# Healthcare-Associated Infections in North Carolina

2012 Annual Report
Healthcare Provider Version

N.C. Department of Health and Human Services



# Introduction

The U.S. Centers for Disease Control and Prevention estimates that 5 percent of all hospital admissions result in a healthcare-associated infection, culminating in approximately 1.7 million infections and 99,000 deaths each year¹ as well as \$28–\$33 billion in excess costs.² In North Carolina, a minimum of 100 individuals per acute care hospital contract healthcare-associated infections each year, resulting in approximate direct costs to facilities ranging from \$124 million to \$348 million.³ These numbers likely underestimate the true burden of healthcare-associated infections because they include only a subset of acute care hospitals and healthcare-associated infections.

The prevention of healthcare-associated infections is a public health priority in North Carolina and is a collaborative effort among the healthcare and public health communities. This April 2013 Healthcare-Associated Infections Quarterly Report is an important product of this collaboration. Included in this report is information about infections occurring in North Carolina short-term acute care hospitals, long-term acute care hospitals, and inpatient rehabilitation facilities during January 1 – December 31, 2012. Data included in this report are preliminary and subject to change.

This report focuses on three important types of healthcare-associated infections that may occur while patients are hospitalized: central line-associated bloodstream infections, catheter-associated urinary tract infections, and surgical site infections (specifically those following abdominal hysterectomies or colon surgeries). These three types of infections account for a large proportion of illnesses and deaths attributed to healthcare, but they do not represent the full spectrum of healthcare-associated infections. Information about other types of healthcare-associated infections – including those caused by methicillin-resistant *Staphylococcus aureus* and by *Clostridium difficile* – will be included in future reports.

This report was prepared by the Healthcare-Associated Infections Prevention Program located in the Communicable Disease Branch of the Epidemiology Section of the North Carolina Division of Public Health. The N.C. Healthcare-Associated Infections Prevention Program works to eliminate preventable infections in health care settings by:

- 1. Conducting statewide surveillance for selected HAIs;
- 2. Providing useful, unbiased information to health care providers and consumers;
- 3. Promoting and coordinating prevention efforts; and
- 4. Responding to outbreaks in health care settings.

We hope that the information in this report will be useful to providers. Data are intended to provide an understanding of the burden of healthcare-associated infections in North Carolina. Furthermore, providers can use these data to assess their hospital's healthcare-associated infections burden in conjunction with other healthcare facilities. This may help to identify potential resources and opportunities to strengthen their hospital's healthcare-associated infections prevention program. Prevention tips on healthcare-associated infections are also provided (Appendix C). A separate healthcare consumer version is also available at <a href="http://epi.publichealth.nc.gov/cd/diseases/hai">http://epi.publichealth.nc.gov/cd/diseases/hai</a>.

We welcome your feedback to improve the usefulness of future reports (<a href="nchai@dhhs.nc.gov">nchai@dhhs.nc.gov</a>). For more information on Healthcare-Associated Infections and the N.C. Healthcare-Associated Infections Prevention Program, please visit <a href="http://epi.publichealth.nc.gov/cd/diseases/hai">http://epi.publichealth.nc.gov/cd/diseases/hai</a>.

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<sup>&</sup>lt;sup>1</sup> Klevens RM, Edwards JR, Richards CL, Jr., et al. Estimating health care-associated infections and deaths in U.S. hospitals, 2002. *Public Health Rep.* Mar-Apr 2007;122(2):160-166. Available at <a href="http://www.cdc.gov/hai/burden.html">http://www.cdc.gov/hai/burden.html</a>.

<sup>&</sup>lt;sup>2</sup> Scott R. The Direct Medical Costs of Healthcare-Associated Infections in U.S. Hospitals and the Benefits of Prevention. Internal Report. Division of Healthcare Quality Promotion, National Center for Preparedness, Detection, and Control of Infectious Diseases, Coordinating Center for Infectious Diseases, Centers for Disease Control and Prevention; February 2009. Available at <a href="http://www.cdc.gov/hai/burden.html">http://www.cdc.gov/hai/burden.html</a>.

<sup>&</sup>lt;sup>3</sup> Anderson DJ, Pyatt DG, Weber DJ, Rutala WA; North Carolina Department of Public Health HAI Advisory Group. Statewide costs of health care-associated infections: Estimates for acute care hospitals in North Carolina. *Am J Infect Control.* 2013 Feb 27. pii: S0196-6553(13)00063-1. doi: 10.1016/j.ajic.2012.11.022. [Epub ahead of print]

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The Healthcare-Associated Infection Prevention Program would also like to recognize the contributions of the Healthcare-Associated Infections Advisory Group members listed in Appendix D. In particular, the program is grateful to the Subgroup on Reporting and Surveillance for their thoughtful feedback on the presentation and content of the Quarterly Reports.

Finally, the program would like to acknowledge our partners who have been important leaders and strong supporters of surveillance and prevention programs for healthcare-associated infections in North Carolina. These include the North Carolina Hospital Association, the North Carolina Statewide Program for Infection Control and Epidemiology, the North Carolina Chapter of the Association for Professionals in Infection Control and Epidemiology, the Carolinas Center for Medical Excellence, and the Adult Care Licensure and Nursing Home Licensure and Certification sections of the North Carolina Division of Health Service Regulation.

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# I. Highlights of Healthcare-Associated Infections Activities in 2012

# A. Healthcare-Associated Infections Reporting

#### N.C. Healthcare-Associated Infections Prevention Program Highlights

Key accomplishments and activities of the North Carolina Healthcare-Associated Infections Prevention Program (N.C. HAI Program) in 2012 include the following:

- 1. Transitioned to a mandatory surveillance program for healthcare-associated infections (HAI) effective January 1, 2012.
  - The permanent version of the North Carolina Administrative Code rule (10A North Carolina Administrative Code 41A .0106) specifying requirements for reporting of healthcare-associated infections from North Carolina hospitals was adopted by the Commission for Public Health on September 20, 2012 and became effective October 1, 2012.
- 2. Became the third state partner in the One & Only Campaign, a public health campaign led by the CDC and the Safe Injection Practices Coalition that aims to eradicate outbreaks resulting from unsafe injection practices by raising awareness among patients and healthcare providers about safe injection practices.
- 3. Released first public report on healthcare-associated infections on October 1, 2012, as required by the N.C. Administrative Code.
- 4. Participated or consulted in responses to more than 75 outbreaks in healthcare settings.

# N.C. Healthcare-Associated Infections 2012 Annual Summary

# **Central Line-Associated Bloodstream Infections (CLABSI)**

#### Adult and Pediatric Intensive Care Units (ICUs)

The overall North Carolina rate for CLABSIs in adult and pediatric ICUs from short-term acute care hospitals was 1.06 per 1,000 central line days.

- When compared to the national 2006-2008 baseline data, the number of reported CLABSIs in N.C. was statistically significantly lower than predicted by the baseline data.
- The most commonly identified organisms from adult and pediatric CLABSI patients were *Candida* and other yeasts/fungi and *Enterococcus*.

#### Neonatal Intensive Care Units (NICUs)

The statewide CLABSI rate for NICUs in short-term acute care hospitals was 0.84 per 1,000 central line days.

- The number of reported CLABSI infections was statistically significantly lower than predicted by the national 2006-2008 baseline data.
- *Staphylococcus* species (*Staphylococcus aureus* and *Staphylococcus* coagulase negative) were the most commonly identified organisms from neonatal CLABSI patients.

#### **Catheter-Associated Urinary Tract Infections (CAUTI)**

In North Carolina, the rate of CAUTI in adult and pediatric ICUs in short-term acute care hospitals was 2.31 per 1,000 catheter days.

- When compared to the national 2009 baseline data, the number of reported CAUTI infections was statistically significantly higher than predicted.
- The most commonly identified organisms were *Candida* and other yeasts and *E. coli*.

#### **Surgical Site Infections (SSI)**

# Post Abdominal Hysterectomy

Among inpatient abdominal hysterectomies performed on females  $\geq$  18 years in North Carolina short-term acute care hospitals, the SSI rate was 0.67 per 100 inpatient abdominal hysterectomies.

- Based on the 2006-2008 national baseline data, the number of reported SSIs was statistically significantly lower than predicted.
- A variety of organisms were identified from SSIs.

#### Post Colon Surgery

For inpatient colon surgeries performed on adults ( $\geq$  18 years) in North Carolina short-term acute care hospitals, the SSI rate was 2.41 per 100 inpatient colon surgeries.

- The reported number of SSIs was statistically significantly lower than predicted based on the 2006-2008 national baseline data.
- Escherichia coli (E. coli) and Enterococcus species were the most commonly identified organisms.

#### North Carolina 2012 HAI Rates and National 2011 HAI Rates

The results in this report were not directly comparable to those of the most recent 2011 national numbers published by NHSN for CLABSI and CAUTI (<a href="http://www.cdc.gov/nhsn/PDFs/dataStat/2011-NHSN-DataSummary.pdf">http://www.cdc.gov/nhsn/PDFs/dataStat/2011-NHSN-DataSummary.pdf</a>) or SSIs (<a href="http://www.cdc.gov/hai/pdfs/SIR/SIR-Report 02 07 2013.pdf">http://www.cdc.gov/hai/pdfs/SIR/SIR-Report 02 07 2013.pdf</a>). Data collection methods and protocols differed which may have led to important differences between the two populations. However, data in these reports provided a general context in which the N.C. 2012 rates could be viewed.

The tables below summarize the N.C. 2012 rates and the national 2011 HAI rates. For most HAIs, the rates were generally similar to one another in their direction (both rates above or below 1.0) and magnitude (both rates close to 1.0 or far from 1.0).

CLABSI			
	Adult/Pediatric ICUs	NICUs Level III	NICUs Level II/III
2012 North Carolina	1.06 per 1,000 central	0.94 per 1,000 central	0.70 per 1,000 central
	line days	line days	line days
2011 United States	1.09 per 1,000 central	1.55 per 1,000 central	1.41 per 1,000 central
	line days	line days	line days

CAUTI		
Adult/Pediatric ICUs		
2012 North Carolina	2.31 per 1,000 catheter days	
2011 United States	1.94 per 1,000 catheter days	

SSIs		
	Abdominal hysterectomies	Colon surgery
2012 North Carolina	0.67 per 100 inpatient surgeries	2.41 per 100 inpatient surgeries
2011 United States	0.64 per 100 inpatient surgeries	2.40 per 100 inpatient surgeries

# B. Statewide Efforts in Preventing and Reducing Healthcare-Associated Infections in North Carolina

# **Healthcare-Associated Infections Partner Updates**

#### North Carolina Statewide Program for Infection Control and Epidemiology (N.C. SPICE)

The North Carolina Statewide Program for Infection Control and Epidemiology (N.C. SPICE) promotes prevention and control of healthcare-associated infections in North Carolina and beyond by providing evidence-based education and consultation across the healthcare spectrum. In 2012, N.C. SPICE trained 274 healthcare professionals through infection control courses for long term care and acute care settings. Additionally, an estimated 1,000 healthcare professionals obtained N.C. SPICE infection control training through the N.C. SPICE .0206 infection control curriculum. In addition, N.C. SPICE provided consultation to more than 550 inquiries. Also in 2012, N.C. SPICE was awarded funding through a partnership between The Centers for Medicaid and Medicare Services and the N.C. Division of Health Services Regulation for enhanced education of infection prevention in nursing homes. N.C. SPICE will develop a series of four modules that can be accessed via a new website: SPICEducation.unc.edu, or on DVD. The module topics are: antibiotic resistant bacteria, isolation precautions, injection safety and glucometer care, and environmental disinfection. Looking forward, N.C. SPICE will develop additional e-learning opportunities through SPICEducation.unc.edu, and the N.C. SPICE quarterly e-newsletter, Infection Control Report.

#### North Carolina Chapter of the Association for Professionals in Infection Control (APIC-NC)

The North Carolina Chapter of the Association for Professionals in Infection Control and Epidemiology (APIC-NC) is the leading professional association for infection preventionists (IP). Its mission is to create a safer world through the prevention of infections.

APIC-NC boasts more than 200 members consisting of nurses, physicians, public health professionals, epidemiologists, microbiologists or medical technologists. Many infection preventionists are employed within healthcare institutions and also serve as educators, researchers, consultants and clinical scientists.

APIC-NC serves two primary roles in regard to its membership. First, educational programs support the infection prevention activities of the many patient safety stakeholders. Second, APIC-NC collaborates with other professional associations, consumer groups, thought leaders, and regulatory and accrediting agencies to maximize the synergy of shared interests and resources with the goal of improving patient outcomes.

In 2012, APIC-NC offered two educational sessions that consisted of the latest infection prevention information. The first session focused on the use of the NHSN for CAUTI and SSI surveillance. The second session provided strategies to assist IPs to achieve and maintain success in today's changing healthcare environment and incorporated the following relevant topics:

- HAIs
- current guidelines governing sterilization and disinfection;
- vaccine preventable diseases;
- · epidemiologically important microorganisms; and
- regulatory requirements impacting healthcare organizations.

# North Carolina Division of Health Service Regulation (DHSR)

#### **Adult Care Licensure Section (ACL)**

Healthcare-associated infections can occur in any healthcare setting, including adult care homes such as assisted living facilities. The North Carolina Division of Health Service Regulation's (DHSR) Adult Care Licensure (ACL) Section is an important partner in ensuring infection prevention strategies are implemented in these types of healthcare settings.

General statute §131D-4.4 and 4.5 specifies provisions specific for adult care homes including written infection prevention guidelines in facility policies and procedures, infection prevention training requirements for adult care home staff, and the establishment of guidelines for reporting communicable disease outbreaks to the North Carolina Division of Public Health (DPH). As a result of this statute, ACL developed a state infection prevention course for adult care homes and in April 2012, provided a state-wide training for care providers and county and state staff with regulatory responsibilities for adult care homes.

Collaboration among ACL, DPH and the local health departments has grown during 2012. During inspections of licensed adult care homes, the facility's compliance with infection prevention policies and procedures is reviewed. Noncompliance or breaches in infection prevention practices by facility staff when monitoring resident blood glucose levels are reported to the N.C. HAI Program, which shares information with the local health department. Guidelines for reporting and enhanced communication between DHSR and DPH have led to increased education of adult care providers, safe infection prevention practices, and appropriate testing of residents when potential exposures occur.

# **Nursing Home Licensure and Certification Section (NHLC)**

The Nursing Home Licensure and Certification Section (NHLC) regulates more than 430 nursing homes. In 2012, training and education of NHLC staff was a priority to provide basic knowledge in infection prevention practices and appropriate corrective action if infection prevention practices were inadequately implemented. The following infection prevention educational sessions were provided:

- 1. Annual training to all nursing home and acute care surveyors;
- 2. Dissemination of N.C. SPICE newsletter and routine updates to surveyors and nursing home administrators;
- 3. Centers for Medicaid and Medicare Services webinar was made available to all surveyors;
- 4. N.C. HAI Program summary updates;
- 5. CDC updates and other alerts from NHLC Regional Office disseminated to surveyors and nursing home administrators.
- 6. All staff from the Branch Mangers Quality Evaluative Systems attended the N.C. SPICE Infection Control in Nursing Homes;
- 7. Engaged in a partnership with the Centers for Medicaid and Medicare Services and N.C. SPICE to create a DVD series on infection prevention. The first DVD on hand washing is available and will be offered at no cost to all N.C. nursing homes.

# The Carolinas Center for Medical Excellence (CCME)

#### North Carolina Quality Improvement Organization (QIO)

Through the Improving Individual Patient Care aim, the Carolinas Center for Medical Excellence (CCME) is working with the Centers for Medicare & Medicaid Services to improve individual patient care. Specifically, CCME and Quality Improvement Organizations (QIOs) across the country are assisting hospitals with reducing the following HAIs:

- CLABSI The goal is to meet one of the following:
  - 1. CLABSI rate ≤1 per 1,000 patient days
  - 2. Relative Improvement Rate = 50%
  - 3. Standardized Infection Ratio (SIR) ≤1
- CAUTI The objective is a SIR ≤1.
- *Clostridium difficile* infections (CDI) The goal is that all facilities will have an Antimicrobial Stewardship Program in place by August 31, 2013.
- SSI The objective is for all facilities to receive SSI prevention tools and report on current or intended SSI prevention projects.

CCME assist hospitals in implementing best practices to reduce HAIs through ongoing support and education. To date, CCME have recruited 14 hospitals across the state, targeted because of their need for improvement. CCME work with five units within four hospitals for CLABSI, seven hospitals for CAUTI, and four hospitals for CDI.

Aggregate data demonstrates the current progress towards meeting collaborative goals:

- CLABSI rate has improved from 2.62 to 1.37 per 1,000 patient days (48% relative improvement) and SIR of 1.21 is moving towards the program goal of ≤1.
- CAUTI SIR of 1.41 is moving towards the program goal of  $\leq$ 1.

Quarterly educational webinars and one in-person learning session were provided to participating hospitals. These educational sessions included topics such as "Comprehensive Unit-based Safety Program (CUSP)", "The Science of Safety, Engaging Senior Leaders in the Frontline of Care", "Defect Analysis", "Interventions to Prevent CAUTI – Focus on Avoiding Unnecessary Catheter Placement", and CDC guidelines for preventing HAIs. Needs assessments for each hospital were performed through monthly coaching calls and quarterly site visits. Team discussions included data, defect analysis and/or plan, do, study, act (PDSA) cycles, tools and resources, and shared successes, barriers, and challenges. CCME partnered with the NC Quality Center and facilitated an advisory board to provide education and network opportunities to participating hospitals.

#### North Carolina Hospital Association (NCHA)

#### N.C. Center for Hospital Quality and Patient Safety

The North Carolina Quality Center (NCQC) is committed to partnering with healthcare providers and communities to provide safe, quality healthcare and to prevent HAIs. Towards this mission, the NCQC has recently engaged in the following HAI prevention projects:

#### North Carolina-Virginia Hospital Engagement Network Healthcare-associated Infections Learning Network

This learning network will extend into 2013 and addresses prevention strategies for CAUTI, CLABSI, ventilator-associated events, and two types of SSIs: colon surgery and abdominal hysterectomy. There are 49 North Carolina and 20 Virginia hospitals participating in this learning network. The following partners are engaged to deliver this learning network: Virginia Hospital and Healthcare Association, Virginia Department of Public Health, North Carolina Division of Public Health, the Carolinas Center for Medical Excellence, Virginia Health Quality Center, APIC-NC and APIC-VA.

# North Carolina-Virginia Hospital Engagement Network Safe Surgery Collaborative

Beginning in early 2012, the focus of this collaborative was on prevention of perioperative complications, including prevention of surgical site infections. Partners in this collaborative include the Harvard School of Public Health and the Virginia Hospital and Healthcare Association. This collaborative has been endorsed by the NC Association of periOperative Registered Nurses (AORN), the NC Chapter of the American College of Surgeons, the NC Orthopedic Association, and the NC Society of Anesthesiologists.

#### N.C. Prevent CLABSI Collaborative

Targeting Zero

With the goal of reducing CLABSI rates, 10 N.C. hospitals (14 nursing units) participated in this collaborative from August 2011 through December 2012. Units housing patients at high risk for acquiring infections such as oncology and trauma participated. At the end of 2012, these 14 units saw a 28 percent decrease in CLABSIs; many had a zero CLABSI rate during the last six months of the collaborative. Ongoing monitoring for sustainability and progress will occur. Partners in this collaborative were the Carolinas Center for Medical Excellence, North Carolina Division of Public Health, APIC-NC, and the Southern Atlantic Healthcare Alliance.

#### Stories of Success in Eliminating and/or Reducing Healthcare-Associated Infections in North Carolina

#### One Hospital's Road to Zero CLABSIs

Working with the N.C. Prevent CLABSI Collaborative, the Vascular Access Safety Team at CaroMont Health in Gastonia reduced CLABSI rates to zero across all of their ICUs for the last six months of the collaborative with the following strategies:

- Implemented the Institute for Healthcare Improvement Central Line Insertion Bundle. (A bundle is a group of best practices for healthcare providers and evidence-based interventions for patients that, when implemented together, result in better outcomes than when implemented individually.)
- Initiated house-wide, staff education and incorporated annual competencies for central lines into applicable staff positions.
- Implemented a maintenance bundle in 2011 when it was recognized that CLABSIs were occurring, on average, ten days after line insertion, indicating the infection was most likely happening after line insertion. The bundle included: strict hand hygiene when the central line was entered or manipulated; scrubbing hubs/ports with a sterile 70 percent isopropyl alcohol wipe for at least 15 seconds prior to entering or accessing; and ensuring all ports were capped at all times. Cap styles were changed and standardized throughout the hospital to promote better disinfection.
- Ensured line dressing changes were performed according to current evidence-based policy.
- Instituted daily patient rounds to assess necessity of medical devices such as central lines.
- Ensured blood specimens were consistently drawn per current scientific evidence-based recommendations.

As a result of a cluster of CLABSIs in 2012 and the N.C. Prevent CLABSI conference in May 2012, an interventional patient hygiene strategy of bathing with the antimicrobial solution chlorhexidine gluconate was implemented. A cost analysis showed the cost-per-bath would increase by \$4.68 for the chlorhexidine gluconate bathing but this would be offset by an estimated cost savings of \$114,695 if CLABSI rates decreased to zero. The Vascular Access Safety Team implemented a three-month pilot in their surgical ICU during which no CLABSIs were identified. Chlorhexidine gluconate bathing protocols were implemented house-wide. CLABSI rates fell to zero from July through December 2012 in all four of CaroMont Health's ICUs. The team credited strong support from the organization and the Chief Medical Officer.

Contact David Avalos, BSN, RN, OCN, CaroMont Infection Preventionist: <u>AvalosD@CaroMontHealth.org</u>. - *Excerpted from N.C. Quality Highlights, Feb. 2013. N.C. Center for Hospital Quality and Patient Safety* 

#### How One Emergency Department Made a Huge Difference in Urinary Catheter Utilization

Many facilities have been working to engage their Emergency Departments in the efforts to prevent CAUTIs. However, few have achieved the level of success in avoiding catheter use as the emergency department team at Carteret General Hospital in Morehead City.

In 2010, Carteret General data showed that most urinary catheters were inserted in the emergency department. Work was already being done in the hospital's inpatient wards to eliminate CAUTIs, primarily by ensuring catheters were placed only when clinically indicated.

In October 2010, emergency department staff began analyzing how they could make sure each catheter was needed. Over the next several months, significant changes were made related to catheter insertions in the emergency department. The same clinical criteria developed by the inpatient departments were implemented in the emergency department. By May 2011, emergency department catheter insertions had decreased by 76 percent.

Commitment and collaboration by all emergency department nurses and physicians, emergency department director, hospital quality specialist and other administrators, was essential. Barriers were encountered, yet were overcome through collaboration. One such example was limited bathrooms in the emergency department and "old" habits of placing a catheter to obtain urine specimens. Patient-centered solutions included providing urine specimen cups to patients in triage so that a urine specimen could be obtained while waiting; purchasing additional bedside commodes; and developing a protocol for obtaining urine specimens calling for an in-and-out catheter to obtain the specimen versus insertion of a longer-term catheter.

Building trust with administrators and co-workers was critical to this effort. Their tips included:

- Provide accurate, actionable data in a timely manner.
- Do your homework. All recommendations must be based on sound science and common sense.
- Be consistent over time.
- Learn to listen.
- Collaborate for a solution, keeping it practical.
- Do not hesitate to tap into others' expertise and to lend yours when appropriate.
- Keep the welfare of the patient central to all discussions and decisions.

For more information, contact Kathy Salter, RN, Infection Preventionist, Carteret General Hospital, <a href="mailto:kfsalter@CCGH.org">kfsalter@CCGH.org</a>.
- Excerpted from N.C. Quality Highlights, Oct. 2011. N.C. Center for Hospital Quality and Patient Safety

# II. Surveillance for Healthcare-Associated Infections in North Carolina

HAIs are infections caused by a variety of organisms, including bacteria and fungi, while receiving medical care. Hospitals report specific types of HAIs to the N.C. DPH. These infections include central line-associated bloodstream infections (CLABSI), catheter-associated urinary tract infections (CAUTI), and surgical site infections (SSI) occurring after inpatient abdominal hysterectomies or colon surgeries. Currently, these infections are only reported for patients in the hospital and not for patients in outpatient settings such as clinics, outpatient surgery centers or dialysis facilities.

By North Carolina law, hospital reporting requirements are based on the reporting requirements established by the CMS. The first HAI reporting requirement went into effect on January 1, 2012, when short-term acute care hospitals (ACHs) began reporting CLABSIs, CAUTIs and SSIs. Long-term acute care hospitals (LTACs) began reporting CLABSIs and CAUTIs in October 2012. Likewise inpatient rehabilitation facilities (IRFs) began reporting CAUTIs in October 2012. In January 2013, ACHs, state psychiatric hospitals, and specialty hospitals began reporting laboratory confirmed bloodstream infections caused by methicillin-resistant *Staphylococcus aureus* (MRSA) and infections caused by *Clostridium difficile* (*C. diff*). This 2013 information will be included in future quarterly reports.

HAI information is entered into the CDC web-based surveillance system called the National Healthcare Safety Network (NSHN). These data are shared with the N.C. HAI Program within N.C. DPH through an agreement with hospitals that satisfies the reporting requirements of CMS and the N.C law. Infections should be reported within 30 days following the end of the month in which they are identified. Additionally, the denominator data such as the number of central line days, catheter days, abdominal hysterectomies, and colon surgeries must also be reported within 30 days of the end of a calendar month. The N.C. HAI Program works with hospitals on a monthly basis to reconcile their data. At the beginning of each month, the N.C. HAI Program generates hospital-specific data reports to share with each hospital. Hospitals are given 30 days from the receipt of the reconciliation report to review and update any errors in NHSN. All data in NHSN are entered and modified by hospitals; the N.C. HAI Program cannot change data in NHSN.

To learn more about CLABSIs, CAUTIs, SSIs and other HAIs please visit the N.C. Healthcare-Associated Infections website at <a href="http://epi.publichealth.nc.gov/cd/diseases/hai.html">http://epi.publichealth.nc.gov/cd/diseases/hai.html</a>. In addition to information about specific infections, there is a link to "Facts and Figures" which includes previous Quarterly Reports. The October 2012 Quarterly Report (<a href="http://epi.publichealth.nc.gov/cd/hai/figures/hai oct2012.pdf">http://epi.publichealth.nc.gov/cd/hai/figures/hai oct2012.pdf</a>), contains background information on HAI surveillance in North Carolina and detailed information on statistics commonly used to describe and summarize HAIs.

# III. Healthcare-Associated Infections Data, 2012

A total of 99 North Carolina hospitals reported HAIs in 2012, including 88 short-term acute-care hospitals, nine long-term acute-care hospitals and two inpatient rehabilitation facilities.

Data included in this report were from January 1 to December 31, 2012. Data were downloaded from NHSN on March 12, 2013; any changes made to the 2012 data after this date are not reflected in this report. Before reviewing this report, a few clarifications about the data need to be made:

- 1. The data are <u>preliminary</u>. Although efforts were made by hospitals and the N.C. HAI Program to ensure that the data were accurate and complete, a formal validation of the data has not yet been performed. Data validation is a process by which data from hospitals are carefully reviewed to ensure that they meet established criteria and standards for reporting. If these criteria and standards are not met, over-reporting or under-reporting of infections, device (i.e., central line, catheter) days, and procedures can occur, giving a distorted presentation of what is occurring in the hospital. Until data validation is completed, data are preliminary and should be interpreted with caution. Collaboration with partners is anticipated to discuss data validation options.
- 2. The data were self-reported. Although efforts were made through education and training to improve understanding of NHSN surveillance guidelines, definitions and criteria, there can be variability in interpretation and application, leading to differences in reporting practices among hospitals. This issue will be addressed by data validation.
- 3. The rates of infections were not included for HAIs in a few facilities. Approximately 25 percent of reporting hospitals in N.C. were small hospitals with less than 100 beds. These hospitals were likely to have low numbers of denominator data central line days, catheter days, and surgeries. Calculating rates with small numbers in the denominator will lead to an unstable estimate. The difference in rates with the addition of one or two HAI events can be quite pronounced when denominators are small; however, little or no difference when the denominator is large. Therefore the N.C. HAI Program chose to present only the actual number of infections for units and wards, hospitals, and/or surgeries that did not meet a minimum threshold value for the reporting period; rates were not presented. The minimum threshold numbers for the reporting period are based on CDC recommendations for reporting healthcare-associated infection data:
  - Central line-associated bloodstream infections: 50 central line days;
  - Catheter-associated urinary tract infections: 50 catheter days; and
  - Surgical site infections: 20 surgeries.

# IV. Overview of Statewide Aggregate Healthcare-Associated Infections Data

The April quarterly report serves as the 2012 annual report for HAIs, therefore aggregate data at the state-level have been included. Data for CLABSIs and CAUTIs were restricted to ICUs within ACHs; information from rehabilitation wards in ACHs, LTACs and IRFs were excluded from this section of the report (Sections IV-V) but are included in the hospital-specific summary reports (Sections VI-VII).

The following section describes information presented in Section V.

#### **CLABSIs** in Neonatal Intensive Care Units

CLABSIs were reported from adult and pediatric ICUs as well as neonatal ICUs (NICUs). In Section V, CLABSIs in adult and pediatric ICUs were summarized separately from NICUs. Both umbilical catheters and non-umbilical central lines were included in the count of central lines. Infection information for NICUs were reported separately as neonates, particularly those with low birthweights (<2500 grams), represent the most vulnerable patient population in healthcare settings. Neonates hospitalized for extended periods of time and who undergo numerous invasive procedures are most susceptible to HAIs.

#### Organisms and Antibiotic Susceptibility Testing

In NHSN, hospitals may report up to three organisms identified from a HAI. These organisms were categorized into one of ten groups: *Candida* & other yeasts/fungi, *Enterobacter, Enterococcus, Escherichia coli (E. coli), Klebsiella, Pseudomonas, Staphylococcus aureus, Staphylococcus* coagulase negative, and two "other" categories – Other Gram-Positive Bacteria and Other Gram-Negative Bacteria. The first eight categories or organisms listed represent the leading causes of HAIs.<sup>4</sup> Many of these organisms are part of the normal flora contained within the human body, found on the skin, or in the gastrointestinal and/or urinary tract. Introduction of these organisms into other areas of the body can lead to infection.

Antibiotic-resistant organisms such as methicillin-resistant *Staphylococcus aureus* (MRSA), vancomycin-resistant *Enterococcus* (VRE), and carbapenem-resistant Enterobacteriaceae (CRE) are organisms that have become resistant to certain antibiotics. In general, these antibiotic resistant organisms are most often detected in specialized healthcare settings, such as ICUs, where patients are hospitalized for extended periods of time, treated with multiple antibiotics and have weakened immune systems, therefore making them more vulnerable to infections.

Facilities entered limited antibiotic susceptibility information into NHSN. Susceptibility testing results were entered as susceptible (S), intermediate (I), resistant (R), or not tested. Antibiotic resistant organisms were classified according to NHSN guidance as follows:

- 1. CRE: any Enterobacteriaceae that was intermediate (I) or resistant (R) to imipenem, meropenem or doripenem;
- 2. MRSA: Staphylococcus aureus resistant (R) to oxacillin, cefoxitin, or methicillin; and
- 3. VRE: any *Enterococcus* species resistant (R) to vancomycin.

Currently, several laboratory methods exist for antibiotic susceptibility testing, including available tests and sensitivity breakpoints. As such, hospitals reported varied laboratory capability and testing methods. Testing for antibiotic susceptibility may be routine at some hospitals while rarely performed at others. As a standardized approach to antibiotic susceptibility testing across clinical laboratories does not exist, data on antibiotic resistance organisms in this report should be interpreted with caution.

#### **Bar Charts**

Bar charts were used to present the rates of HAIs by unit type (CLABSI and CAUTI only) and hospital groups (all HAIs). For CLABSIs and CAUTIs, the rate by unit type and hospital groups was calculated by summing the number of HAIs in each category and dividing by the total number of device days (central line or catheter days) within the category. This was then multiplied by 1,000 to get "per 1,000 device days." If the minimum threshold number of 50 device days was not met, then a rate was not calculated. Likewise for SSIs, the rate by hospital groups was calculated as the total number of SSIs in each category divided by the total number of procedures within the category and then multiplied by 100 to get "per 100 procedures". If <20 procedures were performed, a rate was not calculated.

In addition to the rates, the lower limit and upper limit of the 95% confidence intervals (CIs) were presented in the bar charts. The 95% CI is a useful measure to describe the precision of the estimate (the narrower the confidence interval, the more

<sup>&</sup>lt;sup>4</sup> Sievert DM, Ricks P, Edwards JR, Schneider A, Patel J, Srinivasan A, Kallen A, Limbago B, Fridkin S; National Healthcare Safety Network (NHSN) Team and Participating NHSN Facilities. Infect Control Hosp Epidemiol. 2013 Jan;34(1):1-14.

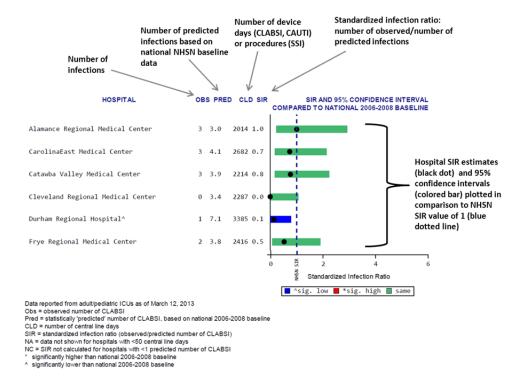
precise the estimate). The 95% CI can also be used for hypothesis testing. In the bar charts, the 95% CI can be used to test the hypothesis that there were no differences in the HAI rates between one category and another. If the 95% CIs of two HAI rates overlapped, then the observed differences in the rates were not considered statistically significantly different. However, if the 95% CIs of two HAI rates did not overlap, then the rates were considered to be statistically significantly different. If the rate was 0, the corresponding 95% CI was not presented.

The hospital groups were categorized by total hospital bed counts: less than 100 beds, 100-199 beds, 200-399 beds, and 400+ beds. Hospitals that served as the primary location for medical schools were included in a separate category (primary medical school affiliation). A list of the hospitals in each category can be found in Appendix E.

#### Standardized Infection Ratio (SIR) Plots

Standardized infection ratio (SIR) plots have been included for each HAI. This plot (Figure 1) summarizes information about HAIs for each hospital from January 1 to December 31, 2012, by hospital group. Each plot includes the names of hospitals, the number of reported infections, the number of predicted infections based on NHSN baseline data, the number of device days or procedures, SIRs, and the corresponding 95% CIs and interpretations.

Figure 1. Example of a Standardized Infection Ratio (SIR) Plot.



The predicted number of infections was calculated using rates from a standard population during a baseline time period. For CLABSI and SSI, the predicted number of infections was based on 2006-2008 NSHN national data. For CAUTI, the predicted number of infections was based on the 2009 NHSN national data.

The standardized infection ratio (SIR) was calculated by dividing the observed number of infections by the predicted number of infections. A SIR of 1.0 indicated that the number of observed and predicted infections was the same. If the SIR was greater than 1.0, the number of observed infections was greater than the number of predicted infections. If the SIR was less than 1.0, the number of observed infections was less than the number of predicted infections. If the number of predicted infections was less than 1, the SIR was not calculated because the number of device days or procedures was too low to calculate a precise SIR.

The 95% confidence interval (CI) corresponds to the SIR presented in the table. When the number of infections was 0, the lower bound of the 95% CI was not calculated. The 95% CI is a useful measure for precision – the wider the interval, the less precise the estimate. The 95% CI can also be used for hypothesis testing –that there were no differences in the numbers of observed and predicted infections. If the 95% CI included the value of 1, then there was no statistically significant difference between the numbers of observed and predicted infections. The green colored bars indicate those SIRs that are the "same" or not statistically different from 1. However, if the 95% CI did not include the NHSN SIR value of 1.0, then there was a

statistically significant difference in the number of observed and predicted infections. This may have been a significantly lower (blue bars) number of infections or a significantly higher (red bars) number of infections.

Detailed information on all of the measures included in the SIR plot can be found in the October 2012 Quarterly Report at http://epi.publichealth.nc.gov/cd/hai/figures/hai\_oct2012.pdf.

#### V. Statewide Aggregate Healthcare-Associated Infections

# A. Central Line-Associated Bloodstream Infections (CLABSI)

#### **Adult and Pediatric Intensive Care Units**

North Carolina 2012 CLABSI Highlights

#### Infections:

- 270 CLABSI infections in adult and pediatric ICUs were reported:
  - 254,968 central line days;
  - Rate of 1.06 CLABSIs per 1,000 central line days (95% CI: 0.93-1.19).
- The reported number of CLABSIs was significantly lower than the predicted 520 infections (SIR= 0.52; 95% CI: 0.46-0.59) based on 2006-2008 national baseline data.

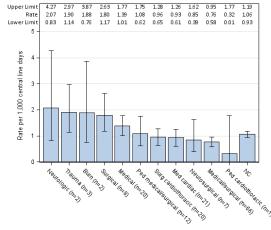
#### Facilities:

- 13 (15%) of 88 hospitals reported significantly lower numbers of CLABSI infections than predicted.
  - Eleven of these were larger hospitals including those affiliated with primary medical schools.

#### Organisms:

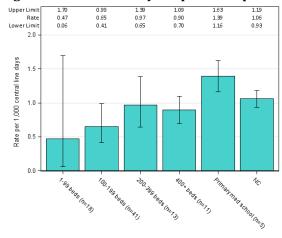
The most commonly identified organisms from CLABSI infections were Candida and other yeasts/fungi (22%) and Enterococcus (21%).

Figure 2. CLABSI rates by ICU Type.



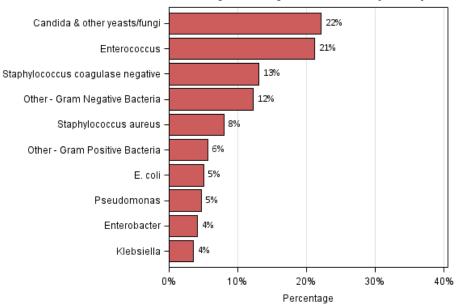
- Although the rates of CLABSIs in adult and pediatric ICUs in N.C. ranged from 0.32 to 2.07 per 1,000 central line days (Figure 2), these rates were not significantly different from statewide rates.
- The three highest observed rates of CLABSIs were in the specialized neurological, trauma and burn units. This observation was similar to the most recent published national 2011 data where burn and trauma units reported higher rates of CLABSIs than other units. Patients in these specialized units are at increased risk of acquiring infections due to severity of illness, major surgeries, and/or compromised immune systems.
- The lowest rate of CLABSIs was in the pediatric cardiothoracic unit. The observed rate in the national 2011 data was 1.6 CLABSIs per 1,000 central line days.

Figure 3. CLABSI rates by Hospital Groups.



- The rate of CLABSIs in adult and pediatric ICUs tended to increase with hospital group size (Figure 3), ranging from 0.49 to 1.39 CLABSIs per 1,000 central line days. The highest rate was among hospitals with primary medical school affiliations. These hospitals typically have the highest observed rates of CLABSI, because their patients are at higher risk of acquiring HAIs due to severity of illness, underlying health problems, major trauma or major surgical procedures.
- Despite the observed trend, CLABSI rates of the hospital groups were not significantly different from the overall state CLABSI rate.

Figure 4. Organisms identified from CLABSIs in adult and pediatric patients in ICUs (n=335).



- A total of 335 organisms were identified from 270 CLABSIs (Figure 4). More than one organism may have been identified from a CLABSI.
- The most commonly identified organisms were Candida and other yeasts/fungi (22%) and Enterococcus (21%).
- Serratia marcescens (20%) and Burkholderia cepacia. (17%) were the top two organisms among the 41 "Other Gram-Negative Bacteria".
- Streptococcus species (42%) were the most commonly reported organisms among the 19 "Other Gram-Positive Bacteria".
- All three antibiotic resistant organisms CRE, VRE, and MRSA were identified from CLABSI infections (Table 1). This represented 13% of the 335 organisms identified. Antibiotic-resistant organisms are an increasing source of infection among ICU patients. Patients with CLABSIs caused by antibiotic-resistant organisms are more likely to have longer hospital stays, and may be more likely to die as a result of the infection.

Table 1. Antibiotic resistant organisms identified from CLABSIs in adult and pediatric patients in ICUs.

Organism	Count (Percent)
Enterobacteriaceae	63 (100)
Carbapenem-resistant Enterobacteriaceae (CRE)	3 (5)
Enterococcus	71 (100)
Vancomycin-resistant Enterococcus (VRE)	30 (42)
Staphylococcus aureus	27 (100)
Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA)	12 (44)

The following SIR plots summarize CLABSI information for adult and pediatric ICUs in North Carolina hospitals by hospital groups (Appendix E).

