associated pneumonia (PVAP) definitions. The SIR is calculated by dividing the number of observed events by the number predicted events. The number of predicted events is calculated using VAE rates from a standard population during a baseline time period as reported in the NHSN Report.

Eligible Data

The 2016 HIDA Annual Report contains information regarding infections reported to DHEC through NHSN during the 2016 calendar year.

Facility-specific comparison CLABSI Reports are available for the following inpatient locations: adult critical care, adult wards, pediatric critical care, pediatric wards, adult specialty care, pediatric specialty care, and neonatal intensive care units.

Facility-specific comparison SSI reports are available for the following procedure types: coronary artery bypass graft (chest incision only), coronary artery bypass graft (chest and donor incisions), hip prosthesis, knee prosthesis, abdominal hysterectomy, and colon surgery. The SSI SIR presented is the complex admission readmission (AR) SIR. The complex AR SIR includes only inpatient procedures and deep incision primary and organ/space SSIs identified during admission or readmission to the facility where the procedure was performed. Superficial infections are not included in this metric.

Facility-specific comparison hospital onset MRSA and CDI BSI LabID event reports are available for all HIDA facilities. Facility specific comparison reports for CLABSI, SSI, MRSA LabID, and CDI LabID events are located in appendices C1 through C4, respectively.

Results

The data contained in this report is self-reported from healthcare facilities in South Carolina, from January 1, 2016 – December 31, 2016, in compliance with HIDA.

Reporting Facility Information

Seventy-seven facilities of varying types were required to report HAI data to DHEC via NHSN in 2016. The majority of HIDA reporting hospitals were acute care hospitals, comprised of fifty-six general hospitals, five critical access hospitals, one children's hospital, one women's and children's hospital, and one surgical hospital. Six long term acute care hospitals and seven inpatient rehabilitation hospitals also reported data. A summary of HIDA reporting facility types is shown in Table 1.

Table 1. Summary of HIDA Reporting Hospital Types							
Facility Type	N	Percent (%) of HIDA Reporting Facilities					
Acute Care Hospital (General)	56	74%					
Acute Care Hospital (Critical Access)	5	6%					
Acute Care Hospital (Surgical)	1	1%					
Acute Care Hospital (Women's and Children's)	1	1%					
Acute Care Hospital (Children's)	1	1%					
Inpatient Rehabilitation Hospital	7	9%					
Long Term Acute Care Hospital	6	8%					
Total Hospitals	77	100%					

Table 2 displays the frequency of acute care hospitals with affiliation to a medical school. The majority (57%) of hospitals have no affiliation with a medical school.

Table 2. Medical School Affiliation of HIDA Hospitals						
Medical School Affiliation No. Hospitals Percentage (%) of Reporting Acute Care Hospitals						
Medical School Affiliation	27	43%				
Major	<i>15</i>					
Graduate	5					
Undergraduate	7					
No affiliation	36	57%				

CLABSI SIR Summary Data

Table 3 shows overall South Carolina CLABSI SIRs by the following location types: adult critical care unit (CCU), pediatric CCU, adult ward, pediatric ward, adult specialty care area (SCA), pediatric SCA, adult rehabilitation ward, and neonatal intensive care units (NICU). The overall South Carolina CLABSI SIR is less than 1 and is statistically significant, indicating the CLABSI experience among South Carolina hospitals was better than the overall national baseline experience for the same location types.

Table 3. Overall South Carolina CLABSI SIR for Acute Care Hospital by Location Type

	No.	No.	No.		95%	Statistical
Location Type	Central Line	Observed	Expected	SIR	Confidence	Interpretation
	Days	CLABSI	CLABSI		Interval	
Adult CCU	130068	129	134.54	0.959	0.80, 1.14	Not Different
Pediatric CCU	8513	12	12.21	0.98	0.53, 1.67	Not Different
Adult Ward	218688	160	183.99	0.87	0.74, 1.01	Not Different
Pediatric Ward	7156	10	6.89	1.45	0.74, 2.59	Not Different
Rehabilitation	1445	0	0.89	0	*	No Conclusion
Adult SCA	41039	47	45.51	1.03	0.77, 1.36	Not Different
Pediatric SCA	6547	9	7.77	1.16	0.57, 2.13	Not Different
NICU	19112	38	30.15	1.26	0.91, 1.71	Not Different
All Location Types	432568	405	421.95	0.96	0.87, 1.06	Not Different

Table 4: Overall South Carolina CLABSI SIR for Critical Access Hospital by Location Type

Location Type	No. of Central Line	No. of Observed	No. of Predicted CLABSI	SIR	95% Confidence	Statistical Interpretation
туре	Days	CLABSI	CLABSI		Interval	interpretation
CCU	65	0	0.018	0	*	No Conclusion
Ward	509	0	0.139	0	*	No Conclusion
All Location	571	0	0.157	0	*	No Conclusion
Types						

Table 5: Overall South Carolina CLABSI SIR for Long Term Acute Care Hospital by Location Type

Location	No. of	No. of	No. of	SIR	95%	Statistical
Type	Central	Observed	Predicted		Confidence	Interpretation
	Line Days	CLABSI	CLABSI		Interval	
CCU	2635	5	3.526	1.418	0.52, 3.14	Not Different
Ward	35017	43	36.851	1.167	0.86, 1.56	Not Different
All Location	37752	48	40.378	1.189	0.89, 1.56	Not Different
Types						

Table 6: Overall South Carolina CLABSI SIR for Inpatient Rehabilitation Facilities by Location Type

Location	No. of	No. of	No. of	SIR	95%	Statistical
Туре	Central	Observed	Predicted		Confidence	Interpretation
	Line Days	CLABSI	CLABSI		Interval	
CCU	4939	0	2.773	0	0.82	No Conclusion
Ward	5054	0	0.866	0	*	No Conclusion
All Location	9993	0	3.639	0	0.82	No Conclusion
Types						

CLABSI Microorganism Data

Table 7 shows identified microorganisms for all reported CLABSI in all adult and pediatric inpatient locations. *Candida species* and other yeasts represent approx. 16 % of the total isolates reported for CLABSI in all adult and pediatric inpatient locations and make up the largest percentage of identified microorganisms.

Microorganisms	Number of Isolates	Percentage (%) of Total Isolates
Candida species and other yeasts	77	16.24%
Enterobacter species	70	14.77%
VRE Only	23	4.82
Staphylococcus aureus (includes Methicillin- resistant Staphylococcus aureus (MRSA) isolates)	62	13.08%
MRSA only	23	4.82%
Enterococcus species (includes Vancomycin resistant	55	11.60%
Escherichia coli	36	7.59%
Staphylococcus Species (Other than aureus)	35	7.38%
Klebsiella species	32	6.75%
Coagulase negative Staphylococcus species	17	3.59%
Pseudomonas species	17	3.59%
Streptococcus species	14	2.95%
Bacteroides species and other anaerobes	7	1.48%
Serratia species	11	2.32%
Stenotrophomonas species	3	0.63%
Proteus species	3	0.63%
Rothia species	3	0.63%
Citrobacter species	3	0.63%
Other pathogens	28	5.91%
Total Isolates	477	100.00%

Table 8 shows identified microorganisms for all reported CLABSI in NICU locations. *Staphylococcus aureus* (includes Methicillin-resistant *Staphylococcus aureus* (MRSA)) represent 23% of the total isolates reported for NICU CLABSIs and make up the largest percentage of identified microorganisms.

Table 8. Identified Microorganisms for CLABSI in NICU Locations

Microorganisms	Number of Isolates	Percentage (%) of Total Isolates
Staphylococcus aureus (includes Methicillin-		
sensitive and resistant Staphylococcus aureus	9	23.08%
(MSSA. MRSA. respectively) isolates) MRSA only	3	7.69%
Escherichia coli	6	15.38%
Klebsiella species	5	12.82%
Enterococcus species	3	7.69%
Coagulase negative Staphylococcus species	2	5.13%
Candida species	1	2.56%
Serratia species	1	2.56%
Enterobacter species	1	2.56%
Streptococcus species	2	2.56%
Other	3	2.56%
Total Isolates	39	100.00%

Table 9 shows identified microorganisms for all reported CLABSI in LTAC locations. *Enterococcus species* (includes Vancomycin-resistant Enterococcus (VRE)) represent 25% of the total isolates reported for CLABSIs in LTAC locations and make up the largest percentage of identified microorganisms.

Table 9. Identified Microorganisms for CLABSI in Long Term Acute Care

Microorganisms	Number of Isolates	Percentage (%) of Total Isolates
Enterococcus species (includes Vancomycin- resistant Enterococcus(VRE) isolates)	12	25%
VRE only	7	14.58%
Candida species and other yeasts	5	10.42%
Klebsiella species	6	12.5%
Staphylococcus aureus (includes Methicillin- resistant Staphylococcus aureus (MRSA) isolates)	9	18.75%
MRSA only	4	8.33%
Enterobacter species	1	2.08%
Serratia species	1	2.08%
Coagulase negative Staphylococcus species	5	10
Acinetobacter species	1	2.08%
Escherichia coli	2	4.17%
Pseudomonas species	2	4.17%
Proteus species	1	2.08%
Stenotrophomonas maltophilia	2	4.17%
Citrobacter freundi	1	2.08%
TOTAL Isolates	48	100.00%

SSI SIR Summary Data

Table 10 shows overall South Carolina SSI complex AR SIRs by reportable procedure type. CBGB, CGBC, COLO, HYST, HPRO, and KPRO procedures shows that the SIRs are not different than the national baseline SSI experience.

Table 10. Overall South Carolina SSI Complex AR SIR ¹ by Surgical Procedure										
Procedure Type			No. Predicted SSI	SIR	95% Confidence Interval	Statistical Interpretation				
CBGB	3368	31	24.36	1.27	0.88, 1.78	Not Different				
CBGC	255	2	1.83	1.09	0.18, 3.60	Not Different				
COTO	4887	116	113.70	1.02	0.85, 1.22	Not Different				
HPRO	8392	65	54.20	1.19	0.93, 1.52	Not Different				
HYST	5656	34	36.39	0.93	0.66, 1.29	Not Different				
KPRO	12649	53	42.96	1.23	0.93, 1.60	Not Different				
All Procedures	35207	301	273.44	1.10	0.98, 1.23	Not Different				

¹The complex AR SIR includes only inpatient procedures and deep incision primary and organ/space SSIs that were identified during admission or readmission to the procedure performing facility.