Adult/Pediatric ICUs, January 1 - December 31, 2012 Hospital Group: Hospitals with Less than 100 Beds

HOSPITAL	OBS PRED	CLD SIR	SIR AND 95% CONFIDENCE INTERVAL COMPARED TO NATIONAL 2006-2008 BASELINE
Annie Penn Hospital	0 0.6	411 NC	
Anson Community Hospital		No ICU	
Blue Ridge Regional Hospital	0 0.2	117 NC	
Brunswick Community Hospital	1 0.5	351 NC	
Franklin Regional Medical Center	0 0.3	146 NC	
Granville Medical Center	0 0.6	404 NC	İ
Hugh Chatham Memorial Hospital	0 0.2	142 NC	
Martin General Hospital	0 0.4	280 NC	
MedWest-Harris Regional Hospital	0 0.7	493 NC	į
Medical Park Hospital		No ICU	
Murphy Medical Center	0 0.3	174 NC	
Presbyterian Hospital Huntersville	1 1.0	667 1.0	•
Sampson Regional Medical Center	0 0.1	79 NC	
Sandhills Regional Medical Center	0 0.5	254 NC	
The McDowell Hospital	0 0.2	159 NC	İ
Vidant Beaufort Hospital	0 0.2	126 NC	
Vidant Duplin Hospital	0 0.1	83 NC	
Wake Forest Baptist Health-Lexington MC	0 0.6	369 NC	į
		+	
			Standardized Infection Ratio
			<pre>^sig. low ■ *sig. high ■ same</pre>

Data reported from adult/pediatric ICUs as of August 16, 2013

Obs = observed number of CLABSI

Pred = statistically 'predicted' number of CLABSI, based on national 2006-2008 baseline

CLD = number of central line days

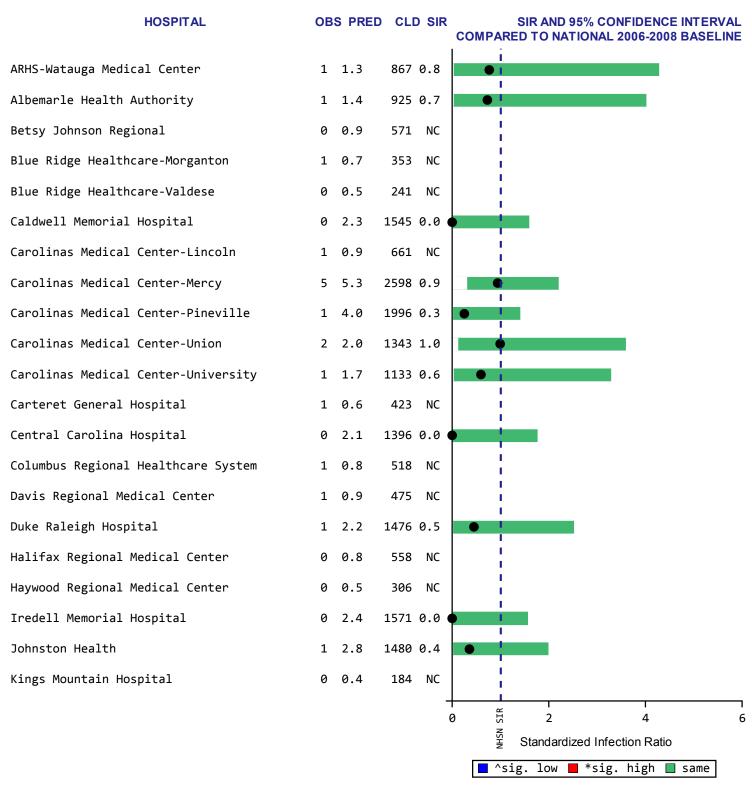
SIR = standardized infection ratio (observed/predicted number of CLABSI)

NA = data not shown for hospitals with <50 central line days

<sup>\*</sup> significantly higher than national 2006-2008 baseline

<sup>^</sup> significantly lower than national 2006-2008 baseline

Adult/Pediatric ICUs, January 1 - December 31, 2012 Hospital Group: Hospitals with 100-199 Beds



Data reported from adult/pediatric ICUs as of August 16, 2013

Obs = observed number of CLABSI

Pred = statistically 'predicted' number of CLABSI, based on national 2006-2008 baseline

CLD = number of central line days

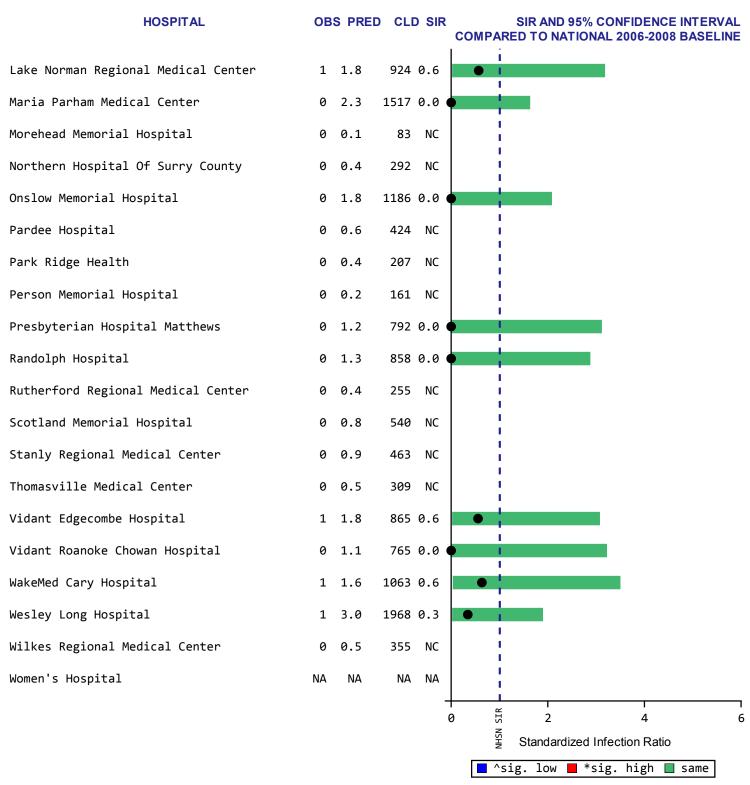
SIR = standardized infection ratio (observed/predicted number of CLABSI)

NA = data not shown for hospitals with <50 central line days

<sup>\*</sup> significantly higher than national 2006-2008 baseline

<sup>^</sup> significantly lower than national 2006-2008 baseline

Adult/Pediatric ICUs, January 1 - December 31, 2012 Hospital Group: Hospitals with 100-199 Beds



Data reported from adult/pediatric ICUs as of August 16, 2013

Obs = observed number of CLABSI

Pred = statistically 'predicted' number of CLABSI, based on national 2006-2008 baseline

CLD = number of central line days

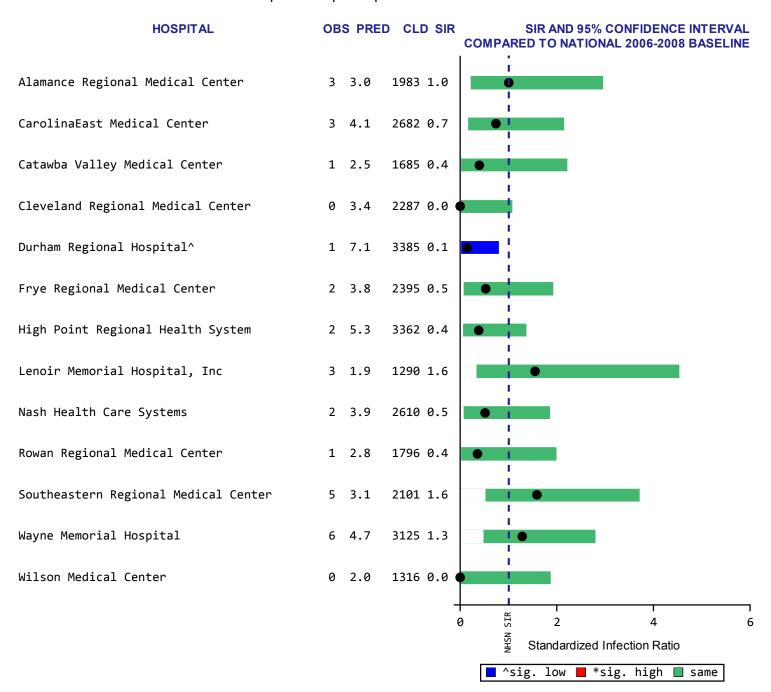
SIR = standardized infection ratio (observed/predicted number of CLABSI)

NA = data not shown for hospitals with <50 central line days

<sup>\*</sup> significantly higher than national 2006-2008 baseline

<sup>^</sup> significantly lower than national 2006-2008 baseline

Adult/Pediatric ICUs, January 1 - December 31, 2012 Hospital Group: Hospitals with 200-399 Beds



Data reported from adult/pediatric ICUs as of August 16, 2013

Obs = observed number of CLABSI

Pred = statistically 'predicted' number of CLABSI, based on national 2006-2008 baseline

CLD = number of central line days

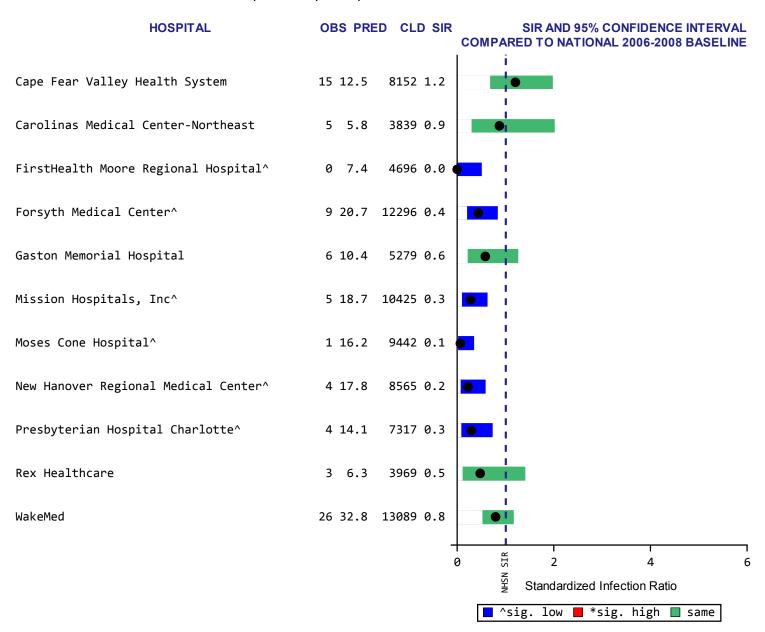
SIR = standardized infection ratio (observed/predicted number of CLABSI)

NA = data not shown for hospitals with <50 central line days

significantly higher than national 2006-2008 baseline

<sup>^</sup> significantly lower than national 2006-2008 baseline

Adult/Pediatric ICUs, January 1 - December 31, 2012 Hospital Group: Hospitals with 400 or More Beds



Data reported from adult/pediatric ICUs as of August 16, 2013

Obs = observed number of CLABSI

Pred = statistically 'predicted' number of CLABSI, based on national 2006-2008 baseline

CLD = number of central line days

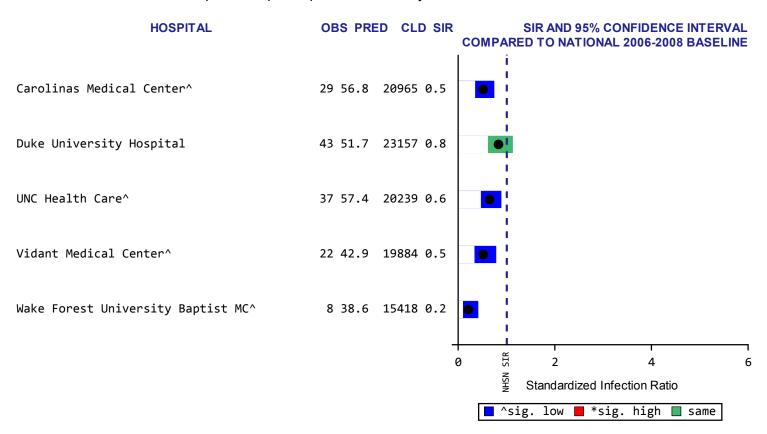
SIR = standardized infection ratio (observed/predicted number of CLABSI)

NA = data not shown for hospitals with <50 central line days

<sup>\*</sup> significantly higher than national 2006-2008 baseline

<sup>^</sup> significantly lower than national 2006-2008 baseline

Adult/Pediatric ICUs, January 1 - December 31, 2012 Hospital Group: Hospitals with Primary Medical School Affiliation



Data reported from adult/pediatric ICUs as of August 16, 2013

Obs = observed number of CLABSI

Pred = statistically 'predicted' number of CLABSI, based on national 2006-2008 baseline

CLD = number of central line days

SIR = standardized infection ratio (observed/predicted number of CLABSI)

NA = data not shown for hospitals with <50 central line days

- \* significantly higher than national 2006-2008 baseline
- ^ significantly lower than national 2006-2008 baseline

#### **Neonatal Intensive Care Units**

#### North Carolina 2012 CLABSI Highlights

#### Infections:

- 39 CLABSIs were reported from NICUs
  - 46,615 central line days;
  - Rate of 0.84 CLABSIs per 1,000 central line days (95% CI: 0.57-1.10).
- The number of observed CLABSIs in NICUs was significantly lower than the predicted 117 (SIR: 0.33; 95% CI: 0.24-0.45) based on 2006-2008 national baseline data.

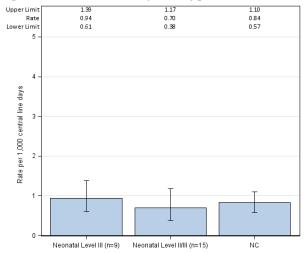
#### Facilities:

- Of the 24 hospitals with NICUs, six (25%) hospitals reported significantly lower numbers of CLABSI than predicted by 2006-2008 national baseline data.
- None of the hospitals reported significantly higher numbers.

#### Organisms:

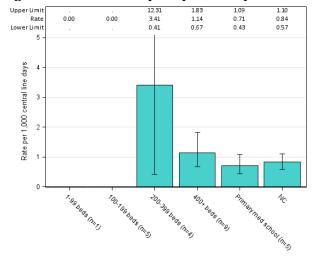
The most common organisms identified were Staphylococcus aureus and Staphylococcus coagulase negative.





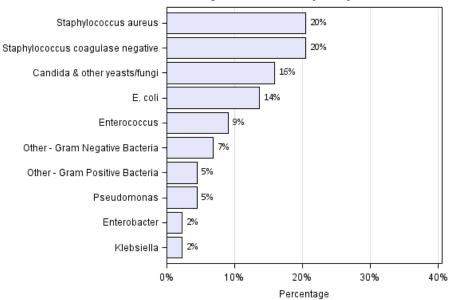
The CLABSI rates in the two types of NICUs, Level II/III and Level III, were not significantly different from the state CLABSI rate for all NICUs (Figure 5).

Figure 6. CLABSI rates by Hospital Groups.



- In Figure 6, no CLABSI infections were reported in NICUs of smaller hospitals (i.e., <200 beds); however, few smaller hospitals had NICUs.
- Although the CLABSI rate of NICUs in hospitals with 200-399 beds was the highest, it was not significantly different from the overall state NICU CLABSI rate. Likewise, the CLABSI rates in other hospital groups were not significantly different from the statewide NICU CLABSI rate.

Figure 7. Organisms identified from CLABSIs in neonatal patients in ICUs (n=44).



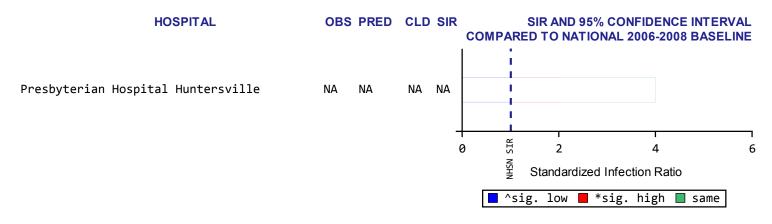
- As shown in Figure 7, 44 organisms were identified from the 39 reported NICU CLABSIs. More than one organism may have been identified from a CLABSI.
- The most commonly identified organisms were Staphylococcus species. Because Staphylococcus is very common in the environment and can colonize the skin, it is one of the most common causes of infections within NICUs. Hands of care givers (nurses, doctors, parents) can easily become contaminated with Staphylococcus and if hand hygiene is not performed properly, *Staphylococcus* can be transmitted to susceptible neonates.
- Streptococcus group B and C were the two identified "Other Gram-Positive Bacteria".
- Acinetobacter, Serratia, and an unspecified Gram-negative rod were the three identified "Other Gram-Negative Bacteria".
- MRSA was the only antibiotic-resistant organism identified among the reported CLABSI infections (Table 2).

Table 2. Antibiotic resistant organisms identified from CLABSIs in neonatal patients in ICUs.

Organism	Count (Percent)
Enterobacteriaceae	9 (100)
Carbapenem-resistant Enterobacteriaceae (CRE)	0 (0)
Enterococcus	4 (100)
Vancomycin-resistant Enterococcus (VRE)	0 (0)
Staphylococcus aureus	9 (100)
Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA)	3 (33)

The following SIR plots summarize CLABSI information for NICUs in North Carolina hospitals by hospital groups (Appendix E).

Neonatal ICUs, January 1 - December 31, 2012 Hospital Group: Hospitals with Less than 100 Beds



Data reported from adult/pediatric ICUs as of March 12, 2013

Obs = observed number of CLABSI

Pred = statistically 'predicted' number of CLABSI, based on national 2006-2008 baseline

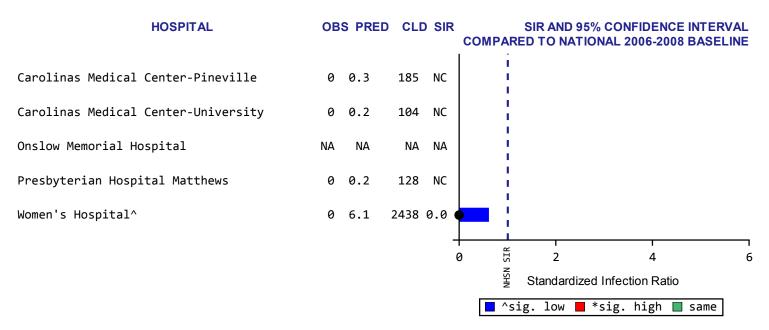
CLD = number of central line days

SIR = standardized infection ratio (observed/predicted number of CLABSI)

NA = data not shown for hospitals with <50 central line days

- significantly higher than national 2006-2008 baseline
- ^ significantly lower than national 2006-2008 baseline

Neonatal ICUs, January 1 - December 31, 2012 Hospital Group: Hospitals with 100-199 Beds



Data reported from adult/pediatric ICUs as of March 12, 2013

Obs = observed number of CLABSI

Pred = statistically 'predicted' number of CLABSI, based on national 2006-2008 baseline

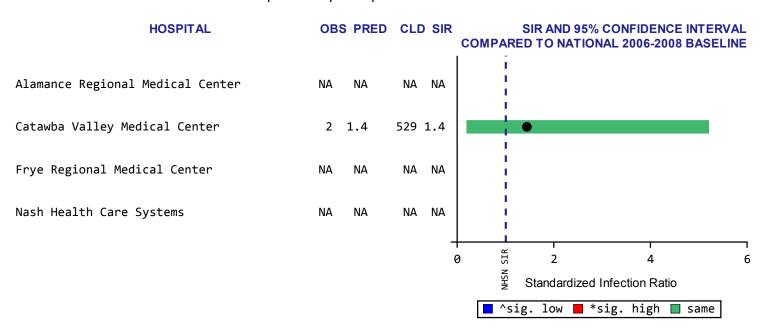
CLD = number of central line days

SIR = standardized infection ratio (observed/predicted number of CLABSI)

NA = data not shown for hospitals with <50 central line days

- significantly higher than national 2006-2008 baseline
- ^ significantly lower than national 2006-2008 baseline

Neonatal ICUs, January 1 - December 31, 2012 Hospital Group: Hospitals with 200-399 Beds



Data reported from adult/pediatric ICUs as of March 12, 2013

Obs = observed number of CLABSI

Pred = statistically 'predicted' number of CLABSI, based on national 2006-2008 baseline

CLD = number of central line days

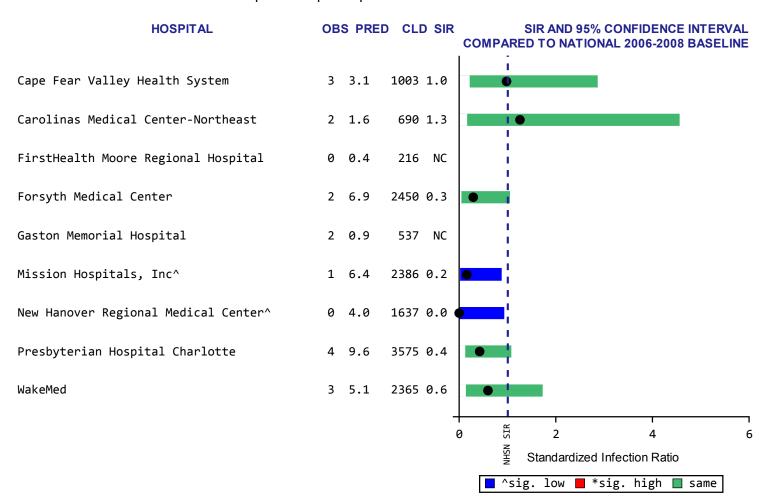
SIR = standardized infection ratio (observed/predicted number of CLABSI)

NA = data not shown for hospitals with <50 central line days

significantly higher than national 2006-2008 baseline

<sup>^</sup> significantly lower than national 2006-2008 baseline

Neonatal ICUs, January 1 - December 31, 2012 Hospital Group: Hospitals with 400 or More Beds



Data reported from adult/pediatric ICUs as of March 12, 2013

Obs = observed number of CLABSI

Pred = statistically 'predicted' number of CLABSI, based on national 2006-2008 baseline

CLD = number of central line days

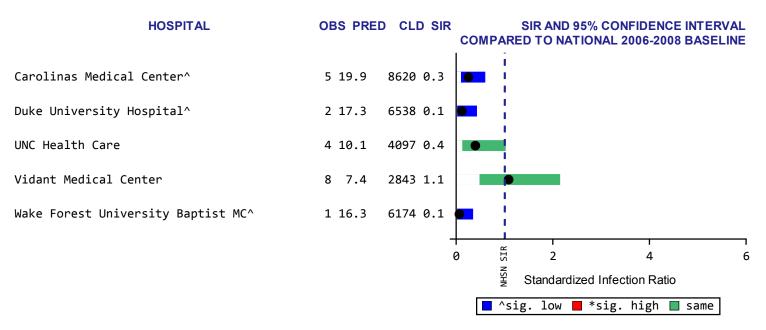
SIR = standardized infection ratio (observed/predicted number of CLABSI)

NA = data not shown for hospitals with <50 central line days

significantly higher than national 2006-2008 baseline

<sup>\*</sup> significantly lower than national 2006-2008 baseline

Neonatal ICUs, January 1 - December 31, 2012 Hospital Group: Hospitals with Primary Medical School Affiliation



Data reported from adult/pediatric ICUs as of March 12, 2013

Obs = observed number of CLABSI

Pred = statistically 'predicted' number of CLABSI, based on national 2006-2008 baseline

CLD = number of central line days

SIR = standardized infection ratio (observed/predicted number of CLABSI)

NA = data not shown for hospitals with <50 central line days

significantly higher than national 2006-2008 baseline

<sup>^</sup> significantly lower than national 2006-2008 baseline

# **B.** Catheter-Associated Urinary Tract Infections (CAUTI)

#### North Carolina 2012 CAUTI Highlights

#### Infections:

- 789 CAUTIs were reported in adult and pediatric ICUs
  - o 342,544 catheter days;
  - o Rate of 2.31 CAUTIs per 1,000 catheter days (95% CI: 2.15-2.47).
- The number of observed CAUTIs was significantly higher than the 707 CAUTIs predicted (SIR: 1.12; 95% CI: 1.04-1.20) based on 2009 national baseline data.

#### Facilities:

- Five hospitals reported significantly lower numbers of CAUTI than predicted.
- Eight hospitals reported significantly higher numbers of CAUTIs reported than predicted.

#### Organisms:

- Candida and other yeasts (27%) and E. coli (24%) were the most commonly identified organisms.
- CAUTI rates in ICUs ranged from 1.10 to 4.77 per 1,000 catheter days (Figure 8).
- The highest rates of CAUTI were in specialized units such as neurosurgical and trauma. These types of units also had the highest CAUTI rates in the 2011 national data. This is not unexpected because patients in these types of units are at increased risk of acquiring infections due to severity of illness, have had major surgery, and/or have compromised immune systems. The CAUTI rates in the neurosurgical, trauma, and surgical units were significantly higher than the overall rate of CAUTIs in North Carolina.
- The rate of CAUTIs in the medical/surgical units was significantly lower than the overall state CAUTI rate. A low CAUTI rate for the unit was similarly observed in the 2011 national data.

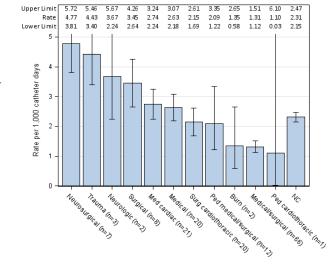


Figure 8. CAUTI rates by ICU Type.

- There was an increasing trend in the rate of CAUTI with increasing hospital size, from 0.50 to 2.10 CAUTIs per 1,000 catheter days (Figure 9). Primary medical school affiliated hospitals had the highest rate of CAUTI; it was significantly higher than the overall state CAUTI rate. Once again, these hospitals tend to have patients that are at higher risk of acquiring CAUTI and other infections because of severity of illness, underlying health problems, major trauma, or major surgical procedures.
- Smaller-sized hospitals (<200 beds) had rates of CAUTI that were significantly lower than the overall state CAUTI rate.

Figure 9. CAUTI rates by Hospital Groups.

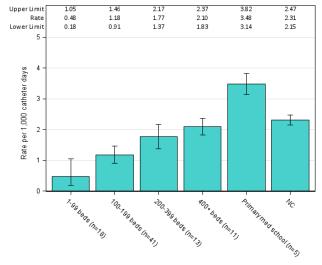
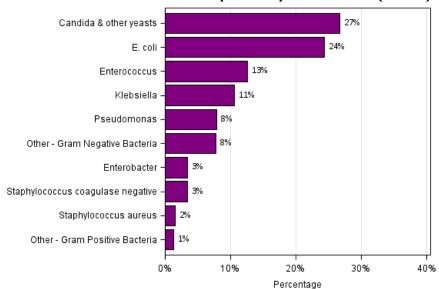


Figure 10. Organisms identified from CAUTIs in adults and pediatric patients in ICUs (n= 862).



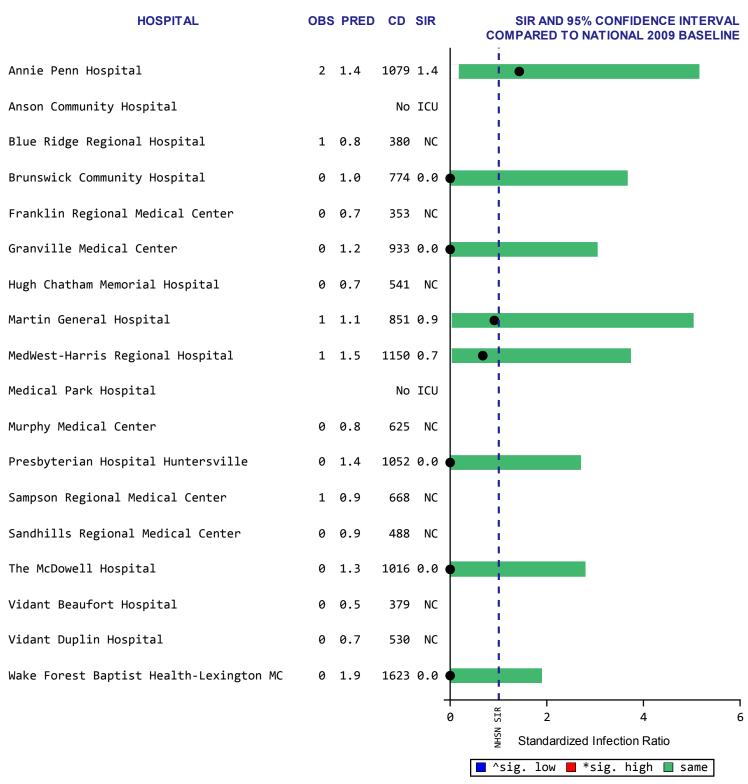
- As shown in Figure 10, 862 organisms were identified from 789 CAUTI infections in adult and pediatric ICU patients. More than one organism may have been identified from a single CAUTI.
- The most commonly identified organisms were Candida and other yeasts and E. coli. Candida and other yeasts may be increasingly identified in the ICU because patients have compromised immune systems, urinary catheters and may be receiving antibiotics. E. coli, a type of bacteria commonly found in the gastrointestinal tract, can easily contaminate the perineum or the urinary catheter and cause a urinary tract infection.
- *Proteus* species (45%) and *Citrobacter* species (27%) comprise the majority of the 67 "Other Gram-Negative Bacteria".
- Streptococcus species comprised 67% of the 12 "Other Gram-Positive Bacteria".
- There were 29 organisms identified that were resistant to antibiotics (Table 3), 12 of which were CREs. The detection of Enterobacteriaceae in a CAUTI is not uncommon as they are normal intestinal flora and failure to adhere to proper hand hygiene and catheter care can result in contamination of the perineum and catheters.

Table 3. Antibiotic resistant organisms identified from CAUTIs in adult and pediatric patients in ICUs.

Organism	Count (Percent)
Enterobacteriaceae	395 (100)
Carbapenem-resistant Enterobacteriaceae (CRE)	12 (3)
Enterococcus	109 (100)
Vancomycin-resistant Enterococcus (VRE)	9 (8)
Staphylococcus aureus	14 (100)
Methicillin-resistant Staphylococcus aureus (MRSA)	8 (57)

The following SIR plots summarize CAUTI information for adult and pediatric ICUs in North Carolina hospitals by hospital groups (Appendix E).

Adult/Pediatric ICUs, January 1 - December 31, 2012 Hospital Group: Hospitals with Less than 100 Beds



Data reported from adult/pediatric ICUs as of March 12, 2013

Obs = observed number of CAUTI

Pred = statistically 'predicted' number of CAUTI, based on national 2009 baseline

CD = number of catheter days

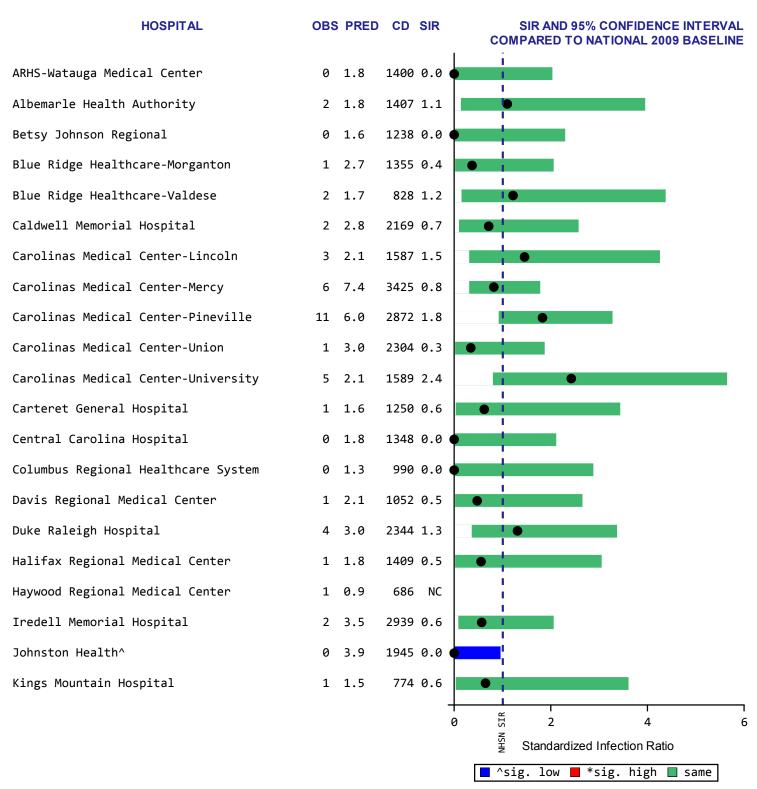
SIR = standardized infection ratio (observed/predicted number of CAUTI)

NA = data not shown for hospitals with <50 catheter days

<sup>\*</sup> significantly higher than national 2009 baseline

<sup>^</sup> significantly lower than national 2009 baseline

Adult/Pediatric ICUs, January 1 - December 31, 2012 Hospital Group: Hospitals with 100-199 Beds



Data reported from adult/pediatric ICUs as of March 12, 2013

Obs = observed number of CAUTI

Pred = statistically 'predicted' number of CAUTI, based on national 2009 baseline

CD = number of catheter days

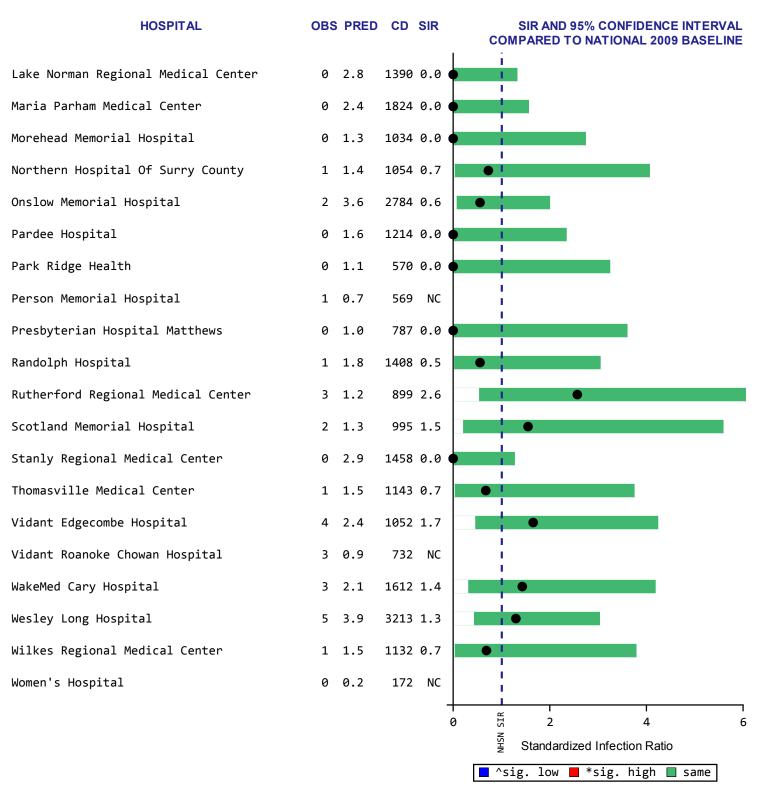
SIR = standardized infection ratio (observed/predicted number of CAUTI)

NA = data not shown for hospitals with <50 catheter days

<sup>\*</sup> significantly higher than national 2009 baseline

<sup>^</sup> significantly lower than national 2009 baseline

Adult/Pediatric ICUs, January 1 - December 31, 2012 Hospital Group: Hospitals with 100-199 Beds



Data reported from adult/pediatric ICUs as of March 12, 2013

Obs = observed number of CAUTI

Pred = statistically 'predicted' number of CAUTI, based on national 2009 baseline

CD = number of catheter days

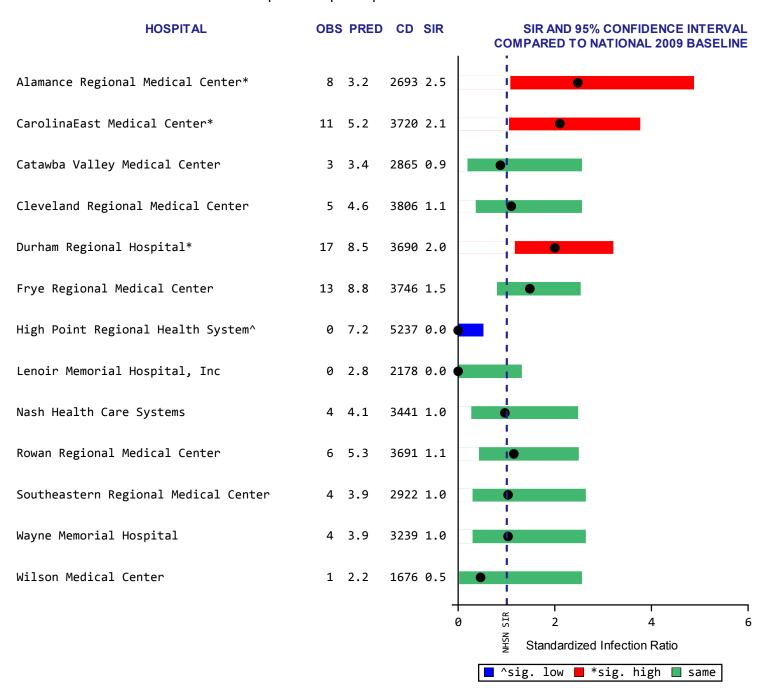
SIR = standardized infection ratio (observed/predicted number of CAUTI)

NA = data not shown for hospitals with <50 catheter days

<sup>\*</sup> significantly higher than national 2009 baseline

<sup>^</sup> significantly lower than national 2009 baseline

Adult/Pediatric ICUs, January 1 - December 31, 2012 Hospital Group: Hospitals with 200-399 Beds



Data reported from adult/pediatric ICUs as of March 12, 2013

Obs = observed number of CAUTI

Pred = statistically 'predicted' number of CAUTI, based on national 2009 baseline

CD = number of catheter days

SIR = standardized infection ratio (observed/predicted number of CAUTI)

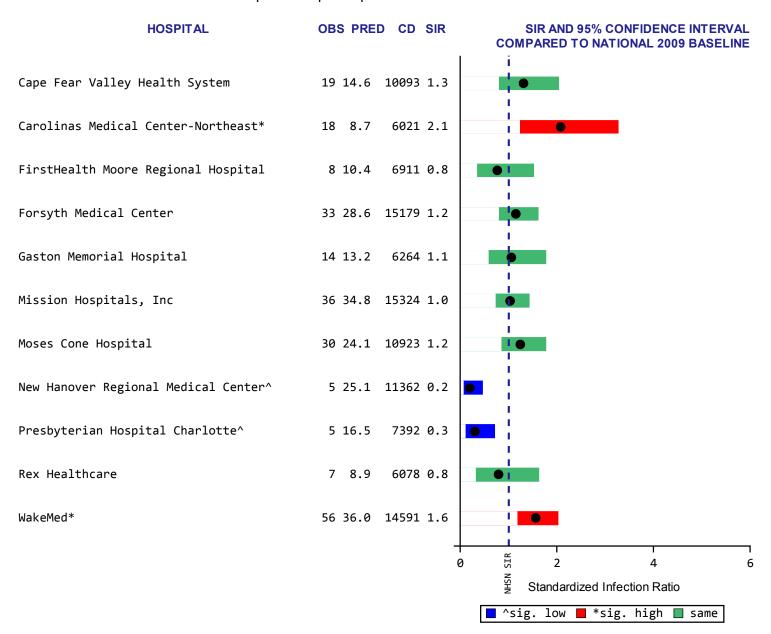
NA = data not shown for hospitals with <50 catheter days

<sup>\*</sup> significantly higher than national 2009 baseline

<sup>^</sup> significantly lower than national 2009 baseline

#### Catheter-Associated Urinary Tract Infections, Standardized Infection Ratios

Adult/Pediatric ICUs, January 1 - December 31, 2012 Hospital Group: Hospitals with 400 or More Beds



Data reported from adult/pediatric ICUs as of March 12, 2013

Obs = observed number of CAUTI

Pred = statistically 'predicted' number of CAUTI, based on national 2009 baseline

CD = number of catheter days

SIR = standardized infection ratio (observed/predicted number of CAUTI)

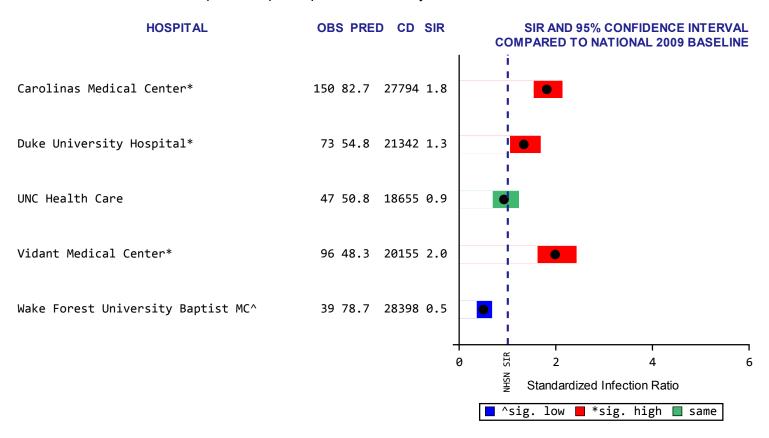
NA = data not shown for hospitals with <50 catheter days

<sup>\*</sup> significantly higher than national 2009 baseline

<sup>^</sup> significantly lower than national 2009 baseline

#### Catheter-Associated Urinary Tract Infections, Standardized Infection Ratios

Adult/Pediatric ICUs, January 1 - December 31, 2012 Hospital Group: Hospitals with Primary Medical School Affiliation



Data reported from adult/pediatric ICUs as of March 12, 2013

Obs = observed number of CAUTI

Pred = statistically 'predicted' number of CAUTI, based on national 2009 baseline

CD = number of catheter days

SIR = standardized infection ratio (observed/predicted number of CAUTI)

NA = data not shown for hospitals with <50 catheter days

significantly higher than national 2009 baseline

<sup>^</sup> significantly lower than national 2009 baseline

### C. Surgical Site Infections (SSI)

#### 1. Abdominal Hysterectomies

#### North Carolina 2012 Abdominal Hysterectomy SSI Highlights

#### Infections:

- 64 SSIs were reported among 9,586 inpatient abdominal hysterectomies performed in females 18 years and older.
  - The rate was 0.67 SSIs per 100 inpatient abdominal hysterectomies (95% CI: 0.50-0.83). 0
- The number of observed infections was significantly lower than the 94 SSIs predicted (SIR: 0.68; 95% CI: 0.52-0.87) based on 2006-2008 national baseline data.

#### Facilities:

- The number of observed SSI infections was not statistically significantly different from the predicted number. Organisms:
  - A variety of organisms were identified; few were resistant to first-line antibiotics.
- There was no observed trend in the rates of SSI with increasing hospital size and the rates of SSIs ranged from 0.41 to 0.82 per 100 inpatient abdominal hysterectomies (Figure 11). These rates were not statistically significantly different from the overall rate of SSI in N.C.

Figure 11. SSI rates by Hospital Groups.

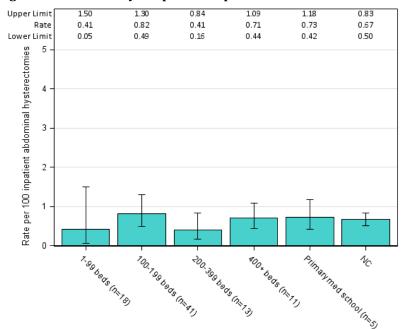
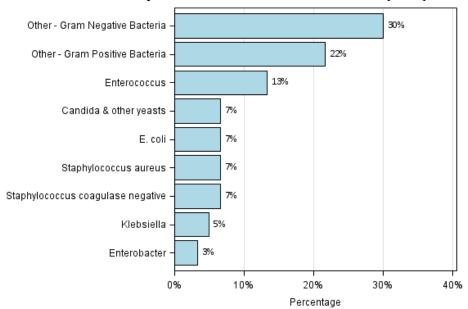


Figure 12. Organisms identified from SSIs in adults (≥18 years) within 30 days of an inpatient abdominal hysterectomy. One anaerobe not otherwise specified was detected but not included (n=61).



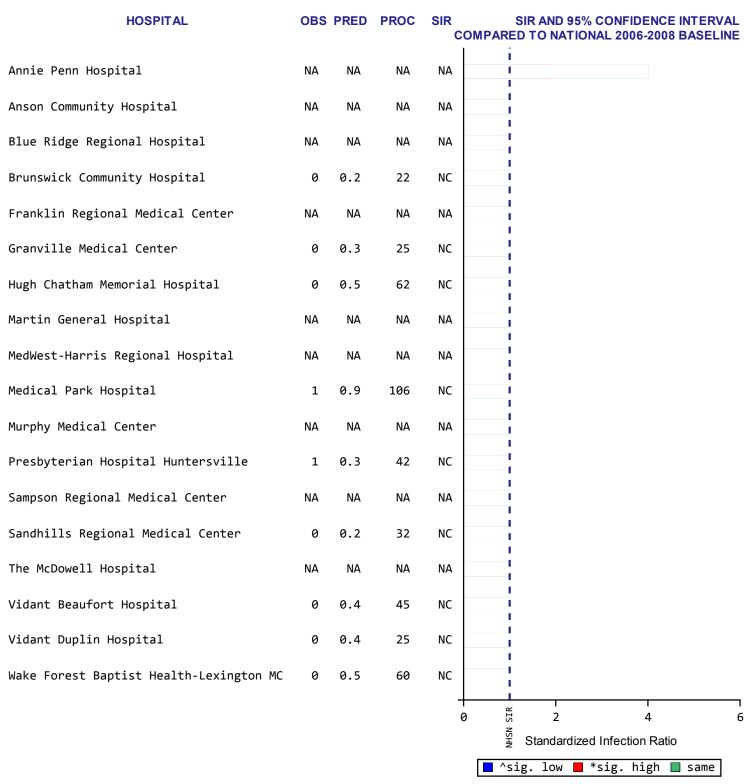
- Sixty-one organisms were identified from 64 SSIs from inpatient abdominal hysterectomies (Figure 12). An organism was not identified for every SSI, while multiple organisms were identified from other SSIs.
- The majority of identified organisms were in the "Other Gram-Negative Bacteria" and "Other Gram-Positive Bacteria" categories. 28% (5 of 18) of the Gram-negative bacteria were *Bacteroides fragilis* while 54% (7 of 13) Gram-positive bacteria were *Streptococcus* species. Because these types of bacteria are found within the female vaginal tract, they are a frequent cause of infection after an abdominal hysterectomy.
- Few antibiotic resistant organisms were identified (Table 4). Better preoperative preparation of patients has led to a decrease not only in the number of post-operative infections but those caused by antibiotic-resistant organisms. Measures such as restrictions on shaving the surgical site, appropriate skin preparations, appropriate use and timing of antibiotics, and monitoring of blood glucose levels have all contributed to decreased rates of SSI.

Table 4. Antibiotic-resistant organisms identified from SSIs in adults (≥18 years) within 30 days of an inpatient abdominal hysterectomy.

Organism	Count (Percent)
Enterobacteriaceae	16 (100)
Carbapenem-resistant Enterobacteriaceae (CRE)	0 (0)
Enterococcus	8 (100)
Vancomycin-resistant Enterococcus (VRE)	0 (0)
Staphylococcus aureus	4 (100)
Methicillin-resistant Staphylococcus aureus (MRSA)	2 (50)

The following SIR plots summarize SSI information after inpatient abdominal hysterectomies among female adults older than 18 years of age in North Carolina hospitals by hospital groups (Appendix E).

Abdominal Hysterectomies, January 1 - December 31, 2012 Hospital Group: Hospitals with Less than 100 Beds



Data reported as of March 12, 2013

Obs = observed number of SSI

Pred = statistically 'predicted' number of SSI, based on national 2006-2008 baseline

Proc = number of inpatient procedures among adults (18+ years)

SIR = standardized infection ratio (observed/predicted number of SSI)

NA = data not shown for hospitals with <20 inpatient procedures

<sup>\*</sup> significantly higher than national 2006-2008 baseline

<sup>\*</sup> significantly lower than national 2006-2008 baseline

Abdominal Hysterectomies, January 1 - December 31, 2012 Hospital Group: Hospitals with 100-199 Beds

HOSPITAL	OBS	PRED	PROC	SIR C	SIR AND 95% CONFIDENCE INTERVAL OMPARED TO NATIONAL 2006-2008 BASELINE
ARHS-Watauga Medical Center	NA	NA	NA	NA	i
Albemarle Health Authority	1	0.9	87	NC	
Betsy Johnson Regional	0	0.7	62	NC	i
Blue Ridge Healthcare-Morganton	NA	NA	NA	NA	
Blue Ridge Healthcare-Valdese	NA	NA	NA	NA	
Caldwell Memorial Hospital	1	0.1	24	NC	
Carolinas Medical Center-Lincoln	0	0.5	49	NC	1
Carolinas Medical Center-Mercy	0	0.5	67	NC	
Carolinas Medical Center-Pineville	1	2.7	312	0.4	
Carolinas Medical Center-Union	1	0.7	71	NC	
Carolinas Medical Center-University	1	0.8	92	NC	
Carteret General Hospital	0	0.3	31	NC	
Central Carolina Hospital	0	0.6	58	NC	
Columbus Regional Healthcare System	1	0.9	80	NC	1
Davis Regional Medical Center	NA	NA	NA	NA	
Duke Raleigh Hospital	0	0.9	105	NC	
Halifax Regional Medical Center	0	0.3	37	NC	
Haywood Regional Medical Center	0	0.5	51	NC	1
Iredell Memorial Hospital	0	0.8	82	NC	
Johnston Health	0	0.7	98	NC	
Kings Mountain Hospital	NA	NA	NA	NA	1
				_	1 1 1 1 1 0 1 0 E H 5 1 6
					Standardized Infection Ratio
					<pre>^sig. low ■ *sig. high ■ same</pre>

Data reported as of March 12, 2013

Obs = observed number of SSI

Pred = statistically 'predicted' number of SSI, based on national 2006-2008 baseline

Proc = number of inpatient procedures among adults (18+ years)

SIR = standardized infection ratio (observed/predicted number of SSI)

NA = data not shown for hospitals with <20 inpatient procedures

significantly higher than national 2006-2008 baseline

<sup>^</sup> significantly lower than national 2006-2008 baseline

Abdominal Hysterectomies, January 1 - December 31, 2012 Hospital Group: Hospitals with 100-199 Beds

HOSPITAL	OBS	PRED	PROC	SIR C	SIR AND 95% CONFIDENCE INTERVAL OMPARED TO NATIONAL 2006-2008 BASELINE
Lake Norman Regional Medical Center	0	0.3	41	NC	
Maria Parham Medical Center	0	0.4	41	NC	
Morehead Memorial Hospital	0	0.4	34	NC	
Northern Hospital Of Surry County	NA	NA	NA	NA	
Onslow Memorial Hospital	1	0.3	35	NC	
Pardee Hospital	0	0.6	50	NC	
Park Ridge Health	0	0.5	49	NC	i
Person Memorial Hospital	NA	NA	NA	NA	
Presbyterian Hospital Matthews	3	0.6	81	NC	
Randolph Hospital	0	0.5	51	NC	
Rutherford Regional Medical Center	0	0.7	54	NC	
Scotland Memorial Hospital	1	0.5	45	NC	i i
Stanly Regional Medical Center	NA	NA	NA	NA	
Thomasville Medical Center	1	0.2	22	NC	
Vidant Edgecombe Hospital	0	0.5	45	NC	
Vidant Roanoke Chowan Hospital	0	0.4	33	NC	
WakeMed Cary Hospital	1	0.7	83	NC	i i
Wesley Long Hospital	1	0.3	37	NC	
Wilkes Regional Medical Center	NA	NA	NA	NA	
Women's Hospital	2	1.3	121	1.5	•
				-	1 1 1 1 2 4 6
					Standardized Infection Ratio
					<pre>^sig. low ■ *sig. high ■ same</pre>

Data reported as of March 12, 2013

Obs = observed number of SSI

Pred = statistically 'predicted' number of SSI, based on national 2006-2008 baseline

Proc = number of inpatient procedures among adults (18+ years)

SIR = standardized infection ratio (observed/predicted number of SSI)

NA = data not shown for hospitals with <20 inpatient procedures

significantly higher than national 2006-2008 baseline

<sup>^</sup> significantly lower than national 2006-2008 baseline

Abdominal Hysterectomies, January 1 - December 31, 2012 Hospital Group: Hospitals with 200-399 Beds

HOSPITAL	OBS PRED	PROC	SIR SIR AND 95% CONFIDENCE INTERVAL COMPARED TO NATIONAL 2006-2008 BASELINE
Alamance Regional Medical Center	0 1.8	178	0.0
CarolinaEast Medical Center	1 1.2	113	0.8
Catawba Valley Medical Center	0 0.8	84	NC
Cleveland Regional Medical Center	1 0.9	81	NC
Durham Regional Hospital	2 2.5	303	0.8
Frye Regional Medical Center	0 0.6	73	NC
High Point Regional Health System	0 1.8	149	0.0
Lenoir Memorial Hospital, Inc	0 0.6	52	NC
Nash Health Care Systems	1 2.2	204	0.5
Rowan Regional Medical Center	0 0.2	24	NC
Southeastern Regional Medical Center	0 2.3	202	0.0
Wayne Memorial Hospital	1 1.4	143	0.7
Wilson Medical Center	1 0.9	115	NC I
			0 H 2 4 6
			Standardized Infection Ratio
			<pre>^sig. low ■ *sig. high ■ same</pre>

Data reported as of March 12, 2013

Obs = observed number of SSI

Pred = statistically 'predicted' number of SSI, based on national 2006-2008 baseline

Proc = number of inpatient procedures among adults (18+ years)

SIR = standardized infection ratio (observed/predicted number of SSI)

NA = data not shown for hospitals with <20 inpatient procedures

significantly higher than national 2006-2008 baseline

<sup>^</sup> significantly lower than national 2006-2008 baseline

Abdominal Hysterectomies, January 1 - December 31, 2012 Hospital Group: Hospitals with 400 or More Beds

HOSPITAL	OBS	PRED	PROC	SIR SIR AND 95% CONFIDENCE INTERVAL COMPARED TO NATIONAL 2006-2008 BASELINE
Cape Fear Valley Health System	1	3.2	268	0.3
Carolinas Medical Center-Northeast	2	3.1	325	0.6
FirstHealth Moore Regional Hospital	1	0.6	77	NC I
Forsyth Medical Center	0	1.8	182	0.0
Gaston Memorial Hospital	0	1.7	155	0.0
Mission Hospitals, Inc	4	4.1	430	1.0
Moses Cone Hospital	NA	NA	NA	NA I
New Hanover Regional Medical Center	2	3.7	419	0.5
Presbyterian Hospital Charlotte	7	3.9	406	1.8
Rex Healthcare	3	4.3	456	0.7
WakeMed	1	2.2	233	0.5
				0 H 2 4 6
				Standardized Infection Ratio
				<pre>^sig. low ■ *sig. high ■ same</pre>

Data reported as of March 12, 2013

Obs = observed number of SSI

Pred = statistically 'predicted' number of SSI, based on national 2006-2008 baseline

Proc = number of inpatient procedures among adults (18+ years)

SIR = standardized infection ratio (observed/predicted number of SSI)

NA = data not shown for hospitals with <20 inpatient procedures

significantly higher than national 2006-2008 baseline

<sup>^</sup> significantly lower than national 2006-2008 baseline

Abdominal Hysterectomies, January 1 - December 31, 2012 Hospital Group: Hospitals with Primary Medical School Affiliation

HOSPITAL	OBS PRE	D PROC	SIR SIR AND 95% CONFIDENCE INTERVAL COMPARED TO NATIONAL 2006-2008 BASELINE
Carolinas Medical Center	5 6.3	707	0.8
Duke University Hospital	1 3.7	396	0.3
UNC Health Care	9 6.3	553	1.4
Vidant Medical Center	0 3.2	316	0.0
Wake Forest University Baptist MC	1 2.8	230	0.4
			0 E 2 4 6
			Standardized Infection Ratio  ^sig. low *sig. high same

Data reported as of March 12, 2013

Obs = observed number of SSI

Pred = statistically 'predicted' number of SSI, based on national 2006-2008 baseline

Proc = number of inpatient procedures among adults (18+ years)

SIR = standardized infection ratio (observed/predicted number of SSI)

NA = data not shown for hospitals with <20 inpatient procedures

significantly higher than national 2006-2008 baseline

<sup>^</sup> significantly lower than national 2006-2008 baseline

#### **Colon Surgeries**

#### North Carolina 2012 Colon Surgery SSI Highlights

#### Infections:

- 210 SSIs reported among 8,704 inpatient colon surgeries performed on adults (≥18 years)
  - o A rate of 2.41 SSIs per 100 inpatient colon surgeries (95% CI: 2.09-2.74).
- The number of observed infections was significantly lower than the 284 SSIs predicted (SIR: 0.74; 95% CI: 0.64-0.85) based on 2006-2008 national baseline data.

#### Facilities:

- Most hospitals reported SSI numbers that were similar to those predicted.
- One hospital reported significantly lower numbers of SSIs;
- One hospital reported a significantly higher number of SSIs than predicted.

#### Organisms:

- Few antibiotic-resistant organisms were identified; however, all Staphylococcus aureus identified were resistant to methicillin.
- The rates of SSIs from colon surgeries varied only slightly across hospital groups, ranging from 2.11 to 2.60 SSIs per 100 inpatient colon surgeries in adults 18 years and older (Figure 13). These rates were not statistically significantly different from the overall state rate of 2.40 SSIs per 100 inpatient colon surgeries.

Figure 13. SSI rates by Hospital Groups.

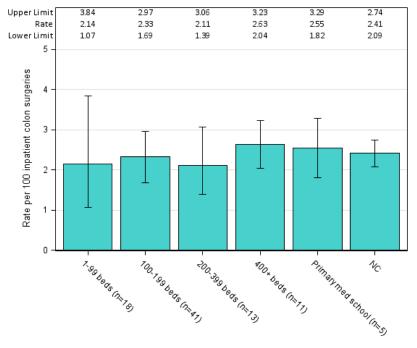
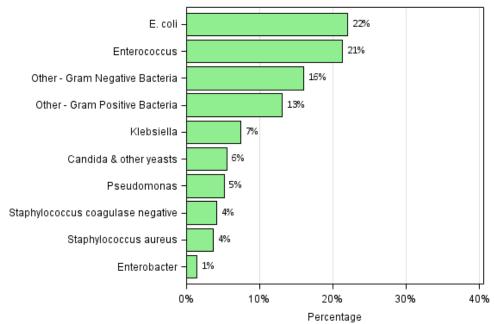


Figure 14. Organisms identified from SSIs in adults ( $\geq$ 18 years) within 30 days after an inpatient colon surgery (n= 268).



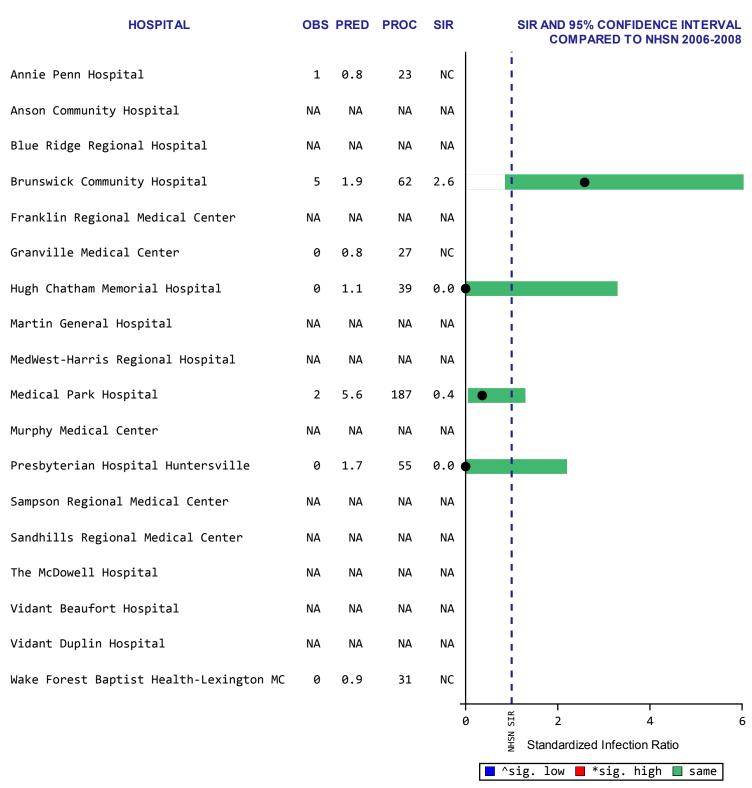
- There were 268 organisms identified from 210 SSIs from inpatient colon surgeries (Figure 14). An organism was not identified for every SSI; in some circumstances, multiple organisms were identified from one SSI.
- The most commonly identified organisms from SSIs after inpatient colon surgeries were *E. coli* (22%) and *Enterococcus* (21%) species. Both *E. coli* and *Enterococcus* are normal flora of the human intestinal tract; thus it is not unexpected that they would be associated with post-colon surgery infections.
- Streptococcus species (49%) and Clostridium species (29%) were the most common organisms of the 35 in the "Other Gram-Positive Bacteria" category while 44 percent of the 43 "Other Gram-Negative Bacteria" organisms were Bacteroides species.
- Few antibiotic-resistant organisms were identified, but all *Staphylococcus aureus* identified were resistant to methicillin (Table 5). Generally, the proportion of methicillin-resistant and methicillin-sensitive would be more evenly distributed.

Table 5. Antibiotic resistant organisms identified from SSIs in adults (≥18 years) within 30 days of an inpatient colon surgery.

Organism	Count (Percent)
Enterobacteriaceae	94 (100)
Carbapenem-resistant Enterobacteriaceae (CRE)	0 (0)
Enterococcus	57 (100)
Vancomycin-resistant Enterococcus (VRE)	9 (16)
Staphylococcus aureus	10 (100)
Methicillin-resistant Staphylococcus aureus (MRSA)	10 (100)

The following SIR plots summarize SSI information after inpatient colon surgeries among adults older than 18 years of age in North Carolina hospitals by hospital groups (Appendix E).

Colon Surgeries, January 1 - December 31, 2012 Hospital Group: Hospitals with Less than 100 Beds



Data reported as of March 12, 2013

Obs = observed number of SSI

Pred = statistically 'predicted' number of SSI, based on national 2006-2008 baseline

Proc = number of inpatient procedures among adults (18+ years)

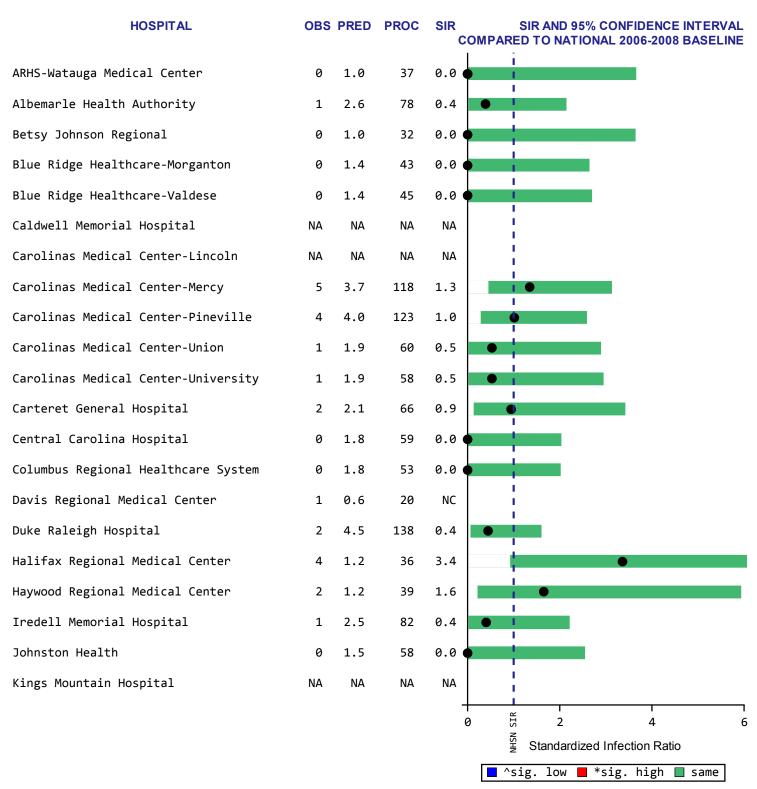
SIR = standardized infection ratio (observed/predicted number of SSI)

NA = data not shown for hospitals with <20 inpatient procedures

<sup>\*</sup> significantly higher than national 2006-2008 baseline

<sup>\*</sup> significantly lower than national 2006-2008 baseline

Colon Surgeries, January 1 - December 31, 2012 Hospital Group: Hospitals with 100-199 Beds



Data reported as of March 12, 2013

Obs = observed number of SSI

Pred = statistically 'predicted' number of SSI, based on national 2006-2008 baseline

Proc = number of inpatient procedures among adults (18+ years)

SIR = standardized infection ratio (observed/predicted number of SSI)

NA = data not shown for hospitals with <20 inpatient procedures

<sup>\*</sup> significantly higher than national 2006-2008 baseline

<sup>^</sup> significantly lower than national 2006-2008 baseline

Colon Surgeries, January 1 - December 31, 2012 Hospital Group: Hospitals with 100-199 Beds

HOSPITAL	OBS	PRED	PROC	SIR C	SIR AND 95% CONFIDENCE INTERVAL COMPARED TO NATIONAL 2006-2008 BASELINE
Lake Norman Regional Medical Center	0	0.9	32	NC	
Maria Parham Medical Center	3	1.9	54	1.6	
Morehead Memorial Hospital	0	1.1	35	0.0	
Northern Hospital Of Surry County	2	1.2	42	1.6	
Onslow Memorial Hospital	1	1.6	53	0.6	
Pardee Hospital	0	2.2	69	0.0	
Park Ridge Health	1	1.3	39	0.8	
Person Memorial Hospital	NA	NA	NA	NA	
Presbyterian Hospital Matthews	1	1.5	46	0.7	
Randolph Hospital	3	2.8	84	1.1	
Rutherford Regional Medical Center	4	2.0	62	2.0	
Scotland Memorial Hospital	0	1.1	33	0.0	
Stanly Regional Medical Center	0	0.7	25	NC	
Thomasville Medical Center	1	1.7	58	0.6	
Vidant Edgecombe Hospital	0	0.7	23	NC	
Vidant Roanoke Chowan Hospital	1	0.7	26	NC	
WakeMed Cary Hospital	7	4.5	144	1.6	
Wesley Long Hospital	2	4.4	139	0.5	
Wilkes Regional Medical Center	NA	NA	NA	NA	i
Women's Hospital	NA	NA	NA	NA	
				-	0 5 2 4 6
					Standardized Infection Ratio
					<pre>^sig. low ■ *sig. high ■ same</pre>

Data reported as of March 12, 2013

Obs = observed number of SSI

Pred = statistically 'predicted' number of SSI, based on national 2006-2008 baseline

Proc = number of inpatient procedures among adults (18+ years)

SIR = standardized infection ratio (observed/predicted number of SSI)

NA = data not shown for hospitals with <20 inpatient procedures

significantly higher than national 2006-2008 baseline

<sup>^</sup> significantly lower than national 2006-2008 baseline

Colon Surgeries, January 1 - December 31, 2012 Hospital Group: Hospitals with 200-399 Beds

HOSPITAL	OBS F	PRED	PROC	SIR C	SIR AND 95% CONFIDENCE INTERVAL
Alamance Regional Medical Center	1	4.0	129	0.3	
CarolinaEast Medical Center	3	4.4	138	0.7	
Catawba Valley Medical Center	3	2.8	84	1.1	
Cleveland Regional Medical Center	3	2.6	82	1.1	
Durham Regional Hospital	3	3.5	112	0.9	
Frye Regional Medical Center	1	3.3	103	0.3	•
High Point Regional Health System	2	5.0	152	0.4	
Lenoir Memorial Hospital, Inc	3	2.0	61	1.5	•
Nash Health Care Systems	3	2.7	85	1.1	•
Rowan Regional Medical Center	0	2.1	63	0.0	
Southeastern Regional Medical Center	3	3.2	91	0.9	
Wayne Memorial Hospital	1	3.9	113	0.3	
Wilson Medical Center	1	2.2	69	0.5	
				-	0 H 2 4 6
				·	Standardized Infection Ratio
					<pre>^sig. low ■ *sig. high ■ same</pre>

Data reported as of March 12, 2013

Obs = observed number of SSI

Pred = statistically 'predicted' number of SSI, based on national 2006-2008 baseline

Proc = number of inpatient procedures among adults (18+ years)

SIR = standardized infection ratio (observed/predicted number of SSI)

NA = data not shown for hospitals with <20 inpatient procedures

significantly higher than national 2006-2008 baseline

<sup>^</sup> significantly lower than national 2006-2008 baseline

Colon Surgeries, January 1 - December 31, 2012 Hospital Group: Hospitals with 400 or More Beds

OBS	PRED	PROC	SIR SIR AND 95% CONFIDENCE INTERVAL COMPARED TO NATIONAL 2006-2008 BASELINE
3	9.2	266	0.3
4	8.0	250	0.5
2	4.0	137	0.5
8	8.2	250	1.0
5	5.2	159	1.0
14	12.2	389	1.1
4	4.5	138	0.9
6	12.3	385	0.5
15	8.3	257	1.8
8	14.2	437	0.6
6	6.2	182	1.0
			0
	3 4 2 8 5 14 4 6 15 8	3 9.2 4 8.0 2 4.0 8 8.2 5 5.2 14 12.2 4 4.5 6 12.3 15 8.3 8 14.2	4 8.0 250 2 4.0 137 8 8.2 250 5 5.2 159 14 12.2 389 4 4.5 138 6 12.3 385 15 8.3 257 8 14.2 437

Data reported as of March 12, 2013

Obs = observed number of SSI

Pred = statistically 'predicted' number of SSI, based on national 2006-2008 baseline

Proc = number of inpatient procedures among adults (18+ years)

SIR = standardized infection ratio (observed/predicted number of SSI)

NA = data not shown for hospitals with <20 inpatient procedures

significantly higher than national 2006-2008 baseline

<sup>^</sup> significantly lower than national 2006-2008 baseline

Colon Surgeries, January 1 - December 31, 2012 Hospital Group: Hospitals with Primary Medical School Affiliation

HOSPITAL	OBS PRED	PROC	SIR SIR AND 95% CONFIDENCE INTERVAL COMPARED TO NATIONAL 2006-2008 BASELINE
Carolinas Medical Center	8 15.0	436	0.5
Duke University Hospital	3 8.0	240	0.4
UNC Health Care	17 12.7	340	1.3
Vidant Medical Center	9 15.5	460	0.6
Wake Forest University Baptist MC	9 11.8	325	0.8
			0 H 2 4 6
			Standardized Infection Ratio
			<pre>^sig. low ■ *sig. high ■ same</pre>

Data reported as of March 12, 2013

Obs = observed number of SSI

Pred = statistically 'predicted' number of SSI, based on national 2006-2008 baseline

Proc = number of inpatient procedures among adults (18+ years)

SIR = standardized infection ratio (observed/predicted number of SSI)

NA = data not shown for hospitals with <20 inpatient procedures

significantly higher than national 2006-2008 baseline

<sup>^</sup> significantly lower than national 2006-2008 baseline

#### VI. **Overview of Hospital-Specific Summary Reports**

The last section of the report (Section VII) includes the hospital-specific summary reports for HAIs. Reports were generated for each hospital including ACHs, LTACs, and IRFs. Hospital-specific summary reports of relevant ACHs also included inpatient rehabilitation wards.

Each one-page summary contains five sections: 1) general hospital information, 2) central line-associated bloodstream infections (CLABSI), 3) catheter associated urinary tract infections (CAUTI), 4) surgical site infections (SSI), and 5) commentary from the hospital. These sections are described in detail below.

#### A. Section Overview

Tables and figures from hospital-specific summary reports have been included in the following sections to provide a pictorial representation of data. These tables and figures do not represent one single hospital and are used as examples to highlight key points.

#### 1. General Hospital Information

This section contains general information about the hospital and includes a map of where the hospital (blue "H" icon) is located in N.C. Data in this section are from the NSHN 2011 Annual Hospital Survey. The 2012 Annual Hospital Survey could not be included in this report but will be included in future quarterly reports.

#### **Central Line-Associated Bloodstream Infections (CLABSI)**

Short-term acute care hospitals (ACHs)

This section of the report includes a table and figure about CLABSIs. CLABSIs are reported from adult, pediatric, and neonatal intensive care units.

The below table summarizes the number of infections, central line days, rates, predicted infections, SIR and corresponding 95% CI with interpretation by type of unit. There may be more than one reporting unit for a given classification. At the bottom of table is the "YTD Total for Reporting ICUs" that summarizes the year-to-date total for the reporting units in the hospital.

Type of ICU	Infections	Line Days	Rate	Predicted Infections	SIR*	95% CI	Interpreta
Medical	3	1,673	1.79	4.35	0.69	0.142, 2.015	Same
Medical cardiac	1	2,548	0.39	5.096	0.196	0.005, 1.093	Lowe
Medical/surgical	0	77	0	0.162			
Neonatal Level II/III	0	1,637	0	3.972	0	, 0.929	Lowe
Pediatric medical/surgical	0	131	0	0.393			
Surgical	0	2,184	0	5.023	0	, 0.734	Lowe
Surgical cardiothoracic	0	1,952	0	2.733	0	, 1.350	Same
YTD Total for Reporting ICUs	4	10,202	0.39	21.729	0.184	0.050, 0.471	Lowe

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval. Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

- 1. The rate was the number of CLABSIs divided by the number of central line days multiplied by 1,000 to get "per 1,000" central line days." If the minimum threshold number of 50 central line days was not met, then rates and additional statistics were not calculated.
- 2. The predicted number of infections was calculated using CLABSI rates from a standard population during a baseline time period. For CLABSI, the predicted number of infections was based on 2006-2008 NSHN national data. Detailed information on how the predicted number of infections is calculated can be found in the October 2012 Quarterly Report at http://epi.publichealth.nc.gov/cd/hai/figures/hai oct2012.pdf.

- The standardized infection ratio (SIR) was calculated by dividing the observed number of infections by the predicted number of infections. Further explanation of the SIR can be found in Section IV under "SIR Plot". If the number of predicted infections was less than 1, the SIR was not calculated. For example, the predicted number of infections in the medical unit was 0.162; therefore the SIR and corresponding 95% CI with interpretation were not presented.
- The 95% confidence interval (CI) corresponds to the SIR presented in the table. When the number of infections was 0, the lower bound of the 95% CI was not calculated. Further explanation of the SIR can be found in Section IV under "SIR Plot".
- The column "Interpretation" details the results of hypothesis testing. If the interpretation was the "Same" then there was no statistically significant difference between the numbers of observed and predicted infections in a unit (or hospital). If the interpretation was "Higher" then the observed number of infections in a unit (or hospital) was significantly higher than predicted. Finally, if the interpretation was "Lower" then the observed number of infections in a unit (or hospital) was significantly lower than predicted.

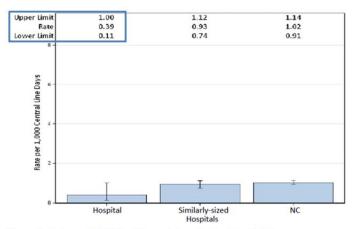


Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

The figure above shows an example of the hospital CLABSI rate along with the CLABSI rates of similarly-sized hospitals and all hospitals in N.C. Recall from Section IV that the categories for "Similarly-sized Hospitals" are based on total hospital bed counts and that hospitals that serve as the primary location for medical schools are included in a separate category (primary medical school affiliation). A list of the hospitals in each category can be found in Appendix E1.

In the figure, the CLABSI rate in the hospital appeared to be lower than that of similarly-sized hospitals and all hospitals in N.C. To test the hypothesis that there were no differences in the hospital rate from similarly-sized hospitals or all hospitals in N.C., the 95% CIs were examined. If the 95% CIs of two CLABSI rates overlapped, then the observed differences in the CLABSI rates were not considered statistically significantly different. However, if the 95% CIs of two CLABSI rates did not overlap, then the CLABSI rates were considered to be statistically significantly different. Note that the 95% CI for the CLABSI rates (Figure) are used to test a different hypothesis than the 95% CI for CLABSI SIRs (Table).

In the example in the Figure, the 95% CI of the hospital CLABSI rate overlapped with the 95% CIs of both similarly-sized hospitals and all hospitals in N.C. Therefore, one would conclude that there was no statistically significant difference in the hospital CLABSI rate compared to the CLABSI rate of similarly-sized hospitals or all hospitals in N.C.

#### Long-term acute care hospitals (LTACs)

Similar to ACHs, this section of the report includes a table and figure about CLABSIs that were reported from adult and pediatric ICUs and wards in LTACs.

The information included in the LTAC table was different from the table presented for ACHs; only the number of CLABSIs, central line days, and rates were included.

Table 1. Rates by Location, Jan-Dec 2012.

Type of Unit	Infections	Line Days	Rate	
Adult intensive care unit	0	546	0.00	
Adult ward	2	965	2.07	
YTD Total for Reporting Units	2	1,511	1.32	

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days.

The figure below shows the hospital rate and 95% CI with the overall CLABSI rate among all nine licensed LTACs in N.C. A list of the LTACs can be found in Appendix E2.

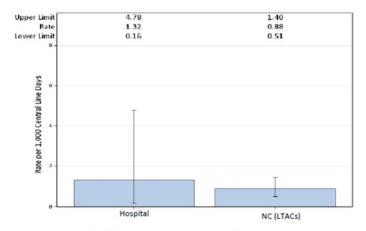


Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

#### **Catheter-Associated Urinary Tract Infections (CAUTI)**

#### Short-term acute care hospitals (ACHs)

Like the section on CLABSIs, this section includes a table and figure about CAUTIs. CAUTIs were reported from adult and pediatric ICUs and inpatient rehabilitation wards.

The calculation of the statistics in this section were the same as those presented in "Section 2 - Central line-associated bloodstream infections (CLABSI)"; please refer to that section for more information. The one difference was that the number of predicted CAUTIs was based on the 2009 NHSN national data.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	0	541	0	0.703			
YTD Total for Reporting ICU:	s 0	541	0	0.703			

<sup>\*</sup>SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval. Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

In the example above, the hospital CAUTI rate was 0 per 1,000 catheter-days. The accompanying figure below displays that the 95% CI was not presented when the rate was 0.

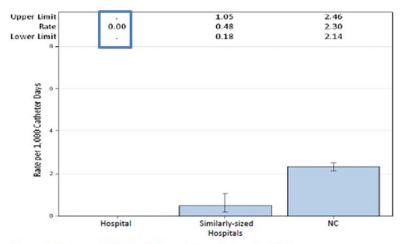


Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

#### Long-term acute care hospitals (LTACs)

CAUTIS were reported from adult ICUs and wards. The content of the CAUTI section for LTACs was similar to CLABSIs in LTACs; please refer to that section for more information.

#### <u>Inpatient rehabilitation facilities (IRFs)</u>

Inpatient rehabilitation facilities reported CAUTI from adult and pediatric rehabilitation wards. Hospital-specific summary reports were only generated for free-standing IRFs; data from inpatient rehabilitation wards within ACHs were included in their respective hospital-specific summary reports. Data in the tables included number of CAUTI infections, number of catheter days, and CAUTI rate for each ward and total for reporting wards.

Table 1. Rates by Location, Jan-Dec 2012

Type of Unit	Infections	Catheter Days	Rate	
Adult rehabilitation ward	1	395	2.53	
YTD Total for Reporting War	rds 1	395	2.53	

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days.

The accompanying figure below shows the rate of CAUTI in the IRF and the rate of CAUTI in all IRFs and inpatient rehabilitation wards from ACHs. A list of the rehabilitation wards and facilities can be found in Appendix E3.

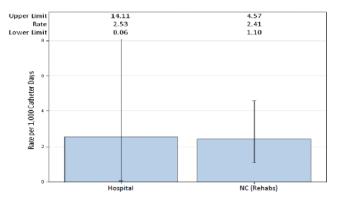


Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

#### 4. Surgical Site Infections (SSI)

This section includes a table and two figures about SSIs. ACHs were required to report SSIs that occurred among adults 18 years or older following inpatient abdominal hysterectomies and colon surgeries. Only SSIs that occurred at the primary incision site within 30 days of surgery were included in the report. Infections were not included if they occurred after 30 days post-operation or if they involved only the skin or subcutaneous tissues (the layer of tissue directly under the skin). Finally, if patient age or the American Society of Anesthesiologists (ASA) score were missing for a surgery, it was classified as an "incomplete procedure" and not included in the final count of surgeries.

The predicted number of SSIs and the SSI SIRs were calculated differently from CLABSI and CAUTI. Details on these calculations be found the October 2012 Quarterly can in Report http://epi.publichealth.nc.gov/cd/hai/figures/hai\_oct2012.pdf. Similar to CLABSIs, the baseline period for the calculation of predicted SSIs was the 2006-2008 NHSN national data. Finally, the SSI SIRs were adjusted for patient age and ASA score.

Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Abdomi	Colon surgery		
Infections*	0		0
Procedures	10		37
Rate			0
Predicted Infections			1.01
SIR**			0
95% CI**		•	, 3.652
Interpretation			Same

<sup>\*</sup>Infections from deep incisional and/or organ space.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

Recall that if the number of procedures (or central line days for CLABSIs or catheter days for CAUTIs) at a hospital did not meet a minimum threshold number, the number of infections and surgeries would be presented, but not the rate. For SSIs, the minimum threshold was 20 surgeries for a reporting period. In the example above, less than 20 abdominal hysterectomies were performed. Therefore, the SSI rate for abdominal hysterectomy was not included in the table. In the accompanying figure below, the hospital SSI rate and 95% CI were not presented.

<sup>\*\*</sup>SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

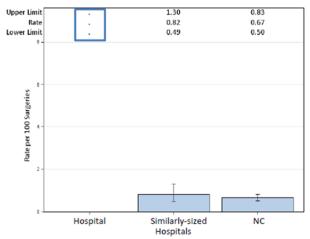


Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

#### **Commentary from Hospital**

This section was an opportunity for hospitals to comment on HAIs and infection control activities in their hospitals. There was a 690 character limit (including spaces); therefore hospitals may have chosen to provide a link to their hospital website to provide lengthier comments.

**Hospital-Specific Summary Reports** 

ARHS-Watauga Medical Center, Boone, Watauga County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: Limited **Profit Status:** Not for Profit Admissions in 2011: 4,691 Patient Days in 2011: 19,027 Total Number of Beds: 110 Number of ICU Beds: 10 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.91



\*FTE = Full-time equivalent

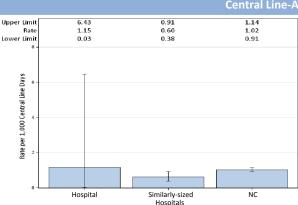


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Predicted Infections Line Type of ICU Infections Days Rate 95% CI\* Interpretation Medical/surgical 1 867 1.15 1.301 0.769 0.019, 4.283 Same YTD Total for Reporting ICUs 867 1.15 1.301 0.769 0.019, 4.283 Same

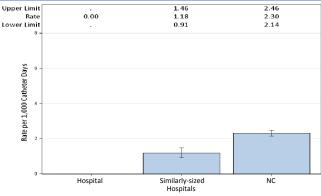
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Catheter-Associated Urinary Tract Infections (CAUTI) Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009

	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		••	pa			
Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	0	1,400	0	1.82	0	, 2.027	Same
YTD Total for Reporting ICU:	s 0	1,400	0	1.82	0	, 2.027	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

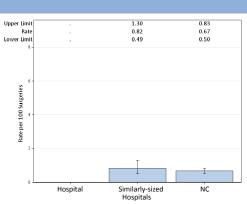


Figure 3. Rates and 95% Confidence Intervals for Abdominal

Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	0
Procedures	10	37
Rate		0
Predicted Infection	s .	1.01
SIR**		0
95% CI**		, 3.652
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

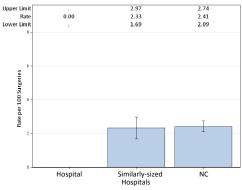


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

No comments provided.

Alamance Regional Medical Center, Burlington, Alamance County

Central Line-Associated Bloodstream Infections (CLABSI)

#### **2011 Hospital Survey Information**

1.01

Similarly-sized

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 10,996 Patient Days in 2011: 46,125 Total Number of Beds: 238 Number of ICU Beds: 32 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.42

1.49

0.31

Hospital



\*FTE = Full-time equivalent

**Upper Limit** 

Rate per 1,000 Central Line Days

# 1.14 1.02 0.91 YTD Total for Reporting ICUs

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Rate Infections 95% CI\* Interpretation Medical/surgical 3 1,983 1.51 2.975 1.008 0.208, 2.947 Same Neonatal Level II/III 0 31

1.49

3.009

2,014

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

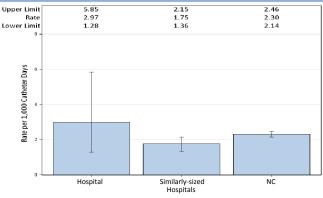
\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

3

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	8	2,693	2.97	3.232	2.475	1.069, 4.877	Higher
YTD Total for Reporting ICU	s 8	2.693	2.97	3.232	2.475	1.069. 4.877	Higher



0.997 0.206, 2.914

Same

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

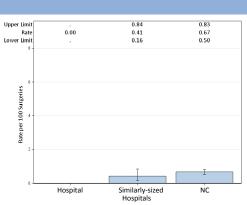


Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

## Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	1
Procedures	178	129
Rate	0	0.78
<b>Predicted Infections</b>	1.76	4.00
SIR**	0	0.25
95% CI**	, 2.100	0.006, 1.392
Interpretation	Same	Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

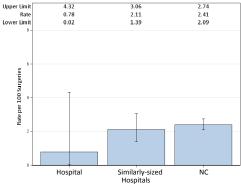


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

#### **Commentary from Hospitals:**

No comments provided.

Albemarle Health Authority, Elizabeth City, Pasquotank County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 5,780 Patient Days in 2011: 22,562 Total Number of Beds: 135 Number of ICU Beds: 10 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.74



## 1.14 1.02 **Upper Limit** 1.08 0.60 0.03 0.91 Rate per 1,000 Central Line Days

Central Line-Associated Bloodstream Infections (CLABSI)

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Rate Infections 95% CI\* Interpretation Medical/surgical 1 925 1.08 1.388 0.72 0.018, 4.014 Same YTD Total for Reporting ICUs 925 1.08 1.388 0.018, 4.014 Same

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

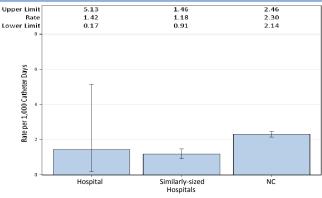
Hospital

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	2	1,407	1.42	1.829	1.093	0.132, 3.950	Same
YTD Total for Reporting ICU	s 2	1.407	1.42	1.829	1.093	0.132, 3.950	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

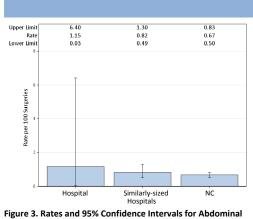


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	1
Procedures	87	78
Rate	1.15	1.28
Predicted Infection	s 0.87	2.61
SIR**		0.383
95% CI**		0.010, 2.131
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

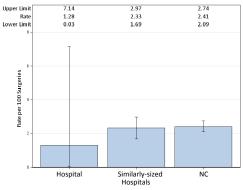


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

No comments provided.

Refer to Section IV of the NC HAI Prevention Program - Quarterly Report October 2012 for further explanation of presented statistics (epi.publichealth.nc.gov/cd/hai/figures.html). Data as of March 12, 2013.