SSI Positive Culture and Positive MRSA Culture Data SSI

Table 11 shows positive culture and positive MRSA culture results for SSIs by procedure type. The percentage of MRSA positive culture results for all reportable procedure types ranged from 0.0% to 23.4%.

able 11. SSI Positive Culture and SSI Positive MRSA Culture Counts by Procedure								
Procedure Type	No. Observed SSI ¹	No. Observed SSI with Positive Culture Results	No. Observed SSI with Positive MRSA Culture Results	% MRSA of Positive Culture				
CBGB	56	44	5	11.36%				
CBGC	3	2	0	0.00%				
COLO	268	177	5	2.82%				
HPRO	124	113	27	23.89%				
HYST	81	52	3	5.77%				
KPRO	78	71	14	19.72%				
All Procedures	610	459	54	11.76%				

¹Includes all reported SSIs regardless of surgical wound class.

Hospital Onset MRSA BSI LabID Event Summary Data

Table 12 shows the overall South Carolina hospital onset (HO) MRSA BSI LabID event SIR for acute care hospitals. A total of 167 HO MRSA BSI LabID events were reported from acute care hospitals in 2016. The overall South Carolina HO MRSA BSI LabID event SIR for acute care hospitals was not statistically significant; indicating the HO MRSA BSI experience in South Carolina was not different than the HO MRSA BSI experience in the national baseline population.

Table 12. South Carolina MRSA LabID Event SIR for Acute Care Hospitals								
No. of Observed HO MRSA LabID	No. Patient Days	No. Predicted HO MRSA BSI LabID	SIR	95% Confidence	Statistical Interpretation			
Events		Events		Interval				
167	2502653	164.4	0.859	0.87, 1.18	Not Different			

Table 13 shows the overall South Carolina hospital-onset MRSA LabID event SIR for Critical Access Hospitals

Table 13	Table 13. South Carolina MRSA LabID Event SIR for Critical Access Hospitals								
No. of	Observed	НО	No. Patient	No. Predicted HO		95%	Statistical		
MRSA L	abID		Days	MRSA BSI LabID	SIR	Confidence	Interpretation		
Events				Events		Interval			
	0		7869	0.164	*	*	No Conclusion		

Table 14 shows the overall South Carolina hospital-onset MRSA LabID event SIR for Inpatient Rehabilitation Facilities

Table 14.South Carolina MRSALabID Event SIR for Inpatient Rehabilitation Facilities							
No. of Observed HO MRSA LabID	No. Patient Days	No. Predicted HO MRSA BSI LabID	SIR	95% Confidence	Statistical Interpretation		
Events		Events		Interval			
3	109583	2.084	1.44	0.37, 3.92	Not Different		

Table 15 shows the overall South Carolina hospital-onset MRSA LabID event SIR for Long Term Acute Care Hospitals

Table 15. Overall South Carolina HO MRSA BSI LabID Event SIR for Long Term Acute Care Hospital							
No. of Observed HO	No. Patient	No. Predicted HO		95%	Statistical		
MRSA LabID	Days	MRSA BSI LabID	SIR	Confidence	Interpretation		
Events		Events		Interval			
15	58943	8.832	1.698	0.99, 2.74	Not Different		

Hospital Onset CDI LabID Event Summary Data

Table 16 shows the overall South Carolina hospital onset (HO) CDI LabID event SIR for acute care hospitals. A total of 1373 hospital HO CDI LabID events were reported from acute care hospitals in 2016. The overall South Carolina HO CDI LabID event SIR for acute care hospitals was statistically significantly lower; indicating the HO CDI experience in South Carolina is better than the HO CDI experience in the national baseline population.

Table 16. South Carolina CDI LabID Event SIR for Acute Care Hospitals							
No. of Observed HO CDI LabID	No. Patient Days	No. Predicted HO CDI LabID Events	SIR	95% Confidence	Statistical Interpretation		
Events				Interval			
1373	2339731	1717.7	0.799	0.77, 0.84	Lower		

Table 17 shows the overall South Carolina hospital-onset CDI LabID event SIR for Critical Access Hospitals.

Table 17. South Carolina CDI LabID Event SIR for Critical Access Hospitals							
No. of Observed HO CDI LabID Events	No. Patient Days	No. Predicted HO CDI LabID Events	SIR	95% Confidence Interval	Statistical Interpretation		
1	7869	1.939	0.516		Not Different		

Table 18 shows the overall South Carolina hospital-onset CDI LabID event SIR for Inpatient Rehabilitation Facilities.

Table 18. South Carolina CDI LabID Event SIR for Inpatient Rehabilitation Facilities							
No. of Observed HO CDI	No. Patient	No. Predicted HO CDI		95%	Statistical		
LabID	Days	LabID Events	SIR	Confidence	Interpretation		
Events				Interval			
25	109583	41.15	0.608	0.40, 0.88	Lower		

Table 19 shows the overall South Carolina hospital-onsetCDI LabID event SIR for Long Term Acute Care Hospitals.

Table 19. South Carolina CDI LabID Event SIR for Long Term Acute Care Hospitals							
No. of Observed HO CDI LabID	No. Patient Days	No. Predicted HO CDI LabID Events	SIR	95% Confidence	Statistical Interpretation		
Events				Interval			
57	58943	60.525	0.942	0.72, 1.21	Not Different		

Table 20 shows the overall South Carolina Ventilator-Associated Event SIR for acute care hospitals.

Table 20. Overall South Carolina IVAC-Plus SIR for Long Term Acute Care Hospital							
No. of Observed IVA	No. Ventilator	No. Predicted IVAC-		95%	Statistical		
Plus Events	Days	Plus Events	SIR	Confidence	Interpretation		
				Interval			

IVAC plus events are defined as all ventilator associated events meeting the infection related ventilator associated complications (IVAC) and possible ventilator-associated pneumonia (PVAP) definitions

Conclusion

South Carolina's implementation of HIDA provides consumers and public health officials with access to statewide and facility specific HAI data, which supports the prevention of HAIs and the promotion of infection control practices across the state.

Due to the implementation of the new 2015 baseline for 2016 data, South Carolina's SIRs for 2016 are not comparable to SIRs from previous years. The Department of Health and Human Services (DHHS) has also updated their National HAI Prevention Goals to reflect the new 2015 baseline. These national goals are anticipated to be met by the year 2020.

South Carolina continues to make strides in HAI prevention. The DHHS national prevention target for 2020 for CLABSI SIR is 0.50, which represents a goal to reduce CLABSI by 50% compared to the national baseline. Based on 2015 national data, SC's CLABSI SIR for 2016 was 0.96, which is 4% fewer infections than predicted. However, SC'S 2016 CLABSI SIR is not statistically significantly different than the national baseline.

The DHHS national prevention target for 2020 is a 30% reduction in SSIs as compared to the national baseline, or a target SIR of 0.70. South Carolina's SSI SIR for 2016 is 1.10, indicating that SC had 10% more infections than predicted, however this difference is not statistically significant.

In reference to LabID Events for multi-drug resistant organisms, the DHHS national target MRSA SIR for 2020 is 0.50. SC's MRSA SIR for 2016 is 1.05, which is not statistically significantly different than the national baseline. The DHHS national target SIR for CDI for 2020 is 0.70. SC's 2016 CDI SIR was significantly lower at 0.80, indicating SC had 20 % fewer infections than predicted using the national 2015 baselines.

For IVAC —Plus events, SC's 2016 IVAC-Plus event SIR was significantly high at 1.32 indicating there were 32% more infections than what was predicted to occur, using the national baseline. DHHS national prevention target for 2020 is not available for IVAC-Plus events.

Table 21: South Carolina SIRs compared to DHHS National Action Plan's prevention targets ¹						
HAI Metric	Target SIR ¹	South Carolina SIR, 2016 (95%CI)				
CLABSI	0.50	0.97 (0.88, 1.06)				
SSI	0.70	1.10 (0.98, 1.23)				
MRSA LabID Events	0.50	1.05 (0.91, 1.22)				
CDI LabID Events	0.70	0.80 (0.76, 0.84)				
IVAC-Plus Events	Not available	1.32 (1.18, 1.46)				

¹2020 Target (from 2015 baseline)

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Appendix A

Hospital Infection Disclosure Act Advisory Committee Member List

DHEC Representatives

- Nijika Shrivastwa, PhD, Healthcare Associated Infections Coordinator for DADE
- Katie Stilwell Waites, Healthcare Associated Infections Epidemiologist
- Patricia Kopp, Infection Preventionist for DADE
- Linda Bell, M.D., State Epidemiologist
- William D. Britt, Chief Counsel for Public Health, Office of General Council

APIC Palmetto Infection Preventionist Representatives

- Ann Pope North, Infection Preventionist, Carolinas Hospital System
- Kathy Ward, Infection Preventionist, Roper St. Francis Hospital
- Jan Lienau, Infection Preventionist, Greer Memorial Hospital
- Gwen Usry, Infection Preventionist, Patewood Memorial Hospital
- Sue Boker, Infection Preventionist, Greenville Hospital System

Infectious Disease Physician Representatives

- Majdi N. Al-Hasan, M.D., University of South Carolina School of Medicine, Columbia, SC
- Kevin Shea, M.D., Trident Health
- Cassandra Salgado, M.D., Medical University of South Carolina

Other Medical Professional

• Bob Rife, Manager Respiratory Care/ Sleep Lab, Roper St. Francis

South Carolina Hospital Association Representatives

- Aunyika Moonan, Director, Quality Measurement Services
- Richard Foster, M.D., Senior Vice President for Quality Improvement and Patient Safety
- Lorrie Gibbons, Vice President for Quality Improvement and Patient Safety

Consumer Representatives

- Jon Ruoff, Founder, The Ruoff Group
- Francee Levin, American Association of Retired Persons (AARP)

SC Revenue and Fiscal Affairs Office

• Julie Royer, Statistician

Carolinas Center for Medical Excellence Representatives

• Christine Wlodarczyk

Patient Advocate Representatives

• Helen Haskell, Founder, Mothers Against Medical Error

Appendix B

Attestation Letter of Data Completeness and Accuracy Template

Facility:
Dear Infection Preventionist:
To ensure the accuracy and timeliness of individual Hospital Infections Disclosure Act (HIDA) facility reports, and to allow for a validation of the quality and accuracy of hospital information reported under SC Code of Laws Section 44-7-2410 et seq., infection preventionists must sign below, affirming they have reviewed and made corrections, if needed, to their facility's 2016 HIDA Annual Report.
Please note that if a facility does not submit a signed version of this letter or notify us of any discrepancy in the report by Wednesday, August 17 th , 2017, the facility's report will be posted on the S.C. Department of Health and Environmental Control's HIDA webpage, and marked with an asterisk to note that the facility failed to confirm the accuracy of their report prior to the publish date. The intent of this statement is to ensure facilities are accountable for the accuracy of their data in a timely fashion and to avoid any unnecessary delays caused by last minute change requests.
STATEMENT OF REVIEW AND CORRECTION:
To the best of my knowledge, my facility's preliminary HIDA reports, containing centraline associated blood stream infection data, surgical site infection data, multi drug resistant organism laboratory identified event, Clostridium Difficile infections laboratory identified event, and ventilator associated events data from January – December 2016, is accurate. Errors that may have been identified during the review process have been corrected within the National Healthcare Safety Network.
Infection Preventionist Name (Printed):
Infection Preventionist Signature:
Please copy this letter on facility letterhead and email/scan a signed form to Nijika Shrivastwa, or Katie Stilwell Waites by Thursday, August 17 th , 2017.