<sup>\*</sup>FTE = Full-time equivalent

Annie Penn Hospital, Reidsville, Rockingham County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 3,063 Patient Days in 2011: 13,704 Total Number of Beds: 78 Number of ICU Beds: 12 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 1.28



\*FTE = Full-time equivalent

#### Central Line-Associated Bloodstream Infections (CLABSI)

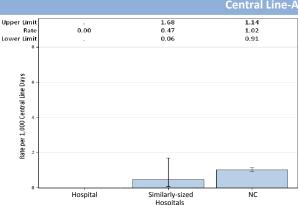


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Type of ICU Infections Infections Interpretation 0 0 0.617

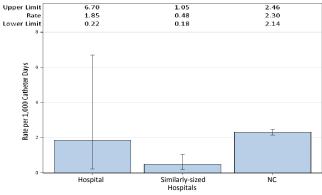
Medical/surgical 411 YTD Total for Reporting ICUs 0 411 0 0.617

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval. Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	2	1,079	1.85	1.403	1.426	0.173, 5.149	Same
YTD Total for Reporting ICU:	s 2	1.079	1.85	1.403	1.426	0.173. 5.149	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

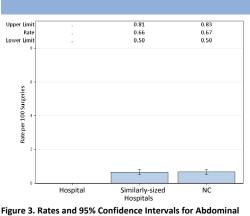


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	1
Procedures	16	23
Rate		4.35
Predicted Infections		0.76
SIR**		
95% CI**		
Interpretation		
*1		

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

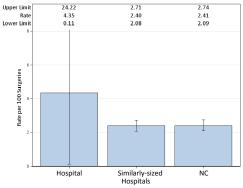


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

Cone Health is committed to preventing Healthcare Associated Infections. We have dedicated teams of experts focused on process improvements to improve our patient outcomes. Please contact Cone Health Infection Prevention if you would like further information.

Refer to Section IV of the NC HAI Prevention Program - Quarterly Report October 2012 for further explanation of presented statistics (epi.publichealth.nc.gov/cd/hai/figures.html). Data as of March 12, 2013.

Anson Community Hospital, Wadesboro, Anson County

#### **2011 Hospital Survey Information**

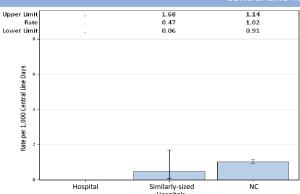
Hospital Type: Acute Care Hospital

Medical Affiliation: No

Profit Status:
Admissions in 2011:
Patient Days in 2011:
2,186
Total Number of Beds:
Number of ICU Beds:
FTE\* Infection Preventionists:
0.38
Number of FTEs\* per 100 beds:
1.25



#### Central Line-Associated Bloodstream Infections (CLABSI)



This hospital does not have intensive care units (ICUs).

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

#### **Catheter-Associated Urinary Tract Infections (CAUTI)**

This hospital does not have intensive care units (ICUs).

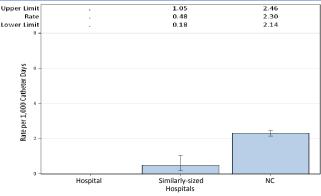


Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Upper Limit

# 

Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

## Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

**Surgical Site Infections (SSI)** 

	Abdominal hysterectomy	Colon surgery			
Infections*	0	0			
Procedures	1	1			
Rate					
Predicted Infection	s .				
SIR**					
95% CI**					
Interpretation					
*Infections from deep incisional and/or organ space. **SIR, 95%CI = Standardized Infection Ratio and corresponding 95%					

Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

Lower Limit . 2.08 2.09

Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

#### **Commentary from Hospitals:**

No comments provided.

2.74

Asheville Specialty Hospital, Asheville, Buncombe County

## 2011 Hospital Survey Information

Hospital Type: Long-term Acute Care Hospital

For Profit Profit Status: Admissions in 2011: 369 8,734 Patient Days in 2011: Total Number of Beds: 34 1.00 FTE\* Infection Preventionists: Number of FTEs\* per 100 beds: 2.94



\*FTE = Full-time equivalent

## Central Line-Associated Bloodstream Infections (CLABSI) 1.40 0.88 0.51 Upper Limit 1.32 Lower Limit Rate per 1,000 Central Line Days NC (LTACs)

Table 1. Rates by Location, Jan-Dec 2012.

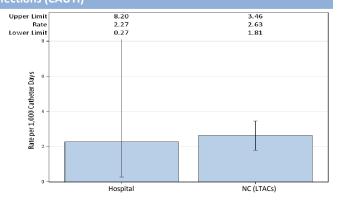
Type of Unit	Infections	Line Days	Rate	
Adult intensive care unit	0	546	0.00	
Adult ward	2	965	2.07	
YTD Total for Reporting Units	2	1,511	1.32	

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days.

#### Table 2. Rates by Location, Jan-Dec 2012

Type of Unit	Infections	Catheter Days	Rate	
Adult intensive care unit	1	478	2.09	
Adult ward	1	403	2.48	
YTD Total for Reporting Unit	ts 2	881	2.27	



Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

#### **Surgical Site Infections (SSI)**

Long-term acute care hospitals (LTACs) do not report surgical site infections.

#### **Commentary from Hospitals:**

No comments provided.

Betsy Johnson Regional, Dunn, Harnett County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 7,306 Patient Days in 2011: 27,411 Total Number of Beds: 101 Number of ICU Beds: 6 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.99



\*FTE = Full-time equivalent

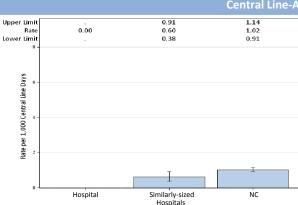


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Infections Interpretation 0 Medical/surgical 0 571 0.857 YTD Total for Reporting ICUs 0 571 0 0.857

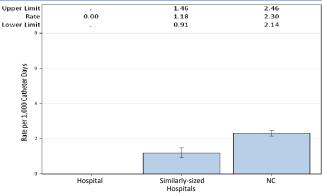
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Catheter-Associated Urinary Tract Infections (CAUTI) Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	0	1,238	0	1.609	0	, 2.293	Same
YTD Total for Reporting ICU:	s 0	1,238	0	1.609	0	, 2.293	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

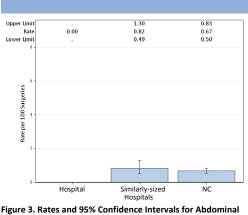


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

	Abdominal hysterectomy	Colon surgery
Infections*	0	0
Procedures	62	32
Rate	0	0
Predicted Infections	s 0.72	1.02
SIR**	•	0
95% CI**		, 3.631
Interpretation		Same

Surgical Site Infections (SSI)

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

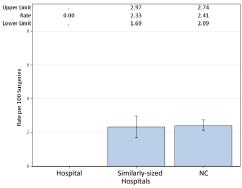


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

No comments provided.

Blue Ridge Healthcare Hospitals - Valdese Campus, Valdese, Burke County

#### **2011 Hospital Survey Information**

0.69

Hospital Type: Acute Care Hospital Medical Affiliation: Graduate **Profit Status:** Not for Profit Admissions in 2011: 2,057 Patient Days in 2011: 8,501 Total Number of Beds: 131 Number of ICU Beds: 10 FTE\* Infection Preventionists: 0.90



\*FTE = Full-time equivalent

Number of FTEs\* per 100 beds:

#### Central Line-Associated Bloodstream Infections (CLABSI)

YTD Total for Reporting ICUs

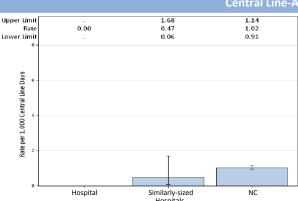


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Type of ICU Infections Infections 95% CI\* Medical 0 241 0 0.458

0

0.458

0

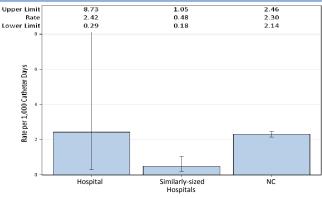
241

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval. Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical	2	828	2.42	1.656	1.208	0.146, 4.363	Same
YTD Total for Reporting ICU	s 2	828	2.42	1.656	1.208	0.146, 4.363	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

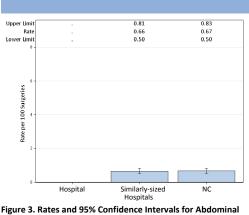


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

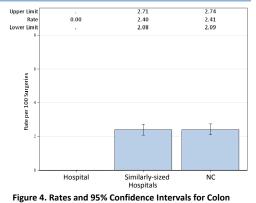
Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	0
Procedures	0	45
Rate		0
Predicted Infection	s .	1.37
SIR**	•	0
95% CI**		, 2.693
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.



Surgeries, Jan-Dec 2012.

# Hysterectomies, Jan-Dec 2012.

The prevention and reduction of healthcare associated infections is a top priority at Blue Ridge Healthcare Hospitals Valdese. To accomplish this, infection prevention strategies are continually assessed and measures implemented to decrease the risk for infection. These measures are based on evidence based practices and clinical guidelines. A comprehensive program is provided that encompasses patient care and patient safety.

Refer to Section IV of the NC HAI Prevention Program - Quarterly Report October 2012 for further explanation of presented statistics (epi.publichealth.nc.gov/cd/hai/figures.html). Data as of March 12, 2013.

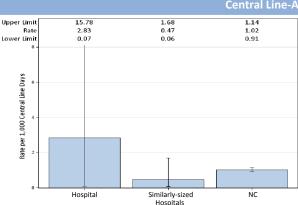
Blue Ridge Healthcare Hospitals, Inc. - Morganton Campus, Morganton, Burke County

Hospital Type: Acute Care Hospital Medical Affiliation: Graduate **Profit Status:** Not for Profit Admissions in 2011: 5.931 Patient Days in 2011: 23,517 Total Number of Beds: 184 Number of ICU Beds: 10 FTE\* Infection Preventionists: 0.90 Number of FTEs\* per 100 beds: 0.49



\*FTE = Full-time equivalent

#### Central Line-Associated Bloodstream Infections (CLABSI) Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.



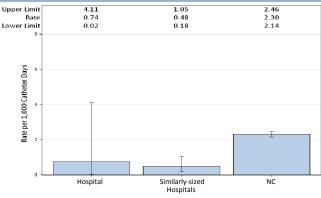
Line Predicted Days Type of ICU Infections Rate Infections 95% CI\* Interpretation Medical 1 353 2.83 0.671 YTD Total for Reporting ICUs 353 2.83 0.671

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval. Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical	1	1,355	0.74	2.71	0.369	0.009, 2.056	Same
YTD Total for Reporting ICU	s 1	1.355	0.74	2.71	0.369	0.009, 2.056	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

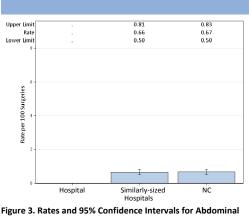


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
	Abdominal hysterectomy	Colon surgery
Infections*	0	0
Procedures	18	43
Rate	•	0
Predicted Infections		1.40
SIR**	·	0
95% CI**		, 2.633
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

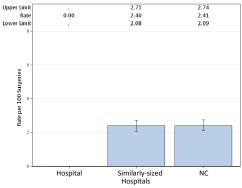


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

# Hysterectomies, Jan-Dec 2012.

The prevention and reduction of healthcare associated infections is a top priority at Blue Ridge Healthcare Hospitals Morganton. To accomplish this, infection prevention strategies are continually assessed and measures implemented to decrease the risk for infection. These measures are based on evidence based practices and clinical guidelines. A comprehensive program is provided that encompasses patient care and patient safety.

Refer to Section IV of the NC HAI Prevention Program - Quarterly Report October 2012 for further explanation of presented statistics (epi.publichealth.nc.gov/cd/hai/figures.html). Data as of March 12, 2013.

Blue Ridge Regional Hospital, Spruce Pine, Mitchell County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 2,183 Patient Days in 2011: 6,661 Total Number of Beds: 46 Number of ICU Beds: 8 FTE\* Infection Preventionists: 0.88 Number of FTEs\* per 100 beds: 1.90



YTD Total for Reporting ICUs

1.68 0.47 1.14 1.02 **Upper Limit** 0.00 0.91 Rate per 1,000 Central Line Days Hospital

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Infections Interpretation 0 Medical cardiac 0 117 0.234

0

0.234

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

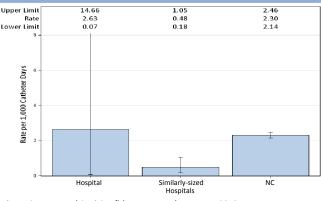
117

0

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical cardiac	1	380	2.63	0.76			
YTD Total for Reporting ICU:	s 1	380	2.63	0.76			



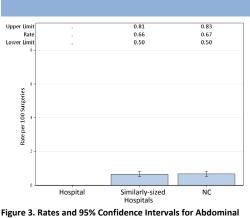
Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Upper Limit

Lower Limit

100 Surgeries



## Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery				
Infections*	0	0				
Procedures	3	5				
Rate	•					
Predicted Infections						
SIR**	·					
95% CI**						
Interpretation						
*Infections from deep incisional and/or organ space.  **SIR, 95%CI = Standardized Infection Ratio and corresponding 95%						

Confidence Interval Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

Surgeries, Jan-Dec 2012.

## Rate Similarly-sized Hospitals Hospital Figure 4. Rates and 95% Confidence Intervals for Colon

Hysterectomies, Jan-Dec 2012.

**Commentary from Hospitals:** No comments provided.

2.74

<sup>\*</sup>FTE = Full-time equivalent

<sup>\*</sup>SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Brunswick Community Hospital, Supply, Brunswick County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 3,640 Patient Days in 2011: 11,920 Total Number of Beds: 60 Number of ICU Beds: FTE\* Infection Preventionists: 0.50 Number of FTEs\* per 100 beds: 0.83



\*FTE = Full-time equivalent

#### Central Line-Associated Bloodstream Infections (CLABSI)

1.68 0.47 1.14 1.02 **Upper Limit** 0.07 0.91 Rate per 1,000 Central Line Days Hospital

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Type of ICU Infections Rate Infections Interpretation Medical/surgical 1 351 2.85 0.527 YTD Total for Reporting ICUs 351 2.85 0.527

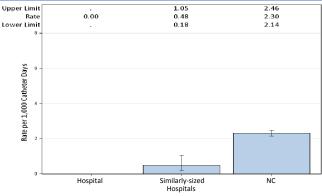
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

	717						
Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	0	774	0	1.006	0	, 3.667	Same
YTD Total for Reporting ICUs	s 0	774	0	1.006	0	3.667	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

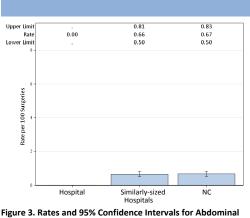


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	5
Procedures	22	62
Rate	0	8.06
Predicted Infection	s 0.24	1.94
SIR**		2.584
95% CI**		0.839, 6.030
Interpretation		Higher

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

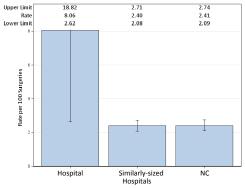


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

# Hysterectomies, Jan-Dec 2012.

At Novant Health, the safety of our patients comes first. Our goal is to have the lowest possible infection rates and we continually monitor infection prevention tactics for improvement opportunities. We support transparency in reporting infection rates and make common infection data available on our website. More information can be found under 'quality' on NovantHealth.org.

Refer to Section IV of the NC HAI Prevention Program - Quarterly Report October 2012 for further explanation of presented statistics (epi.publichealth.nc.gov/cd/hai/figures.html). Data as of March 12, 2013.

Caldwell Memorial Hospital, Lenoir, Caldwell County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 4,060 Patient Days in 2011: 18,281 Total Number of Beds: 110 Number of ICU Beds: 10 FTE\* Infection Preventionists: 0.75 Number of FTEs\* per 100 beds: 0.68



\*FTE = Full-time equivalent

1.14 1.02 **Upper Limit** 0.00 0.60 0.91 Rate per 1,000 Central Line Days Hospital Hospitals

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Infections 95% CI\* Interpretation 0 Medical/surgical 0 1,545 2.318 0 , 1.591 Same YTD Total for Reporting ICUs 0 1,545 0 2.318 0 , 1.591 Same

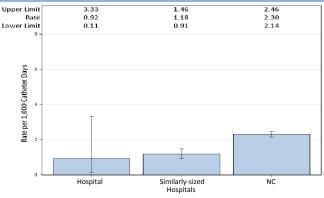
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	2	2,169	0.92	2.82	0.709	0.086, 2.562	Same
YTD Total for Reporting ICU:	s 2	2.169	0.92	2.82	0.709	0.086, 2.562	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

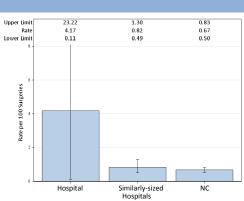


Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

## Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	0
Procedures	24	11
Rate	4.17	
Predicted Infections	0.14	
SIR** 95% CI** Interpretation	·	

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

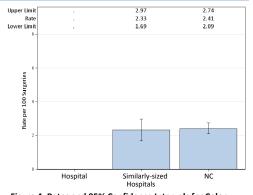


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

#### **Commentary from Hospitals:**

Cape Fear Valley Health System, Fayetteville, Cumberland County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 29,287 Patient Days in 2011: 155,939 Total Number of Beds: 535 Number of ICU Beds: 90 FTE\* Infection Preventionists: 4.25 Number of FTEs\* per 100 beds: 0.79



\*FTE = Full-time equivalent

**Upper Limit** 

Rate per 1,000 Central Line Days

## Central Line-Associated Bloodstream Infections (CLABSI) 1.14 1.02 0.93 0.74 0.91

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Rate Infections 95% CI\* Interpretation Medical/surgical 11 5,522 1.99 8.283 1.328 0.663, 2.376 Same 2.99 0.979 Same

Neonatal Level II/III 3 1,003 3.063 0.202, 2.862 Pediatric medical/surgical 0 347 0 0 1.041 , 3.544 Same Surgical cardiothoracic 4 2,283 3.196 0.341, 3.205 1.75 1.252 Same YTD Total for Reporting ICUs 15.583 9.155 1.97 1.155 0.684, 1.826 Same

Hospital

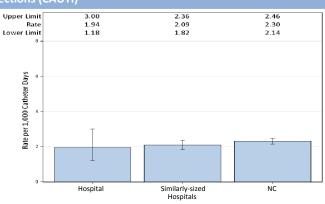
\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

## Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Similarly-sized

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	15	7,271	2.06	9.452	1.587	0.888, 2.618	Same
Pediatric medical/surgical	0	295	0	0.826			
Rehabiliation	1	218	4.59	0.828			
Surgical cardiothoracic	4	2,527	1.58	4.296	0.931	0.254, 2.384	Same
YTD Total for Reporting ICL	Js 20	10,311	1.94	15.403	1.298	0.793, 2.005	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

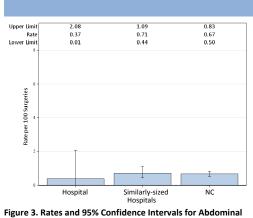


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	3
Procedures	268	266
Rate	0.37	1.13
Predicted Infections	s 3.24	9.24
SIR**	0.309	0.325
95% CI**	0.008, 1.721	0.067, 0.949
Interpretation	Same	Lower

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

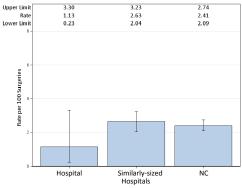


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

## Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

CarePartners Health Services, Asheville, Buncombe County

## 2011 Hospital Survey Information

Hospital Type: Inpatient Rehabilitation Facility

Profit Status:

Admissions in 2011:

Patient Days in 2011:

Total Number of Beds:

Number of FTEs\* per 100 beds:

Not for Profit
1,298
17,123
17,123
0.45
0.45
0.56



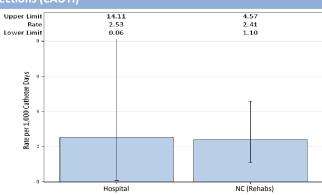
\*FTE = Full-time equivalent

#### Central Line-Associated Bloodstream Infections (CLABSI)

Inpatient rehabilitation facilities (IRF) do not report central line-associated bloodstream infections.

# Catheter-Associated Urinary Tract Infectio Table 1. Rates by Location, Jan-Dec 2012 Upper

Type of UnitInfectionsCatheter DaysRateAdult rehabilitation ward13952.53YTD Total for Reporting Wards13952.53



Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days.

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

#### Surgical Site Infections (SSI)

Inpatient rehabilitation facilities (IRF) do not report surgical site infections.

#### Commentary from Hospitals:

No comments provided.

CarolinaEast Medical Center, New Bern, Craven County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 15,504 Patient Days in 2011: 66,443 Total Number of Beds: 350 Number of ICU Beds: 33 FTE\* Infection Preventionists: 3.00 Number of FTEs\* per 100 beds: 0.86



\*FTE = Full-time equivalent

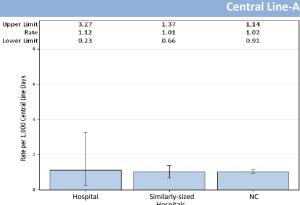


Table 1. Rates and Siks by ICO Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.							
Type of ICU	Infections	Line Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical	2	302	6.62	0.574			
Medical/surgical	0	1,811	0	2.717	0	, 1.358	Same
Surgical cardiothoracic	1	569	1.76	0.797			
YTD Total for Reporting ICUs	3	2,682	1.12	4.087	0.734	0.151, 2.145	Same

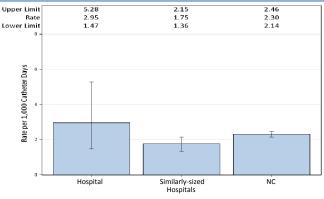
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical	4	600	6.67	1.2	3.333	0.908, 8.535	Higher
Medical/surgical	4	2,527	1.58	3.032	1.319	0.359, 3.378	Same
Rehabiliation	0	11		•			
Surgical cardiothoracic	3	593	5.06	1.008	2.976	0.614, 8.698	Same
YTD Total for Reporting ICU	s 11	3,731	2.95	5.282	2.083	1.040, 3.726	Higher



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

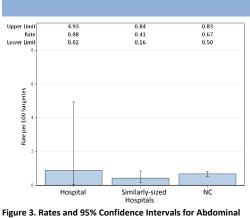


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

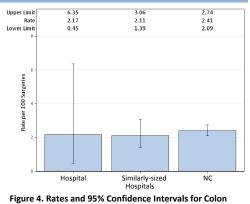
Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	3
Procedures	113	138
Rate	0.88	2.17
Predicted Infections	1.22	4.39
SIR**	0.817	0.683
95% CI**	0.021, 4.552	0.141, 1.995
Interpretation	Same	Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.



Surgeries, Jan-Dec 2012.

## Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

Carolinas Medical Center, Charlotte, Mecklenburg County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: Major **Profit Status:** Not for Profit Admissions in 2011: 52,282 Patient Days in 2011: 271,498 Total Number of Beds: 880 Number of ICU Beds: 218 FTE\* Infection Preventionists: 5.00 Number of FTEs\* per 100 beds: 0.57



\*FTE = Full-time equivalent

TTE - Tun time	cquivalent		
			Central Line-As
Upper Limit	1.54	1.12	1.14
Rate	1.15	0.93	1.02
Lower Limit	0.76	0.74	0.91
Rate per 1,000 Central Line Days			
	I	I	I
•	Hospital	Similarly-sized Hospitals	NC

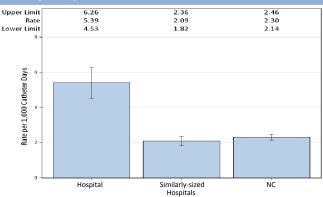
Table 1. Rates and SIRS by ICO	iype, jan-υ	ec zotz i	n com	parison to N	ational i	saseline Data t	rom 2006-2008.
Type of ICU	Infections	Line Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical	7	5,090	1.38	13.234	0.529	0.213, 1.090	Lower
Medical cardiac	3	2,341	1.28	4.682	0.641	0.132, 1.873	Same
Neonatal Level III	5	8,620	0.58	19.936	0.251	0.081, 0.585	Lower
Neurosurgical	4	2,593	1.54	6.483	0.617	0.168, 1.580	Same
Pediatric medical/surgical	3	3,079	0.97	9.237	0.325	0.067, 0.949	Lower
Surgical cardiothoracic	4	2,320	1.72	3.248	1.232	0.336, 3.153	Same
Trauma	8	5,542	1.44	19.951	0.401	0.173, 0.790	Lower
YTD Total for Reporting ICUs	34	29,585	1.15	76.77	0.443	0.307, 0.619	Lower

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Nates and Sins by ICO Type, Jan-Dec 2012 in Companison to National Baseline Data Iron 2005.							UIII 2005.
Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical	37	7,043	5.25	16.199	2.284	1.608, 3.148	Higher
Medical cardiac	14	3,277	4.27	6.554	2.136	1.168, 3.584	Higher
Neurosurgical	44	5,487	8.02	24.143	1.822	1.324, 2.447	Higher
Pediatric medical/surgical	4	1,485	2.69	4.158	0.962	0.262, 2.463	Same
Pediatric rehabiliation	0	16					
Surgical cardiothoracic	7	2,414	2.9	4.104	1.706	0.686, 3.514	Same
Trauma	44	8,088	5.44	27.499	1.6	1.162, 2.148	Higher
YTD Total for Reporting ICU	s 150	27,810	5.39	82.7	1.814	1.535, 2.128	Higher



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

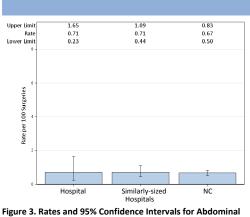


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

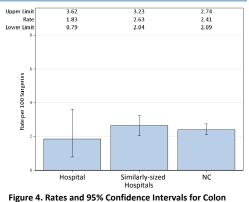
Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	5	8
Procedures	707	436
Rate	0.71	1.83
Predicted Infections	6.32	15.03
SIR**	0.792	0.532
95% CI**	0.257, 1.847	0.230, 1.049
Interpretation	Same	Lower

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.



Surgeries, Jan-Dec 2012.

# Hysterectomies, Jan-Dec 2012.

The prevention and reduction of healthcare associated infections is a top priority at Carolinas Healthcare System hospitals. To accomplish this, infection prevention strategies are continually assessed and measures implemented to decrease the risk for infection. These measures are based on evidence based practices and clinical guidelines. A comprehensive program is provided that encompasses patient care and patient safety.

Carolinas Medical Center - Lincoln, Lincolnton, Lincoln County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 4,105 Patient Days in 2011: 17,248 Total Number of Beds: 101 Number of ICU Beds: 10 FTE\* Infection Preventionists: 0.75 Number of FTEs\* per 100 beds: 0.74



\*FTE = Full-time equivalent

#### Central Line-Associated Bloodstream Infections (CLABSI)

YTD Total for Reporting ICUs

1.14 1.02 **Upper Limit** 1.51 0.60 0.91 Rate per 1,000 Central Line Days Hospital Similarly-sized

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Infections Type of ICU Infections Rate 95% CI\* Interpretation Medical/surgical 1 661 1.51 0.992

1.51

0.992

661

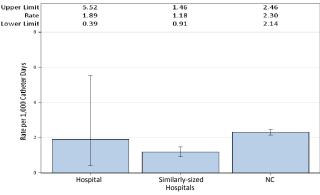
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Catheter Predicted Type of ICU SIR\* 95% CI\* Infections Rate Interpretation Days Infections Medical/surgical 3 1,587 1.89 2.063 1.454 0.300, 4.250 Same YTD Total for Reporting ICUs 3 1,587 1.89 2.063 1.454 0.300, 4.250 Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

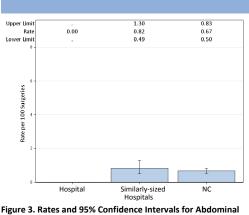


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	1
Procedures	49	17
Rate	0	
Predicted Infections	0.48	
SIR**	•	
95% CI**		
Interpretation		
*Infections from deep	o incisional and/or organ space	e. responding 95%

Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

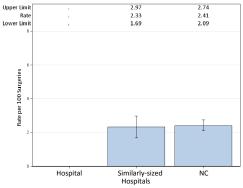


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

# Hysterectomies, Jan-Dec 2012.

The prevention and reduction of healthcare associated infections is a top priority at Carolinas Healthcare System hospitals. To accomplish this, infection prevention strategies are continually assessed and measures implemented to decrease the risk for infection. These measures are based on evidence based practices and clinical guidelines. A comprehensive program is provided that encompasses patient care and patient safety.

Carolinas Medical Center- Mercy, Charlotte, Mecklenburg County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: Limited **Profit Status:** Not for Profit Admissions in 2011: 9,264 Patient Days in 2011: 40,462 Total Number of Beds: 170 Number of ICU Beds: 30 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.59



\*FTE = Full-time equivalent

#### Central Line-Associated Bloodstream Infections (CLABSI)

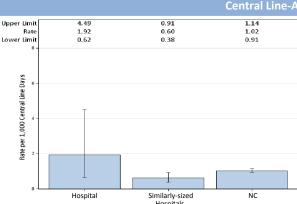


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Rate Infections 95% CI\* Interpretation Medical 1 1,035 0.97 1.967 0.508 0.013, 2.833 Same Medical cardiac 1 829 1.21 1.658 0.603 0.015, 3.360 Same 1.688 Surgical 734 4.09 3 1.777 0.367, 5.194 Same YTD Total for Reporting ICUs 2,598 0.306, 2.196 1.92 5.313 0.941 Same

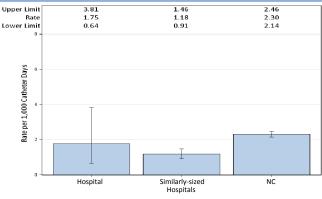
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical	1	1,420	0.7	2.84	0.352	0.009, 1.962	Same
Medical cardiac	3	1,148	2.61	2.296	1.307	0.269, 3.818	Same
Surgical	2	857	2.33	2.228	0.898	0.109, 3.243	Same
YTD Total for Reporting ICUs	6	3,425	1.75	7.364	0.815	0.299, 1.773	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

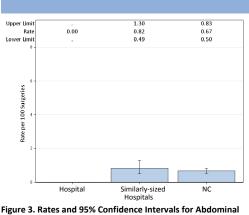


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

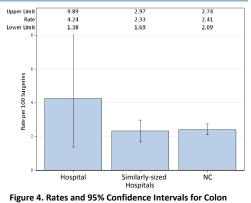
Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	5
Procedures	67	118
Rate	0	4.24
Predicted Infections	0.53	3.74
SIR**		1.338
95% CI**		0.434, 3.122
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.



Surgeries, Jan-Dec 2012.

# Hysterectomies, Jan-Dec 2012.

The prevention and reduction of healthcare associated infections is a top priority at Carolinas Healthcare System hospitals. To accomplish this, infection prevention strategies are continually assessed and measures implemented to decrease the risk for infection. These measures are based on evidence based practices and clinical guidelines. A comprehensive program is provided that encompasses patient care and patient safety.

Carolinas Medical Center - Northeast, Concord, Cabarrus County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 24,746 Patient Days in 2011: 106,692 Total Number of Beds: 435 Number of ICU Beds: 54 FTE\* Infection Preventionists: 3.00 Number of FTEs\* per 100 beds: 0.69



\*FTE = Full-time equivalent

1.14	Table 1. Rates and SIRs i	oy ICU Type, Ja
1.02 0.91	Type of ICU	Infectio
	NA 1: 1/ : 1	

Central Line-Associated Bloodstream Infections (CLABSI)

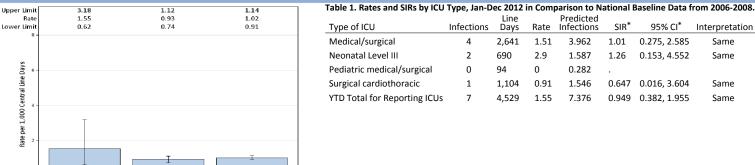


Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Hospital

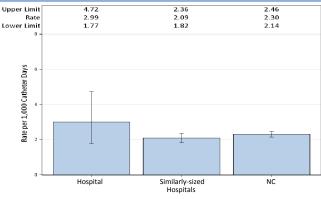
\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

## Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

	- ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	11	4,054	2.71	5.27	2.087	1.042, 3.735	Higher
Pediatric medical/surgical	0	73	0	0.204			
Surgical cardiothoracic	7	1,894	3.7	3.22	2.174	0.874, 4.479	Higher
YTD Total for Reporting ICU	s 18	6,021	2.99	8.694	2.07	1.226, 3.272	Higher

Similarly-sized



95% CI\*

0.275, 2.585

0.153, 4.552

0.016, 3.604

0.382, 1.955

Interpretation

Same

Same

Same

Same

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

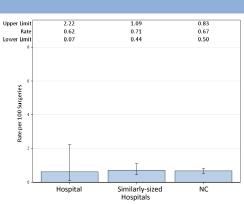


Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

## Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	2	4
Procedures	325	250
Rate	0.62	1.6
<b>Predicted Infections</b>	3.14	7.96
SIR**	0.638	0.502
95% CI**	0.077, 2.304	0.137, 1.286
Interpretation	Same	Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95%

Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

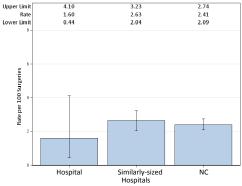


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

The prevention and reduction of healthcare associated infections is a top priority at Carolinas Healthcare System hospitals. To accomplish this, infection prevention strategies are continually assessed and measures implemented to decrease the risk for infection. These measures are based on evidence based practices and clinical guidelines. A comprehensive program is provided that encompasses patient care and patient safety.

Carolinas Medical Center-Pineville, Charlotte, Mecklenburg County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: Limited **Profit Status:** Not for Profit Admissions in 2011: 10,863 Patient Days in 2011: 39,353 Total Number of Beds: 109 Number of ICU Beds: 8 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.92



\*FTE = Full-time equivalent

## Central Line-Associated Bloodstream Infections (CLABSI)

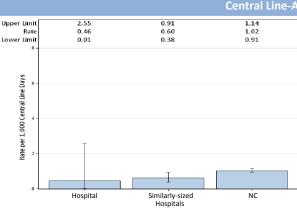


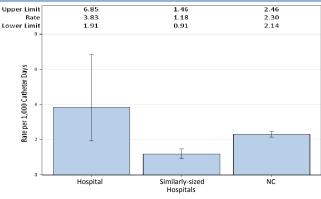
Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Predicted Infections Line Type of ICU Infections Days Rate 95% CI\* Interpretation Medical 1 1,543 0.65 2.932 0.341 0.009, 1.900 Same Neonatal Level II/III 0 185 0 0.292 0 453 0 1.042 0 Surgical , 3.540 Same YTD Total for Reporting ICUs 0.46 4.265 0.006, 1.306 2,181 0.234 Same

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval. Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical	9	2,415	3.73	4.83	1.863	0.852, 3.537	Same
Surgical	2	457	4.38	1.188	1.684	0.204, 6.081	Same
YTD Total for Reporting ICU	s 11	2,872	3.83	6.018	1.828	0.912, 3.271	Higher



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

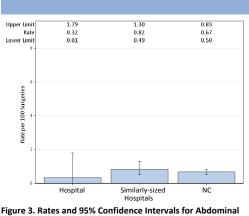


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

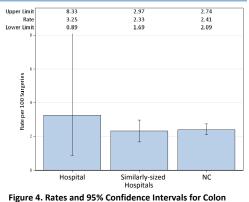
Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	4
Procedures	312	123
Rate	0.32	3.25
Predicted Infections	2.73	3.97
SIR**	0.367	1.008
95% CI**	0.009, 2.044	0.275, 2.580
Interpretation	Same	Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.



Surgeries, Jan-Dec 2012.

# Hysterectomies, Jan-Dec 2012.

The prevention and reduction of healthcare associated infections is a top priority at Carolinas Healthcare System hospitals. To accomplish this, infection prevention strategies are continually assessed and measures implemented to decrease the risk for infection. These measures are based on evidence based practices and clinical guidelines. A comprehensive program is provided that encompasses patient care and patient safety.

Carolinas Medical Center - Union, Monroe, Union County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: Limited **Profit Status:** Not for Profit Admissions in 2011: 9,602 Patient Days in 2011: 40,252 Total Number of Beds: 165 Number of ICU Beds: 14 FTE\* Infection Preventionists: 2.00 Number of FTEs\* per 100 beds: 1.21



\*FTE = Full-time equivalent

#### Central Line-Associated Bloodstream Infections (CLABSI)

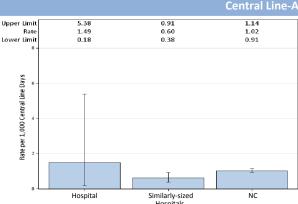


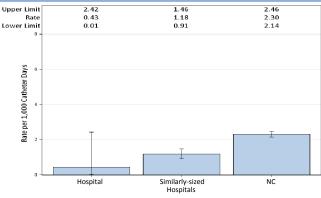
Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Rate Infections 95% CI\* Interpretation Medical/surgical 1,343 1.49 2.015 0.993 0.120, 3.585 Same YTD Total for Reporting ICUs 1,343 1.49 2.015 0.993 0.120, 3.585 Same

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval. Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	1	2,304	0.43	2.995	0.334	0.008, 1.860	Same
YTD Total for Reporting ICU	s 1	2.304	0.43	2.995	0.334	0.008, 1.860	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

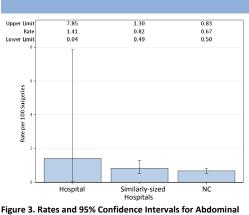


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

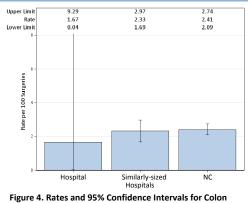
Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	1
Procedures	71	60
Rate	1.41	1.67
Predicted Infection	s 0.73	1.93
SIR**		0.519
95% CI**		0.013, 2.890
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.



Surgeries, Jan-Dec 2012.

# Hysterectomies, Jan-Dec 2012.

The prevention and reduction of healthcare associated infections is a top priority at Carolinas Healthcare System hospitals. To accomplish this, infection prevention strategies are continually assessed and measures implemented to decrease the risk for infection. These measures are based on evidence based practices and clinical guidelines. A comprehensive program is provided that encompasses patient care and patient safety.

Carolinas Medical Center- University, Charlotte, Mecklenburg County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: Limited **Profit Status:** Not for Profit Admissions in 2011: 7.399 Patient Days in 2011: 23,883 Total Number of Beds: 130 Number of ICU Beds: FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.77



\*FTE = Full-time equivalent

## 1.14 1.02 **Upper Limit** 0.81 0.60 0.02 0.91 Rate per 1,000 Central Line Days Hospita

### Central Line-Associated Bloodstream Infections (CLABSI)

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Type of ICU Infections Rate Infections 95% CI\* Interpretation Medical/surgical 1 1,133 0.88 1.7 0.588 0.015, 3.277 Same Neonatal Level II/III 0 104 0 0.189 1.888 YTD Total for Reporting ICUs 1,237 0.013, 2.951 0.81 0.53 Same

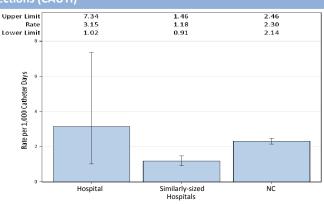
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	5	1,589	3.15	2.066	2.42	0.786, 5.648	Same
YTD Total for Reporting ICU	s 5	1.589	3.15	2.066	2.42	0.786. 5.648	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

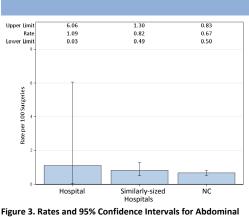


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	1
Procedures	92	58
Rate	1.09	1.72
Predicted Infections	s 0.83	1.89
SIR**		0.528
95% CI**		0.013, 2.943
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

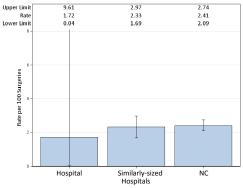


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

# Hysterectomies, Jan-Dec 2012.

The prevention and reduction of healthcare associated infections is a top priority at Carolinas Healthcare System hospitals. To accomplish this, infection prevention strategies are continually assessed and measures implemented to decrease the risk for infection. These measures are based on evidence based practices and clinical guidelines. A comprehensive program is provided that encompasses patient care and patient safety.

Carolinas Rehabilitation, Charlotte, Mecklenburg County

#### **2011 Hospital Survey Information**

Hospital Type: Inpatient Rehabilitation Facility

Profit Status:
Admissions in 2011:
Patient Days in 2011:
Total Number of Beds:
FTE\* Infection Preventionists:
Number of FTEs\* per 100 beds:

Number of Status:
Number of FTEs\* per 100 beds:



\*FTE = Full-time equivalent

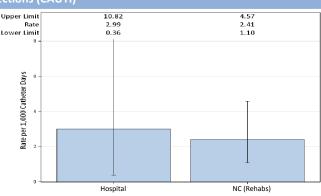
#### **Central Line-Associated Bloodstream Infections (CLABSI)**

Inpatient rehabilitation facilities (IRF) do not report central line-associated bloodstream infections.

### Catheter-Associated Urinary Tract Infections (CAUT

Table 1. Rates by Location, Jan-Dec 2012

Type of Unit	Infections	Catheter Days	Rate	
Adult rehabilitation ward	2	668	2.99	
YTD Total for Reporting War	ds 2	668	2.99	



Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days.

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Surgical Site Infections (SSI)

Inpatient rehabilitation facilities (IRF) do not report surgical site infections.

#### **Commentary from Hospitals:**

The prevention and reduction of healthcare associated infections is a top priority at Carolinas Healthcare System hospitals. To accomplish this, infection prevention strategies are continually assessed and measures implemented to decrease the risk for infection. These measures are based on evidence based practices and clinical guidelines. A comprehensive program is provided that encompasses patient care and patient safety.

Carolinas Specialty Hospital, Charlotte, Mecklenburg County

#### **2011 Hospital Survey Information**

Hospital Type: Long-term Acute Care Hospital

Not for Profit Profit Status: Admissions in 2011: 412 Patient Days in 2011: 11,322 Total Number of Beds: 40 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 2.50



\*FTE = Full-time equivalent

# Central Line-Associated Bloodstream Infections (CLABSI) 1.40 0.88 0.51 Upper Limit 6.18 2.41 Rate per 1,000 Central Line Days NC (LTACs)

Table 1. Rates by Location, Jan-Dec 2012.

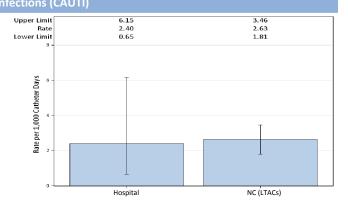
Type of Unit	Infections	Line Days	Rate
Adult ward	4	1,657	2.41
YTD Total for Reporting Units	4	1.657	2.41

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days.

### Table 2. Rates by Location, Jan-Dec 2012

Type of Unit	Infections	Catheter Days	Rate
Adult ward	4	1,665	2.4
YTD Total for Reporting Uni	ts 4	1,665	2.4



Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

#### **Surgical Site Infections (SSI)**

Long-term acute care hospitals (LTACs) do not report surgical site infections.