Fax: (803) 898 – 0897

Email: shrivan@dhec.sc.gov, waitesks@dhec.sc.gov

Date:

Appendix C1 CLABSI Comparison Reports

Central Line-Associated Bloodstream Infections (CLABSI) in South Carolina's Acute Care, Long-term Acute

Care and Inpatient Rehabilitation Hospitals, January-December, 2016
*South Carolina collects CLABSI data from adult and pediatric intensive care units (ICUs), neonatal ICUs (NICUs), adult and pediatric wards, and adult and pediatric specialty care units. Only those unit types from which data have been reported and/or that are present in the facility will be shown in the table below.

	Legend							
*	Fewer infections (better) than predicted based on the national experience.*	=	About the same number of infections as predicted based on the national experience.*	×	More infections (worse) than predicted based on the national experience.*	No Conclusion	When the number of predicted infections is less than 1, no conclusion can be made.	
	*National experience contains data from 2015.							
	Comparison to the National Experience mean the observed infections are either statistically significantly different if better or worse, or are statistically the same							

Facility Name	Unit Type	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Abbeville Area Medical Center	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
Appeville Area Medical Center	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
Ailton Dogional Madical Contant	All Adult Critical Care Units	6	2.5	= Same
Aiken Regional Medical Centers	All Adult Inpatient Wards	1	1.9	= Same
Allendale County Hospital	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
AnMed Health	All Adult Critical Care Units	5	5.3	= Same
Aliwed Health	All Adult Inpatient Wards	4	6.7	= Same
AnMed Health Rehabilitation Hospital	Inpatient Rehabilitation Ward	0	Less than 1.0	No Conclusion
AnMed Health Women's and	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
Children's Hosptial	All Pediatric Inpatient Wards	0	Less than 1.0	No Conclusion
Baptist Easley Hospital	All Adult Critical Care Units	1	Less than 1.0	No Conclusion
Daptist Easley Hospital	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
Descript Managinal Hermital	All Adult Critical Care Units	0	1.1	= Same
	All Adult Inpatient Wards	4	3.5	= Same
Beaufort Memorial Hospital	All Pediatric Inpatient Wards	0	Less than 1.0	No Conclusion
	Inpatient Rehabilitation Ward	0	Less than 1.0	No Conclusion

Facility Name	Unit Type	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Bon Secours St. Francis Eastside	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
bon Secours St. Francis Eastside	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
	All Adult Critical Care Units	2	4.5	= Same
Bon Secours St. Francis Hospital -	All Adult Inpatient Wards	5	7.6	= Same
Downtown	Inpatient Rehabilitation Ward	0	Less than 1.0	No Conclusion
	Adult Speciality Care	6	4.9	= Same
Bon-Secour St. Francis Xavier	All Adult Critical Care Units	1	Less than 1.0	No Conclusion
Hospital	All Adult Inpatient Wards	2	2.6	= Same
Cannon Memorial Hospital	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
Camion Memoriai Hospitai	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
Carolina Pines Regional Medical	All Adult Critical Care Units	1	Less than 1.0	No Conclusion
Center	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
Canalinas Hasnital System	All Adult Critical Care Units	2	2.4	= Same
Carolinas Hospital System	All Adult Inpatient Wards	4	3.9	= Same
Carolines Hespital System Marion	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
Carolinas Hospital System-Marion	All Adult Inpatient Wards	1	Less than 1.0	No Conclusion
Charten Dagional Madical Conton	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
Chester Regional Medical Center	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
Coastal Carolina Hamital	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
Coastal Carolina Hospital	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
	All Adult Critical Care Units	1	Less than 1.0	No Conclusion
Colleton Medical Center	All Adult Inpatient Wards	2	Less than 1.0	No Conclusion
	Inpatient Rehabilitation Ward	0	Less than 1.0	No Conclusion
ContinueCARE Hospital at Palmetto Health Baptist	Long Term Acute Care Unit(s)	8	4.8	= Same

Facility Name	Unit Type	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
Conway Medical Center	All Adult Inpatient Wards	0	1.7	= Same
	All Pediatric Inpatient Wards	0	Less than 1.0	No Conclusion
East Cooper Medical Center	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
East Cooper Medical Center	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
Edgefield County Hospital	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
Fairfield Memorial Hospital	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
	All Adult Critical Care Units	10	8.0	= Same
Crand Strand Dagianal Madical	All Adult Inpatient Wards	7	9.9	= Same
Grand Strand Regional Medical Center	All Pediatric Critical Care Units	0	Less than 1.0	No Conclusion
	All Pediatric Inpatient Wards	1	Less than 1.0	No Conclusion
	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
Greenville Health System Laurens County Memorial Hospital	All Adult Inpatient Wards	1	Less than 1.0	No Conclusion
County Momorial Hospital	Inpatient Rehabilitation Ward	0	Less than 1.0	No Conclusion
	All Adult Critical Care Units	15	16	= Same
	All Adult Inpatient Wards	6	14	★ Better
	All Pediatric Critical Care Units	5	1.9	= Same
Greenville Memorial Hospital	All Pediatric Inpatient Wards	1	1.7	= Same
	Inpatient Rehabilitation Ward	0	Less than 1.0	No Conclusion
	Adult Speciality Care	7	6.0	= Same
	Pediatric Specialty Care	3	1.7	= Same
	Neonatal Intensive Care Unit	13	7.1	= Same
Greenwood Regional Rehabilitation Hospital	Inpatient Rehabilitation Ward	0	Less than 1.0	No Conclusion
Greer Memorial Hospital	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
Greet мешогіаі ноѕрітаі	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion

Facility Name	Unit Type	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Hampton Regional Medical	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
Center	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
HealthSouth Rehabilitation Hospital of Charleston	Inpatient Rehabilitation Ward	0	Less than 1.0	No Conclusion
HealthSouth Rehabilitation Hospital of Columbia	Inpatient Rehabilitation Ward	0	Less than 1.0	No Conclusion
HealthSouth Rehabilitation Hospital of Florence	Inpatient Rehabilitation Ward	O	Less than 1.0	No Conclusion
HealthSouth Rehabilitation Hospital of Rock Hill	Inpatient Rehabilitation Ward	0	Less than 1.0	No Conclusion
Hillcrest Memorial Hospital	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
Hillerest Mellioriai Hospitai	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
Hilton Head Heavital	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
Hilton Head Hospital	All Adult Inpatient Wards	0	1.5	= Same
KershawHealth Medical Center	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
Reisilawneathi Medical Center	All Adult Inpatient Wards	1	Less than 1.0	No Conclusion
Lake City Community Hospital	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
	All Adult Critical Care Units	6	6.7	= Same
Lexington Medical Center	All Adult Inpatient Wards	18	14	= Same
	Adult Speciality Care	8	5.4	= Same
	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
Mary Black Health System Gaffney	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
Guinicy	10	1	Less than 1.0	No Conclusion
	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
Mary Black Health System, LLC	All Pediatric Inpatient Wards	0	Less than 1.0	No Conclusion
	Inpatient Rehabilitation Ward	0	Less than 1.0	No Conclusion
	Neonatal Intensive Care Unit	0	Less than 1.0	No Conclusion

Facility Name	Unit Type	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Mal and Clause day Health Systems	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
McLeod Clarendon Health System	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
McLeod Health Cheraw	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
McLeod Health Cheraw	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
McLeod Loris	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
MicLeon Loris	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
McLeod Medical Center - Darlington	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
	All Adult Critical Care Units	1	Less than 1.0	No Conclusion
McLeod Medical Center - Dillon	All Adult Inpatient Wards	1	Less than 1.0	No Conclusion
	All Pediatric Inpatient Wards	0	Less than 1.0	No Conclusion
	All Adult Critical Care Units	13	16	= Same
	All Adult Inpatient Wards	14	16	= Same
McLeod Regional Medical Center	All Pediatric Critical Care Units	0	Less than 1.0	No Conclusion
o .	All Pediatric Inpatient Wards	0	Less than 1.0	No Conclusion
	Adult Speciality Care	11	9.7	= Same
	Neonatal Intensive Care Unit	2	1.2	= Same
McLeod Seacoast	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
McLeod Seacoast	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
	All Adult Critical Care Units	14	17	= Same
	All Adult Inpatient Wards	15	23	= Same
Medical University of South Carolina Medical Center	All Pediatric Critical Care Units	5	8.2	= Same
	All Pediatric Inpatient Wards	6	3.2	= Same
	Adult Speciality Care	9	9.3	= Same
	Pediatric Specialty Care	4	3.9	= Same
	Neonatal Intensive Care Unit	9	6.6	= Same

Facility Name	Unit Type	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
M + D + H + H	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
Mount Pleasant Hospital	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
Novebours County Hognital	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
Newberry County Hospital	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
North Greenville Long Term Acute Care Hospital	Long Term Acute Care Unit(s)	4	4.0	= Same
Oconee Medical Center	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
Oconee Medical Center	All Adult Inpatient Wards	1	1.1	= Same
	All Adult Critical Care Units	7	2.5	×Worse
	All Adult Inpatient Wards	4	5.2	= Same
Palmetto Health Baptist	Inpatient Rehabilitation Ward	0	Less than 1.0	No Conclusion
	Adult Speciality Care	4	3.6	= Same
	Neonatal Intensive Care Unit	0	1.8	= Same
Delmotte Heelth Dentist Denkridge	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
Palmetto Health Baptist Parkridge	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
	All Adult Critical Care Units	13	11	= Same
	All Adult Inpatient Wards	20	13	= Same
Palmetto Health Richland	All Pediatric Critical Care Units	2	1.5	= Same
	All Pediatric Inpatient Wards	1	1.2	= Same
	Pediatric Specialty Care	2	2.1	= Same
	Neonatal Intensive Care Unit	13	11	= Same
Patewood Memorial Hospital	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
Pelham Medical Center	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
i emain Medicai Center	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion

Facility Name	Unit Type	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
	All Adult Critical Care Units	1	2.2	= Same
Die Jessest Medical Conten	All Adult Inpatient Wards	4	3.8	= Same
Piedmont Medical Center	All Pediatric Inpatient Wards	0	Less than 1.0	No Conclusion
	Neonatal Intensive Care Unit	0	Less than 1.0	No Conclusion
Duoviden ee Hegnitele NE	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
Providence Hospitals NE	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
Regency Hospital of Florence	Long Term Acute Care Unit(s)	4	7.9	= Same
Regency Hospital of Greenville	Long Term Acute Care Unit(s)	1	5.0	= Same
	All Adult Critical Care Units	2	2.0	= Same
Regional Medical Center of Orangeburg and Calhoun Counties	All Adult Inpatient Wards	2	3.0	= Same
	Inpatient Rehabilitation Ward	0	Less than 1.0	No Conclusion
	All Adult Critical Care Units	3	4.2	= Same
Roper Hospital	All Adult Inpatient Wards	4	6.9	= Same
Koper Hospital	Inpatient Rehabilitation Ward	0	Less than 1.0	No Conclusion
	Adult Speciality Care	2	2.8	= Same
	All Adult Critical Care Units	3	3.7	= Same
Self Regional Healthcare	All Adult Inpatient Wards	3	3.9	= Same
Sen Regional Healthcare	All Pediatric Inpatient Wards	0	Less than 1.0	No Conclusion
	Neonatal Intensive Care Unit	0	Less than 1.0	No Conclusion
Shriners Hospitals for ChildrenGreenville	All Pediatric Inpatient Wards	0	Less than 1.0	No Conclusion
Sisters of Charity Providence	All Adult Critical Care Units	1	1.6	= Same
Hospitals Downtown	All Adult Inpatient Wards	6	3.4	= Same
Spartanburg Hospital for Restorative Care	Long Term Acute Care Unit(s)	9	6.6	= Same

Facility Name	Unit Type	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
-	All Adult Critical Care Units	6	12	= Same
	All Adult Inpatient Wards	7	15	★ Better
Spartanburg Medical Center	All Pediatric Critical Care Units	0	Less than 1.0	No Conclusion
	All Pediatric Inpatient Wards	0	Less than 1.0	No Conclusion
	Adult Speciality Care	1	3.8	= Same
	Neonatal Intensive Care Unit	1	3.9	= Same
Spartanburg Rehabilitation Institute	Inpatient Rehabilitation Ward	О	Less than 1.0	No Conclusion
	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
Springs Memorial Hospital	All Adult Inpatient Wards	3	Less than 1.0	No Conclusion
	Inpatient Rehabilitation Ward	0	Less than 1.0	No Conclusion
	All Adult Critical Care Units	1	Less than 1.0	No Conclusion
Summerville Medical Center	All Adult Inpatient Wards	1	Less than 1.0	No Conclusion
	All Pediatric Inpatient Wards	0	Less than 1.0	No Conclusion
Tidelands Georgetown Memorial	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
hospital	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
Tidelands Waccamaw Community Hospital	All Adult Inpatient Wards	0	1.4	= Same
	Inpatient Rehabilitation Ward	0	Less than 1.0	No Conclusion
	All Adult Critical Care Units	7	4.2	= Same
Trident Medical Center	All Adult Inpatient Wards	8	5.6	= Same
	Adult Speciality Care	2	2.0	= Same

Facility Name	Unit Type	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
	All Adult Critical Care Units	7	1.6	×Worse
	All Adult Inpatient Wards	11	4.0	×Worse
Tuomey Healthcare System	All Pediatric Inpatient Wards	1	Less than 1.0	No Conclusion
	Inpatient Rehabilitation Ward	0	Less than 1.0	No Conclusion
	Adult Speciality Care	6	3.3	= Same
Union Medical Center	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
Official Medical Center	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion
Vibra Hospital of Charleston	Long Term Acute Care Unit(s)	22	12	×Worse
William shang Dagianal Hagnital	All Adult Critical Care Units	0	Less than 1.0	No Conclusion
Williamsburg Regional Hospital	All Adult Inpatient Wards	0	Less than 1.0	No Conclusion

Appendix C2 SSI Comparison Reports

Table 1: Surgical Site Infections (SSI) from Colon Procedures in South Carolina's Acute Care Hospitals, January-December, 2016

	Legend							
*	Fewer infections (better) than predicted based on the national experience.*	=	About the same number of infections as predicted based on the national experience.*	×	More infections (worse) than predicted based on the national experience.*	No Conclusion	When the number of predicted infections is less than 1, no conclusion can be made.	
	*National experience contains data from 2015.							
	Comparison to the National Ex	perier	ce mean the observed infections	are ei	ther statistically significantly diffe	erent if better or v	worse, or are statistically the same	

Facility Name	Procedure Type	Number of Procedures	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Abbeville Area Medical Center	Colon Surgery	9	0	Less than 1.0	No Conclusion
Aiken Regional Medical Centers	Colon Surgery	130	2	2.7	= Same
AnMed Health	Colon Surgery	209	1	4.7	= Same
AnMed Health Women's and Children's Hosptial	Colon Surgery	3	0	Less than 1.0	No Conclusion
Baptist Easley Hospital	Colon Surgery	24	3	Less than 1.0	No Conclusion
Beaufort Memorial Hospital	Colon Surgery	60	1	1.4	= Same
Bon Secours St. Francis Eastside	Colon Surgery	75	0	1.8	= Same
Bon Secours St. Francis Hospital - Downtown	Colon Surgery	199	5	4.3	= Same
Bon-Secour St. Francis Xavier Hospital	Colon Surgery	52	1	Less than 1.0	No Conclusion
Cannon Memorial Hospital	Colon Surgery	5	0	Less than 1.0	No Conclusion
Carolina Pines Regional Medical Center	Colon Surgery	24	0	Less than 1.0	No Conclusion
Carolinas Hospital System	Colon Surgery	116	1	2.6	= Same
Carolinas Hospital System-Marion	Colon Surgery	11	0	Less than 1.0	No Conclusion
Chester Regional Medical Center	Colon Surgery	5	0	Less than 1.0	No Conclusion
Coastal Carolina Hospital	Colon Surgery	41	0	Less than 1.0	No Conclusion

Facility Name	Procedure Type	Number of Procedures	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Colleton Medical Center	Colon Surgery	28	2	Less than 1.0	No Conclusion
Conway Medical Center	Colon Surgery	78	0	1.5	= Same
East Cooper Medical Center	Colon Surgery	65	0	1.6	= Same
Grand Strand Regional Medical Center	Colon Surgery	242	4	5.9	= Same
Greenville Health System Laurens County Memorial Hospital	Colon Surgery	10	0	Less than 1.0	No Conclusion
Greenville Memorial Hospital	Colon Surgery	334	8	9.6	= Same
Greer Memorial Hospital	Colon Surgery	16	О	Less than 1.0	No Conclusion
Hampton Regional Medical Center	Colon Surgery	1	0	Less than 1.0	No Conclusion
Hillcrest Memorial Hospital	Colon Surgery	19	0	Less than 1.0	No Conclusion
Hilton Head Hospital	Colon Surgery	80	0	1.3	= Same
KershawHealth Medical Center	Colon Surgery	36	2	Less than 1.0	No Conclusion
Lexington Medical Center	Colon Surgery	328	5	7.9	= Same
Mary Black Health System Gaffney	Colon Surgery	5	1	Less than 1.0	No Conclusion
Mary Black Health System, LLC	Colon Surgery	59	3	1.3	= Same
McLeod Clarendon Health System	Colon Surgery	7	0	Less than 1.0	No Conclusion
McLeod Health Cheraw	Colon Surgery	18	0	Less than 1.0	No Conclusion
McLeod Loris	Colon Surgery	13	1	Less than 1.0	No Conclusion
McLeod Medical Center - Dillon	Colon Surgery	20	0	Less than 1.0	No Conclusion
McLeod Regional Medical Center	Colon Surgery	288	7	7.6	= Same
McLeod Seacoast	Colon Surgery	33	0	Less than 1.0	No Conclusion
Medical University of South Carolina Medical Center	Colon Surgery	328	12	10	= Same
Mount Pleasant Hospital	Colon Surgery	16	1	Less than 1.0	No Conclusion

Facility Name	Procedure Type	Number of Procedures	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Newberry County Hospital	Colon Surgery	34	0	Less than 1.0	No Conclusion
Oconee Medical Center	Colon Surgery	39	1	Less than 1.0	No Conclusion
Palmetto Health Baptist	Colon Surgery	242	8	4.8	= Same
Palmetto Health Baptist Parkridge	Colon Surgery	33	2	Less than 1.0	No Conclusion
Palmetto Health Richland	Colon Surgery	74	3	2.4	= Same
Pelham Medical Center	Colon Surgery	16	1	Less than 1.0	No Conclusion
Piedmont Medical Center	Colon Surgery	148	0	3.1	★ Better
Regional Medical Center of Orangeburg and Calhoun Counties	Colon Surgery	98	2	2.4	= Same
Roper Hospital	Colon Surgery	376	14	6.8	×Worse
Self Regional Healthcare	Colon Surgery	133	1	2.5	= Same
Sisters of Charity Providence Hospitals Downtown	Colon Surgery	57	3	1.1	= Same
Spartanburg Medical Center	Colon Surgery	239	10	7.9	= Same
Springs Memorial Hospital	Colon Surgery	31	1	Less than 1.0	No Conclusion
Summerville Medical Center	Colon Surgery	63	2	1.0	= Same
Tidelands Georgetown Memorial hospital	Colon Surgery	19	O	Less than 1.0	No Conclusion
Tidelands Waccamaw Community Hospital	Colon Surgery	61	O	1.2	= Same
Trident Medical Center	Colon Surgery	154	7	3.3	= Same
Tuomey Healthcare System	Colon Surgery	83	1	1.8	= Same

Table 2: Surgical Site Infections (SSI) from Abdominal Hysterectomy Procedures in South Carolina's Acute Care Hospitals, January-December, 2016

				Le	gend			
*	Fewer infections (better) than predicted based on the national experience.*	=	About the same number of infections as predicted based on the national experience.*	×	More infections (worse) than predicted based on the national experience.*	No Conclusion	When the number of predicted infections is less than 1, no conclusion can be made.	
*Na	*National experience contains data from 2015.							