#### **Commentary from Hospitals:**

Carteret General Hospital, Morehead City, Carteret County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 6.980 Patient Days in 2011: 24,561 Total Number of Beds: 135 Number of ICU Beds: 8 FTE\* Infection Preventionists: 1.50 Number of FTEs\* per 100 beds: 1.11



\*FTE = Full-time equivalent

1.14 1.02 **Upper Limit** 0.60 0.06 0.91 Rate per 1,000 Central Line Days Hospital Similarly-sized

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Rate Infections Interpretation Medical/surgical 1 423 2.36 0.635 YTD Total for Reporting ICUs 423 0.635

2.36

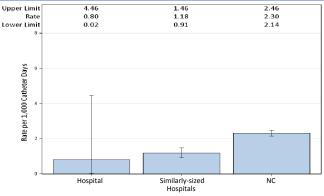
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	1	1,250	0.8	1.625	0.615	0.016, 3.429	Same
YTD Total for Reporting ICU:	s 1	1,250	0.8	1.625	0.615	0.016, 3.429	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

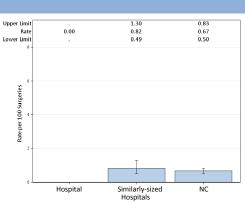


Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

## Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	2
Procedures	31	66
Rate	0	3.03
Predicted Infections	0.35	2.12
SIR**	•	0.945
95% CI**		0.114, 3.413
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

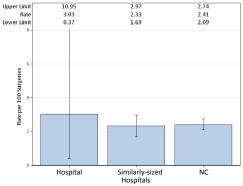


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

#### **Commentary from Hospitals:**

Catawba Valley Medical Center, Hickory, Catawba County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

 Profit Status:
 Not for Profit

 Admissions in 2011:
 11,668

 Patient Days in 2011:
 48,263

 Total Number of Beds:
 200

 Number of ICU Beds:
 28

 FTE\* Infection Preventionists:
 1.50

 Number of FTEs\* per 100 beds:
 0.75



\*FTE = Full-time equivalent

#### Central Line-Associated Bloodstream Infections (CLABSI)

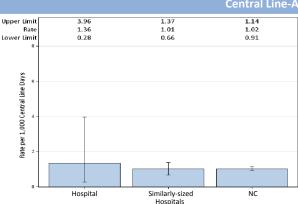


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Type of ICU Infections Rate Infections 95% CI\* Interpretation Medical/surgical 1 1,685 0.59 2.528 0.396 0.010, 2.204 Same 1.387 Neonatal Level II/III 2 529 3.78 1.442 0.175, 5.209 Same YTD Total for Reporting ICUs 3.914 0.766 0.158, 2.240 2,214 1.36 Same

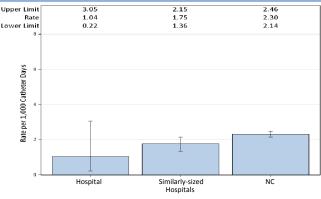
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	3	2,865	1.05	3.438	0.873	0.180, 2.550	Same
Rehabiliation	0	8					
YTD Total for Reporting ICU	s 3	2,873	1.04	3.468	0.865	0.178, 2.528	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

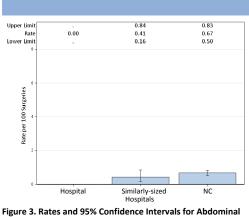


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

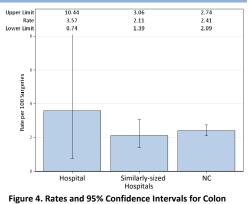
Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	3
Procedures	84	84
Rate	0	3.57
Predicted Infections	0.77	2.76
SIR**	•	1.085
95% CI**		0.224, 3.172
Interpretation		Same

\*Infections from deep incisional and/or organ space.
\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95%

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.



Surgeries, Jan-Dec 2012.

# Hysterectomies, Jan-Dec 2012. Commentary from Hospitals:

Central Carolina Hospital, Sanford, Lee County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No **Profit Status:** For Profit Admissions in 2011: 465 Patient Days in 2011: 1,654 Total Number of Beds: 112 Number of ICU Beds: 8 FTE\* Infection Preventionists: 0.50 Number of FTEs\* per 100 beds: 0.45



\*FTE = Full-time equivalent

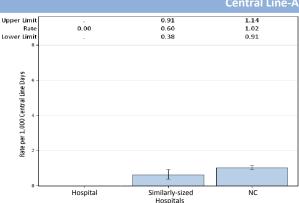


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Infections 95% CI\* Interpretation 0 2.094 Medical/surgical 0 1,396 0 , 1.762 Same YTD Total for Reporting ICUs 0 1,396 0 2.094 0 , 1.762 Same

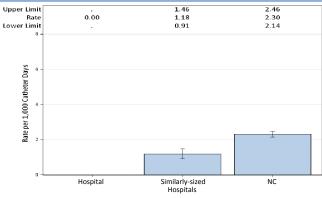
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	0	1,348	0	1.752	0	, 2.106	Same
YTD Total for Reporting ICU:	s 0	1,348	0	1.752	0	, 2.106	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

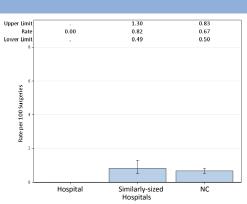


Figure 3. Rates and 95% Confidence Intervals for Abdominal

Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	0
Procedures	58	59
Rate	0	0
Predicted Infections	s 0.56	1.82
SIR**		0
95% CI**		, 2.027
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

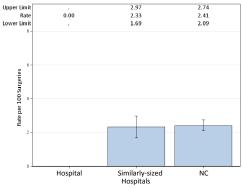


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

## Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

Cleveland Regional Medical Center, Shelby, Cleveland County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

Profit Status:

Admissions in 2011:
9,772
Patient Days in 2011:
35,345
Total Number of Beds:
Number of ICU Beds:
FTE\* Infection Preventionists:
Number of FTEs\* per 100 beds:
0.62



\*FTE = Full-time equivalent

#### Central Line-Associated Bloodstream Infections (CLABSI)

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Infections 95% CI\* Interpretation 0 Medical/surgical 0 2,287 3.431 0 , 1.075 Lower YTD Total for Reporting ICUs 0 2,287 0 3.431 0 , 1.075 Lower

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

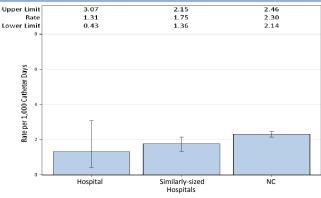
\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Catheter-Associated Urinary Tract Infections (CA

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	5	3,806	1.31	4.567	1.095	0.355, 2.555	Same
YTD Total for Reporting ICU:	s 5	3.806	1.31	4.567	1.095	0.355, 2.555	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

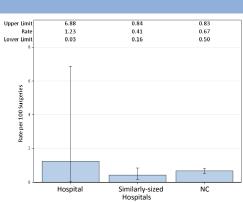


Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

## Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	3
Procedures	81	82
Rate	1.23	3.66
<b>Predicted Infections</b>	0.97	2.61
SIR**		1.149
95% CI**		0.237, 3.358
Interpretation		Same

\*Infections from deep incisional and/or organ space.
\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95%

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient suggestion. Rate per calculated if less the

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

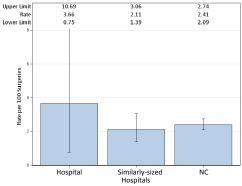


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

#### **Commentary from Hospitals:**

Columbus Regional Healthcare System, Whiteville, Columbus County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 5,759 Patient Days in 2011: 23,894 Total Number of Beds: 107 Number of ICU Beds: 10 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.93



\*FTE = Full-time equivalent

#### Central Line-Associated Bloodstream Infections (CLABSI)

1.14 1.02 **Upper Limit** 0.60 0.05 0.91 Rate per 1,000 Central Line Days Hospital Similarly-sized

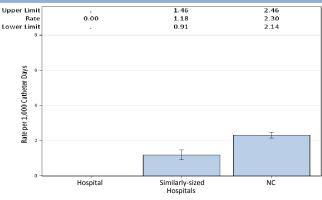
Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Type of ICU Infections Rate Infections 95% CI\* Interpretation Medical/surgical 1 518 1.93 0.777 YTD Total for Reporting ICUs 518 1.93 0.777

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval. Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	0	990	0	1.287	0	, 2.866	Same
YTD Total for Reporting ICU:	s 0	990	0	1.287	0	, 2.866	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

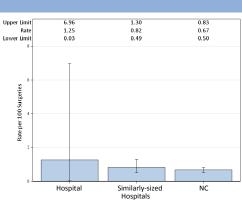


Figure 3. Rates and 95% Confidence Intervals for Abdominal

## Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	0
Procedures	80	53
Rate	1.25	0
Predicted Infections	s 0.85	1.84
SIR**		0
95% CI**		, 2.007
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

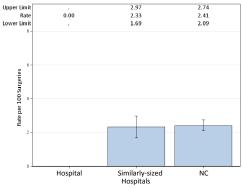


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

# Hysterectomies, Jan-Dec 2012.

The prevention and reduction of healthcare associated infections is a top priority at Columbus Regional Healthcare System. To accomplish this, infection prevention strategies are continually assessed and measures implemented to decrease the risk for infection. These measures are based on evidence based practices and clinical guidelines. A comprehensive program is provided that encompasses patient care and patient safety.

Crawley Memorial Hospital, Shelby, Cleveland County

#### **2011** Hospital Survey Information

Hospital Type: Long-term Acute Care Hospital

Not for Profit Profit Status: Admissions in 2011: 128 Patient Days in 2011: 3,690 Total Number of Beds: 41 FTE\* Infection Preventionists: 0.25 Number of FTEs\* per 100 beds: 0.61



\*FTE = Full-time equivalent

# Central Line-Associated Bloodstream Infections (CLABSI) 1.40 0.88 0.51 Upper Limit 0.00 Rate per 1,000 Central Line Days NC (LTACs)

#### Table 1. Rates by Location, Jan-Dec 2012.

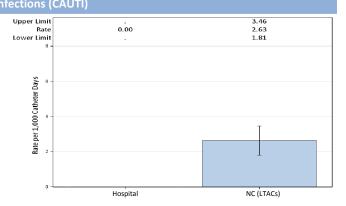
Type of Unit	Infections	Line Days	Rate
Adult ward	0	861	0.00
YTD Total for Reporting Units	. 0	861	0.00

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days.

#### Table 2. Rates by Location, Jan-Dec 2012

Type of Unit	Infections	Catheter Days	Rate	
Adult ward	0	342	0.00	
YTD Total for Reporting Unit	ts 0	342	0.00	



Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

#### **Surgical Site Infections (SSI)**

Long-term acute care hospitals (LTACs) do not report surgical site infections.

**Commentary from Hospitals:** 

Davis Regional Medical Center, Statesville, Iredell County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No **Profit Status:** For Profit Admissions in 2011: 4,453 Patient Days in 2011: 22,936 Total Number of Beds: 143 Number of ICU Beds: FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.70



\*FTE = Full-time equivalent

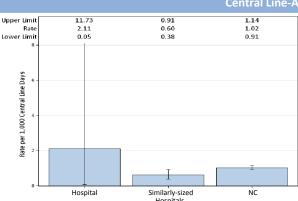


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Type of ICU Infections Rate Infections Interpretation 475 0.95 Medical cardiac 1 2.11 YTD Total for Reporting ICUs 475 0.95

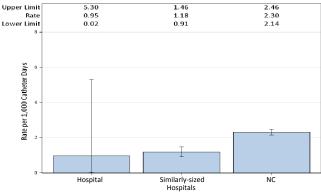
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical cardiac	1	1,052	0.95	2.104	0.475	0.012, 2.648	Same
YTD Total for Reporting ICU:	s 1	1,052	0.95	2.104	0.475	0.012, 2.648	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Upper Limit

Lower Limit

100 Surgeries

Rate per

27.86

Hospital

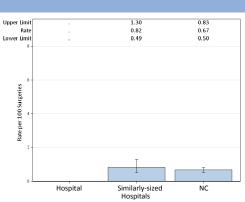


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	1
Procedures	6	20
Rate		5
Predicted Infections		0.63
SIR**		
95% CI**		
Interpretation		
*1		_

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95%

Confidence Interval. Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

Similarly-sized Hospitals Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

#### Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

#### **Commentary from Hospitals:**

No comments provided.

2.74

Duke Raleigh Hospital, Raleigh, Wake County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

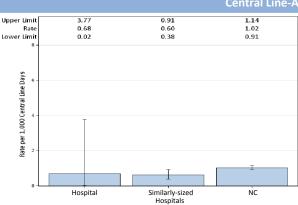
Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 7,238 Patient Days in 2011: 36,751 Total Number of Beds: 148 Number of ICU Beds: 15 FTE\* Infection Preventionists: 2.00 Number of FTEs\* per 100 beds: 1.35



\*FTE = Full-time equivalent

## Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.



Line Predicted Type of ICU Infections Days Rate Infections 95% CI\* Interpretation Medical/surgical 1 1,476 0.68 2.214 0.452 0.011, 2.517 Same YTD Total for Reporting ICUs 1,476 0.68 2.214 0.452 0.011, 2.517 Same

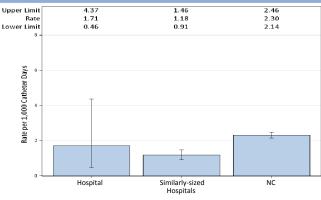
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Davs		Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	4		1.71			0.358. 3.361	Same
YTD Total for Reporting ICU	•	2.344	1.71	3.047		0.358, 3.361	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

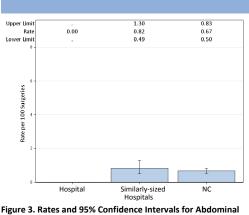


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	2
Procedures	105	138
Rate	0	1.45
Predicted Infection	s 0.97	4.53
SIR**		0.441
95% CI**		0.053, 1.594
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

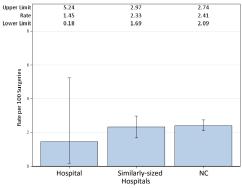


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

## Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

No comments provided.

**Duke University Hospital, Durham, Durham County** 

#### 2011 Hospital Survey Information

Hospital Type: Acute Care Hospital

Medical Affiliation: Major **Profit Status:** Not for Profit Admissions in 2011: 31,508 Patient Days in 2011: 246,858 Total Number of Beds: 812 Number of ICU Beds: 196 FTE\* Infection Preventionists: 6.25 Number of FTEs\* per 100 beds: 0.77



\*FTE = Full-time equivalent

#### Central Line-Associated Bloodstream Infections (CLABSI)

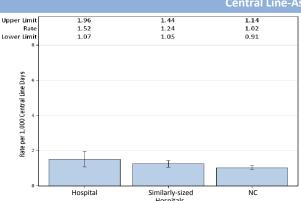


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Infections Days 95% CI\* Type of ICU Rate Infections Interpretation Medical 4,172 1.68 10.847 0.645 0.259, 1.330 Same Medical cardiac 2 3,074 0.65 6.148 0.325 0.039, 1.175 Same Neonatal Level III 2 6,538 0.31 17.261 0.116 0.014, 0.419 Lower 3.867 7 Neurologic 2,762 2.53 1.81 0.728, 3.730 Same Pediatric cardiothoracic 1 3,152 0.32 10.402 0.096 0.002, 0.536 Lower Pediatric medical/surgical 5 2,323 2.15 6.969 0.717 0.233, 1.674 Same 9 3,055 2.95 7.027 1.281 0.586, 2.431 Same 12 0.959, 3.241 Surgical cardiothoracic 4,619 2.6 6.467 1.856 Higher YTD Total for Reporting ICUs 45 29,695 68.987 0.476, 0.873 1.52 0.652 Lower

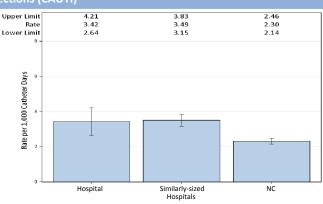
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Catheter-Associated Urinary Tract Infections Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

	, p -,						
Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical	11	4,141	2.66	9.524	1.155	0.577, 2.067	Same
Medical cardiac	12	2,531	4.74	5.062	2.371	1.225, 4.141	Higher
Neurologic	17	4,444	3.83	16.887	1.007	0.586, 1.612	Same
Pediatric cardiothoracic	1	913	1.1	2.465	0.406	0.010, 2.260	Same
Pediatric medical/surgical	3	1,582	1.9	4.43	0.677	0.140, 1.979	Same
Surgical	18	3,654	4.93	9.5	1.895	1.122, 2.995	Higher
Surgical cardiothoracic	11	4,077	2.7	6.931	1.587	0.792, 2.840	Same
YTD Total for Reporting ICU	s 73	21,342	3.42	54.8	1.332	1.044, 1.675	Higher



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

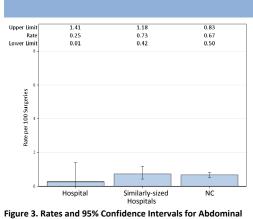


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

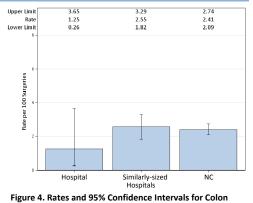
Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	3
Procedures	396	240
Rate	0.25	1.25
Predicted Infections	3.74	8.04
SIR**	0.267	0.373
95% CI**	0.007, 1.490	0.077, 1.091
Interpretation	Same	Lower

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.



Surgeries, Jan-Dec 2012.

## Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

**Durham Regional Hospital, Durham, Durham County** 

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: Major **Profit Status:** Not for Profit Admissions in 2011: 13,891 Patient Days in 2011: 73,575 Total Number of Beds: 202 Number of ICU Beds: 23 FTE\* Infection Preventionists: 2.50 Number of FTEs\* per 100 beds: 1.24



\*FTE = Full-time equivalent

## Central Line-Associated Bloodstream Infections (CLABSI)

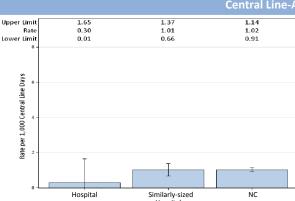


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Rate Infections 95% CI\* Interpretation Medical/surgical 1 3,385 0.3 7.109 0.141 0.004, 0.784 Lower YTD Total for Reporting ICUs 3,385 0.3 7.109 0.141 0.004, 0.784 Lower

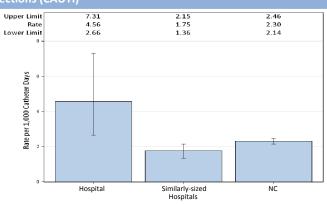
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	17	3,690	4.61	8.487	2.003	1.166, 3.207	Higher
Rehabiliation	0	36					
YTD Total for Reporting ICU	s 17	3,726	4.56	8.624	1.971	1.148, 3.156	Higher



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

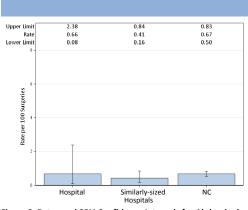


Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

## Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	2	3
Procedures	303	112
Rate	0.66	2.68
Predicted Infections	2.53	3.47
SIR**	0.791	0.864
95% CI**	0.096, 2.858	0.178, 2.525
Interpretation	Same	Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

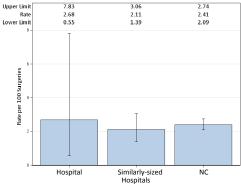


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

#### **Commentary from Hospitals:**

FirstHealth Moore Regional Hospital, Pinehurst, Moore County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 26,995 Patient Days in 2011: 108,631 Total Number of Beds: 528 Number of ICU Beds: 69 FTE\* Infection Preventionists: 4.00 Number of FTEs\* per 100 beds: 0.76



\*FTE = Full-time equivalent

#### Central Line-Associated Bloodstream Infections (CLABSI)

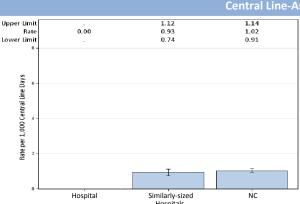


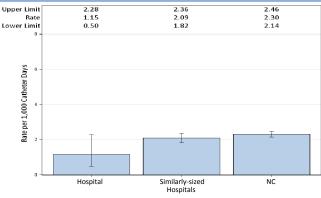
Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Infections Infections Type of ICU Interpretation Medical cardiac 0 914 0 1.828 0 , 2.018 Same Medical/surgical 0 2,414 0 3.621 0 , 1.019 Lower 0 0 Neonatal Level III 216 0.391 Surgical cardiothoracic 0 0 1.915 0 1,368 , 1.926 Same YTD Total for Reporting ICUs 4.912 0 7.756 0 , 0.476 Lower

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and Siks by ICO Type, Jan-Dec 2012 in Companison to National Daseline Data from 2005.							
Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical cardiac	2	1,579	1.27	3.158	0.633	0.077, 2.288	Same
Medical/surgical	5	3,723	1.34	4.492	1.113	0.361, 2.598	Same
Rehabiliation	0	16					
Surgical cardiothoracic	1	1,609	0.62	2.735	0.366	0.009, 2.037	Same
YTD Total for Reporting ICU	s 8	6,927	1.15	10.446	0.766	0.331, 1.509	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

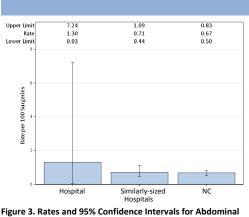


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	2
Procedures	77	137
Rate	1.3	1.46
Predicted Infections	0.62	4.04
SIR**	•	0.495
95% CI**		0.060, 1.787
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

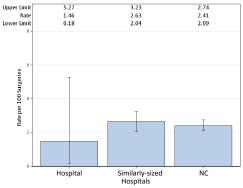


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

# Hysterectomies, Jan-Dec 2012.

Over the past year, FirstHealth has strived to continue to reduce our infections by continuing to educate staff on infection prevention, emphasizing hand hygiene, and following all evidence based practices to reduce infections. We have worked to decrease use of urinary catheters and worked with our operating room to assure all measures are taken to prevent surgical site infections such as appropriate use of antibiotics. We are also participating in the Partnership for Patients Collaborative with the North Carolina Quality

Forsyth Medical Center, Winston Salem, Forsyth County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 45,261 Patient Days in 2011: 232,937 Total Number of Beds: 906 Number of ICU Beds: 130 FTE\* Infection Preventionists: 5.00 Number of FTEs\* per 100 beds: 0.55



\*FTE = Full-time equivalent

## 1.33 0.75 1.14 1.02 **Upper Limit** 0.93 0.37 0.74 0.91 Rate per 1,000 Central Line Days

Similarly-sized

Table 1. Rates and Siks by ICO Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.							
Type of ICU	Infections	Line Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical	0	138	0	0.262			
Medical cardiac	0	2,569	0	5.138	0	, 0.718	Lower
Medical/surgical	7	7,145	0.98	10.718	0.653	0.263, 1.346	Same
Neonatal Level II/III	2	2,450	0.82	6.93	0.289	0.035, 1.043	Lower
Neurosurgical	1	1,066	0.94	2.665	0.375	0.010, 2.091	Same
Surgical cardiothoracic	1	1,378	0.73	1.929	0.518	0.013, 2.888	Same
YTD Total for Reporting ICUs	11	14,746	0.75	27.642	0.398	0.199, 0.712	Lower

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

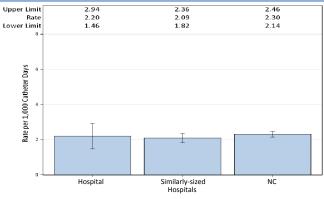
Hospita

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

## Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009

rable 2. Rates and Sins by ico Type, sair-bee 2012 in Comparison to National baseline bata from 2005.							
Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical	0	326	0	0.652			
Medical cardiac	6	3,247	1.85	6.494	0.924	0.339, 2.011	Same
Medical/surgical	13	7,917	1.64	9.5	1.368	0.729, 2.340	Same
Neurosurgical	12	2,118	5.67	9.319	1.288	0.665, 2.249	Same
Pediatric rehabiliation	0	43					
Rehabiliation	1	246	4.07	0.935			
Surgical cardiothoracic	2	1,571	1.27	2.671	0.749	0.091, 2.705	Same
YTD Total for Reporting ICU	s 34	15,468	2.2	29.687	1.145	0.793, 1.600	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

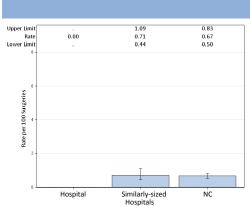


Figure 3. Rates and 95% Confidence Intervals for Abdominal

Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	8
Procedures	182	250
Rate	0	3.2
Predicted Infections	1.84	8.19
SIR**	0	0.977
95% CI**	, 2.006	0.422, 1.925
Interpretation	Same	Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

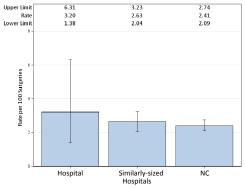


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

# Hysterectomies, Jan-Dec 2012.

At Novant Health, the safety of our patients comes first. Our goal is to have the lowest possible infection rates and we continually monitor infection prevention tactics for improvement opportunities. We support transparency in reporting infection rates and make common infection data available on our website. More information can be found under 'quality' on NovantHealth.org.

Franklin Regional Medical Center, Louisburg, Franklin County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 1,198 Patient Days in 2011: 3,786 Total Number of Beds: 70 Number of ICU Beds: 6 FTE\* Infection Preventionists: 0.30 Number of FTEs\* per 100 beds: 0.43



\*FTE = Full-time equivalent

#### Central Line-Associated Bloodstream Infections (CLABSI)

YTD Total for Reporting ICUs

1.68 0.47 1.14 1.02 **Upper Limit** 0.00 0.91 Rate per 1,000 Central Line Days Hospital

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Type of ICU Infections Infections Interpretation Medical 0 146 0 0.277 0

0.277

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

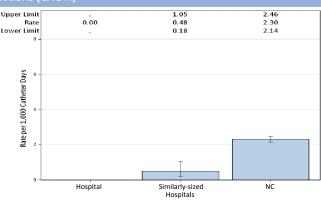
0

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Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical	0	353	0	0.706			
YTD Total for Reporting ICU:	s 0	353	0	0.706			



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

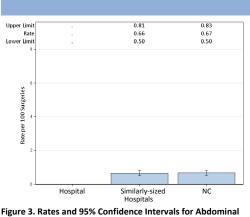


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	0
Procedures	0	0
Rate	•	
Predicted Infections		
SIR**	•	
95% CI**		
Interpretation		
*Infections from deep **SIR, 95%CI = Standa	n incisional and/or organ space ardized Infection Ratio and cor	responding 95%

Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

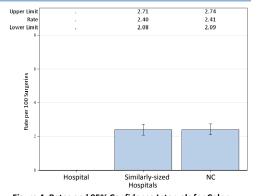


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

# Hysterectomies, Jan-Dec 2012.

At Novant Health, the safety of our patients comes first. Our goal is to have the lowest possible infection rates and we continually monitor infection prevention tactics for improvement opportunities. We support transparency in reporting infection rates and make common infection data available on our website. More information can be found under 'quality' on NovantHealth.org.

Frye Regional Medical Center, Hickory, Catawba County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No **Profit Status:** For Profit Admissions in 2011: 10,103 Patient Days in 2011: 39,037 Total Number of Beds: 355 Number of ICU Beds: 30 FTE\* Infection Preventionists: 1.90 Number of FTEs\* per 100 beds: 0.54



\*FTE = Full-time equivalent

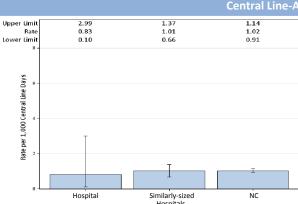


Table 1. Rates and SIRS by ICU	rype, Jan-ນ	ec 2012	in com	parison to N	ationai i	saseline pata t	rom 2006-2008.
Type of ICU	Infections	Line Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical cardiac	2	683	2.93	1.366	1.464	0.177, 5.289	Same
Neonatal Level III	0	21					
Neurologic	0	616	0	0.862			
Surgical cardiothoracic	0	1,096	0	1.534	0	, 2.405	Same
YTD Total for Reporting ICUs	2	2,416	0.83	3.796	0.527	0.064, 1.903	Same

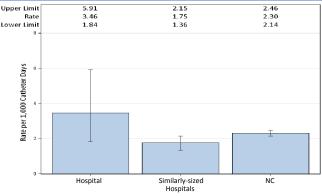
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

-				•			
Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical cardiac	8	1,121	7.14	2.242	3.568	1.541, 7.031	Higher
Neurologic	3	1,000	3	3.8	0.789	0.163, 2.307	Same
Rehabiliation	0	16		•			
Surgical cardiothoracic	2	1,625	1.23	2.763	0.724	0.088, 2.615	Same
YTD Total for Reporting ICU	s 13	3,762	3.46	8.865	1.466	0.781, 2.508	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

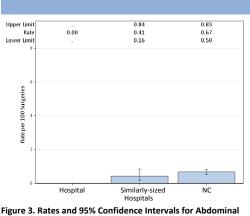


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	1
Procedures	73	103
Rate	0	0.97
Predicted Infections	0.64	3.27
SIR**		0.306
95% CI**		0.008, 1.704
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

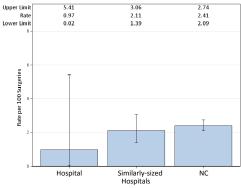


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

## Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

Gaston Memorial Hospital, Gastonia, Gaston County

#### **2011 Hospital Survey Information**

0.93

0.74

Similarly-sized

Hospital Type: Acute Care Hospital

Medical Affiliation: Nο

**Profit Status:** Not for Profit Admissions in 2011: 22,730 Patient Days in 2011: 97,533 Total Number of Beds: 435 Number of ICU Beds: 44 FTE\* Infection Preventionists: 4.00 Number of FTEs\* per 100 beds: 0.92

0.59

Hospital



\*FTE = Full-time equivalent

**Upper Limit** 

Rate per 1,000 Central Line Days

#### Central Line-Associated Bloodstream Infections (CLABSI) 1.14 1.02 Type of ICU 0.91 Medical Medical cardiac

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Predicted Infections Line Infections Days Rate 95% CI\* Interpretation 1,790 2.23 3.401 1.176 0.320, 3.011 Same 0 1,364 0 2.728 0 , 1.352 Same Neonatal Level II/III 2 537 0.998 3.72 2 3.215 0.622 0.075, 2.247 Surgical 1,398 1.43 Same 0 0 Surgical cardiothoracic 0 727 1.018 , 3.624 Same YTD Total for Reporting ICUs 0.304, 1.388 5.816 1.38 11.36 Same

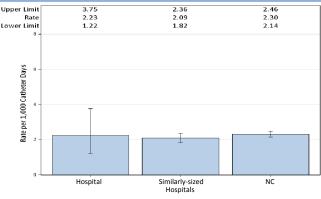
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

•				•			
Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical	1	2,049	0.49	4.098	0.244	0.006, 1.360	Same
Medical cardiac	7	1,582	4.42	3.164	2.212	0.889, 4.558	Higher
Surgical	1	1,658	0.6	4.311	0.232	0.006, 1.292	Same
Surgical cardiothoracic	5	975	5.13	1.658	3.016	0.979, 7.038	Higher
YTD Total for Reporting ICU	s 14	6,264	2.23	13.23	1.058	0.579, 1.775	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

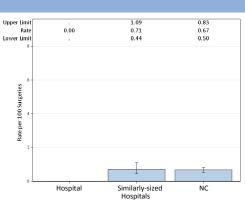


Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

## Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	5
Procedures	155	159
Rate	0	3.14
Predicted Infections	1.66	5.19
SIR**	0	0.964
95% CI**	, 2.218	0.313, 2.249
Interpretation	Same	Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

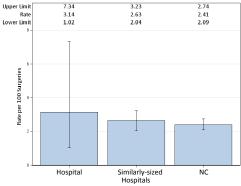


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

#### **Commentary from Hospitals:**

Granville Medical Center, Oxford, Granville County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Government Admissions in 2011: 2,724 Patient Days in 2011: 10,182 Total Number of Beds: 62 Number of ICU Beds: FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 1.61



\*FTE = Full-time equivalent

1.68 0.47 1.14 1.02 Upper Limit 0.00 0.91 Rate per 1,000 Central Line Days Hospital

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Type of ICU Infections Infections Interpretation 404 0 Medical/surgical 0 0.606 YTD Total for Reporting ICUs 0 404 0 0.606

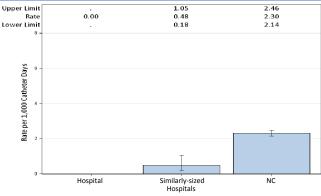
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	0	933	0	1.213	0	, 3.041	Same
YTD Total for Reporting ICU	s 0	933	0	1.213	0	, 3.041	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

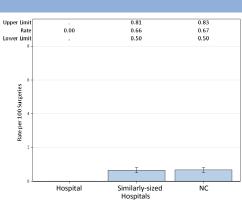


Figure 3. Rates and 95% Confidence Intervals for Abdominal

Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	0
Procedures	25	27
Rate	0	0
Predicted Infections SIR**	0.27	0.82
95% CI**		
Interpretation		
*Infections from deer	incisional and/or organ space	

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

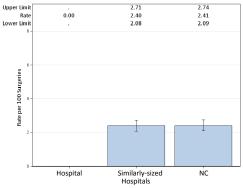


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

## Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

Halifax Regional Medical Center, Roanoke Rapids, Halifax County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 6,108 Patient Days in 2011: 27,527 Total Number of Beds: 128 Number of ICU Beds: 12 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.78



\*FTE = Full-time equivalent

YTD Total for Reporting ICUs

1.14 1.02 Upper Limit 0.00 0.60 0.91 Rate per 1,000 Central Line Days Hospital Hospitals

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Type of ICU Infections Infections Interpretation 0 Medical/surgical 0 558 0.837

0

0.837

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

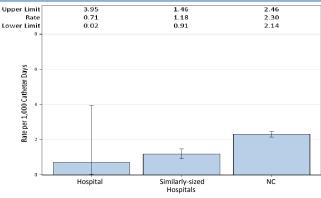
0

558

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	1	1,409	0.71	1.832	0.546	0.014, 3.041	Same
VTD Total for Reporting ICLIs	c 1	1 ///	0.71	1 222	0.546	0.01/1.3.0/1	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

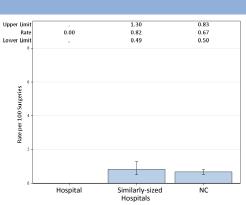


Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

## Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	4
Procedures	37	36
Rate	0	11.1
Predicted Infections	0.32	1.19
SIR**	•	3.364
95% CI**		0.917, 8.614
Interpretation		Higher

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

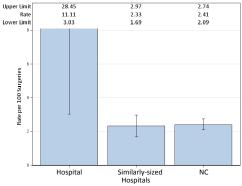


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

#### **Commentary from Hospitals:**

Haywood Regional Medical Center, Clyde, Haywood County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 6,030 Patient Days in 2011: 18,568 Total Number of Beds: 100 Number of ICU Beds: 12 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 1.00



\*FTE = Full-time equivalent

YTD Total for Reporting ICUs

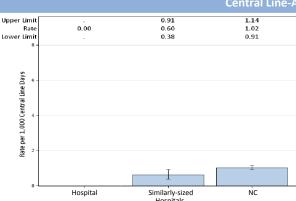


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Infections Interpretation 0 Medical/surgical 0 306 0.459

0

0.459

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

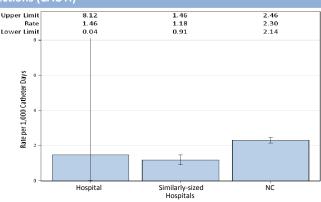
0

306

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	1	686	1.46	0.892			
YTD Total for Reporting ICU:	5 1	686	1.46	0.892			



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

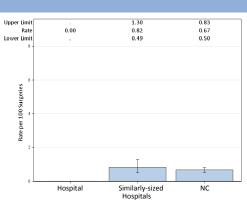


Figure 3. Rates and 95% Confidence Intervals for Abdominal

Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	2
Procedures	51	39
Rate	0	5.13
Predicted Infection	s 0.51	1.22
SIR**		1.642
95% CI**		0.199, 5.932
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

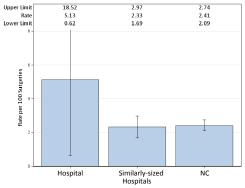


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

## Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

High Point Regional Health System, High Point, Guilford County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 18,059 Patient Days in 2011: 72,679 Total Number of Beds: 363 Number of ICU Beds: 32 FTE\* Infection Preventionists: 2.00 Number of FTEs\* per 100 beds: 0.55



\*FTE = Full-time equivalent

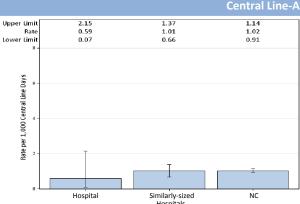


Table 1. Rates and Siks by ICO	Type, Jan-D	ec 2012	in com	parison to iv	ational i	baseiine Data i	10111 2006-2008.
Type of ICU	Infections	Line Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical cardiac	0	610	0	1.22	0	, 3.024	Same
Medical/surgical	2	2,297	0.87	3.446	0.58	0.070, 2.097	Same
Surgical cardiothoracic	0	455	0	0.637			
YTD Total for Reporting ICUs	2	3,362	0.59	5.303	0.377	0.046, 1.362	Same

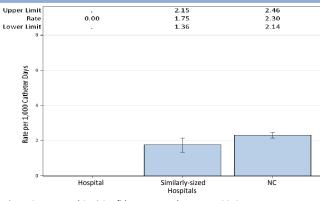
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

,				•			
Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical cardiac	0	905	0	1.81	0	, 2.038	Same
Medical/surgical	0	3,862	0	4.634	0	, 0.796	Lower
Rehabiliation	0	74	0	0.281			
Surgical cardiothoracic	0	470	0	0.799			
YTD Total for Reporting ICU	s 0	5,311	0	7.525	0	, 0.490	Lower



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

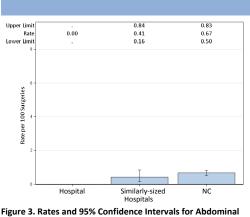


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	2
Procedures	149	152
Rate	0	1.32
Predicted Infections	1.78	5.02
SIR**	0	0.398
95% CI**	, 2.071	0.048, 1.439
Interpretation	Same	Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

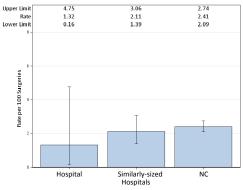


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

## Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

No comments provided.

Highsmith Rainey Specialty Hospital, Fayetteville, Cumberland County

#### **2011 Hospital Survey Information**

Hospital Type: Long-term Acute Care Hospital

Not for Profit Profit Status: Admissions in 2011: 350 21,968 Patient Days in 2011: Total Number of Beds: 66 0.88 FTE\* Infection Preventionists: Number of FTEs\* per 100 beds: 1.33



\*FTE = Full-time equivalent

# Central Line-Associated Bloodstream Infections (CLABSI) 3.39 1.79 1.40 0.88 0.51 Upper Limit Lower Limit 0.82 Rate per 1,000 Central Line Days NC (LTACs)

Table 1. Rates by Location, Jan-Dec 2012.

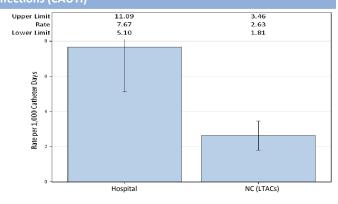
Type of Unit	Infections	Line Days	Rate	
Adult intensive care unit	0	628	0.00	
Adult ward	9	4,405	2.04	
YTD Total for Reporting Units	9	5,033	1.79	

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days.

#### Table 2. Rates by Location, Jan-Dec 2012

Type of Unit	Infections	Catheter Days	Rate	
Adult intensive care unit	2	546	3.66	
Adult ward	26	3,103	8.38	
YTD Total for Reporting Uni	ts 28	3,649	7.67	



Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

#### **Surgical Site Infections (SSI)**

Long-term acute care hospitals (LTACs) do not report surgical site infections.

#### **Commentary from Hospitals:**

Hugh Chatham Memorial Hospital, Elkin, Surry County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: Nο

**Profit Status:** Not for Profit Admissions in 2011: 4,136 Patient Days in 2011: 15,145 Total Number of Beds: 81 Number of ICU Beds: 8 FTE\* Infection Preventionists: 0.63 Number of FTEs\* per 100 beds: 0.77



\*FTE = Full-time equivalent

YTD Total for Reporting ICUs

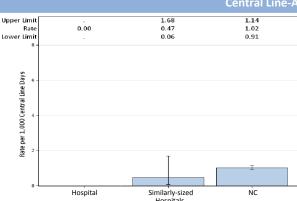


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Infections Interpretation 0 Medical/surgical 0 142 0.213 0

0.213

0

142

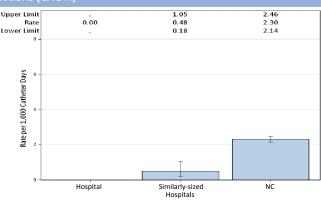
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	0	541	0	0.703			
YTD Total for Reporting ICU:	s 0	541	0	0.703			



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

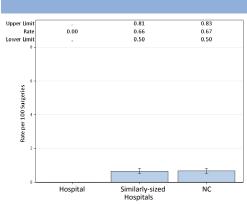


Figure 3. Rates and 95% Confidence Intervals for Abdominal

Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	0
Procedures	62	39
Rate	0	0
Predicted Infections	0.51	1.12
SIR**	•	0
95% CI**		, 3.291
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

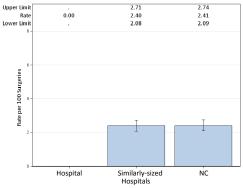


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

## Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

Iredell Memorial Hospital, Statesville, Iredell County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 9,513 Patient Days in 2011: 44,214 Total Number of Beds: 199 Number of ICU Beds: 16 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.50



\*FTE = Full-time equivalent

1.14 1.02 Upper Limit 0.00 0.60 0.91 Rate per 1,000 Central Line Days Hospital Hospitals

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Infections Interpretation Medical/surgical 0 1,571 0 2.357 0 , 1.565 Same YTD Total for Reporting ICUs 0 1,571 0 2.357 0 , 1.565 Same

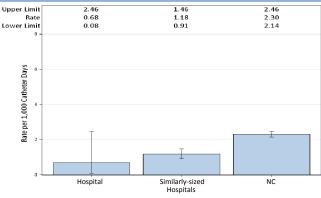
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

•	,	Catheter		Predicted			
Type of ICU	Infections	Days	Rate	Infections	SIR*	95% CI*	Interpretation
Medical/surgical	2	2,939	0.68	3.527	0.567	0.069, 2.048	Same
YTD Total for Reporting ICUs	s 2	2 939	0.68	3.527	0.567	0.069 2.048	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

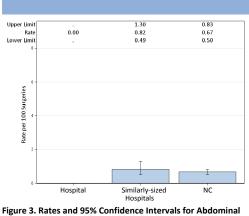


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	1
Procedures	82	82
Rate	0	1.22
Predicted Infection	s 0.78	2.53
SIR**		0.395
95% CI**		0.010, 2.202
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95%

Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

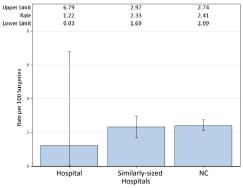


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

## Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

Johnston Health, Smithfield, Johnston County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 9.919 Patient Days in 2011: 45,127 Total Number of Beds: 199 Number of ICU Beds: 16 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.50



\*FTE = Full-time equivalent

## 1.14 1.02 **Upper Limit** 0.68 0.60 0.02 0.91 Rate per 1,000 Central Line Days

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Rate Infections 95% CI\* Interpretation 1 1,480 0.68 2.812 0.356 0.009, 1.981 Same YTD Total for Reporting ICUs 1,480 0.68 2.812 0.356 0.009, 1.981 Same

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

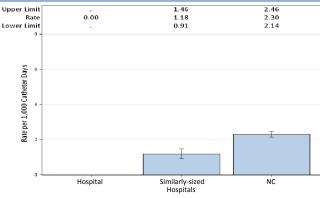
Hospital

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

## Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical	0	1,945	0	3.89	0	, 0.948	Lower
YTD Total for Reporting ICU:	s 0	1.945	0	3.89	0	, 0.948	Lower



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

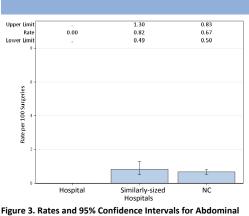


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	0
Procedures	98	58
Rate	0	0
Predicted Infection	s 0.74	1.45
SIR**	•	0
95% CI**		, 2.544
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

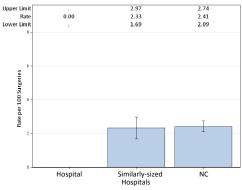


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

## Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

Kindred Hospital Greensboro, Greensboro, Guilford County

### 2011 Hospital Survey Information

Hospital Type: Long-term Acute Care Hospital

For Profit Profit Status: Admissions in 2011: 424 17,573 Patient Days in 2011: Total Number of Beds: 101 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.99



\*FTE = Full-time equivalent

## Central Line-Associated Bloodstream Infections (CLABSI) 1.40 0.88 0.51 Upper Limit 0.00 Rate per 1,000 Central Line Days NC (LTACs)

Table 1. Rates by Location, Jan-Dec 2012.