Comparison to the National Experience mean the observed infections are either statistically significantly different if better or worse, or are statistically the same

Facility Name	Procedure Type	Number of Procedures	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Aiken Regional Medical Centers	Abdominal Hysterectomy	102	1	Less than 1.0	No Conclusion
AnMed Health	Abdominal Hysterectomy	2	О	Less than 1.0	No Conclusion
AnMed Health Women's and Children's Hosptial	Abdominal Hysterectomy	68	O	Less than 1.0	No Conclusion
Baptist Easley Hospital	Abdominal Hysterectomy	57	1	Less than 1.0	No Conclusion
Beaufort Memorial Hospital	Abdominal Hysterectomy	117	1	Less than 1.0	No Conclusion
Bon Secours St. Francis Eastside	Abdominal Hysterectomy	264	1	1.2	= Same
Bon Secours St. Francis Hospital - Downtown	Abdominal Hysterectomy	74	1	Less than 1.0	No Conclusion
Bon-Secour St. Francis Xavier Hospital	Abdominal Hysterectomy	168	2	1.0	= Same
Carolina Pines Regional Medical Center	Abdominal Hysterectomy	42	1	Less than 1.0	No Conclusion
Carolinas Hospital System	Abdominal Hysterectomy	102	1	Less than 1.0	No Conclusion
Carolinas Hospital System-Marion	Abdominal Hysterectomy	10	0	Less than 1.0	No Conclusion
Chester Regional Medical Center	Abdominal Hysterectomy	4	0	Less than 1.0	No Conclusion
Coastal Carolina Hospital	Abdominal Hysterectomy	9	0	Less than 1.0	No Conclusion
Colleton Medical Center	Abdominal Hysterectomy	15	0	Less than 1.0	No Conclusion

Facility Name	Procedure Type	Number of Procedures	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Conway Medical Center	Abdominal Hysterectomy	166	1	1.1	= Same
East Cooper Medical Center	Abdominal Hysterectomy	41	0	Less than 1.0	No Conclusion
Grand Strand Regional Medical Center	Abdominal Hysterectomy	121	O	Less than 1.0	No Conclusion
Greenville Health System Laurens County Memorial Hospital	Abdominal Hysterectomy	5	0	Less than 1.0	No Conclusion
Greenville Memorial Hospital	Abdominal Hysterectomy	297	0	2.4	= Same
Greer Memorial Hospital	Abdominal Hysterectomy	13	1	Less than 1.0	No Conclusion
Hilton Head Hospital	Abdominal Hysterectomy	21	0	Less than 1.0	No Conclusion
KershawHealth Medical Center	Abdominal Hysterectomy	35	0	Less than 1.0	No Conclusion
Lake City Community Hospital	Abdominal Hysterectomy	7	0	Less than 1.0	No Conclusion
Lexington Medical Center	Abdominal Hysterectomy	625	2	4.2	= Same
Mary Black Health System Gaffney	Abdominal Hysterectomy	7	0	Less than 1.0	No Conclusion
Mary Black Health System, LLC	Abdominal Hysterectomy	31	0	Less than 1.0	No Conclusion
McLeod Clarendon Health System	Abdominal Hysterectomy	13	0	Less than 1.0	No Conclusion
McLeod Health Cheraw	Abdominal Hysterectomy	10	0	Less than 1.0	No Conclusion
McLeod Loris	Abdominal Hysterectomy	33	0	Less than 1.0	No Conclusion
McLeod Medical Center - Dillon	Abdominal Hysterectomy	38	0	Less than 1.0	No Conclusion
McLeod Regional Medical Center	Abdominal Hysterectomy	154	2	1.0	= Same
McLeod Seacoast	Abdominal Hysterectomy	21	0	Less than 1.0	No Conclusion
Medical University of South Carolina Medical Center	Abdominal Hysterectomy	257	2	2.8	= Same
Mount Pleasant Hospital	Abdominal Hysterectomy	90	0	Less than 1.0	No Conclusion
Newberry County Hospital	Abdominal Hysterectomy	1	0	Less than 1.0	No Conclusion
Oconee Medical Center	Abdominal Hysterectomy	16	0	Less than 1.0	No Conclusion

Facility Name	Procedure Type	Number of Procedures	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Palmetto Health Baptist	Abdominal Hysterectomy	459	3	2.6	= Same
Palmetto Health Baptist Parkridge	Abdominal Hysterectomy	97	0	Less than 1.0	No Conclusion
Palmetto Health Richland	Abdominal Hysterectomy	313	0	2.3	= Same
Patewood Memorial Hospital	Abdominal Hysterectomy	3	0	Less than 1.0	No Conclusion
Pelham Medical Center	Abdominal Hysterectomy	17	0	Less than 1.0	No Conclusion
Piedmont Medical Center	Abdominal Hysterectomy	23	0	Less than 1.0	No Conclusion
Regional Medical Center of Orangeburg and Calhoun Counties	Abdominal Hysterectomy	79	0	Less than 1.0	No Conclusion
Roper Hospital	Abdominal Hysterectomy	240	1	1.4	= Same
Self Regional Healthcare	Abdominal Hysterectomy	170	2	1.2	= Same
Spartanburg Medical Center	Abdominal Hysterectomy	518	3	3.2	= Same
Springs Memorial Hospital	Abdominal Hysterectomy	51	0	Less than 1.0	No Conclusion
Summerville Medical Center	Abdominal Hysterectomy	125	2	Less than 1.0	No Conclusion
Tidelands Georgetown Memorial hospital	Abdominal Hysterectomy	26	0	Less than 1.0	No Conclusion
Tidelands Waccamaw Community Hospital	Abdominal Hysterectomy	18	0	Less than 1.0	No Conclusion
Trident Medical Center	Abdominal Hysterectomy	310	2	1.9	= Same
Tuomey Healthcare System	Abdominal Hysterectomy	171	4	1.1	×Worse

Table 3: Surgical Site Infections (SSI) from HIP Procedures in South Carolina's Acute Care Hospitals, January-December, 2016

	Legend						
*	Fewer infections (better) than predicted based on the national experience.*	=	About the same number of infections as predicted based on the national experience.*	×	More infections (worse) than predicted based on the national experience.*	No Conclusion	When the number of predicted infections is less than 1, no conclusion can be made.
*National experience contains data from 2015.							
Com	parison to the National Experien	ce me	an the observed infections are eit	her st	atistically significantly different if	better or worse.	or are statistically the same

Facility Name	Procedure Type	Number of Procedures	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Abbeville Area Medical Center	Hip Prosthesis (Replacement)	4	0	Less than 1.0	No Conclusion
Aiken Regional Medical Centers	Hip Prosthesis (Replacement)	146	1	1.1	= Same
AnMed Health	Hip Prosthesis (Replacement)	86	2	1.0	★ Better
AnMed Health Women's and Children's Hosptial	Hip Prosthesis (Replacement)	111	0	1.1	= Same
Baptist Easley Hospital	Hip Prosthesis (Replacement)	49	2	Less than 1.0	No Conclusion
Beaufort Memorial Hospital	Hip Prosthesis (Replacement)	148	0	Less than 1.0	No Conclusion
Bon Secours St. Francis Eastside	Hip Prosthesis (Replacement)	557	5	2.4	= Same
Bon Secours St. Francis Hospital - Downtown	Hip Prosthesis (Replacement)	149	0	Less than 1.0	No Conclusion
Bon-Secour St. Francis Xavier Hospital	Hip Prosthesis (Replacement)	14	0	Less than 1.0	No Conclusion
Cannon Memorial Hospital	Hip Prosthesis (Replacement)	6	0	Less than 1.0	No Conclusion

Facility Name	Procedure Type	Number of Procedures	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Carolina Pines Regional Medical Center	Hip Prosthesis (Replacement)	32	O	Less than 1.0	No Conclusion
Carolinas Hospital System	Hip Prosthesis (Replacement)	109	o	Less than 1.0	No Conclusion
Chester Regional Medical Center	Hip Prosthesis (Replacement)	17	0	Less than 1.0	No Conclusion
Coastal Carolina Hospital	Hip Prosthesis (Replacement)	12	0	Less than 1.0	No Conclusion
Colleton Medical Center	Hip Prosthesis (Replacement)	34	o	Less than 1.0	No Conclusion
Conway Medical Center	Hip Prosthesis (Replacement)	264	o	1.1	= Same
East Cooper Medical Center	Hip Prosthesis (Replacement)	275	2	1.4	= Same
Grand Strand Regional Medical Center	Hip Prosthesis (Replacement)	312	4	1.8	= Same
Greenville Health System Laurens County Memorial Hospital	Hip Prosthesis (Replacement)	54	0	Less than 1.0	No Conclusion
Greenville Memorial Hospital	Hip Prosthesis (Replacement)	169	6	2.1	×Worse
Greer Memorial Hospital	Hip Prosthesis (Replacement)	194	1	1.1	= Same
Hampton Regional Medical Center	Hip Prosthesis (Replacement)	4	o	Less than 1.0	No Conclusion
Hillcrest Memorial Hospital	Hip Prosthesis (Replacement)	5	o	Less than 1.0	No Conclusion
Hilton Head Hospital	Hip Prosthesis (Replacement)	193	O	Less than 1.0	No Conclusion
KershawHealth Medical Center	Hip Prosthesis (Replacement)	64	O	Less than 1.0	No Conclusion
Lake City Community Hospital	Hip Prosthesis (Replacement)	2	0	Less than 1.0	No Conclusion

Facility Name	Procedure Type	Number of Procedures	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Lexington Medical Center	Hip Prosthesis (Replacement)	129	2	Less than 1.0	No Conclusion
Mary Black Health System Gaffney	Hip Prosthesis (Replacement)	28	1	Less than 1.0	No Conclusion
Mary Black Health System, LLC	Hip Prosthesis (Replacement)	94	O	Less than 1.0	No Conclusion
McLeod Clarendon Health System	Hip Prosthesis (Replacement)	7	O	Less than 1.0	No Conclusion
McLeod Medical Center - Dillon	Hip Prosthesis (Replacement)	6	o	Less than 1.0	No Conclusion
McLeod Regional Medical Center	Hip Prosthesis (Replacement)	317	o	2.2	= Same
McLeod Seacoast	Hip Prosthesis (Replacement)	126	1	Less than 1.0	No Conclusion
Medical University of South Carolina Medical Center	Hip Prosthesis (Replacement)	336	2	3.7	= Same
Mount Pleasant Hospital	Hip Prosthesis (Replacement)	13	o	Less than 1.0	No Conclusion
Newberry County Hospital	Hip Prosthesis (Replacement)	108	o	Less than 1.0	No Conclusion
Oconee Medical Center	Hip Prosthesis (Replacement)	124	2	Less than 1.0	No Conclusion
Palmetto Health Baptist	Hip Prosthesis (Replacement)	542	12	4.4	X Worse
Palmetto Health Baptist Parkridge	Hip Prosthesis (Replacement)	111	0	Less than 1.0	No Conclusion
Palmetto Health Richland	Hip Prosthesis (Replacement)	230	o	3.2	★ Better
Patewood Memorial Hospital	Hip Prosthesis (Replacement)	422	1	1.9	= Same
Pelham Medical Center	Hip Prosthesis (Replacement)	105	0	Less than 1.0	No Conclusion

Facility Name	Procedure Type	Number of Procedures	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Piedmont Medical Center	Hip Prosthesis (Replacement)	149	2	Less than 1.0	No Conclusion
Providence Hospitals NE	Hip Prosthesis (Replacement)	455	o	3.2	★ Better
Regional Medical Center of Orangeburg and Calhoun Counties	Hip Prosthesis (Replacement)	48	1	Less than 1.0	No Conclusion
Roper Hospital	Hip Prosthesis (Replacement)	662	4	2.8	= Same
Self Regional Healthcare	Hip Prosthesis (Replacement)	186	0	1.1	= Same
Sisters of Charity Providence Hospitals Downtown	Hip Prosthesis (Replacement)	35	o	Less than 1.0	No Conclusion
Spartanburg Medical Center	Hip Prosthesis (Replacement)	373	9	3.9	×Worse
Springs Memorial Hospital	Hip Prosthesis (Replacement)	24	O	Less than 1.0	No Conclusion
Summerville Medical Center	Hip Prosthesis (Replacement)	62	o	Less than 1.0	No Conclusion
Tidelands Georgetown Memorial hospital	Hip Prosthesis (Replacement)	37	O	Less than 1.0	No Conclusion
Tidelands Waccamaw Community Hospital	Hip Prosthesis (Replacement)	312	0	1.5	= Same
Trident Medical Center	Hip Prosthesis (Replacement)	223	4	1.3	= Same
Tuomey Healthcare System	Hip Prosthesis (Replacement)	118	1	Less than 1.0	No Conclusion

Table 4: Surgical Site Infections (SSI) from Knee Procedures in South Carolina's Acute Care Hospitals, January-December, 2016

	Legend						
*	Fewer infections (better) than predicted based on the national experience.*	=	About the same number of infections as predicted based on the national experience.*	×	More infections (worse) than predicted based on the national experience.*	No Conclusion	When the number of predicted infections is less than 1, no conclusion can be made.
*National experience contains data from 2015.							
Com	parison to the National Experience	ce me	an the observed infections are eit	her st	atistically significantly different if	f better or worse.	or are statistically the same

Facility Name	Procedure Type	Number of Procedures	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Abbeville Area Medical Center	Knee Prosthesis (Replacement)	3	0	Less than 1.0	No Conclusion
Aiken Regional Medical Centers	Knee Prosthesis (Replacement)	204	4	Less than 1.0	No Conclusion
AnMed Health	Knee Prosthesis (Replacement)	4	0	Less than 1.0	No Conclusion
AnMed Health Women's and Children's Hosptial	Knee Prosthesis (Replacement)	305	0	2.0	= Same
Baptist Easley Hospital	Knee Prosthesis (Replacement)	59	2	Less than 1.0	No Conclusion
Beaufort Memorial Hospital	Knee Prosthesis (Replacement)	330	0	1.0	= Same
Bon Secours St. Francis Eastside	Knee Prosthesis (Replacement)	1214	3	3.3	= Same
Bon Secours St. Francis Hospital - Downtown	Knee Prosthesis (Replacement)	45	0	Less than 1.0	No Conclusion
Cannon Memorial Hospital	Knee Prosthesis (Replacement)	23	0	Less than 1.0	No Conclusion
Carolina Pines Regional Medical Center	Knee Prosthesis (Replacement)	65	0	Less than 1.0	No Conclusion

Facility Name	Procedure Type	Number of Procedures	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Carolinas Hospital System	Knee Prosthesis (Replacement)	145	O	Less than 1.0	No Conclusion
Carolinas Hospital System-Marion	Knee Prosthesis (Replacement)	2	О	Less than 1.0	No Conclusion
Chester Regional Medical Center	Knee Prosthesis (Replacement)	20	0	Less than 1.0	No Conclusion
Coastal Carolina Hospital	Knee Prosthesis (Replacement)	7	0	Less than 1.0	No Conclusion
Colleton Medical Center	Knee Prosthesis (Replacement)	46	O	Less than 1.0	No Conclusion
Conway Medical Center	Knee Prosthesis (Replacement)	380	1	1.1	= Same
East Cooper Medical Center	Knee Prosthesis (Replacement)	394	О	1.5	= Same
Grand Strand Regional Medical Center	Knee Prosthesis (Replacement)	375	3	1.6	= Same
Greenville Health System Laurens County Memorial Hospital	Knee Prosthesis (Replacement)	52	0	Less than 1.0	No Conclusion
Greenville Memorial Hospital	Knee Prosthesis (Replacement)	6	0	Less than 1.0	No Conclusion
Greer Memorial Hospital	Knee Prosthesis (Replacement)	268	О	Less than 1.0	No Conclusion
Hampton Regional Medical Center	Knee Prosthesis (Replacement)	23	О	Less than 1.0	No Conclusion
Hillcrest Memorial Hospital	Knee Prosthesis (Replacement)	95	О	Less than 1.0	No Conclusion
Hilton Head Hospital	Knee Prosthesis (Replacement)	228	0	Less than 1.0	No Conclusion
KershawHealth Medical Center	Knee Prosthesis (Replacement)	85	O	Less than 1.0	No Conclusion
Lake City Community Hospital	Knee Prosthesis (Replacement)	5	0	Less than 1.0	No Conclusion

Facility Name	Procedure Type	Number of Procedures	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Lexington Medical Center	Knee Prosthesis (Replacement)	531	3	1.7	= Same
Mary Black Health System Gaffney	Knee Prosthesis (Replacement)	32	1	Less than 1.0	No Conclusion
Mary Black Health System, LLC	Knee Prosthesis (Replacement)	279	0	Less than 1.0	No Conclusion
McLeod Clarendon Health System	Knee Prosthesis (Replacement)	13	O	Less than 1.0	No Conclusion
McLeod Medical Center - Dillon	Knee Prosthesis (Replacement)	16	1	Less than 1.0	No Conclusion
McLeod Regional Medical Center	Knee Prosthesis (Replacement)	547	2	1.5	= Same
McLeod Seacoast	Knee Prosthesis (Replacement)	249	0	Less than 1.0	No Conclusion
Medical University of South Carolina Medical Center	Knee Prosthesis (Replacement)	328	4	2.0	= Same
Mount Pleasant Hospital	Knee Prosthesis (Replacement)	30	O	Less than 1.0	No Conclusion
Newberry County Hospital	Knee Prosthesis (Replacement)	144	O	Less than 1.0	No Conclusion
Oconee Medical Center	Knee Prosthesis (Replacement)	204	2	Less than 1.0	No Conclusion
Palmetto Health Baptist	Knee Prosthesis (Replacement)	958	8	3.3	X Worse
Palmetto Health Baptist Parkridge	Knee Prosthesis (Replacement)	86	0	Less than 1.0	No Conclusion
Palmetto Health Richland	Knee Prosthesis (Replacement)	237	2	1.6	= Same
Patewood Memorial Hospital	Knee Prosthesis (Replacement)	711	3	1.9	= Same
Pelham Medical Center	Knee Prosthesis (Replacement)	203	1	Less than 1.0	No Conclusion

Facility Name	Procedure Type	Number of Procedures	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Piedmont Medical Center	Knee Prosthesis (Replacement)	184	O	Less than 1.0	No Conclusion
Providence Hospitals NE	Knee Prosthesis (Replacement)	228	o	Less than 1.0	No Conclusion
Regional Medical Center of Orangeburg and Calhoun Counties	Knee Prosthesis (Replacement)	84	0	Less than 1.0	No Conclusion
Roper Hospital	Knee Prosthesis (Replacement)	1110	7	2.7	×Worse
Self Regional Healthcare	Knee Prosthesis (Replacement)	346	0	1.3	= Same
Sisters of Charity Providence Hospitals Downtown	Knee Prosthesis (Replacement)	63	o	Less than 1.0	No Conclusion
Spartanburg Medical Center	Knee Prosthesis (Replacement)	513	5	2.9	= Same
Springs Memorial Hospital	Knee Prosthesis (Replacement)	23	0	Less than 1.0	No Conclusion
Summerville Medical Center	Knee Prosthesis (Replacement)	120	0	Less than 1.0	No Conclusion
Tidelands Georgetown Memorial hospital	Knee Prosthesis (Replacement)	97	0	Less than 1.0	No Conclusion
Tidelands Waccamaw Community Hospital	Knee Prosthesis (Replacement)	370	0	1.3	= Same
Trident Medical Center	Knee Prosthesis (Replacement)	355	O	1.1	= Same
Tuomey Healthcare System	Knee Prosthesis (Replacement)	205	1	Less than 1.0	No Conclusion

Table 5: Surgical Site Infections (SSI) from Coronary Artery Bypass Graft (Chest Incision Only) in South Carolina's Acute Care Hospitals, January-December, 2016

	Legend						
*	Fewer infections (better) than predicted based on the national experience.*	=	About the same number of infections as predicted based on the national experience.*	×	More infections (worse) than predicted based on the national experience.*	No Conclusion	When the number of predicted infections is less than 1, no conclusion can be made.
*National experience contains data from 2015.							
Com	parison to the National Experien	ce me:	an the observed infections are eit	her st	atistically significantly different in	f better or worse.	or are statistically the same

Facility Name	Procedure Type	Number of Procedures	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Aiken Regional Medical Centers	Coronary Bypass Graft (Chest Only Incision)	1	0	Less than 1.0	No Conclusion
AnMed Health	Coronary Bypass Graft (Chest Only Incision)	19	0	Less than 1.0	No Conclusion
Bon Secours St. Francis Hospital - Downtown	Coronary Bypass Graft (Chest Only Incision)	20	0	Less than 1.0	No Conclusion
Carolinas Hospital System	Coronary Bypass Graft (Chest Only Incision)	3	0	Less than 1.0	No Conclusion
Grand Strand Regional Medical Center	Coronary Bypass Graft (Chest Only Incision)	7	0	Less than 1.0	No Conclusion
Hilton Head Hospital	Coronary Bypass Graft (Chest Only Incision)	8	0	Less than 1.0	No Conclusion
Lexington Medical Center	Coronary Bypass Graft (Chest Only Incision)	41	О	Less than 1.0	No Conclusion
McLeod Regional Medical Center	Coronary Bypass Graft (Chest Only Incision)	31	О	Less than 1.0	No Conclusion
Medical University of South Carolina Medical Center	Coronary Bypass Graft (Chest Only Incision)	15	0	Less than 1.0	No Conclusion
Palmetto Health Richland	Coronary Bypass Graft (Chest Only Incision)	15	0	Less than 1.0	No Conclusion

Facility Name	Procedure Type	Number of Procedures	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Piedmont Medical Center	Coronary Bypass Graft (Chest Only Incision)	8	0	Less than 1.0	No Conclusion
Roper Hospital	Coronary Bypass Graft (Chest Only Incision)	18	0	Less than 1.0	No Conclusion
Self Regional Healthcare	Coronary Bypass Graft (Chest Only Incision)	1	0	Less than 1.0	No Conclusion
Sisters of Charity Providence Hospitals Downtown	Coronary Bypass Graft (Chest Only Incision)	14	1	Less than 1.0	No Conclusion
Spartanburg Medical Center	Coronary Bypass Graft (Chest Only Incision)	53	1	Less than 1.0	No Conclusion
Trident Medical Center	Coronary Bypass Graft (Chest Only Incision)	1	0	Less than 1.0	No Conclusion

Table 6: Surgical Site Infections (SSI) from Coronary Artery Bypass Graft (Chest and Donor Site Incision) in South Carolina's Acute Care Hospitals, January-December, 2016

	Legend							
*	Fewer infections (better) than predicted based on the national experience.*	II	About the same number of infections as predicted based on the national experience.*	×	More infections (worse) than predicted based on the national experience.*	No Conclusion	When the number of predicted infections is less than 1, no conclusion can be made.	