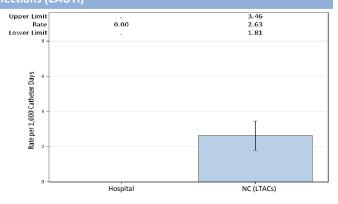
Type of Unit	Infections	Line Days	Rate
Adult ward	0	4,187	0.00
YTD Total for Reporting Units	0	4,187	0.00

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days.

### Table 2. Rates by Location, Jan-Dec 2012

Type of Unit	Infections	Catheter Days	Rate
Adult ward	0	2,790	0.00
YTD Total for Reporting Uni	ts 0	2,790	0.00



Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

### **Surgical Site Infections (SSI)**

Long-term acute care hospitals (LTACs) do not report surgical site infections.

### Commentary from Hospitals:

Kings Mountain Hospital, Kings Mountain, Cleveland County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

Profit Status:

Admissions in 2011:
2,786
Patient Days in 2011:
14,380
Total Number of Beds:
Number of ICU Beds:
FTE\* Infection Preventionists:
Number of FTEs\* per 100 beds:
0.49



\*FTE = Full-time equivalent

### Central Line-Associated Bloodstream Infections (CLABSI)

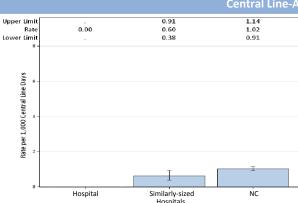


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Line Predicted
Type of ICU Infections Days Rate Infections SIR\* 95% CI\* Interpretation

Type of ICUInfectionsDaysRateInfectionsSIR\*95% CI\*InterpretationMedical018400.35.YTD Total for Reporting ICUs018400.35.

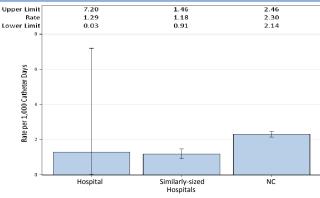
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days		Predicted Infections	SIR*	95% CI*	Interpretation
Medical	1	774	1.29	1.548	0.646	0.016, 3.599	Same
YTD Total for Reporting ICU	s 1	774	1.29	1.548	0.646	0.016, 3.599	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

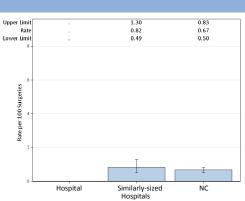


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

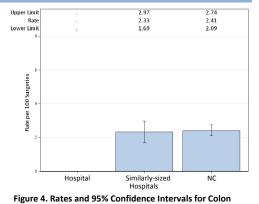
Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery			
Infections*	0	0			
Procedures	0	16			
Rate					
Predicted Infection	s .				
SIR**					
95% CI**					
Interpretation					
*Infections from deep incisional and/or organ space.  **SIR, 95%CI = Standardized Infection Ratio and corresponding 95%					

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Pate per 100 inputions surgeries. Pate pet calculated if less the

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.



Surgeries, Jan-Dec 2012.

## Hysterectomies, Jan-Dec 2012. Commentary from Hospitals:

No comments provided.

Figure 3. Rates and 95% Confidence Intervals for Abdominal

Lake Norman Regional Medical Center, Mooresville, Iredell County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No **Profit Status:** For Profit Admissions in 2011: 5,567 Patient Days in 2011: 21,917 Total Number of Beds: 123 Number of ICU Beds: 12 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.81



\*FTE = Full-time equivalent

### Central Line-Associated Bloodstream Infections (CLABSI)

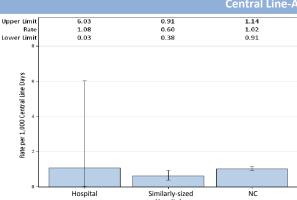


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Predicted Infections Line Days Type of ICU Infections Rate 95% CI\* Interpretation 0.014, 3.173 1 924 1.08 1.756 0.569 Same YTD Total for Reporting ICUs 924 1.08 1.756 0.569 0.014, 3.173 Same

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

YTD Total for Reporting ICUs

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

, 1.327

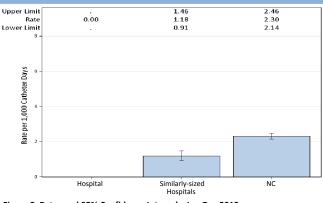
Type of ICU		Catheter Days		Predicted Infections	SIR*	95% CI*	Interpretation
Medical	0	1,390	0	2.78	0	, 1.327	Same

0

2.78

0

1,390



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Upper Limit

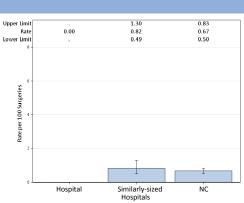


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

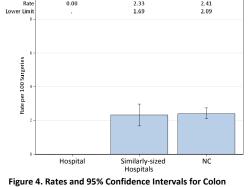
Same

	Abdominal hysterectomy	Colon surgery
Infections*	0	0
Procedures	41	32
Rate	0	0
Predicted Infections SIR** 95% CI** Interpretation	0.34	0.90
*Infantions from door	incidenal and/or organ and	

\*Infections from deep incisional and/or organ space.
\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95%

Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.



Surgeries, Jan-Dec 2012.

Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

### **Commentary from Hospitals:**

No comments provided.

2.74

Lenoir Memorial Hospital, Inc, Kinston, Lenoir County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 8,311 Patient Days in 2011: 44,349 Total Number of Beds: 216 Number of ICU Beds: 14 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.46



\*FTE = Full-time equivalent

1.14 1.02 **Upper Limit** 2.33 1.01 0.91 Rate per 1,000 Central Line Days Hospital Similarly-sized

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Rate Infections 95% CI\* Interpretation 1.935 Medical/surgical 3 1,290 2.33 1.55 0.320, 4.531 Same 1.935 YTD Total for Reporting ICUs 1,290 2.33 0.320, 4.531 Same

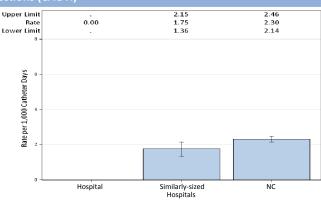
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	0	2,178	0	2.831	0	, 1.303	Same
Rehabiliation	0	2					
YTD Total for Reporting ICU	s 0	2,180	0	2.839	0	, 1.299	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

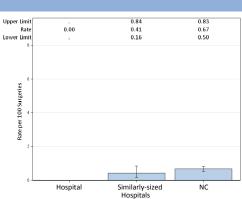


Figure 3. Rates and 95% Confidence Intervals for Abdominal

Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	3
Procedures	52	61
Rate	0	4.92
Predicted Infections	0.57	1.99
SIR**		1.51
95% CI**		0.311, 4.412
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

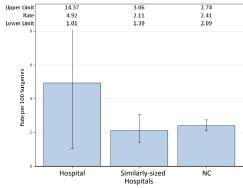


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

Lifecare Hospitals Of North Carolina, Rocky Mount, Nash County

### **2011 Hospital Survey Information**

Hospital Type: Long-term Acute Care Hospital

For Profit Profit Status: Admissions in 2011: 457 Patient Days in 2011: 14,328 Total Number of Beds: 50 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 2.00



\*FTE = Full-time equivalent

## Central Line-Associated Bloodstream Infections (CLABSI) 1.40 0.88 0.51 Upper Limit 0.00 Rate per 1,000 Central Line Days NC (LTACs)

Table 1. Rates by Location, Jan-Dec 2012.

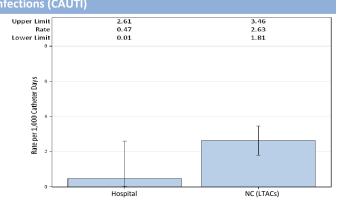
Type of Unit	Infections	Line Days	Rate	
Adult intensive care unit	0	2,410	0.00	
YTD Total for Reporting Units	0	2,410	0.00	

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days.

### Table 2. Rates by Location, Jan-Dec 2012

Type of Unit	Infections	Catheter Days	Rate	
Adult intensive care unit	1	2,136	0.47	
YTD Total for Reporting Uni	ts 1	2,136	0.47	



Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

### **Surgical Site Infections (SSI)**

Long-term acute care hospitals (LTACs) do not report surgical site infections.

### **Commentary from Hospitals:**

Maria Parham Medical Center, Henderson, Vance County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No **Profit Status:** For Profit Admissions in 2011: 5,340 Patient Days in 2011: 19,576 Total Number of Beds: 102 Number of ICU Beds: 8 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.98



\*FTE = Full-time equivalent

### Central Line-Associated Bloodstream Infections (CLABSI)

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Infections 95% CI\* Interpretation 0 2.276 Medical/surgical 0 1,517 0 , 1.621 Same YTD Total for Reporting ICUs 0 1,517 0 2.276 0 , 1.621 Same

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

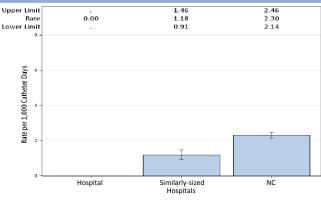
\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Catheter-Associated Urinary Tract Infections (C

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	0	1,824	0	2.371	0	, 1.556	Same
Rehabiliation	0	48					
YTD Total for Reporting ICU	s 0	1,872	0	2.554	0	, 1.444	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

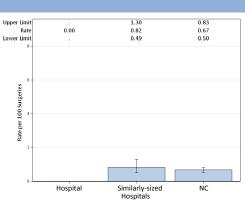


Figure 3. Rates and 95% Confidence Intervals for Abdominal

Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Abdominal hysterectomy Colon surgery

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	3
Procedures	41	54
Rate	0	5.56
Predicted Infections	s 0.42	1.88
SIR**	•	1.594
95% CI**		0.329, 4.658
Interpretation		Same

\*Infections from deep incisional and/or organ space.
\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95%

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

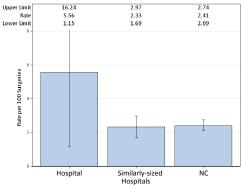


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

## Hysterectomies, Jan-Dec 2012. Commentary from Hospitals:

Martin General Hospital, Williamston, Martin County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No **Profit Status:** For Profit Admissions in 2011: 2,222 Patient Days in 2011: 7,343 Total Number of Beds: 49 Number of ICU Beds: 6 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 2.04



\*FTE = Full-time equivalent

### Central Line-Associated Bloodstream Infections (CLABSI)

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Line Predicted
Type of ICU Infections Days Rate Infections SIR\* 95% CI\* Interpretation

Type of ICU	Infections	Days	Rate	Infections	SIR <sup>*</sup>	95% CI*	Inter
Medical/surgical	0	280	0	0.42			
YTD Total for Reporting ICUs	0	280	0	0.42			

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

YTD Total for Reporting ICUs

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

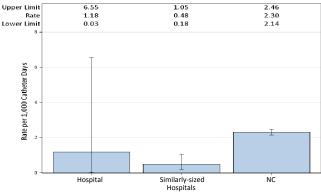
### Catheter-Associated Urinary Tract Infections (CAUTI) Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

0.904 0.023, 5.038

14210 2. Mates and 5.110 1. /pe, 7411 200 2012 11. Companion to Material 2444 11011 2005.									
		Catheter		Predicted					
Type of ICU	Infections	Days	Rate	Infections	SIR*	95% CI <sup>*</sup>	Interpretation		
Medical/surgical	1	851	1.18	1.106	0.904	0.023, 5.038	Same		

1.18

1.106



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

851

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Upper Limit

Lower Limit

100 Surgeries

Rate per

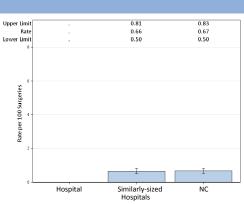


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

Same

	Abdominal hysterectomy	Colon surgery
Infections*	0	1
Procedures	7	4
Rate		-
<b>Predicted Infections</b>		-
SIR**		
95% CI**		
Interpretation		
	incisional and/or organ space rdized Infection Ratio and cor	

Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

Hospital

Similarly-sized Hospitals

### Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

### **Commentary from Hospitals:**

No comments provided.

2.74

The McDowell Hospital, Marion, McDowell County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 1,884 Patient Days in 2011: 6,685 Total Number of Beds: 37 Number of ICU Beds: 9 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 2.70



\*FTE = Full-time equivalent

YTD Total for Reporting ICUs

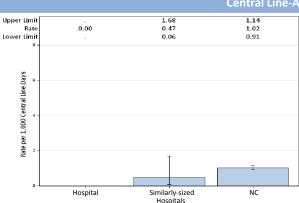


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Infections Interpretation 0 Medical/surgical 0 159 0.239

0

0.239

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

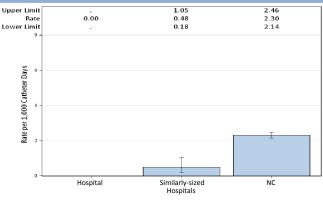
159

0

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

	. , , , , , ,						
Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	0	1,016	0	1.321	0	, 2.792	Same
YTD Total for Reporting ICU:	s 0	1.016	0	1.321	0	. 2.792	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

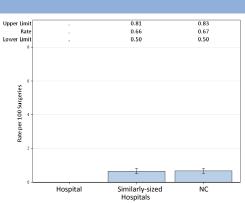


Figure 3. Rates and 95% Confidence Intervals for Abdominal

Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery						
Infections*	0	1						
Procedures	1	18						
Rate								
Predicted Infection	s .							
SIR**								
95% CI**								
Interpretation								
*Infections from deep incisional and/or organ space. **SIR, 95%CI = Standardized Infection Ratio and corresponding 95%								

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

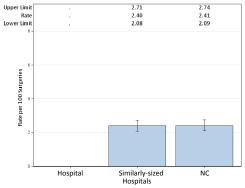


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

MedWest - Harris Regional Hospital, Sylva, Jackson County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: Limited **Profit Status:** Not for Profit Admissions in 2011: 4,426 Patient Days in 2011: 13,977 Total Number of Beds: 94 Number of ICU Beds: 8 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 1.06



\*FTE = Full-time equivalent

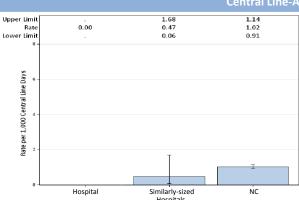


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Type of ICU Infections Infections Interpretation 493 0 0.74 Medical/surgical 0 YTD Total for Reporting ICUs 0 493 0 0.74

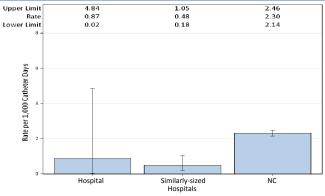
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	1	1,150	0.87	1.495	0.669	0.017, 3.727	Same
YTD Total for Reporting ICU	s 1	1.150	0.87	1.495	0.669	0.017. 3.727	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Upper Limit

Lower Limit

100 Surgeries

Rate per

Hospital

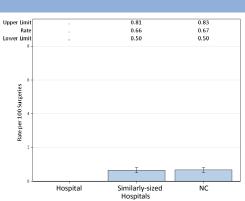


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery					
Infections*	0	0					
Procedures	17	4					
Rate	•						
Predicted Infections							
SIR**	·						
95% CI**							
Interpretation							
*Infections from deep incisional and/or organ space.  **SIR. 95%CI = Standardized Infection Ratio and corresponding 95%							

Confidence Interval. Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

Similarly-sized Hospitals Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

### Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

### **Commentary from Hospitals:**

No comments provided.

2.74

Medical Park Hospital, Winston Salem, Forsyth County

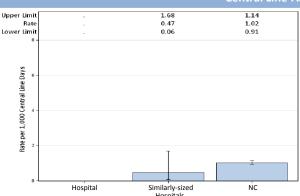
### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 773 Patient Days in 2011: 2,853 Total Number of Beds: 50 Number of ICU Beds: n FTE\* Infection Preventionists: 0.50 Number of FTEs\* per 100 beds: 1.00





This hospital does not have intensive care units (ICUs).

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

### Catheter-Associated Urinary Tract Infections (CAUTI)

This hospital does not have intensive care units (ICUs).

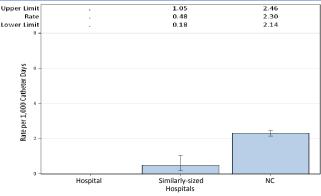


Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

# Upper Limit Lower Limit Rate per 100 Surgeries Similarly-sized Hospitals

Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

### Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

**Surgical Site Infections (SSI)** 

	Abdominal hysterectomy	Colon surgery
Infections*	1	2
Procedures	106	187
Rate	0.94	1.07
Predicted Infections	0.95	5.60
SIR**	•	0.357
95% CI**		0.043, 1.291
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

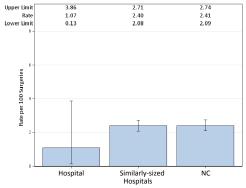


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

At Novant Health, the safety of our patients comes first. Our goal is to have the lowest possible infection rates and we continually monitor infection prevention tactics for improvement opportunities. We support transparency in reporting infection rates and make common infection data available on our website. More information can be found under 'quality' on NovantHealth.org.

Refer to Section IV of the NC HAI Prevention Program - Quarterly Report October 2012 for further explanation of presented statistics (epi.publichealth.nc.gov/cd/hai/figures.html). Data as of March 12, 2013

Mission Hospitals, Inc, Asheville, Buncombe County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: Limited **Profit Status:** Not for Profit Admissions in 2011: 43,652 Patient Days in 2011: 212,503 Total Number of Beds: 739 Number of ICU Beds: 131 FTE\* Infection Preventionists: 4.80 Number of FTEs\* per 100 beds: 0.65



\*FTE = Full-time equivalent

### 1.14 1.02 Upper Limit 0.93 0.47 0.17 0.74 0.91 Rate per 1,000 Central Line Days Similarly-sized

Table 1. Rates and Siks by ICO	Table 1. Rates and Siks by ICO Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.							
Type of ICU	Infections	Line Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation	
Medical cardiac	1	905	1.1	1.81	0.552	0.014, 3.078	Same	
Medical/surgical	2	4,467	0.45	6.701	0.298	0.036, 1.078	Lower	
Neonatal Level II/III	1	2,386	0.42	6.433	0.155	0.004, 0.866	Lower	
Neurosurgical	1	2,143	0.47	5.358	0.187	0.005, 1.040	Lower	
Pediatric medical/surgical	1	479	2.09	1.437	0.696	0.018, 3.877	Same	
Surgical cardiothoracic	0	2,431	0	3.403	0	, 1.084	Lower	
YTD Total for Reporting ICUs	6	12,811	0.47	25.142	0.239	0.088, 0.519	Lower	

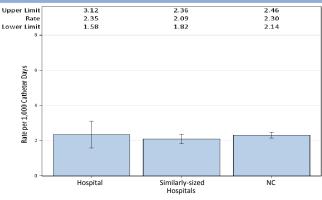
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Catheter-Associated Urinary Tract Infections (CAUTI)

Table 2. Nates and Sins by ic	o Type, Jan-	DEC 2012	III COIII	parison to ive	ational b	aseille Data II	0111 2005.
Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical cardiac	6	1,722	3.48	3.444	1.742	0.639, 3.792	Same
Medical/surgical	12	7,114	1.69	9.248	1.298	0.670, 2.267	Same
Neurosurgical	14	4,050	3.46	17.82	0.786	0.430, 1.318	Same
Pediatric medical/surgical	0	153	0	0.428			
Surgical cardiothoracic	4	2,285	1.75	3.885	1.03	0.281, 2.636	Same
YTD Total for Reporting ICU	ls 36	15,324	2.35	34.825	1.034	0.724, 1.431	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

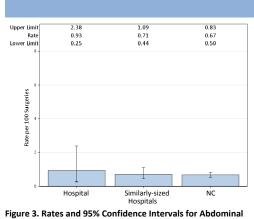


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	4	14
Procedures	430	389
Rate	0.93	3.6
Predicted Infections	4.15	12.21
SIR**	0.965	1.147
95% CI**	0.263, 2.470	0.627, 1.924
Interpretation	Same	Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

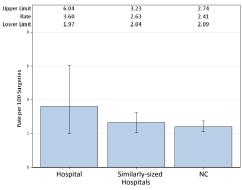


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

No comments provided.

Refer to Section IV of the NC HAI Prevention Program - Quarterly Report October 2012 for further explanation of presented statistics (epi.publichealth.nc.gov/cd/hai/figures.html). Data as of March 12, 2013.

Morehead Memorial Hospital, Eden, Rockingham County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 6,228 Patient Days in 2011: 22,583 Total Number of Beds: 108 Number of ICU Beds: FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.93



\*FTE = Full-time equivalent

YTD Total for Reporting ICUs

1.14 1.02 Upper Limit 0.00 0.60 0.91 Rate per 1,000 Central Line Days Hospital Hospitals

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Type of ICU Infections Infections Interpretation 0 Medical/surgical 0 83 0.125 0

0.125

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

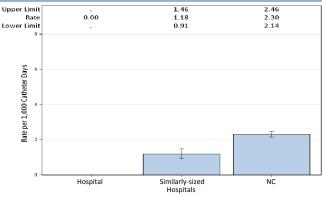
\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

83

0

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.								
Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation	
Medical/surgical	0	1,034	0	1.344	0	, 2.745	Same	
YTD Total for Reporting ICU:	s 0	1,034	0	1.344	0	, 2.745	Same	



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

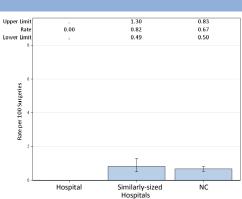


Figure 3. Rates and 95% Confidence Intervals for Abdominal

Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	0
Procedures	34	35
Rate	0	0
Predicted Infections	0.44	1.13
SIR**	•	0
95% CI**		, 3.259
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

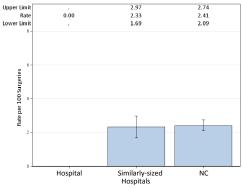


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

Moses Cone Hospital, Greensboro, Guilford County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 25,172 Patient Days in 2011: 124,066 Total Number of Beds: 534 Number of ICU Beds: 66 FTE\* Infection Preventionists: 3.00 Number of FTEs\* per 100 beds: 0.56



\*FTE = Full-time equivalent

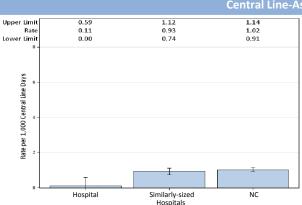


Table 1. Rates and SIRs by ICU	Type, Jan-D	ec 2012	in Com	parison to N	ational I	Baseline Data f	rom 2006-2008.
Type of ICU	Infections	Line Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical cardiac	1	2,219	0.45	4.438	0.225	0.006, 1.255	Same
Medical/surgical	0	2,643	0	3.965	0	, 0.930	Lower
Neurosurgical	0	1,231	0	3.078	0	, 1.198	Lower
Pediatric medical/surgical	0	34					
Surgical cardiothoracic	0	3,315	0	4.641	0	, 0.795	Lower
YTD Total for Reporting ICUs	1	9,442	0.11	16.223	0.062	0.002, 0.343	Lower

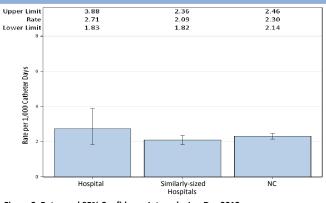
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

rable El nates and sins by le	C Type, sun	DCC LUIL	co	parison to ite	acioniai b	ascime Bata ii	O 2005.
Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical cardiac	9	2,370	3.8	4.74	1.899	0.868, 3.604	Same
Medical/surgical	5	3,041	1.64	3.649	1.37	0.445, 3.198	Same
Neurosurgical	7	2,337	3	10.283	0.681	0.274, 1.403	Same
Pediatric medical/surgical	0	24					
Rehabiliation	0	129	0	0.49			
Surgical cardiothoracic	9	3,151	2.86	5.357	1.68	0.768, 3.189	Same
YTD Total for Reporting ICU	s 30	11,052	2.71	24.586	1.22	0.823, 1.742	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

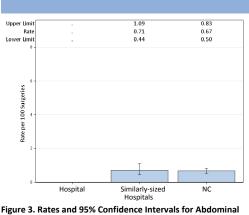


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	4
Procedures	3	138
Rate	•	2.9
Predicted Infections		4.53
SIR**	•	0.883
95% CI**		0.241, 2.261
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

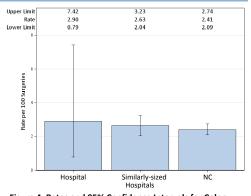


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

Cone Health is committed to preventing Healthcare Associated Infections. We have dedicated teams of experts focused on process improvements to improve our patient outcomes. Please contact Cone Health Infection Prevention if you would like further information.

Refer to Section IV of the NC HAI Prevention Program - Quarterly Report October 2012 for further explanation of presented statistics (epi.publichealth.nc.gov/cd/hai/figures.html). Data as of March 12, 2013.

Murphy Medical Center, Murphy, Cherokee County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 2,475 Patient Days in 2011: 9,271 Total Number of Beds: 57 Number of ICU Beds: 6 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 1.75



\*FTE = Full-time equivalent

1.68 0.47 1.14 1.02 **Upper Limit** 0.00 0.91 Rate per 1,000 Central Line Days Hospital

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Infections Interpretation

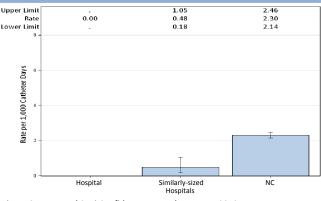
174 0 Medical/surgical 0 0.261 YTD Total for Reporting ICUs 0 174 0 0.261

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval. Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	0	625	0	0.813			
YTD Total for Reporting ICU:	s 0	625	0	0.813			



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

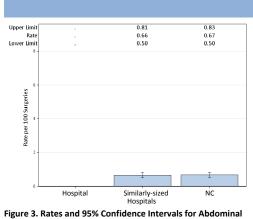


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	0
Procedures	11	9
Rate	•	
Predicted Infections		
SIR**	·	
95% CI**		
Interpretation		
	o incisional and/or organ space	

Confidence Interval

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

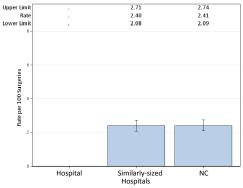


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

Nash Health Care Systems, Rocky Mount, Nash County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 12,013 Patient Days in 2011: 49,385 Total Number of Beds: 286 Number of ICU Beds: 25 FTE\* Infection Preventionists: 2.00 Number of FTEs\* per 100 beds: 0.70



\*FTE = Full-time equivalent

			Central Line-As
Jpper Limit	2.76	1.37	1.14
Rate	0.76	1.01	1.02
ower Limit	0.09	0.66	0.91
Rate per 1,000 Central Line Days			
Rate ber		I	I
0	Hospital	Similarly-sized	NC

Hospitals Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

### Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008

Table 1: Nates and Sins by ico Type, san-bee 2012 in comparison to National baseline bata from 2000-2000.						10111 2000-2000.	
Type of ICU	Infections	Line Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	2	2,610	0.77	3.915	0.511	0.062, 1.845	Same
Neonatal Level II/III	0	6					
YTD Total for Reporting ICUs	2	2,616	0.76	3.921	0.51	0.062, 1.843	Same

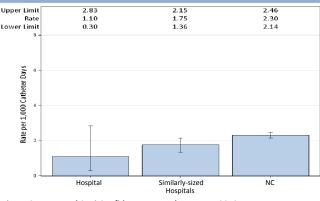
\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Catheter-Associated Urinary Tract Infections (CAUTI)

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	4	3,441	1.16	4.129	0.969	0.264, 2.480	Same
Rehabiliation	0	181	0	0.688			
YTD Total for Reporting ICU	s 4	3,622	1.1	4.817	0.83	0.226, 2.126	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

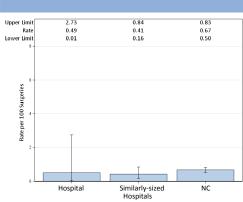


Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

### Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	3
Procedures	204	85
Rate	0.49	3.53
Predicted Infections	2.15	2.74
SIR**	0.465	1.094
95% CI**	0.012, 2.589	0.226, 3.199
Interpretation	Same	Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

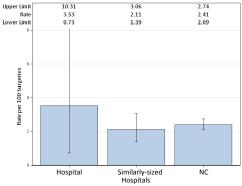


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

### **Commentary from Hospitals:**

New Hanover Regional Medical Center, Wilmington, New Hanover County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: Major **Profit Status:** Not for Profit Admissions in 2011: 36,026 Patient Days in 2011: 176,832 Total Number of Beds: 588 Number of ICU Beds: 112 FTE\* Infection Preventionists: 4.00 Number of FTEs\* per 100 beds: 0.68



\*FTE = Full-time equivalent

### 1.14 1.02 **Upper Limit** 1.00 0.39 0.93 0.11 0.74 0.91 Rate per 1,000 Central Line Days Hospita Similarly-sized

Table 1 Rates and SIRs by ICU Type Jan-Dec 2012 in Comparison to National Raseline Data from 2006-200

Table 1. Nates and Sins by ico	Type, Jan-D	CC 2012 I	II COIII	parison to it	ationari	baseinie Data i	10111 2000-2000.
Type of ICU	Infections	Line Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical	3	1,673	1.79	4.35	0.69	0.142, 2.015	Same
Medical cardiac	1	2,548	0.39	5.096	0.196	0.005, 1.093	Lower
Medical/surgical	0	77	0	0.162			
Neonatal Level II/III	0	1,637	0	3.972	0	, 0.929	Lower
Pediatric medical/surgical	0	131	0	0.393			
Surgical	0	2,184	0	5.023	0	, 0.734	Lower
Surgical cardiothoracic	0	1,952	0	2.733	0	, 1.350	Same
YTD Total for Reporting ICUs	4	10,202	0.39	21.729	0.184	0.050, 0.471	Lower

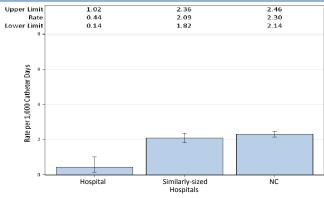
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

dicted
ctions SIR* 95% CI* Interpretation
938 0.203 0.005, 1.128 Lower
954 0.288 0.035, 1.039 Lower
78 .
171 .
331 .
308 0.215 0.026, 0.776 Lower
989 0 , 1.234 Same
.47 0.196 0.064, 0.458 Lower



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

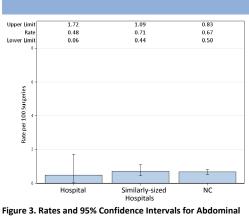


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	2	6
Procedures	419	385
Rate	0.48	1.56
Predicted Infections	3.72	12.34
SIR**	0.537	0.486
95% CI**	0.065, 1.941	0.178, 1.058
Interpretation	Same	Lower

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

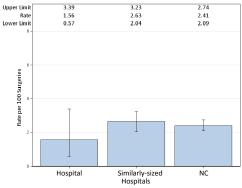


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

At New Hanover Regional Medical Center we take patient safety and quality care extremely seriously. We implement the latest science-based protocols to prevent hospital-acquired infection. We study and adopt best practices, evidence-based medicine and recommendations from national agencies to deliver the best possible outcomes for our patients. We encourage patients and their families to take an active role in helping prevent infections. Our team of infection preventionists works with all staff to ensure they are focused on delivering the highest quality of care possible. We are proud of our success and our ongoing quest to keep preventable infections to an absolute minimum.

Refer to Section IV of the NC HAI Prevention Program - Quarterly Report October 2012 for further explanation of presented statistics (epi.publichealth.nc.gov/cd/hai/figures.html). Data as of March 12, 2013.

Northern Hospital Of Surry County, Mount Airy, Surry County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 4,677 Patient Days in 2011: 15,898 Total Number of Beds: 100 Number of ICU Beds: 10 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 1.00



\*FTE = Full-time equivalent

### Central Line-Associated Bloodstream Infections (CLABSI)

1.14 1.02 Upper Limit 0.00 0.60 0.91 Rate per 1,000 Central Line Days Hospital Hospitals

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Infections Interpretation 0 Medical/surgical 0 292 0.438 YTD Total for Reporting ICUs 0 292 0 0.438

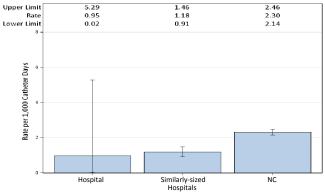
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	1	1,054	0.95	1.37	0.73	0.018, 4.067	Same
YTD Total for Reporting ICU	s 1	1,054	0.95	1.37	0.73	0.018, 4.067	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

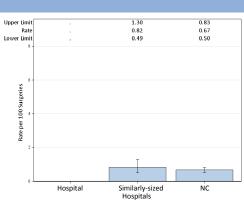


Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

### Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	2
Procedures	13	42
Rate		4.76
Predicted Infections		1.24
SIR**		1.619
95% CI**		0.196, 5.850
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

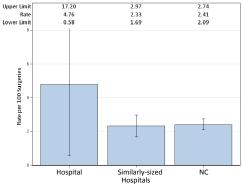


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

### **Commentary from Hospitals:**

Onslow Memorial Hospital, Jacksonville, Onslow County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 10,466 Patient Days in 2011: 38,741 Total Number of Beds: 162 Number of ICU Beds: 30 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.62



\*FTE = Full-time equivalent

### Central Line-Associated Bloodstream Infections (CLABSI)

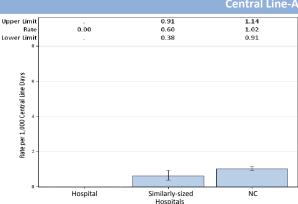


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Infections 95% CI\* Interpretation 0 Medical/surgical 1,186 1.779 , 2.074 Same Neonatal Level III 0 YTD Total for Reporting ICUs 0 1,193 1.79 0 0 , 2.061 Same

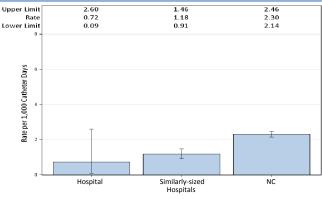
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	2	2,784	0.72	3.619	0.553	0.067, 1.996	Same
YTD Total for Reporting ICU	s 2	2,784	0.72	3.619	0.553	0.067, 1.996	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

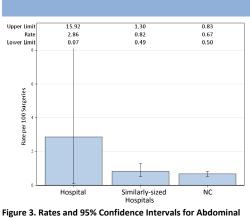


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	1
Procedures	35	53
Rate	2.86	1.89
Predicted Infections	0.28	1.57
SIR**	·	0.638
95% CI**		0.016, 3.556
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

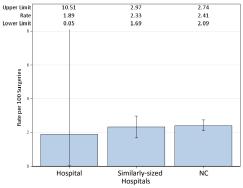


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

Pardee Hospital, Hendersonville, Henderson County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital Medical Affiliation: Graduate **Profit Status:** Not for Profit

Admissions in 2011: 7,331 Patient Days in 2011: 31,319 Total Number of Beds: 145 Number of ICU Beds: FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.69



\*FTE = Full-time equivalent

1.14 1.02 **Upper Limit** 0.00 0.60 0.91 Rate per 1,000 Central Line Days Hospital Hospitals

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Type of ICU Infections Infections Interpretation

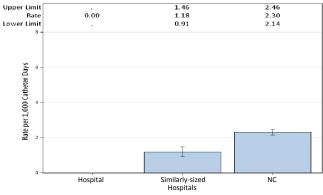
424 0 Medical/surgical 0 0.636 YTD Total for Reporting ICUs 0 424 0 0.636

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	0	1,214	0	1.578	0	, 2.338	Same
YTD Total for Reporting ICU:	s 0	1,214	0	1.578	0	, 2.338	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

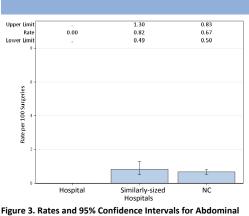


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	0
Procedures	50	69
Rate	0	0
Predicted Infections	s 0.59	2.20
SIR**	•	0
95% CI**		, 1.674
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

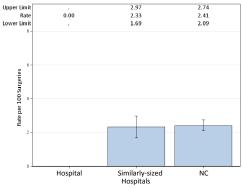


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Park Ridge Health, Hendersonville, Henderson County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

 Profit Status:
 Not for Profit

 Admissions in 2011:
 5,275

 Patient Days in 2011:
 26,662

 Total Number of Beds:
 103

 Number of ICU Beds:
 6

 FTE\* Infection Preventionists:
 1.00

 Number of FTEs\* per 100 beds:
 0.97



\*FTE = Full-time equivalent

### Central Line-Associated Bloodstream Infections (CLABSI)

YTD Total for Reporting ICUs

 Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

 Type of ICU
 Infections
 Line Days
 Predicted Infections
 SIR\*
 95% CI\*
 Interpretation

 Medical
 0
 207
 0
 0.393
 .
 .

0

0.393

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

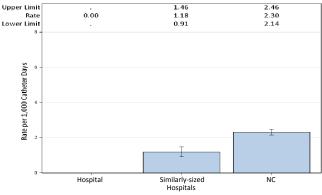
0

207

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days		Predicted Infections	SIR*	95% CI*	Interpretation
Medical	0	570	0	1.14	0	, 3.236	Same
YTD Total for Reporting ICU:	s 0	570	0	1.14	0	, 3.236	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

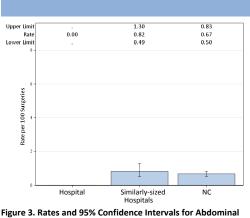


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	1
Procedures	49	39
Rate	0	2.56
Predicted Infection	s 0.51	1.26
SIR**		0.795
95% CI**		0.020, 4.429
Interpretation		Same

\*Infections from deep incisional and/or organ space.
\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95%

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

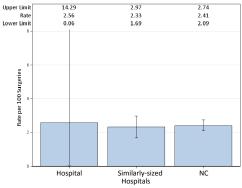


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

## Hysterectomies, Jan-Dec 2012. Commentary from Hospitals:

Person Memorial Hospital, Roxboro, Person County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No **Profit Status:** For Profit Admissions in 2011: 1,842 Patient Days in 2011: 6,158 Total Number of Beds: 110 Number of ICU Beds: 6 FTE\* Infection Preventionists: 0.75 Number of FTEs\* per 100 beds: 0.68



\*FTE = Full-time equivalent

### Central Line-Associated Bloodstream Infections (CLABSI)

YTD Total for Reporting ICUs

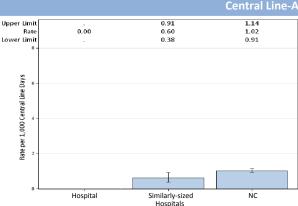


 Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

 Type of ICU
 Infections
 Line Days
 Predicted Infections
 SIR\*
 95% CI\*
 Interpretation

 Medical/surgical
 0
 161
 0
 0.242
 .
 .
 .