^{*}National experience contains data from 2015.

Comparison to the National Experience mean the observed infections are either statistically significantly different if better or worse, or are statistically the same

Facility Name	Procedure Type	Number of Procedures	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Aiken Regional Medical Centers	Coronary Bypass Graft (Chest and Donor Incision)	18	0	Less than 1.0	No Conclusion
AnMed Health	Coronary Bypass Graft (Chest and Donor Incision)	107	0	Less than 1.0	No Conclusion
Bon Secours St. Francis Hospital - Downtown	Coronary Bypass Graft (Chest and Donor Incision)	244	1	1.9	= Same
Carolinas Hospital System	Coronary Bypass Graft (Chest and Donor Incision)	53	0	Less than 1.0	No Conclusion
Grand Strand Regional Medical Center	Coronary Bypass Graft (Chest and Donor Incision)	364	3	2.6	= Same
Greenville Memorial Hospital	Coronary Bypass Graft (Chest and Donor Incision)	341	6	3.3	= Same
Hilton Head Hospital	Coronary Bypass Graft (Chest and Donor Incision)	43	0	Less than 1.0	No Conclusion
Lexington Medical Center	Coronary Bypass Graft (Chest and Donor Incision)	245	3	2.1	= Same
McLeod Regional Medical Center	Coronary Bypass Graft (Chest and Donor Incision)	278	1	2.0	= Same
Medical University of South Carolina Medical Center	Coronary Bypass Graft (Chest and Donor Incision)	155	1	1.4	= Same

Facility Name	Procedure Type	Number of Procedures	Observed Infections	Predicted Infections	How Does This Facility Compare to the National Experience?
Palmetto Health Richland	Coronary Bypass Graft (Chest and Donor Incision)	224	3	1.7	= Same
Piedmont Medical Center	Coronary Bypass Graft (Chest and Donor Incision)	111	1	Less than 1.0	No Conclusion
Roper Hospital	Coronary Bypass Graft (Chest and Donor Incision)	312	3	1.7	= Same
Self Regional Healthcare	Coronary Bypass Graft (Chest and Donor Incision)	73	1	Less than 1.0	No Conclusion
Sisters of Charity Providence Hospitals Downtown	Coronary Bypass Graft (Chest and Donor Incision)	350	6	1.9	×Worse
Spartanburg Medical Center	Coronary Bypass Graft (Chest and Donor Incision)	255	1	2.3	= Same
Trident Medical Center	Coronary Bypass Graft (Chest and Donor Incision)	195	1	1.1	= Same

Appendix C3 Hospital-Onset CDI LabID Event Comparison Reports

Clostridium difficile Events¹ in South Carolina's Acute Care, Long-term Acute Care and Inpatient Rehabilitation Hospitals, January-December, 2016

Legend							
*	Fewer events (better) than predicted based on the national experience.*	=	About the same number of events as predicted based on the national experience.*	×	More events (worse) than predicted based on the national experience.*	No Conclusion	When the number of predicted events is less than 1, no conclusion can be made.
*Nati	*National experience contains data from 2015.						
Comp	parison to the National Experien	ce mea	an the observed infections are eit	her st	atistically significantly different is	f better or worse,	or are statistically the same

Facility Name	Observed Events	Predicted Events	How Does This Facility Compare to the National Experience?
Abbeville Area Medical Center	0	1.0	= Same
Aiken Regional Medical Centers	27	37	= Same
Allendale County Hospital	0	Less than 1.0	No Conclusion
AnMed Health	53	79	★ Better
AnMed Health Rehabilitation Hospital	8	10	= Same
AnMed Health Women's and Children's Hosptial	0	1.3	= Same
Baptist Easley Hospital	14	16	= Same
Beaufort Memorial Hospital	28	52	★ Better
Bon Secours St. Francis Eastside	2	8.5	★ Better
Bon Secours St. Francis Hospital - Downtown	17	42	★ Better
Bon-Secour St. Francis Xavier Hospital	15	29	★ Better
Cannon Memorial Hospital	0	1.4	= Same
Carolina Pines Regional Medical Center	11	8.7	= Same
Carolinas Hospital System	13	38	★ Better

Facility Name	Observed Events	Predicted Events	How Does This Facility Compare to the National Experience?
Carolinas Hospital System-Marion	2	4.8	= Same
Chester Regional Medical Center	2	1.6	= Same
Coastal Carolina Hospital	4	3.1	= Same
Colleton Medical Center	3	7.7	= Same
ContinueCARE Hospital at Palmetto Health Baptist	5	8.4	= Same
Conway Medical Center	3	18	★ Better
East Cooper Medical Center	9	8.5	= Same
Edgefield County Hospital	1	Less than 1.0	No Conclusion
Fairfield Memorial Hospital	0	Less than 1.0	No Conclusion
Grand Strand Regional Medical Center	56	51	= Same
Greenville Health System Laurens County Memorial Hospital	8	6.8	= Same
Greenville Memorial Hospital	149	168	= Same
Greenwood Regional Rehabilitation Hospital	2	3.5	= Same
Greer Memorial Hospital	4	8.3	= Same
Hampton Regional Medical Center	1	1.1	= Same
HealthSouth Rehabilitation Hospital of Charleston	8	5.0	= Same
HealthSouth Rehabilitation Hospital of Columbia	3	9.2	★ Better
HealthSouth Rehabilitation Hospital of Florence	2	3.6	= Same
HealthSouth Rehabilitation Hospital of Rock Hill	1	6.7	★ Better
Hillcrest Memorial Hospital	4	4.5	= Same
Hilton Head Hospital	16	15	= Same

Facility Name	Observed Events	Predicted Events	How Does This Facility Compare to the National Experience?
KershawHealth Medical Center	4	12	★ Better
Lake City Community Hospital	0	1.1	= Same
Lexington Medical Center	99	109	= Same
Mary Black Health System Gaffney	4	8.1	= Same
Mary Black Health System, LLC	10	15	= Same
Mal and Clarendon Health System	0	1.1	= Same
McLeod Clarendon Health System	0	Less than 1.0	No Conclusion
McLeod Health Cheraw	2	3.8	= Same
McLeod Loris	1	3.2	= Same
McLeod Medical Center - Darlington	2	2.7	= Same
McLeod Medical Center - Dillon	3	3.9	= Same
McLeod Regional Medical Center	75	100	★ Better
McLeod Seacoast	3	3.3	= Same
Medical University of South Carolina Medical Center	149	155	= Same
Mount Pleasant Hospital	6	8.8	= Same
Newberry County Hospital	0	2.8	= Same
North Greenville Long Term Acute Care Hospital	14	8.6	= Same
Oconee Medical Center	11	15	= Same
Palmetto Health Baptist	61	54	= Same
Palmetto Health Baptist Parkridge	19	15	= Same
Palmetto Health Richland	112	137	★ Better
Patewood Memorial Hospital	0	Less than 1.0	No Conclusion
Pelham Medical Center	5	2.8	= Same
Piedmont Medical Center	59	51	= Same

Facility Name	Observed Events	Predicted Events	How Does This Facility Compare to the National Experience?
Providence Hospitals NE	1	Less than 1.0	No Conclusion
Regency Hospital of Florence	0	11	★ Better
Regency Hospital of Greenville	4	8.1	= Same
Regional Medical Center of Orangeburg and Calhoun Counties	46	39	= Same
Roper Hospital	47	64	★ Better
Self Regional Healthcare	23	41	★ Better
Shriners Hospitals for ChildrenGreenville	0	Less than 1.0	No Conclusion
Sisters of Charity Providence Hospitals Downtown	9	26	★ Better
Spartanburg Hospital for Restorative Care	2	10	★ Better
Spartanburg Medical Center	106	129	★ Better
Spartanburg Rehabilitation Institute	1	2.8	= Same
Springs Memorial Hospital	5	9.1	= Same
Summerville Medical Center	3	9.3	★ Better
Tidelands Georgetown Memorial hospital	6	8.3	= Same
Tidelands Waccamaw Community Hospital	19	17	= Same
Trident Medical Center	25	35	= Same
Tuomey Healthcare System	14	21	= Same
Union Medical Center	3	Less than 1.0	No Conclusion
Vibra Hospital of Charleston	32	15	×Worse

 $^{^1{}m This}$ includes hospital-onset laboratory-identified events

Appendix C4

Hospital-Onset MRSA BSI LabID Event Comparison Reports

Methicillin-Resistant *Staphylococcus aureus* (MRSA) Events¹ in South Carolina's Acute Care, Long-term Acute Care, and Inpatient Rehabilitation Hospitals, January-December, **2016**

Legend							
*	Fewer events (better) than predicted based on the national experience.*	=	About the same number of events as predicted based on the national experience.*	×	More events (worse) than predicted based on the national experience.*	No Conclusion	When the number of predicted events is less than 1, no conclusion can be made.
*Nat	*National experience contains data from 2015.						
Com	parison to the National Experien	ce me	an the observed infections are eit	her st	atistically significantly different	t if better or worse,	or are statistically the same

Facility Name	Observed Events	Predicted Events	How Does This Facility Compare to the National Experience?
Abbeville Area Medical Center	0	Less than 1.0	No Conclusion
Aiken Regional Medical Centers	1	1.8	= Same
Allendale County Hospital	0	Less than 1.0	No Conclusion
AnMed Health	2	5.7	= Same
AnMed Health Rehabilitation Hospital	0	Less than 1.0	No Conclusion
AnMed Health Women's and Children's Hosptial	0	Less than 1.0	No Conclusion
Baptist Easley Hospital	0	Less than 1.0	No Conclusion
Beaufort Memorial Hospital	0	1.3	= Same
Bon Secours St. Francis Eastside	1	Less than 1.0	No Conclusion
Bon Secours St. Francis Hospital - Downtown	2	4.1	= Same
Bon-Secour St. Francis Xavier Hospital	1	2.7	= Same
Cannon Memorial Hospital	0	Less than 1.0	No Conclusion