0

0.242

0

161

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

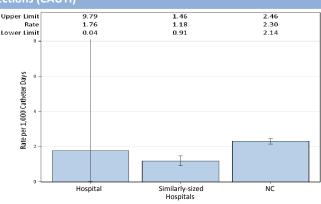
\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### theter-Associated Urinary Tract Infections (CAUTI)

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	1	569	1.76	0.74			
YTD Total for Reporting ICU:	s 1	569	1.76	0.74			



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Upper Limit

Lower Limit

100 Surgeries

Rate per

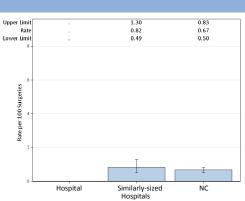


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery				
Infections*	0	0				
Procedures	0	17				
Rate	•					
Predicted Infections						
SIR**	·					
95% CI**						
Interpretation						
*Infections from deep incisional and/or organ space.  **SIR, 95%CI = Standardized Infection Ratio and corresponding 95%						

Hospitals
Figure 3. Rates and 95% Confidence Intervals for Abdominal

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval. Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

# Hospital Similarly-sized NC Hospitals Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

2.97

### Hysterectomies, Jan-Dec 2012.

**Commentary from Hospitals:** No comments provided.

2.74

Presbyterian Hospital Charlotte, Charlotte, Mecklenburg County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 30,399 Patient Days in 2011: 169,031 Total Number of Beds: 531 Number of ICU Beds: 81 FTE\* Infection Preventionists: 6.00 Number of FTEs\* per 100 beds: 1.13



\*FTE = Full-time equivalent

### 1.14 1.02 **Upper Limit** 0.73 0.93 0.32 0.74 0.91 Rate per 1,000 Central Line Days

Similarly-sized

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.							
Type of ICU	Infections	Line Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical cardiac	2	2,209	0.91	4.418	0.453	0.055, 1.635	Same
Medical/surgical	1	2,668	0.37	4.002	0.25	0.006, 1.392	Same
Neonatal Level III	4	3,575	1.12	9.595	0.417	0.114, 1.067	Lower
Neurosurgical	0	987	0	2.468	0	, 1.495	Same
Pediatric medical/surgical	1	705	1.42	2.115	0.473	0.012, 2.634	Same
Surgical cardiothoracic	0	748	0	1.047	0	, 3.523	Same
YTD Total for Reporting ICUs	8	10,892	0.73	23.644	0.338	0.146, 0.667	Lower

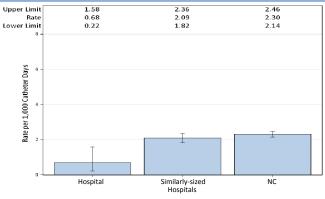
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Hospita

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.							
Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical cardiac	0	2,230	0	4.46	0	, 0.827	Lower
Medical/surgical	3	2,560	1.17	3.328	0.901	0.186, 2.634	Same
Neurosurgical	2	1,410	1.42	6.204	0.322	0.039, 1.165	Same
Pediatric medical/surgical	0	421	0	1.179	0	, 3.129	Same
Surgical cardiothoracic	0	771	0	1.311	0	, 2.814	Same
YTD Total for Reporting ICU	s 5	7,392	0.68	16.482	0.303	0.099, 0.708	Lower



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

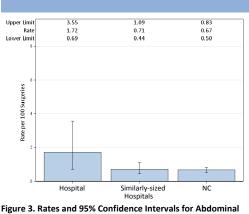


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

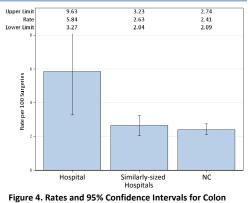
Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	7	15
Procedures	406	257
Rate	1.72	5.84
<b>Predicted Infections</b>	3.89	8.33
SIR**	1.8	1.801
95% CI**	0.724, 3.709	1.007, 2.971
Interpretation	Same	Higher

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.



Surgeries, Jan-Dec 2012.

## Hysterectomies, Jan-Dec 2012.

At Novant Health, the safety of our patients comes first. Our goal is to have the lowest possible infection rates and we continually monitor infection prevention tactics for improvement opportunities. We support transparency in reporting infection rates and make common infection data available on our website. More information can be found under 'quality' on NovantHealth.org.

Refer to Section IV of the NC HAI Prevention Program - Quarterly Report October 2012 for further explanation of presented statistics (epi.publichealth.nc.gov/cd/hai/figures.html). Data as of March 12, 2013.

Presbyterian Hospital Huntersville, Huntersville, Mecklenburg County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 5,297 Patient Days in 2011: 20,193 Total Number of Beds: 60 Number of ICU Beds: FTE\* Infection Preventionists: 0.80 Number of FTEs\* per 100 beds: 1.33



\*FTE = Full-time equivalent

### Central Line-Associated Bloodstream Infections (CLABSI) 1.68 0.47 1.14 1.02 **Upper Limit** 1.42 0.04 0.91 Rate per 1,000 Central Line Days Hospital

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

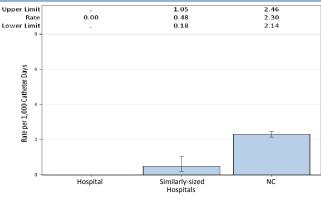
### Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

•		Line		Predicted			
Type of ICU	Infections	Days	Rate	Infections	SIR*	95% CI*	Interpretation
Medical/surgical	1	667	1.5	1.001	0.999	0.025, 5.566	Same
Neonatal Level II/III	0	35					
YTD Total for Reporting ICUs	1	702	1.42	1.045	0.957	0.024, 5.332	Same

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval. Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	0	1,052	0	1.368	0	, 2.697	Same
YTD Total for Reporting ICU:	s 0	1,052	0	1.368	0	, 2.697	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

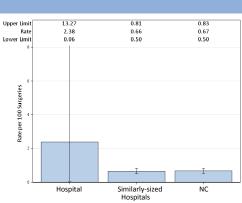


Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

### Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	0
Procedures	42	55
Rate	2.38	0
Predicted Infections	0.32	1.69
SIR**		0
95% CI**		, 2.185
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

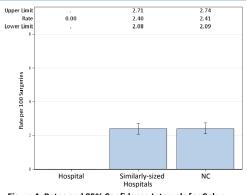


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

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Presbyterian Hospital Matthews, Matthews, Mecklenburg County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

 Profit Status:
 Not for Profit

 Admissions in 2011:
 8,142

 Patient Days in 2011:
 33,028

 Total Number of Beds:
 114

 Number of ICU Beds:
 14

 FTE\* Infection Preventionists:
 0.80

 Number of FTEs\* per 100 beds:
 0.70



\*FTE = Full-time equivalent

### **Central Line-Associated Bloodstream Infections (CLABSI)**

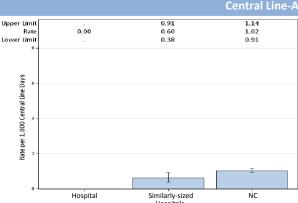


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Infections Type of ICU Infections Interpretation 0 Medical/surgical 792 0 1.188 , 3.105 Same Neonatal Level II/III 0 128 0 0.194 YTD Total for Reporting ICUs 0 920 0 1.382 0 , 2.669 Same

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

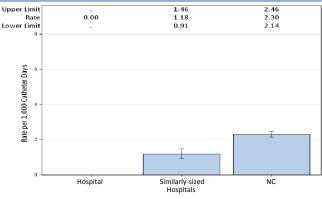
\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Catheter-Associated Urinary Tract Infection

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	0	787	0	1.023	0	, 3.606	Same
YTD Total for Reporting ICU:	s 0	787	0	1.023	0	, 3.606	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

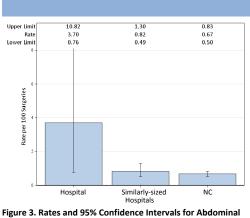


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	3	1
Procedures	81	46
Rate	3.7	2.17
Predicted Infections	0.65	1.47
SIR**	•	0.68
95% CI**		0.017, 3.790
Interpretation		Same

\*Infections from deep incisional and/or organ space.
\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95%

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

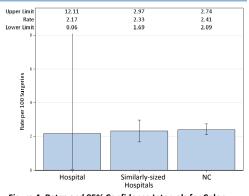


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

## Hysterectomies, Jan-Dec 2012. Commentary from Hospitals:

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Randolph Hospital, Asheboro, Randolph County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 7,004 Patient Days in 2011: 26,195 Total Number of Beds: 119 Number of ICU Beds: FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.84



\*FTE = Full-time equivalent

1.14 1.02 Upper Limit 0.00 0.60 0.91 Rate per 1,000 Central Line Days Hospital Hospitals

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Type of ICU Infections Infections Interpretation 0 1.287 Medical/surgical 0 858 0 , 2.866 Same 1.287 YTD Total for Reporting ICUs 0 858 0 0 , 2.866 Same

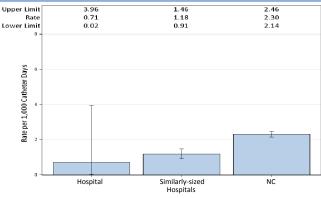
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

•				•			
		Catheter		Predicted			
Type of ICU	Infections	Days	Rate	Infections	SIR*	95% CI*	Interpretation
Medical/surgical	1	1,408	0.71	1.83	0.546	0.014, 3.045	Same
YTD Total for Reporting ICUs	s 1	1.408	0.71	1.83	0.546	0.014 3.045	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

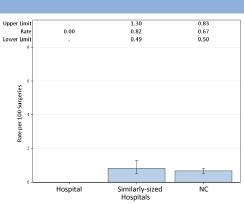


Figure 3. Rates and 95% Confidence Intervals for Abdominal

Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	3
Procedures	51	84
Rate	0	3.57
<b>Predicted Infections</b>	0.54	2.80
SIR**		1.073
95% CI**		0.221, 3.137
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

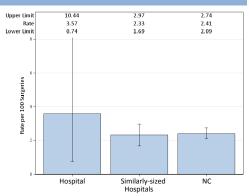


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

Rex Healthcare, Raleigh, Wake County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 31,046 Patient Days in 2011: 115,374 Total Number of Beds: 433 Number of ICU Beds: 38 FTE\* Infection Preventionists: 4.00 Number of FTEs\* per 100 beds: 0.92



\*FTE = Full-time equivalent

### Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. 1.14 1.02 0.91 Type of ICU Medical cardiac

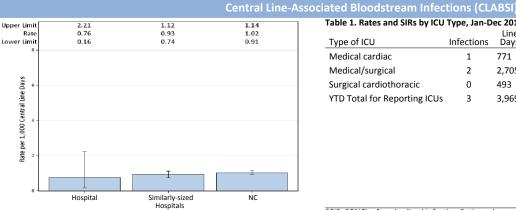


Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

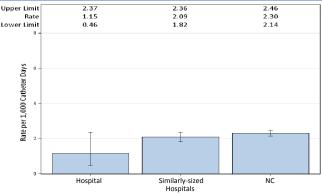
Predicted Infections Line Infections Days Rate 95% CI\* Interpretation 1 771 1.3 1.542 0.649 0.016, 3.613 Same Medical/surgical 2 2,705 0.74 4.058 0.493 0.060, 1.780 Same 0 493 0 0.69 Surgical cardiothoracic YTD Total for Reporting ICUs 3,969 0.76 6.29 0.477 0.098, 1.394 Same

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical cardiac	2	1,310	1.53	2.62	0.763	0.092, 2.758	Same
Medical/surgical	3	3,733	0.8	4.48	0.67	0.138, 1.957	Same
Surgical cardiothoracic	2	1,035	1.93	1.76	1.136	0.138, 4.105	Same
YTD Total for Reporting ICU	s 7	6,078	1.15	8.859	0.79	0.318, 1.628	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

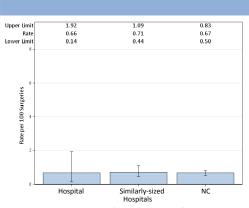


Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

### Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	3	8
Procedures	456	437
Rate	0.66	1.83
Predicted Infections	4.27	14.25
SIR**	0.702	0.562
95% CI**	0.145, 2.053	0.242, 1.107
Interpretation	Same	Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

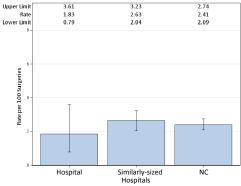


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

### **Commentary from Hospitals:**

Rowan Regional Medical Center, Salisbury, Rowan County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 9,137 Patient Days in 2011: 41,401 Total Number of Beds: 268 Number of ICU Beds: 20 FTE\* Infection Preventionists: 1.50 Number of FTEs\* per 100 beds: 0.56



\*FTE = Full-time equivalent

### Central Line-Associated Bloodstream Infections (CLABSI) Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

YTD Total for Reporting ICUs

1.14 1.02 **Upper Limit** 1.01 0.01 0.91 Rate per 1,000 Central Line Days Hospita Similarly-sized

Line Predicted Days Type of ICU Infections Infections 95% CI\* Interpretation 0 Medical cardiac 230 0 0.46 Medical/surgical 1 1,566 0.64 2.349 0.426 0.011, 2.372 Same

0.56

2.809

0.356

0.009, 1.983

Same

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

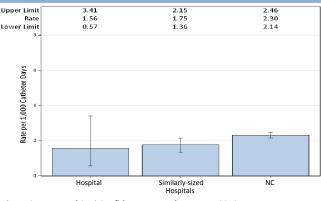
\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

1,796

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical cardiac	2	654	3.06	1.308	1.529	0.185, 5.523	Same
Medical/surgical	4	3,037	1.32	3.948	1.013	0.276, 2.594	Same
Rehabiliation	0	144	0	0.547			
YTD Total for Reporting ICU:	s 6	3,835	1.56	5.803	1.034	0.379, 2.250	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

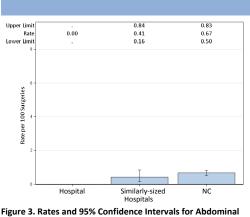


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	0
Procedures	24	63
Rate	0	0
Predicted Infections	s 0.24	2.08
SIR**		0
95% CI**		, 1.772
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

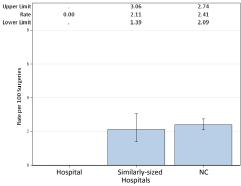


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

## Hysterectomies, Jan-Dec 2012.

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Rutherford Regional Medical Center, Rutherfordton, Rutherford County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

 Profit Status:
 Not for Profit

 Admissions in 2011:
 5,977

 Patient Days in 2011:
 22,450

 Total Number of Beds:
 130

 Number of ICU Beds:
 10

 FTE\* Infection Preventionists:
 1.00

 Number of FTEs\* per 100 beds:
 0.77



\*FTE = Full-time equivalent

### Central Line-Associated Bloodstream Infections (CLABSI)

YTD Total for Reporting ICUs

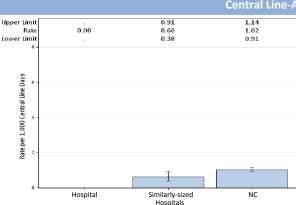


 Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

 Type of ICU
 Infections
 Line Days
 Predicted Infections
 SIR\*
 95% CI\*
 Interpretation

 Medical/surgical
 0
 255
 0
 0.383
 .
 .
 .

0

0.383

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

255

0

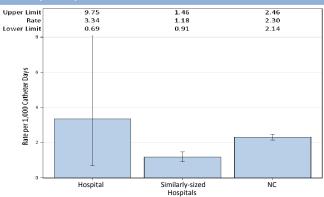
Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Catheter-Associated Urinary Tract Infection

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Catheter Predicted Predi

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	3	899	3.34	1.169	2.566	0.529, 7.500	Same
YTD Total for Reporting ICU:	s 3	899	3.34	1.169	2.566	0.529, 7.500	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

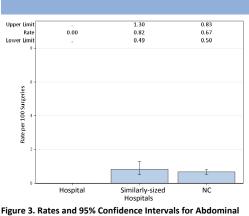


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	4
Procedures	54	62
Rate	0	6.45
Predicted Infections	0.66	2.03
SIR**	•	1.969
95% CI**		0.536, 5.040
Interpretation		Same

\*Infections from deep incisional and/or organ space.
\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95%

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

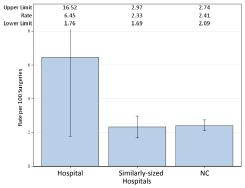


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

## Hysterectomies, Jan-Dec 2012. Commentary from Hospitals:

Sampson Regional Medical Center, Clinton, Sampson County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

 Profit Status:
 Not for Profit

 Admissions in 2011:
 3,361

 Patient Days in 2011:
 13,569

 Total Number of Beds:
 68

 Number of ICU Beds:
 8

 FTE\* Infection Preventionists:
 1.00

 Number of FTEs\* per 100 beds:
 1.47



\*FTE = Full-time equivalent

### Central Line-Associated Bloodstream Infections (CLABSI)

YTD Total for Reporting ICUs

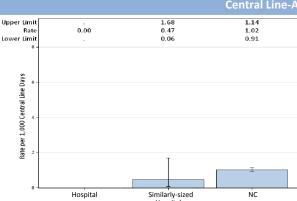


 Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

 Type of ICU
 Infections
 Line Days
 Predicted Infections
 SIR\*
 95% CI\*
 Interpretation

 Medical/surgical
 0
 79
 0
 0.119
 .
 .

0

0.119

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

0

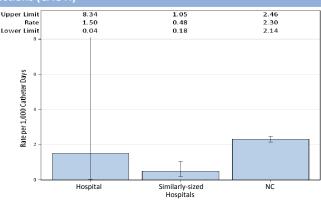
79

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Catheter-Associated Urinary Tract Infections (CAUT

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation	
Medical/surgical	1	668	1.5	0.868				
YTD Total for Reporting ICU:	s 1	668	1.5	0.868				



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Upper Limit

Lower Limit

100 Surgeries

Rate per

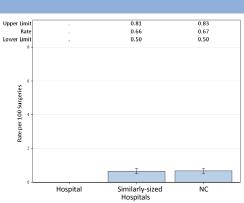


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery				
Infections*	0	0				
Procedures	8	17				
Rate						
Predicted Infection	s .					
SIR**						
95% CI**						
Interpretation						
*Infections from deep incisional and/or organ space.  **SIR, 95%CI = Standardized Infection Ratio and corresponding 95%						

Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

Hospital

Similarly-sized Hospitals

### Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

### **Commentary from Hospitals:**

No comments provided.

2.74

Sandhills Regional Medical Center, Hamlet, Richmond County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No **Profit Status:** For Profit Admissions in 2011: 3,277 Patient Days in 2011: 13,449 Total Number of Beds: 64 Number of ICU Beds: 6 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 1.56



\*FTE = Full-time equivalent

### Central Line-Associated Bloodstream Infections (CLABSI)

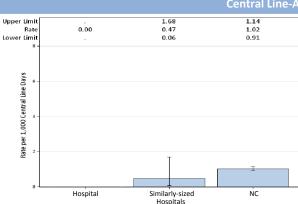


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Infections Interpretation 0 0 254 0.483 YTD Total for Reporting ICUs 0 254 0 0.483

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

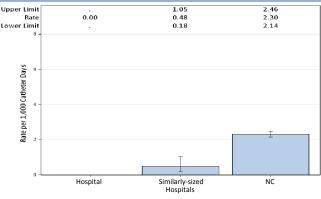
\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Catheter-Associated Urinary Tract Infections (CAUT

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical	0	488	0	0.976			
YTD Total for Reporting ICU:	s 0	488	0	0.976			



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Upper Limit

Lower Limit

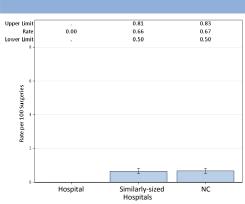


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	0
Procedures	32	5
Rate	0	
Predicted Infections	0.25	
SIR**		
95% CI**		
Interpretation		
*Infections from deep	incisional and/or organ space	e. responding 95%

Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

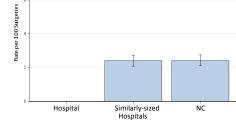


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

### **Commentary from Hospitals:**

No comments provided.

2.74

Scotland Memorial Hospital, Laurinburg, Scotland County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 6,682 Patient Days in 2011: 23,045 Total Number of Beds: 104 Number of ICU Beds: FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.96



\*FTE = Full-time equivalent

1.14 1.02 Upper Limit 0.00 0.60 0.91 Rate per 1,000 Central Line Days Hospital Hospitals

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Predicted Line on

Type of ICU	Infections	Days	Rate	Infections	SIR*	95% CI*	Interpretation
Medical/surgical	0	540	0	0.81			
YTD Total for Reporting ICUs	0	540	0	0.81			

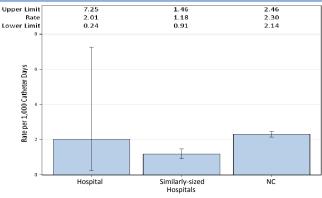
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	2	995	2.01	1.294	1.546	0.187, 5.583	Same
Rehabiliation	0	1					
YTD Total for Reporting ICU:	s 2	996	2.01	1.297	1.542	0.187, 5.570	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

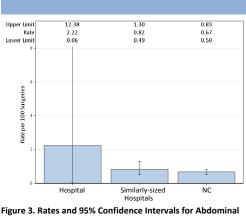


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	0
Procedures	45	33
Rate	2.22	0
Predicted Infections	0.46	1.08
SIR**		0
95% CI**		, 3.409
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

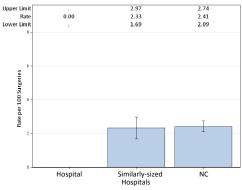


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

Select Specialty Hospital, Durham, Durham, Durham County

### **2011 Hospital Survey Information**

Hospital Type: Long-term Acute Care Hospital

For Profit Profit Status: Admissions in 2011: 303 8,250 Patient Days in 2011: Total Number of Beds: 29 0.25 FTE\* Infection Preventionists: Number of FTEs\* per 100 beds: 0.86



\*FTE = Full-time equivalent

### Central Line-Associated Bloodstream Infections (CLABSI) 8.60 1.54 0.04 1.40 0.88 0.51 Upper Limit Rate per 1,000 Central Line Days Hospital NC (LTACs)

Table 1. Rates by Location, Jan-Dec 2012.

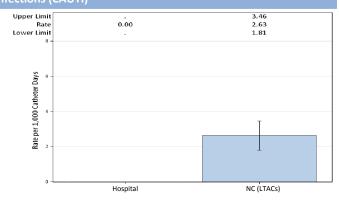
Type of Unit	Infections	Line Days	Rate
Adult ward	1	648	1.54
YTD Total for Reporting Units	. 1	648	1.54

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days.

### Table 2. Rates by Location, Jan-Dec 2012

Type of Unit	Infections	Catheter Days	Rate	
Adult ward	0	508	0.00	
YTD Total for Reporting Uni	ts 0	508	0.00	



Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

### **Surgical Site Infections (SSI)**

Long-term acute care hospitals (LTACs) do not report surgical site infections.

### Commentary from Hospitals:

Select Specialty Hospital, Greensboro, Greensboro, Guilford County

### **2011 Hospital Survey Information**

Hospital Type: Long-term Acute Care Hospital

For Profit Profit Status: Admissions in 2011: 300 6,750 Patient Days in 2011: Total Number of Beds: 30 FTE\* Infection Preventionists: 0.20 Number of FTEs\* per 100 beds: 0.67



\*FTE = Full-time equivalent

## Central Line-Associated Bloodstream Infections (CLABSI) 1.40 0.88 0.51 Upper Limit 0.00 Rate per 1,000 Central Line Days NC (LTACs)

Table 1. Rates by Location, Jan-Dec 2012.

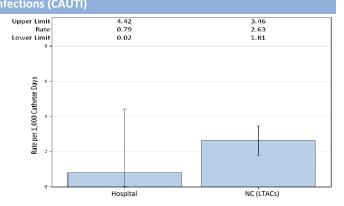
Type of Unit	Infections	Line Days	Rate
Adult ward	0	1,290	0.00
YTD Total for Reporting Units	0	1,290	0.00

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days.

### Table 2. Rates by Location, Jan-Dec 2012

Type of Unit	Infections	Catheter Days	Rate	
Adult ward	1	1,260	0.79	
YTD Total for Reporting Uni	ts 1	1,260	0.79	



Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

### **Surgical Site Infections (SSI)**

Long-term acute care hospitals (LTACs) do not report surgical site infections.

### **Commentary from Hospitals:**

Select Specialty Hospital-Winston Salem, Winston Salem, Forsyth County

### **2011 Hospital Survey Information**

Hospital Type: Long-term Acute Care Hospital

For Profit Profit Status: Admissions in 2011: 431 Patient Days in 2011: 11,654 Total Number of Beds: 42 FTE\* Infection Preventionists: 0.60 Number of FTEs\* per 100 beds: 1.43



\*FTE = Full-time equivalent

## Central Line-Associated Bloodstream Infections (CLABSI) 1.40 0.88 0.51 Upper Limit 0.01 Rate per 1,000 Central Line Days NC (LTACs)

Table 1. Rates by Location, Jan-Dec 2012.

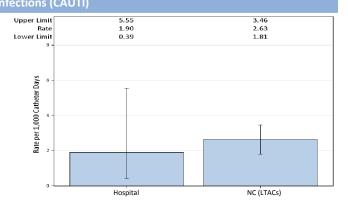
Type of Unit	Infections	Line Days	Rate
Adult ward	1	1,787	0.56
YTD Total for Reporting Units	1	1,787	0.56

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days.

### Table 2. Rates by Location, Jan-Dec 2012

Type of Unit	Infections	Catheter Days	Rate
Adult ward	3	1,581	1.9
YTD Total for Reporting Uni	ts 3	1,581	1.9



Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

### **Surgical Site Infections (SSI)**

Long-term acute care hospitals (LTACs) do not report surgical site infections.

### **Commentary from Hospitals:**

Southeastern Regional Medical Center, Lumberton, Robeson County

### **2011 Hospital Survey Information**

1.01

Similarly-sized

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 17,346 Patient Days in 2011: 69,302 Total Number of Beds: 299 Number of ICU Beds: 19 FTE\* Infection Preventionists: 2.00 Number of FTEs\* per 100 beds: 0.67

2.38

0.77

Hospital



\*FTE = Full-time equivalent

**Upper Limit** 

Rate per 1,000 Central Line Days

# 1.14 1.02 0.91

Central Line-Associated Bloodstream Infections (CLABSI)

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Type of ICU Infections Infections 95% CI\* Interpretation Medical/surgical 5 2,031 2.46 3.047 1.641 0.533, 3.829 Same Surgical cardiothoracic 0 70 0 0.098 3.145 YTD Total for Reporting ICUs 2,101 5 2.38 1.59 0.516, 3.710 Same

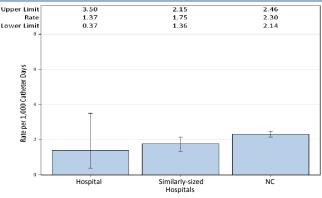
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	4	2,712	1.47	3.526	1.134	0.309, 2.905	Same
Surgical cardiothoracic	0	210	0	0.357			
YTD Total for Reporting ICU	s 4	2,922	1.37	3.883	1.03	0.281, 2.638	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

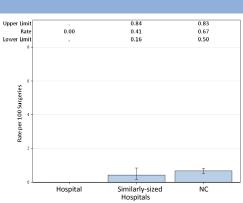


Figure 3. Rates and 95% Confidence Intervals for Abdominal

### Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	3
Procedures	202	91
Rate	0	3.3
Predicted Infections	2.28	3.18
SIR**	0	0.944
95% CI**	, 1.621	0.195, 2.758
Interpretation	Same	Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

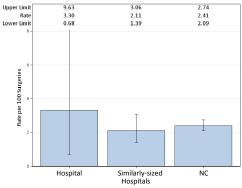


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

Stanly Regional Medical Center, Albemarle, Stanly County

### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: Nο

**Profit Status:** Not for Profit Admissions in 2011: 5,676 Patient Days in 2011: 20,909 Total Number of Beds: 119 Number of ICU Beds: 10 FTE\* Infection Preventionists: 0.88 Number of FTEs\* per 100 beds: 0.74



\*FTE = Full-time equivalent

YTD Total for Reporting ICUs

1.14 1.02 Upper Limit 0.00 0.60 0.91 Rate per 1,000 Central Line Days Hospital

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Type of ICU Infections Infections Interpretation 0 Medical cardiac 0 463 0.926

0

0.926

0

463

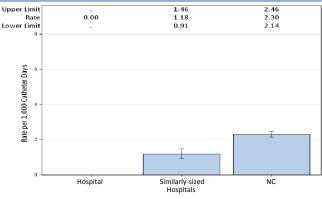
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical cardiac	0	1,458	0	2.916	0	, 1.265	Same
Rehabiliation	0	27					
YTD Total for Reporting ICU	s 0	1.485	0	3.019	0	1.222	Lower



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

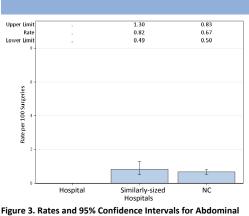


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	0
Procedures	9	25
Rate	•	0
Predicted Infections		0.73
SIR**		
95% CI**		
Interpretation		
*Infections from deep	incisional and/or organ space	<u> </u>

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95%

Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

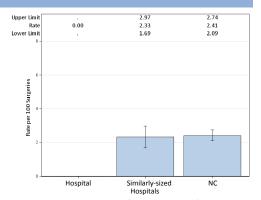


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

Thomasville Medical Center, Thomasville, Davidson County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 4,137 Patient Days in 2011: 21,592 Total Number of Beds: 149 Number of ICU Beds: 11 FTE\* Infection Preventionists: 0.50 Number of FTEs\* per 100 beds: 0.34



\*FTE = Full-time equivalent

#### Central Line-Associated Bloodstream Infections (CLABSI)

YTD Total for Reporting ICUs

1.14 1.02 **Upper Limit** 0.00 0.60 0.91 Rate per 1,000 Central Line Days Hospital

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Type of ICU Infections Infections Interpretation Medical/surgical 0 309 0 0.464

0

0.464

0

309

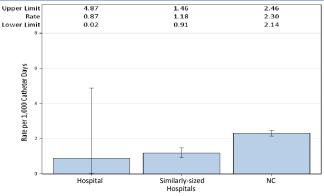
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	1	1,143	0.87	1.486	0.673	0.017, 3.749	Same
YTD Total for Reporting ICU	s 1	1,143	0.87	1.486	0.673	0.017, 3.749	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

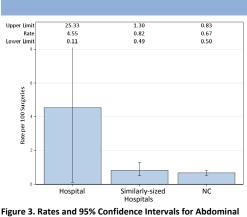


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	1
Procedures	22	58
Rate	4.55	1.72
<b>Predicted Infections</b>	0.17	1.71
SIR**	•	0.585
95% CI**		0.015, 3.262
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

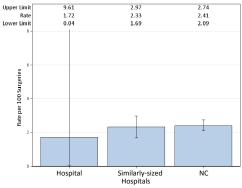


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

# Hysterectomies, Jan-Dec 2012.

At Novant Health, the safety of our patients comes first. Our goal is to have the lowest possible infection rates and we continually monitor infection prevention tactics for improvement opportunities. We support transparency in reporting infection rates and make common infection data available on our website. More information can be found under 'quality' on NovantHealth.org.

**UNC Health Care, Chapel Hill, Orange County** 

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: Major **Profit Status:** Government Admissions in 2011: 43,666 Patient Days in 2011: 244,308 Total Number of Beds: 838 Number of ICU Beds: 171 FTE\* Infection Preventionists: 5.50 Number of FTEs\* per 100 beds: 0.66



\*FTE = Full-time equivalent

#### Central Line-Associated Bloodstream Infections (CLABSI)

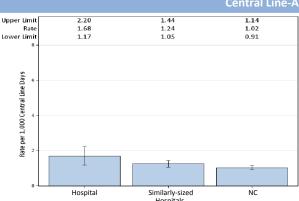


Table 1. Rates and SIRS by ICU	iype, jan-L	ec 2012 i	n com	parison to N	ationai i	Baseline Data t	rom 2006-2008.
Type of ICU	Infections	Line Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Burn	7	3,223	2.17	17.727	0.395	0.159, 0.814	Lower
Medical	13	5,707	2.28	14.838	0.876	0.467, 1.498	Same
Medical cardiac	8	3,472	2.3	6.944	1.152	0.497, 2.270	Same
Neonatal Level III	4	4,097	0.98	10.133	0.395	0.108, 1.011	Lower
Pediatric medical/surgical	3	3,502	0.86	10.506	0.286	0.059, 0.835	Lower
Surgical	3	1,488	2.02	3.422	0.877	0.181, 2.562	Same
Surgical cardiothoracic	3	2,847	1.05	3.986	0.753	0.155, 2.200	Same
YTD Total for Reporting ICUs	41	24,336	1.68	67.556	0.607	0.435, 0.823	Lower

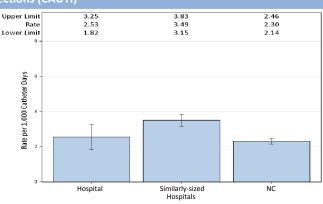
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

rable 2. nates and sins by ic	C Type, sun	DCC LUIL	co	parison to 14	a cioniai b	ascinic Bata ii	o <u>2</u> 005.
Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Burn	6	4,234	1.42	18.63	0.322	0.118, 0.701	Lower
Medical	11	5,605	1.96	12.892	0.853	0.426, 1.527	Same
Medical cardiac	2	2,236	0.89	4.472	0.447	0.054, 1.616	Same
Pediatric medical/surgical	7	1,651	4.24	4.623	1.514	0.609, 3.120	Same
Rehabiliation	1	286	3.5	1.087	0.92	0.023, 5.126	Same
Surgical	13	2,006	6.48	5.216	2.492	1.327, 4.262	Higher
Surgical cardiothoracic	8	2,923	2.74	4.969	1.61	0.695, 3.172	Same
YTD Total for Reporting ICU	s 48	18,941	2.53	51.887	0.925	0.682, 1.227	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

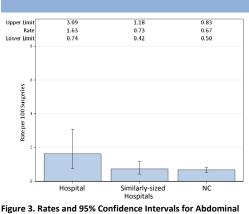


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

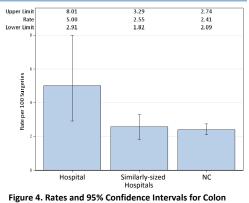
	Abdominal hysterectomy	Colon surgery
Infections*	9	17
Procedures	553	340
Rate	1.63	5
<b>Predicted Infections</b>	6.28	12.67
SIR**	1.434	1.342
95% CI**	0.656, 2.722	0.781, 2.148
Interpretation	Same	Same

\*Infections from deep incisional and/or organ space.
\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95%

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Pate per 100 inactions suggested. Bate pet calculated if less the

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.



Surgeries, Jan-Dec 2012.

# Hysterectomies, Jan-Dec 2012. Commentary from Hospitals:

UNC Health Care is pleased that our rates of all reported healthcare-associated infections are statistically similar to similarly-sized hospitals despite care in a tertiary referral hospital for highly vulnerable populations (e.g., organ transplant, HIV infected, cancer, severely burned, and very premature infants). NC residents should be aware that the reported information is NOT corrected for the severity of illness of the hospital's patients. UNC Health Care supports the need for the data presented in this report to be validated (i.e., demonstration by independent monitors that the submitted data is correct).

Vidant Beaufort Hospital, Washington, Beaufort County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

Profit Status:

Admissions in 2011:
Patient Days in 2011:
Total Number of Beds:
Number of ICU Beds:
FTE\* Infection Preventionists:
Number of FTEs\* per 100 beds:

Number of FTEs\* per 100 beds:

Not for Profit 4,621
1,251
1,621
1,001
1,001



\*FTE = Full-time equivalent

#### Central Line-Associated Bloodstream Infections (CLABSI)

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Line Predicted Predicted SIR\* 059/CI\* Interpretation

Type of ICUInfectionsDaysRateInfectionsSIR\*95% CI\*InterpretationMedical/surgical012600.189.YTD Total for Reporting ICUs012600.189.

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

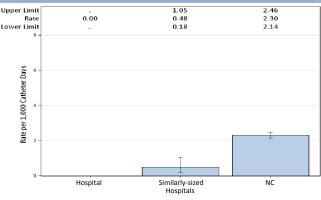
\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Catheter-Associated Urinary Tract Infections (CAU)

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	0	379	0	0.493			
YTD Total for Reporting ICU	s 0	379	0	0.493			



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Upper Limit

Lower Limit

100 Surgeries

Rate per

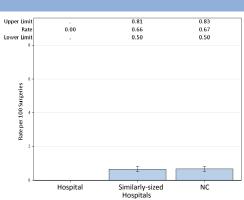


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery					
Infections*	0	1					
Procedures	45	19					
Rate	0						
Predicted Infections	0.37						
SIR**							
95% CI**							
Interpretation							
*Infections from deep incisional and/or organ space.							

Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

Hospital

Similarly-sized Hospitals

# Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

#### **Commentary from Hospitals:**

No comments provided.

2.74

Vidant Duplin Hospital, Kenansville, Duplin County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 3,321 Patient Days in 2011: 16,537 Total Number of Beds: 79 Number of ICU Beds: 9 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 1.27



\*FTE = Full-time equivalent

YTD Total for Reporting ICUs

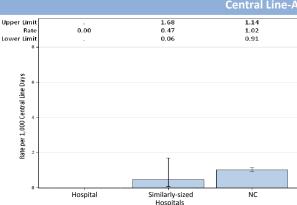


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Type of ICU Infections Infections Interpretation 0 Medical/surgical 0 83 0.125

0

0.125

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

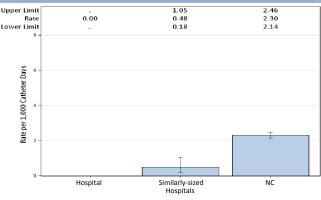
0

83

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	0	530	0	0.689			
YTD Total for Reporting ICU:	s 0	530	0	0.689			



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

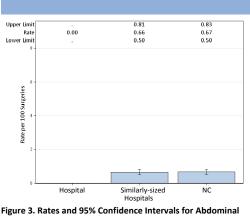


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery				
Infections*	0	0				
Procedures	25	7				
Rate	0					
Predicted Infection	s 0.36					
SIR**						
95% CI**						
Interpretation						
*Infections from deep incisional and/or organ space.						

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

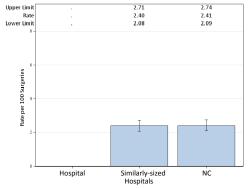


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

#### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

Vidant Edgecombe Hospital, Tarboro, Edgecombe County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: Major **Profit Status:** Not for Profit Admissions in 2011: 5,033 Patient Days in 2011: 18,064 Total Number of Beds: 117 Number of ICU Beds: FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.85



\*FTE = Full-time equivalent

#### Central Line-Associated Bloodstream Infections (CLABSI)

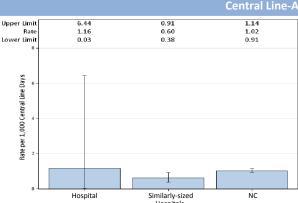


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Type of ICU Infections Rate Infections 95% CI\* Interpretation Medical/surgical 1 865 1.16 1.817 0.55 0.014, 3.066 Same YTD Total for Reporting ICUs 865 1.16 1.817 0.014, 3.066 Same

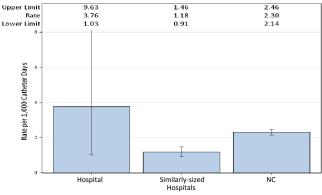
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	4	1,052	3.8	2.42	1.653	0.450, 4.232	Same
Rehabiliation	0	11	•				
YTD Total for Reporting ICU	s 4	1,063	3.76	2.461	1.625	0.443, 4.162	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Upper Limit

Lower Limit

100 Surgeries

Rate per

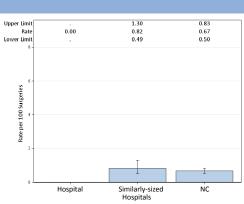


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	0
Procedures	45	23
Rate	0	0
Predicted Infections SIR**	0.49	0.70
95% CI**	•	•
Interpretation		
*!		

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95%

Confidence Interval. Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

Similarly-sized Hospitals Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

Hospital

#### Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

#### **Commentary from Hospitals:**

No comments provided.

2.74

Vidant Medical Center, Greenville, Pitt County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: Major **Profit Status:** Not for Profit Admissions in 2011: 57,661 Patient Days in 2011: 310,339 Total Number of Beds: 861 Number of ICU Beds: 162 FTE\* Infection Preventionists: 6.00 Number of FTEs\* per 100 beds: 0.70



\*FTE = Full-time equivalent

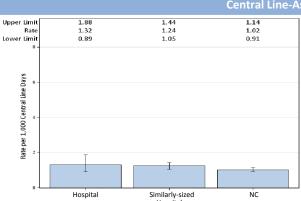


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.							
Type of ICU	Infections	Line Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical	6	5,309	1.13	13.803	0.435	0.160, 0.946	Lower
Medical cardiac	3	3,403	0.88	6.806	0.441	0.091, 1.288	Same
Neonatal Level III	8	2,843	2.81	7.358	1.087	0.469, 2.142	Same
Neurosurgical	1	1,000	1	2.5	0.4	0.010, 2.229	Same
Pediatric medical/surgical	3	1,069	2.81	3.207	0.935	0.193, 2.734	Same
Surgical	7	4,271	1.64	9.823	0.713	0.287, 1.468	Same
Surgical cardiothoracic	2	4,832	0.41	6.765	0.296	0.036, 1.068	Lower
YTD Total for Reporting ICUs	30	22,727	1.32	50.262	0.597	0.403, 0.852	Lower

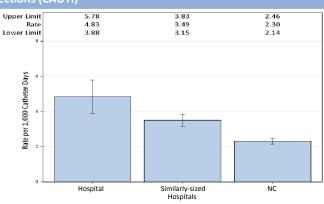
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

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Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical	37	5,765	6.42	13.26	2.79	1.964, 3.846	Higher
Medical cardiac	9	3,512	2.56	7.024	1.281	0.586, 2.432	Same
Neurosurgical	7	1,408	4.97	6.195	1.13	0.454, 2.328	Same
Pediatric medical/surgical	1	787	1.27	2.204	0.454	0.011, 2.528	Same
Rehabiliation	3	354	8.47	1.345	2.23	0.460, 6.518	Same
Surgical	28	5,410	5.18	14.066	1.991	1.322, 2.877	Higher
Surgical cardiothoracic	14	3,273	4.28	5.564	2.516	1.376, 4.222	Higher
YTD Total for Reporting ICU	ls 99	20,509	4.83	49.658	1.994	1.620, 2.427	Higher



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

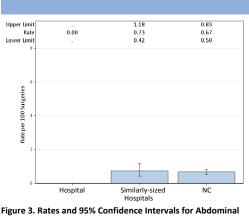


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	9
Procedures	316	460
Rate	0	1.96
Predicted Infection	s 3.16	15.53
SIR**	0	0.58
95% CI**	, 1.167	0.265, 1.100
Interpretation	Lower	Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

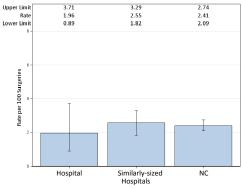


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

#### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

The infection rates above reflect our initiatives to make patient care at Vidant Medical Center safe for all of our patients, and those efforts are ongoing.