Facility Name	Observed Events	Predicted Events	How Does This Facility Compare to the National Experience?
Carolina Pines Regional Medical Center	0	Less than 1.0	No Conclusion
Carolinas Hospital System	3	4.6	= Same
Carolinas Hospital System-Marion	О	Less than 1.0	No Conclusion
Chester Regional Medical Center	О	Less than 1.0	No Conclusion
Coastal Carolina Hospital	0	Less than 1.0	No Conclusion
Colleton Medical Center	1	1.2	= Same
ContinueCARE Hospital at Palmetto Health Baptist	3	1.2	= Same
Conway Medical Center	4	1.9	= Same
East Cooper Medical Center	1	Less than 1.0	No Conclusion
Edgefield County Hospital	0	Less than 1.0	No Conclusion
Fairfield Memorial Hospital	0	Less than 1.0	No Conclusion
Grand Strand Regional Medical Center	8	7.0	= Same
Greenville Health System Laurens County Memorial Hospital	0	Less than 1.0	No Conclusion
Greenville Memorial Hospital	22	19	= Same
Greenwood Regional Rehabilitation Hospital	0	Less than 1.0	No Conclusion
Greer Memorial Hospital	0	Less than 1.0	No Conclusion
Hampton Regional Medical Center	0	Less than 1.0	No Conclusion
HealthSouth Rehabilitation Hospital of Charleston	2	Less than 1.0	No Conclusion
HealthSouth Rehabilitation Hospital of Columbia	0	Less than 1.0	No Conclusion
HealthSouth Rehabilitation Hospital of Florence	0	Less than 1.0	No Conclusion
HealthSouth Rehabilitation Hospital of Rock Hill	0	Less than 1.0	No Conclusion

Facility Name	Observed Events	Predicted Events	How Does This Facility Compare to the National Experience?
Hillcrest Memorial Hospital	0	Less than 1.0	No Conclusion
Hilton Head Hospital	0	Less than 1.0	No Conclusion
KershawHealth Medical Center	3	Less than 1.0	No Conclusion
Lake City Community Hospital	1	Less than 1.0	No Conclusion
Lexington Medical Center	6	9.4	= Same
Mary Black Health System Gaffney	0	Less than 1.0	No Conclusion
Mary Black Health System, LLC	0	Less than 1.0	No Conclusion
McLeod Clarendon Health System	0	Less than 1.0	No Conclusion
McLeod Health Cheraw	1	Less than 1.0	No Conclusion
McLeod Loris	0	Less than 1.0	No Conclusion
McLeod Medical Center - Darlington	0	Less than 1.0	No Conclusion
McLeod Medical Center - Dillon	0	Less than 1.0	No Conclusion
McLeod Regional Medical Center	21	12	×Worse
McLeod Seacoast	0	Less than 1.0	No Conclusion
Medical University of South Carolina Medical Center	15	22	= Same
Mount Pleasant Hospital	0	Less than 1.0	No Conclusion
Newberry County Hospital	0	Less than 1.0	No Conclusion
North Greenville Long Term Acute Care Hospital	1	1.1	= Same
Oconee Medical Center	1	1.6	= Same
Palmetto Health Baptist	2	4.7	= Same
Palmetto Health Baptist Parkridge	2	Less than 1.0	No Conclusion
Palmetto Health Richland	24	16	= Same
Patewood Memorial Hospital	0	Less than 1.0	No Conclusion
Pelham Medical Center	0	Less than 1.0	No Conclusion

Facility Name	Observed Events	Predicted Events	How Does This Facility Compare to the National Experience?
Piedmont Medical Center	2	2.5	= Same
Providence Hospitals NE	0	Less than 1.0	No Conclusion
Regency Hospital of Florence	2	2.2	= Same
Regency Hospital of Greenville	1	1.1	= Same
Regional Medical Center of Orangeburg and Calhoun Counties	3	2.0	= Same
Roper Hospital	4	4.7	= Same
Self Regional Healthcare	3	3.3	= Same
Shriners Hospitals for ChildrenGreenville	0	Less than 1.0	No Conclusion
Sisters of Charity Providence Hospitals Downtown	0	2.1	= Same
Spartanburg Hospital for Restorative Care	4	1.4	= Same
Spartanburg Medical Center	16	11	= Same
Spartanburg Rehabilitation Institute	1	Less than 1.0	No Conclusion
Springs Memorial Hospital	0	1.1	= Same
Summerville Medical Center	3	Less than 1.0	No Conclusion
Tidelands Georgetown Memorial hospital	2	Less than 1.0	No Conclusion
Tidelands Waccamaw Community Hospital	1	1.2	= Same
Trident Medical Center	4	4.8	= Same
Tuomey Healthcare System	7	2.7	×Worse
Union Medical Center	0	Less than 1.0	No Conclusion
Vibra Hospital of Charleston	4	1.8	= Same
Williamsburg Regional Hospital	0	Less than 1.0	No Conclusion

 $^{^1\}mathrm{This}$ includes hospital-onset laboratory-identified bacteremia (blood infection) events



Infection-Related Ventilator-Associated Complication (IVAC) plus Events in South Carolina's Acute Care, and Long-term Acute Care Hospitals, January-December, 2016

	Legend						
*	Fewer infections (better) than predicted based on the national experience.*	=	About the same number of infections as predicted based on the national experience.*	×	More infections (worse) than predicted based on the national experience.*	No Conclusion	When the number of predicted infections is less than 1, no conclusion can be made.

^{*}National experience contains data from 2015.

Comparison to the National Experience mean the observed infections are either statistically significantly different if better or worse, or are statistically the same

Facility Name	Observed Number of IVAC Plus Events	Predicted Number of IVAC Plus Events	How Does This Facility Compare to the National Experience?
Aiken Regional Medical Centers	3	2.7	= Same
AnMed Health	3	7	= Same
Baptist Easley Hospital	1	Less than 1.0	No Conclusion
Bon Secours St. Francis Eastside	2	Less than 1.0	No Conclusion
Bon Secours St. Francis Hospital - Downtown	0	4.1	★ Better
Bon-Secour St. Francis Xavier Hospital	3	1.8	= Same
Cannon Memorial Hospital	0	Less than 1.0	No Conclusion
Carolina Pines Regional Medical Center	5	Less than 1.0	No Conclusion
Carolinas Hospital System	2	3.9	= Same
Carolinas Hospital System-Marion	1	Less than 1.0	No Conclusion
Chester Regional Medical Center	0	Less than 1.0	No Conclusion
Coastal Carolina Hospital	0	Less than 1.0	No Conclusion
Colleton Medical Center	0	Less than 1.0	No Conclusion
Conway Medical Center	0	1.4	No Conclusion
East Cooper Medical Center	0	Less than 1.0	No Conclusion
Greenville Health System Laurens County Memorial Hospital	0	Less than 1.0	No Conclusion

Facility Name	Observed Number of IVAC Plus Events	Predicted Number of IVAC Plus Events	How Does This Facility Compare to the National Experience?
Greenville Memorial Hospital	55	43.5	= Same
Greer Memorial Hospital	0	Less than 1.0	No Conclusion
Hampton Regional Medical Center	0	Less than 1.0	No Conclusion
Hillcrest Memorial Hospital	0	Less than 1.0	No Conclusion
KershawHealth Medical Center	3	Less than 1.0	No Conclusion
Lexington Medical Center	15	10.8	= Same
Mary Black Health System Gaffney	1	Less than 1.0	No Conclusion
Mary Black Health System, LLC	1	1.1	= Same
McLeod Clarendon Health System	0	Less than 1.0	No Conclusion
McLeod Health Cheraw	0	Less than 1.0	No Conclusion
McLeod Loris	0	Less than 1.0	No Conclusion
McLeod Medical Center - Dillon	0	Less than 1.0	No Conclusion
McLeod Regional Medical Center	37	26.9	= Same
McLeod Seacoast	0	Less than 1.0	No Conclusion
Medical University of South Carolina Medical Center	85	52.2	×Worse
Mount Pleasant Hospital	0	Less than 1.0	No Conclusion
Newberry County Hospital	0	Less than 1.0	No Conclusion
North Greenville Long Term Acute Care Hospital	1	Less than 1.0	No Conclusion
Oconee Medical Center	0	Less than 1.0	No Conclusion
Palmetto Health Baptist	9	2.5	×Worse
Palmetto Health Baptist Parkridge	4	Less than 1.0	No Conclusion
Palmetto Health Richland	50	35.9	×Worse
Pelham Medical Center	0	Less than 1.0	No Conclusion
Piedmont Medical Center	3	3	= Same

Facility Name	Observed Number of IVAC Plus Events	Predicted Number of IVAC Plus Events	How Does This Facility Compare to the National Experience?
Regional Medical Center of Orangeburg and Calhoun Counties	1	3.3	= Same
Roper Hospital	10	5.5	= Same
Self Regional Healthcare	2	4.5	= Same
Spartanburg Hospital for Restorative Care	2	Less than 1.0	No Conclusion
Spartanburg Medical Center	35	30	= Same
Springs Memorial Hospital	0	1.2	= Same
Summerville Medical Center	2	1.0	= Same
Tidelands Georgetown Memorial hospital	0	1.4	= Same
Tidelands Waccamaw Community Hospital	0	1.2	= Same
Trident Medical Center	16	9.4	×Worse
Tuomey Healthcare System	0	1.8	= Same
Union Medical Center	0	Less than 1.0	No Conclusion

Appendix D

ASA PHYSICAL STATUS CLASSIFICATION SYSTEM Last approved by the ASA House of Delegates on October 15, 2014 Current definitions and Examples

Classification	Definition	Examples, including, but not limited to:
ASA, I	A normal healthy patient	Healthy, non-smoking, no or minimal alcohol use
ASA II	A patient with mild systemic disease	Mild diseases only without substantive functional limitations. Examples include (but not limited to): current smoker, social alcohol drinker, pregnancy, obesity (30 <bmi<40), disease<="" dm="" htn,="" lung="" mild="" th="" well-controlled=""></bmi<40),>
ASA III	A patient with severe systemic disease	Substantive functional limitations; One or more moderate to severe diseases. Examples include (but not limited to): poorly controlled DM or HTN, COPD, morbid obesity (BMI ≥40), active hepatitis, alcohol dependence or abuse, implanted pacemaker, moderate reduction of ejection fraction, ESRD undergoing regularly scheduled dialysis, premature infant PCA < 60 weeks, history (>3 months) of MI, CAD/stents.
ASA IV	A patient with severe systemic disease that is a constant threat to life	Examples include (but not limited to): recent (<3 months) MI, CVA, TIA, or CAD/stents, ongoing cardiac ischemia or severe valve dysfunction, severe reduction of ejection fraction, sepsis, DIC, ARD or ESRD not undergoing regularly scheduled dialysis
ASA V	A moribund patient who is not expected to survive without the operation	Examples include (but not limited to): ruptured abdominal/thoracic aneurysm, massive trauma, intracranial bleed with mass effect, ischemic bowel in the face of significant cardiac pathology or multiple organ/system dysfunction
ASA VI	A declared brain-dead patient whose organs are being removed for donor purposes	

^{*}The addition of "E" denotes Emergency surgery:

(An emergency is defined as existing when delay in treatment of the patient would lead to a significant in the threat to life or body part)