Vidant Roanoke Chowan Hospital, Ahoskie, Hertford County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 245 Patient Days in 2011: 1,257 Total Number of Beds: 144 Number of ICU Beds: 10 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.69



#### Central Line-Associated Bloodstream Infections (CLABSI)

1.68 0.47 1.14 1.02 **Upper Limit** 0.00 0.91 Rate per 1,000 Central Line Days Hospital

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Type of ICU Infections Infections 95% CI\* Interpretation 0 Medical/surgical 0 765 1.148 0 , 3.213 Same YTD Total for Reporting ICUs 0 765 0 1.148 0 , 3.213 Same

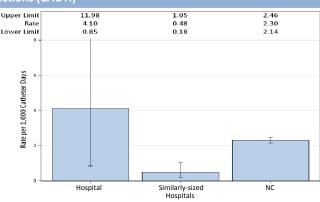
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	3	732	4.1	0.952			
YTD Total for Reporting ICU:	s 3	732	4.1	0.952			



Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

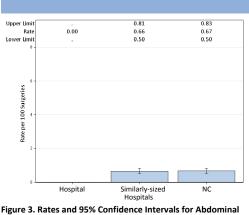


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	1
Procedures	33	26
Rate	0	3.85
Predicted Infections SIR**	0.36	0.73
95% CI**	•	•
Interpretation		

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

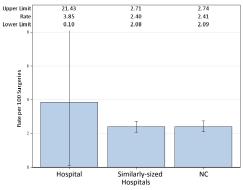


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

#### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

<sup>\*</sup>FTE = Full-time equivalent

<sup>\*</sup>SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Wake Forest Baptist Health-Lexington Medical Center, Lexington, Davidson County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: Limited **Profit Status:** Not for Profit Admissions in 2011: 4,121 Patient Days in 2011: 10,939 Total Number of Beds: 85 Number of ICU Beds: 21 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 1.18



\*FTE = Full-time equivalent

#### Central Line-Associated Bloodstream Infections (CLABSI)

YTD Total for Reporting ICUs

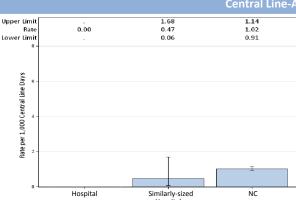


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Type of ICU Infections Infections 0 Medical/surgical 0 369 0.554

0

0.554

0

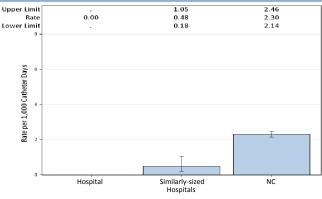
369

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval. Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	0	1,623	0	1.948	0	, 1.894	Same
YTD Total for Reporting ICU:	s 0	1,623	0	1.948	0	, 1.894	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Upper Limit

Lower Limit

100 Surgeries

Rate per

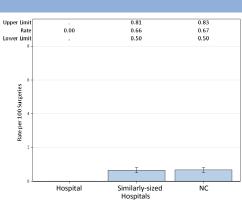


Figure 3. Rates and 95% Confidence Intervals for Abdominal

# Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	0	0
Procedures	60	31
Rate	0	0
Predicted Infections SIR** 95% CI**	0.49	0.97
Interpretation		
*Infections from deep	incisional and/or organ space	2.

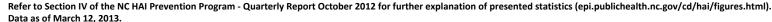
\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95%

Confidence Interval. Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

Similarly-sized Hospitals Hospital Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

#### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

No comments provided.



2.74

Wake Forest University Baptist Medical Center, Winston-Salem, Forsyth County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: Major **Profit Status:** Not for Profit Admissions in 2011: 38,762 Patient Days in 2011: 240,880 Total Number of Beds: 885 Number of ICU Beds: 176 FTE\* Infection Preventionists: 6.00 Number of FTEs\* per 100 beds: 0.68



\*FTE = Full-time equivalent

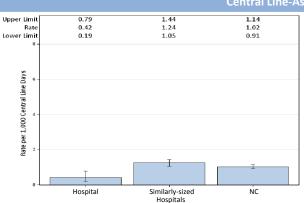


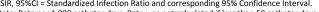
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.							
Type of ICU	Infections	Line Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Burn	0	504	0	2.772	0	, 1.331	Same
Medical	0	4,786	0	12.444	0	, 0.296	Lower
Medical cardiac	1	1,260	0.79	2.52	0.397	0.010, 2.211	Same
Medical/surgical	0	1,237	0	2.598	0	, 1.420	Same
Neonatal Level II/III	1	6,174	0.16	16.347	0.061	0.002, 0.341	Lower
Neurosurgical	2	1,535	1.3	3.838	0.521	0.063, 1.882	Same
Pediatric medical/surgical	0	2,211	0	6.633	0	, 0.556	Lower
Surgical	2	889	2.25	2.045	0.978	0.118, 3.533	Same
Surgical cardiothoracic	2	2,277	0.88	3.188	0.627	0.076, 2.266	Same
Trauma	1	719	1.39	2.588	0.386	0.010, 2.153	Same
YTD Total for Reporting ICUs	9	21,592	0.42	54.971	0.164	0.075, 0.311	Lower

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.							
Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Burn	2	1,705	1.17	7.502	0.267	0.032, 0.963	Lower
Medical	7	8,701	8.0	20.012	0.35	0.141, 0.721	Lower
Medical cardiac	9	1,762	5.11	3.524	2.554	1.168, 4.848	Higher
Medical/surgical	1	3,075	0.33	7.073	0.141	0.004, 0.788	Lower
Neurosurgical	10	3,322	3.01	14.617	0.684	0.328, 1.258	Same
Pediatric medical/surgical	1	1,124	0.89	3.147	0.318	0.008, 1.770	Same
Rehabiliation	0	98	0	0.372			
Surgical	4	2,668	1.5	6.937	0.577	0.157, 1.476	Same
Surgical cardiothoracic	2	2,738	0.73	4.655	0.43	0.052, 1.552	Same
Trauma	3	3,303	0.91	11.23	0.267	0.055, 0.781	Lower
YTD Total for Reporting ICU:	39	28,496	1.37	79.069	0.493	0.351, 0.674	Lower
SIR. 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.							



Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

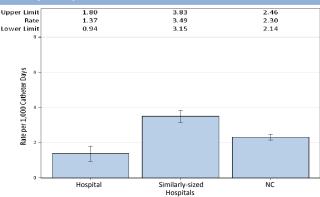


Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

# Upper Limit Rate Lower Limit 1.18 0.83 Rate per 100 Surgeries Hospital Similarly-sized Hospitals

Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

# Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	9
Procedures	230	325
Rate	0.43	2.77
Predicted Infections	2.75	11.76
SIR**	0.363	0.766
95% CI**	0.009, 2.024	0.350, 1.453
Interpretation	Same	Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

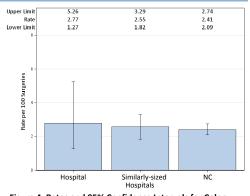


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

#### **Commentary from Hospitals:**

WakeMed, Raleigh, Wake County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital Medical Affiliation: Graduate **Profit Status:** Not for Profit Admissions in 2011: 38,571 Patient Days in 2011: 177,111 Total Number of Beds: 589 Number of ICU Beds: 120 FTE\* Infection Preventionists: 7.00 Number of FTEs\* per 100 beds: 1.19



\*FTE = Full-time equivalent

### 1.14 1.02 Upper Limit 0.93 Lower Limi 1.26 0.74 0.91 Rate per 1,000 Central Line Days Hospital Similarly-sized

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

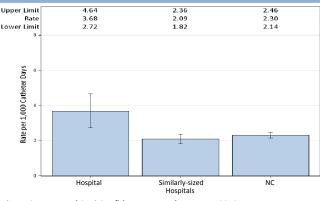
Table 1. Rates and SIRs by ICU	Type, Jan-D	ec 2012 i	n Com	parison to Na	ational E	Baseline Data f	rom 2006-2008.
Type of ICU	Infections	Line Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical	5	2,117	2.36	5.504	0.908	0.295, 2.120	Same
Medical cardiac	5	3,809	1.31	7.618	0.656	0.213, 1.532	Same
Neonatal Level II/III	3	2,365	1.27	5.098	0.588	0.121, 1.720	Same
Pediatric medical/surgical	0	878	0	2.634	0	, 1.400	Same
Surgical cardiothoracic	6	2,539	2.36	3.555	1.688	0.619, 3.674	Same
Trauma	10	3,746	2.67	13.486	0.742	0.356, 1.364	Same
YTD Total for Reporting ICUs	29	15,454	1.88	37.895	0.765	0.512, 1.099	Same

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

### Catheter-Associated Urinary Tract Infections (CAUTI)

Table 2. Rates allu siks by ic	o Type, Jan-	DEC 2012	III COIII	parison to ive	ational b	aseille Data II	OIII 2005.
Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical	9	2,366	3.8	5.442	1.654	0.756, 3.139	Same
Medical cardiac	20	4,364	4.58	8.728	2.291	1.399, 3.539	Higher
Pediatric medical/surgical	1	481	2.08	1.347	0.742	0.019, 4.136	Same
Rehabiliation	0	626	0	2.379	0	, 1.551	Same
Surgical cardiothoracic	2	2,735	0.73	4.65	0.43	0.052, 1.554	Same
Trauma	24	4,645	5.17	15.793	1.52	0.973, 2.261	Higher
YTD Total for Reporting ICU	s 56	15,217	3.68	38.338	1.461	1.103, 1.897	Higher



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

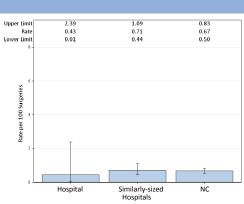


Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

### Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	6
Procedures	233	182
Rate	0.43	3.3
Predicted Infections	2.16	6.23
SIR**	0.463	0.963
95% CI**	0.012, 2.582	0.353, 2.096
Interpretation	Same	Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

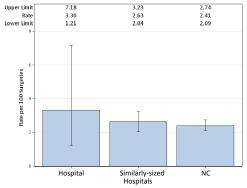


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

#### **Commentary from Hospitals:**

No comments provided.

WakeMed Cary Hospital, Cary, Wake County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 12,855 Patient Days in 2011: 47,475 Total Number of Beds: 172 Number of ICU Beds: 12 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.58



\*FTE = Full-time equivalent

#### Central Line-Associated Bloodstream Infections (CLABSI)

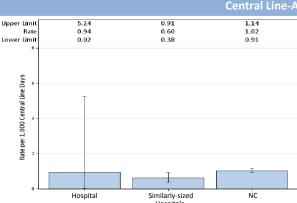


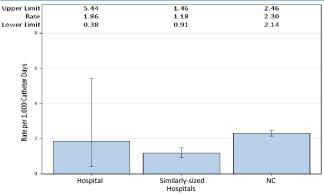
Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Rate Infections 95% CI\* Interpretation 1.595 Medical/surgical 1 1,063 0.94 0.627 0.016, 3.493 Same YTD Total for Reporting ICUs 1,063 0.94 1.595 0.627 0.016, 3.493 Same

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval. Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	3	1,612	1.86	2.096	1.431	0.295, 4.183	Same
YTD Total for Reporting ICU:	s 3	1,612	1.86	2.096	1.431	0.295, 4.183	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

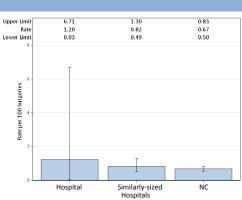


Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

### Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	7
Procedures	83	144
Rate	1.2	4.86
Predicted Infections	0.74	4.50
SIR**	·	1.557
95% CI**		0.626, 3.207
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

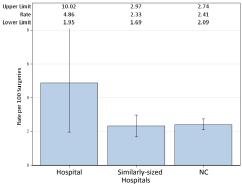


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

#### **Commentary from Hospitals:**

Wayne Memorial Hospital, Goldsboro, Wayne County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

Profit Status:

Admissions in 2011:
Patient Days in 2011:
Total Number of Beds:
Number of ICU Beds:
FTE\* Infection Preventionists:
Number of FTEs\* per 100 beds:

New York Total Number of Reds:
O.63



\*FTE = Full-time equivalent

#### Central Line-Associated Bloodstream Infections (CLABSI)

Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Infections 95% CI\* Interpretation Medical/surgical 6 3,125 1.92 4.688 1.28 0.470, 2.786 Same YTD Total for Reporting ICUs 6 3,125 1.92 4.688 0.470, 2.786 Same

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

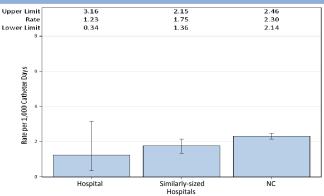
\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Catheter-Associated Orlhary Tract Infections (

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	4	3,239	1.23	3.887	1.029	0.280, 2.635	Same
YTD Total for Reporting ICU	s 4	3,239	1.23	3.887	1.029	0.280, 2.635	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

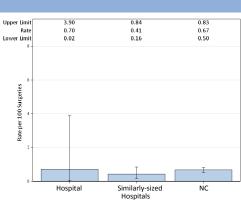


Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

### Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	1
Procedures	143	113
Rate	0.7	0.88
<b>Predicted Infections</b>	1.43	3.86
SIR**	0.702	0.259
95% CI**	0.018, 3.910	0.007, 1.442
Interpretation	Same	Same

\*Infections from deep incisional and/or organ space.
\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95%

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient suggestion. Rate per calculated if less the

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

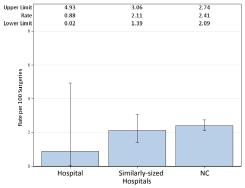


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

#### **Commentary from Hospitals:**

Wesley Long Hospital, Greensboro, Guilford County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 9,458 Patient Days in 2011: 46,816 Total Number of Beds: 195 Number of ICU Beds: 20 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.51



\*FTE = Full-time equivalent

### 1.14 1.02 Upper Limit 0.51 0.60 0.01 0.91 Rate per 1,000 Central Line Days

Hospitals

Central Line-Associated Bloodstream Infections (CLABSI) Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Type of ICU	Infections	Line Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	1	1,968	0.51	2.952	0.339	0.009, 1.887	Same
YTD Total for Reporting ICUs	1	1,968	0.51	2.952	0.339	0.009, 1.887	Same

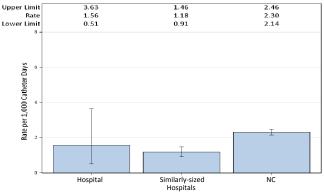
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Catheter-Associated Urinary Tract Infections (CAUTI) Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

	. , , , , ,						
Type of ICU	Infections	Catheter Days		Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	5	3,213	1.56	3.856	1.297	0.421, 3.026	Same
YTD Total for Reporting ICU:	s 5	3,213	1.56	3.856	1.297	0.421, 3.026	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

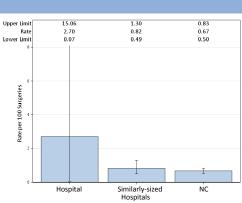


Figure 3. Rates and 95% Confidence Intervals for Abdominal Hysterectomies, Jan-Dec 2012.

### Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	2
Procedures	37	139
Rate	2.7	1.44
Predicted Infections	0.35	4.37
SIR**		0.457
95% CI**		0.055, 1.652
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

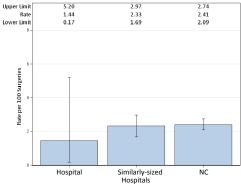


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

#### **Commentary from Hospitals:**

Cone Health is committed to preventing Healthcare Associated Infections. We have dedicated teams of experts focused on process improvements to improve our patient outcomes. Please contact Cone Health Infection Prevention if you would like further information.

Wilkes Regional Medical Center, North Wilkesboro, Wilkes County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 4,266 Patient Days in 2011: 13,730 Total Number of Beds: 130 Number of ICU Beds: FTE\* Infection Preventionists: 0.50 Number of FTEs\* per 100 beds: 0.38



\*FTE = Full-time equivalent

#### Central Line-Associated Bloodstream Infections (CLABSI)

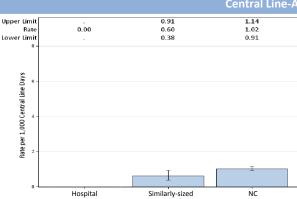


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Infections

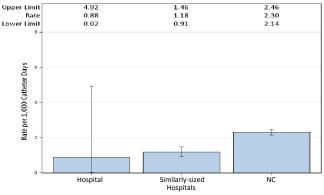
Days Medical/surgical 0 355 0 0.533 YTD Total for Reporting ICUs 0 355 0 0.533

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

#### Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	1	1,132	0.88	1.472	0.679	0.017, 3.785	Same
YTD Total for Reporting ICU	s 1	1.132	0.88	1.472	0.679	0.017. 3.785	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

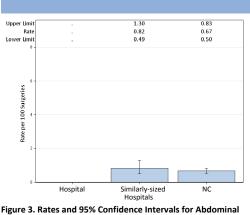


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery					
Infections*	0	0					
Procedures	4	19					
Rate							
Predicted Infections							
SIR**							
95% CI**							
Interpretation							
*Infections from deep incisional and/or organ space. **\$IR. 95%CI = Standardized Infection Ratio and corresponding 95%							

Confidence Interval. Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

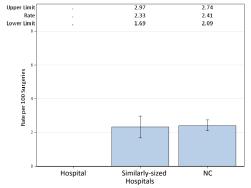


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

# Hysterectomies, Jan-Dec 2012.

The prevention and reduction of healthcare associated infections is a top priority at Wilkes Regional Medical Center. To accomplish this, infection prevention strategies are continually assessed and measures implemented to decrease the risk for infection. These measures are based on evidence based practices and clinical guidelines. A comprehensive program is provided that encompasses patient care and patient safety.

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

Wilson Medical Center, Wilson, Wilson County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 8,528 Patient Days in 2011: 35,549 Total Number of Beds: 220 Number of ICU Beds: 14 FTE\* Infection Preventionists: 1.50 Number of FTEs\* per 100 beds: 0.68



\*FTE = Full-time equivalent

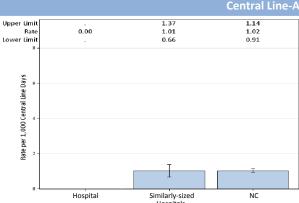


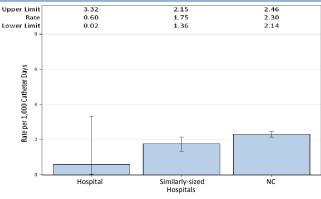
Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Type of ICU Infections Days Infections Interpretation 1.974 Medical/surgical 0 1,316 0 0 , 1.869 Same 1.974 YTD Total for Reporting ICUs 0 1,316 0 0 , 1.869 Same

Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval. Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

_Type of ICU	Infections	Catheter Davs	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
турс от тео	IIIICCLIOII3	Days	Nate	IIIICCLIOIIS	JIII	3370 CI	interpretation
Medical/surgical	1	1,676	0.6	2.179	0.459	0.012, 2.557	Same
YTD Total for Reporting ICUs	s 1	1.676	0.6	2.179	0.459	0.012.2.557	Same



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

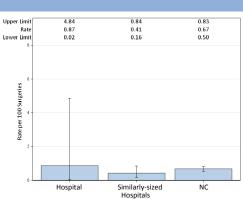


Figure 3. Rates and 95% Confidence Intervals for Abdominal

### Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	1	1
Procedures	115	69
Rate	0.87	1.45
<b>Predicted Infections</b>	0.94	2.18
SIR**		0.459
95% CI**		0.012, 2.557
Interpretation		Same

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

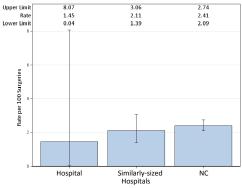


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

#### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

Women's Hospital, Greensboro, Guilford County

#### **2011 Hospital Survey Information**

Hospital Type: Acute Care Hospital - Women's

Medical Affiliation: No

**Profit Status:** Not for Profit Admissions in 2011: 7,561 Patient Days in 2011: 30,567 Total Number of Beds: 134 Number of ICU Beds: 40 FTE\* Infection Preventionists: 1.00 Number of FTEs\* per 100 beds: 0.75



\*FTE = Full-time equivalent

#### Central Line-Associated Bloodstream Infections (CLABSI)

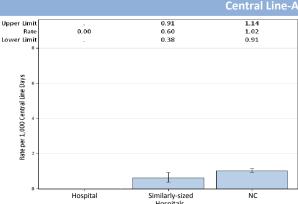


Table 1. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008. Line Predicted Days Type of ICU Infections 95% CI\* Interpretation 0 Medical/surgical 17 Neonatal Level II/III 0 2,438 0 6.065 0 , 0.608 Lower 2,455 YTD Total for Reporting ICUs 0 0 6.091 0 , 0.606 Lower

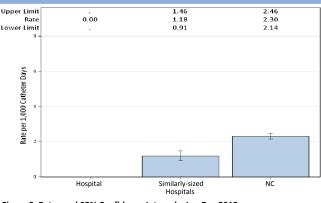
Figure 1. Rates and 95% Confidence Intervals, Jan-Dec 2012.

\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 central line days. Rate was not calculated if less than 50 central line days and SIR not presented.

Table 2. Rates and SIRs by ICU Type, Jan-Dec 2012 in Comparison to National Baseline Data from 2009.

Type of ICU	Infections	Catheter Days	Rate	Predicted Infections	SIR*	95% CI*	Interpretation
Medical/surgical	0	172	0	0.224			
YTD Total for Reporting ICU:	s 0	172	0	0.224			



\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 1,000 catheter days. Rate was not calculated if less than 50 catheter days and SIR not presented.

Figure 2. Rates and 95% Confidence Intervals, Jan-Dec 2012.

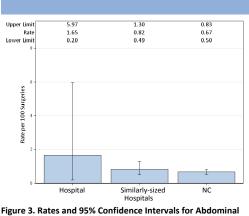


Table 3. Rates and SIRs by Surgery, Jan-Dec 2012 in Comparison to National Baseline Data from 2006-2008.

Surgical Site Infections (SSI)

	Abdominal hysterectomy	Colon surgery
Infections*	2	0
Procedures	121	1
Rate	1.65	
Predicted Infections	s 1.32	
SIR**	1.513	
95% CI**	0.183, 5.465	
Interpretation	Same	

\*Infections from deep incisional and/or organ space.

\*\*SIR, 95%CI = Standardized Infection Ratio and corresponding 95% Confidence Interval.

Note: Rate per 100 inpatient surgeries. Rate not calculated if less than 20 inpatient surgeries were performed and SIR not presented.

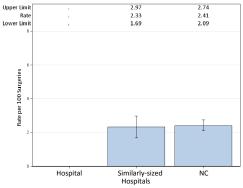


Figure 4. Rates and 95% Confidence Intervals for Colon Surgeries, Jan-Dec 2012.

#### Hysterectomies, Jan-Dec 2012. **Commentary from Hospitals:**

Cone Health is committed to preventing Healthcare Associated Infections. We have dedicated teams of experts focused on process improvements to improve our patient outcomes. Please contact Cone Health Infection Prevention if you would like further information.

### **APPENDICES**

#### **APPENDIX A. Definitions**

<u>Term</u>	<u>Definition</u>
Aggregate data	Sum or total data. For example, aggregate N.C. HAI data refers to the sum, or total, of all hospital HAI data in N.C.
ASA Class	Anesthesiologist's pre-operative assessment of the patient's physical condition, using the American Society of Anesthesiologists' (ASA) Classification of Physical Status.  1. Normally healthy patient 2. Patient with mild systemic disease 3. Patient with severe systemic disease that is not incapacitating 4. Patient with an incapacitating systemic disease, constant threat to life 5. Patient not expected to survive for 24 hours with or without the operation
Beds	The number of staffed beds in a facility or patient care location. This may be different from the number of licensed beds.
Catheter days	A daily count of the number of patients with an indwelling urinary catheter. For example, one patient with an indwelling catheter in place for two days or two patients with indwelling catheters in place for one day each would both result in two catheter days. This number is used when presenting rates of catheter-associated urinary tract infections.
Catheter-associated urinary tract infection	Urinary tract infection (UTI) that occurs in a patient who had an indwelling urinary catheter in place within the 48-hour period before the onset of the UTI.
Central line	A catheter (tube) that doctors place in a large vein in the neck, chest, or groin ending in a large vein near the heart. It is used to give medication or fluids or to collect blood for medical tests. Also known as a central venous catheter.
Central line-associated bloodstream infection	A bloodstream infection (BSI) that occurs in a patient who had a central line within the 48-hour period before the onset of the BSI and is not related to an infection at another site.
Central line days	A daily count of the number of patients with a central line. For example, one patient with a central line in place for two days or two patients with central lines in place for one day each would both result in two central line days. This number is used when presenting rates of central line-associated bloodstream infections.
Device days	A daily count of the number of patients with a specific device (e.g., central line, umbilical catheter, or urinary catheter) in the patient care location. For example, one patient with a device in place for two days or two patients with devices in place for one day each would both result in two device days. This number is used when presenting rates of infections associated with the use of devices.
Full-time equivalent	The equivalent of one person working full time for one year: 8 hour per day at 5 days per week for 52 weeks per year = 2080 hours per year
Hand hygiene	A general term that applies to routine hand washing, antiseptic hand wash, antiseptic hand rub, or surgical hand antisepsis.
	<i>Routine hand washing</i> is the use of clean water and non-antimicrobial soap to remove germs, soil and other debris from the hands.
	Antiseptic hand washing is the use of water and antimicrobial soap to remove or kill germs on the hands.
	<i>Antiseptic hand rub</i> is the use of alcohol-based hand rubs to remove or destroy germs from the hands. Antiseptic hand rubs are less effective when hands are visibly dirty.

<u>Term</u>	<u>Definition</u>
	<i>Surgical hand antisepsis</i> is the use of water and antimicrobial soap to remove or kill germs and takes 2-6 minutes to complete as both hands and forearms are cleaned. Water and non-antimicrobial soap can also be used but must be followed with an alcohol-based surgical hand scrub.
Healthcare-associated infections	Healthcare-associated infections (HAI) are infections caused by a wide variety of common and unusual bacteria, fungi, and viruses during the course of receiving medical care.
Intensive care unit	A nursing care area that provides intensive observation, diagnosis, and therapeutic procedures for adults and/or children who are critically ill. Also referred to as critical care unit.
Medical affiliation	Affiliation with a medical school. There are four categories.
	Major teaching – Hospital is an important part of the teaching program of a medical school and the majority of medical students rotate through multiple clinical services.  Graduate – Hospital used by the medical school for graduate training programs only (i.e., residency and/or fellowships).  Limited – Hospital used in the medical school's teaching program to a limited extent.  No – Hospital not affiliated with a medical school.
Patient days	A daily count of the number of patients in the patient care location during a specified time period.
Rate	Describes the speed with which disease or events occur. The number of diseases or events per unit of time.
Standardized infection ratio	A ratio of observed to expected (or predicted) numbers of events that is adjusted for selected risk factors.
Surgical site infection	Infection that occurs after surgery, in the part of the body where the surgery took place.
Umbilical catheter	Long, thin plastic tubes that travel from the stump of a newborn baby's umbilical cord into the large vessels near the heart
Urinary catheter	A drainage tube that is inserted into the urinary bladder through the urethra, is left in place, and is connected to a closed collection system.
Validity (data)	The extent to which reported cases of a disease or event correspond accurately to cases of a disease event that actually occurred.

#### **APPENDIX B. Acronyms**

**ACH** Acute care hospital (short-term)

ACL Adult Care Licensure

APIC-NC Association for Professionals in Infection Control and Epidemiology, N.C. Chapter

**ASA** American Society of Anesthesiologists

BSI Bloodstream infection

**CAUTI** Catheter-associated urinary tract infection **CCME** Carolinas Center for Medical Excellence

CCU Critical care unit

CDB Communicable Disease Branch

CDC Centers for Disease Control and Prevention

C. diff Clostridium difficile

CDI Clostridium difficile infection

CI Confidence interval

**CMS** Centers for Medicare and Medicaid Services **CLABSI** Central line-associated bloodstream infections CRE Carbapenem-resistant Enterobacteriaceae **CUSP** Comprehensive Unit-based Safety Program **DHHS** Department of Health and Human Services

**DHSR** Division of Health Services Regulation

DPH Division of Public Health ED **Emergency department** FTE Full-time equivalent G.S. General statute

HAI Healthcare-associated Infections

**HRET** American Hospital Associations' Health Research and Trust

ICU Intensive care unit

IPs Infection preventionists

IRF Inpatient rehabilitation facility LTAC Long-term acute care hospital

**MRSA** Methicillin resistant Staphylococcus aureus

**NCHA** North Carolina Hospital Association

N.C. SPICE North Carolina Statewide Program for Infection Control and Epidemiology

NCQC North Carolina Quality Center

NHLC Nursing Home Licensure and Certification

#### **APPENDIX B. Acronyms (continued)**

NHSN National Healthcare Safety Network NICU Neonatal intensive (critical) care unit QIO Quality improvement organization

SIR Standardized infection ratio

SSI Surgical site infection

VAST Vascular Access Safety Team

VRE Vancomycin-resistant Enterococcus **APPENDIX C. Healthcare-Associated Infections Prevention Tips** 

Appendix C1. Catheter (Central Line)-Associated Bloodstream Infections

Appendix C2. Catheter-Associated Urinary Tract Infections

**Appendix C3. Surgical Site Infections** 



about

# "Catheter-Associated Bloodstream Infections"

(also known as "Central Line-Associated Bloodstream Infections")

#### What is a catheter-associated bloodstream infection?

A "central line" or "central catheter" is a tube that is placed into a patient's large vein, usually in the neck, chest, arm, or groin. The catheter is often used to draw blood, or give fluids or medications. It may be left in place for several weeks. A bloodstream infection can occur when bacteria or other germs travel down a "central line" and enter the blood. If you develop a catheter-associated bloodstream infection you may become ill with fevers and chills or the skin around the catheter may become sore and red.

#### Can a catheter-related bloodstream infection be treated?

A catheter-associated bloodstream infection is serious, but often can be successfully treated with antibiotics. The catheter might need to be removed if you develop an infection.

# What are some of the things that hospitals are doing to prevent catheter-associated bloodstream infections?

To prevent catheter-associated bloodstream infections doctors and nurses will:

- Choose a vein where the catheter can be safely inserted and where the risk for infection is small.
- Clean their hands with soap and water or an alcohol-based hand rub before putting in the catheter.
- Wear a mask, cap, sterile gown, and sterile gloves when putting in the catheter to keep it sterile. The patient will be covered with a sterile sheet
- Clean the patient's skin with an antiseptic cleanser before putting in the catheter.
- Clean their hands, wear gloves, and clean the catheter opening
  with an antiseptic solution before using the catheter to draw
  blood or give medications. Healthcare providers also clean their
  hands and wear gloves when changing the bandage that covers
  the area where the catheter enters the skin.
- Decide every day if the patient still needs to have the catheter.
   The catheter will be removed as soon as it is no longer needed.
- Carefully handle medications and fluids that are given through the catheter.

# What can I do to help prevent a catheter-associated bloodstream infection?

• Ask your doctors and nurses to explain why you need the catheter and how long you will have it.

- Ask your doctors and nurses if they will be using all of the prevention methods discussed above.
- Make sure that all doctors and nurses caring for you clean their hands with soap and water or an alcohol-based hand rub before and after caring for you.

If you do not see your providers clean their hands, please ask them to do so.

- If the bandage comes off or becomes wet or dirty, tell your nurse or doctor immediately.
- Inform your nurse or doctor if the area around your catheter is sore or red.
- Do not let family and friends who visit touch the catheter or the tubing.
- Make sure family and friends clean their hands with soap and water or an alcohol-based hand rub before and after visiting you.

#### What do I need to do when I go home from the hospital?

Some patients are sent home from the hospital with a catheter in order to continue their treatment. If you go home with a catheter, your doctors and nurses will explain everything you need to know about taking care of your catheter.

- Make sure you understand how to care for the catheter before leaving the hospital. For example, ask for instructions on showering or bathing with the catheter and how to change the catheter dressing.
- Make sure you know who to contact if you have questions or problems after you get home.
- Make sure you wash your hands with soap and water or an alcohol-based hand rub before handling your catheter.
- Watch for the signs and symptoms of catheter-associated bloodstream infection, such as soreness or redness at the catheter site or fever, and call your healthcare provider immediately if any occur.

If you have additional questions, please ask your doctor or nurse.

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# "Catheter-Associated Urinary Tract Infection"

#### What is "catheter-associated urinary tract infection"?

A urinary tract infection (also called "UTI") is an infection in the urinary system, which includes the bladder (which stores the urine) and the kidneys (which filter the blood to make urine). Germs (for example, bacteria or yeasts) do not normally live in these areas; but if germs are introduced, an infection can occur.

If you have a urinary catheter, germs can travel along the catheter and cause an infection in your bladder or your kidney; in that case it is called a catheter-associated urinary tract infection (or "CA-UTI").

#### What is a urinary catheter?

A urinary catheter is a thin tube placed in the bladder to drain urine. Urine drains through the tube into a bag that collects the urine. A urinary catheter may be used:

- If you are not able to urinate on your own
- To measure the amount of urine that you make, for example, during intensive care
- During and after some types of surgery
- During some tests of the kidneys and bladder

People with urinary catheters have a much higher chance of getting a urinary tract infection than people who don't have a catheter.

#### How do I get a catheter-associated urinary tract infection (CA-UTI)?

If germs enter the urinary tract, they may cause an infection. Many of the germs that cause a catheter-associated urinary tract infection are common germs found in your intestines that do not usually cause an infection there. Germs can enter the urinary tract when the catheter is being put in or while the catheter remains in the bladder.

#### What are the symptoms of a urinary tract infection?

Some of the common symptoms of a urinary tract infection are:

- Burning or pain in the lower abdomen (that is, below the stomach)
- Fever
- Bloody urine may be a sign of infection, but is also caused by other problems
- Burning during urination or an increase in the frequency of urination after the catheter is removed.

Sometimes people with catheter-associated urinary tract infections do not have these symptoms of infection.

#### Can catheter-associated urinary tract infections be treated?

Yes, most catheter-associated urinary tract infections can be treated with antibiotics and removal or change of the catheter. Your doctor will determine which antibiotic is best for you.

What are some of the things that hospitals are doing to prevent catheterassociated urinary tract infections?

To prevent urinary tract infections, doctors and nurses take the following actions.

#### **Catheter insertion**

- o Catheters are put in only when necessary and they are removed as soon as possible.
- o Only properly trained persons insert catheters using sterile ("clean") technique.
- o The skin in the area where the catheter will be inserted is cleaned before inserting the catheter.
- o Other methods to drain the urine are sometimes used, such as
- External catheters in men (these look like condoms and are placed over the penis rather than into the penis)
- Putting a temporary catheter in to drain the urine and removing it right away. This is called intermittent urethral catheterization.

#### Catheter care

o Healthcare providers clean their hands by washing them with soap and water or using an alcohol-based hand rub before and after touching your catheter.

> If you do not see your providers clean their hands, please ask them to do so.

- o Avoid disconnecting the catheter and drain tube. This helps to prevent germs from getting into the catheter tube.
- o The catheter is secured to the leg to prevent pulling on the catheter.
- o Avoid twisting or kinking the catheter.
- o Keep the bag lower than the bladder to prevent urine from backflowing to the bladder.
- o Empty the bag regularly. The drainage spout should not touch anything while emptying the bag.

What can I do to help prevent catheter-associated urinary tract infections if I have a catheter?

- Always clean your hands before and after doing catheter care.
- Always keep your urine bag below the level of your bladder.
- Do not tug or pull on the tubing.
- Do not twist or kink the catheter tubing.
- Ask your healthcare provider each day if you still need the catheter.

#### What do I need to do when I go home from the hospital?

- If you will be going home with a catheter, your doctor or nurse should explain everything you need to know about taking care of the catheter. Make sure you understand how to care for it before you leave the hospital.
- If you develop any of the symptoms of a urinary tract infection, such as burning or pain in the lower abdomen, fever, or an increase in the frequency of urination, contact your doctor or nurse immediately.
- Before you go home, make sure you know who to contact if you have questions or problems after you get home.

If you have questions, please ask your doctor or nurse.













# "Surgical Site Infections"

#### What is a Surgical Site Infection (SSI)?

A surgical site infection is an infection that occurs after surgery in the part of the body where the surgery took place. Most patients who have surgery do not develop an infection. However, infections develop in about 1 to 3 out of every 100 patients who have surgery.

Some of the common symptoms of a surgical site infection are:

- Redness and pain around the area where you had surgery
- Drainage of cloudy fluid from your surgical wound
- Fever

#### Can SSIs be treated?

Yes. Most surgical site infections can be treated with antibiotics. The antibiotic given to you depends on the bacteria (germs) causing the infection. Sometimes patients with SSIs also need another surgery to treat the infection.

#### What are some of the things that hospitals are doing to prevent SSIs?

To prevent SSIs, doctors, nurses, and other healthcare providers:

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

#### What can I do to help prevent SSIs?

#### Before your surgery:

Tell your doctor about other medical problems you may have.
 Health problems such as allergies, diabetes, and obesity could affect your surgery and your treatment.

- Quit smoking. Patients who smoke get more infections. Talk to your doctor about how you can quit before your surgery.
- Do not shave near where you will have surgery. Shaving with a razor can irritate your skin and make it easier to develop an infection.

#### At the time of your surgery:

- Speak up if someone tries to shave you with a razor before surgery.
   Ask why you need to be shaved and talk with your surgeon if you have any concerns.
- · Ask if you will get antibiotics before surgery.

#### After your surgery:

 Make sure that your healthcare providers clean their hands before examining you, either with soap and water or an alcohol-based hand rub.

If you do not see your providers clean their hands, please ask them to do so.

- Family and friends who visit you should not touch the surgical wound or dressings.
- Family and friends should clean their hands with soap and water or an alcohol-based hand rub before and after visiting you. If you do not see them clean their hands, ask them to clean their hands.

#### What do I need to do when I go home from the hospital?

- Before you go home, your doctor or nurse should explain everything you need to know about taking care of your wound. Make sure you understand how to care for your wound before you leave the hospital.
- Always clean your hands before and after caring for your wound.
- Before you go home, make sure you know who to contact if you have questions or problems after you get home.
- If you have any symptoms of an infection, such as redness and pain at the surgery site, drainage, or fever, call your doctor immediately.

If you have additional questions, please ask your doctor or nurse.

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#### APPENDIX D. Healthcare-Associated Infections (HAI) Advisory Group, February 2013

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### APPENDIX E. Healthcare Facility Groupings, 2011 National Healthcare Safety Network Annual Hospital Survey

#### Appendix E1. Healthcare Facility Group: Short-term Acute Care Hospitals

Hospital Groups	Hospital Name	Number of Beds
1-99 Beds	Annie Penn Hospital	78
	Anson Community Hospital	30
	Blue Ridge Regional Hospital	46
	Brunswick Community Hospital	60
	Franklin Regional Medical Center	70
	Granville Medical Center	62
	Hugh Chatham Memorial Hospital	81
	Martin General Hospital	49
	MedWest-Harris Regional Hospital	94
	Medical Park Hospital	50
	Murphy Medical Center	57
	Presbyterian Hospital Huntersville	60
	Sampson Regional Medical Center	68
	Sandhills Regional Medical Center	64
	The McDowell Hospital	37
	Vidant Beaufort Hospital	99
	Vidant Duplin Hospital	79
	Wake Forest Baptist Health-Lexington MC	85
00-199 Beds	ARHS-Watauga Medical Center	110
	Albemarle Health Authority	135
	Betsy Johnson Regional	101
	Blue Ridge Healthcare-Morganton	184
	Blue Ridge Healthcare-Valdese	131
	Caldwell Memorial Hospital	110
	Carolinas Medical Center-Lincoln	101
	Carolinas Medical Center-Mercy	170
	Carolinas Medical Center-Pineville	109
	Carolinas Medical Center-Union	165
	Carolinas Medical Center-University	130
	Carteret General Hospital	135
	Central Carolina Hospital	112
	Columbus Regional Healthcare System	107
	Davis Regional Medical Center	143
	Duke Raleigh Hospital	148
	Halifax Regional Medical Center	128
	Haywood Regional Medical Center	100
	Iredell Memorial Hospital	199
	Johnston Health	199
	Kings Mountain Hospital	102
	Lake Norman Regional Medical Center	123
	Maria Parham Medical Center	102
	Morehead Memorial Hospital	108
	Northern Hospital Of Surry County	100
	Onslow Memorial Hospital	162

### APPENDIX E. Healthcare Facility Groupings, 2011 National Healthcare Safety Network Annual Hospital Survey Appendix E1. Healthcare Facility Group: Short-term Acute Care Hospitals

Hospital Groups	Hospital Name	Number of Beds
	Park Ridge Health	103
	Person Memorial Hospital	110
	Presbyterian Hospital Matthews	114
	Randolph Hospital	119
	Rutherford Regional Medical Center	130
	Scotland Memorial Hospital	104
	Stanly Regional Medical Center	119
	Thomasville Medical Center	149
	Vidant Edgecombe Hospital	117
	Vidant Roanoke Chowan Hospital	144
	WakeMed Cary Hospital	172
	Wesley Long Hospital	195
	Wilkes Regional Medical Center	130
	Women's Hospital	134
200-399 Beds	Alamance Regional Medical Center	238
	CarolinaEast Medical Center	350
	Catawba Valley Medical Center	200
	Cleveland Regional Medical Center	241
	Durham Regional Hospital	202
	Frye Regional Medical Center	355
	High Point Regional Health System	363
	Lenoir Memorial Hospital, Inc	216
	Nash Health Care Systems	286
	Rowan Regional Medical Center	268
	Southeastern Regional Medical Center	299
	Wayne Memorial Hospital	316
	Wilson Medical Center	220
400+ Beds	Cape Fear Valley Health System	535
	Carolinas Medical Center-Northeast	435
	FirstHealth Moore Regional Hospital	528
	Forsyth Medical Center	906
	Gaston Memorial Hospital	435
	Mission Hospitals, Inc	739
	Moses Cone Hospital	534
	New Hanover Regional Medical Center	588
	Presbyterian Hospital Charlotte	531
	Rex Healthcare	433
	WakeMed	589
Primary Medical School Affiliation		880
	Duke University Hospital	812
	UNC Health Care	838
	Vidant Medical Center	861
	Wake Forest University Baptist MC	885

#### APPENDIX E. Healthcare Facility Groupings, 2011 National Healthcare Safety Network Annual Hospital Survey

#### Appendix E2. Healthcare Facility Group: Long-term Acute Care Hospitals

#### Hospital Name

Asheville Specialty Hospital

Carolinas Specialty Hospital

Crawley Memorial Hospital

Highsmith Rainey Specialty Hospital

Kindred Hospital Greensboro

Lifecare Hospitals Of North Carolina

Select Specialty Hospital-Durham

Select Specialty Hospital-Greensboro

Select Specialty Hospital-Winston Salem

### APPENDIX E. Healthcare Facility Groupings, 2011 National Healthcare Safety Network Annual Hospital Survey Appendix E3. Healthcare Facility Group: Inpatient Rehabilitation Facilities & Wards

Hospital Name	Rehabilitation Facility or Ward
Cape Fear Valley Health System	Adult rehabilitation ward
CarePartners Health Services	Inpatient Rehabilitation Facility
CarolinaEast Medical Center	Adult rehabilitation ward
Carolinas Medical Center	Pediatric rehabilitation ward
Carolinas Rehabilitation	Inpatient Rehabilitation Facility
Catawba Valley Medical Center	Adult rehabilitation ward
Durham Regional Hospital	Adult rehabilitation ward
FirstHealth Moore Regional Hospital	Adult rehabilitation ward
Forsyth Medical Center	Adult rehabilitation ward
	Pediatric rehabilitation ward
Frye Regional Medical Center	Adult rehabilitation ward
High Point Regional Health System	Adult rehabilitation ward
Lenoir Memorial Hospital, Inc	Adult rehabilitation ward
Maria Parham Medical Center	Adult rehabilitation ward
Moses Cone Hospital	Adult rehabilitation ward
Nash Health Care Systems	Adult rehabilitation ward
New Hanover Regional Medical Center	Adult rehabilitation ward
Rowan Regional Medical Center	Adult rehabilitation ward
Scotland Memorial Hospital	Adult rehabilitation ward
Stanly Regional Medical Center	Adult rehabilitation ward
UNC Health Care	Adult rehabilitation ward
Vidant Edgecombe Hospital	Adult rehabilitation ward
Vidant Medical Center	Adult rehabilitation ward
Wake Forest University Baptist Medical Center	Adult rehabilitation ward
WakeMed	Adult rehabilitation ward