

May 28, 2008

Honorable Henry A. Waxman
Chairman, Committee on Oversight and Government Reform
2157 Rayburn House Office Building
Washington DC 20515-6043

**Sent by Fax
(202) 225-4784**

Dear Congressman Waxman:

Thank you for your inquiry regarding central line associated bloodstream infections (CLABI). Nebraska has 65 critical access hospitals (25 beds or less) and these hospitals do not have licensed intensive care units. The remaining acute care general hospitals range in size from 47 licensed beds to 689 beds. Eleven of these hospitals have less than 200 beds; 7 have more than 200 beds. Nebraska does not have mandatory reporting of hospital acquired infections so a survey was sent to the Nebraska Hospital Association's member hospitals to obtain this information.

From the survey information reported to the Nebraska Hospital Association, the median rate of CLABSI ranged from 0 to 4.5/1000 central line days; the median value reported was 0. Regarding the overall rate of CLABSI, the responses ranged from 0 to 11.8 (this 11.8 represented 2 patients); the median value reported was 1.5/1000 central line days.

In response to your specific questions, hospitals in Nebraska are undertaking a variety of activities to address healthcare associated infections. Here are their comments:

- We have an active infection control program staffed by two individuals who are certified in infection control. Interventions are woven within the daily processes of care givers so they are just part of routine patient care. We are concerned that outside entities are putting more pressures to provide reporting information that would require more time commitment. This time commitment could take away from already limited resources that are being used to provide interventions targeted at preventing infections. This could lead to a higher rate of infections. There should be a consideration given to a minimum level of staffing required of certified infection control professionals in order to prevent infections. We are also concerned that legislative requirements of clinical processes, such as mandatory screening for MRSA, are being put into law without a true scientific basis that they are effective.

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- Implemented the IHI Central Line Bundle that included hand hygiene, maximum barrier precautions, chlorhexidine skin antisepsis, optimal catheter site selection, and daily review of necessity. Also implemented the use of the BioPatch.
- Central Line Infection: Use of maximum sterile barriers when line is inserted (includes wearing mask, hat, gloves, sterile drape and face shield), appropriate selection of site for line insertion (internal jugular, subclavian or femoral), good hand hygiene, use of consistent skin prep (Chloraprep), applying BioPatch to sites, use of ultrasound to guide insertion, and evaluation of research for most effective interventions/best practices.

Ventilator Associated Pneumonia: Use of bundles (head of the bed elevated, patients awakened daily to determine ability to take off the ventilator, stress ulcer prophylaxis and oral care), use of silver-coated ET tubes, collaborative efforts with physicians and evaluating additional research on patient types to determine most effective interventions/best practices.

Catheter related Urinary Tract Infections: Focus on early removal (developing Automatic discontinue policy), reducing insertions based on criteria, assuring maintenance of a closed system and assuring competency of individuals inserting catheters.

- Activities to address healthcare associated infections include Standard and transmission based isolation precautions, participation in SCIP measures, Hand/Respiratory Hygiene program with monitoring/reporting, employee immunization program, multiple antibiotic use review at P&T committee, daily patient infection surveillance and quarterly physician review
- Have initiated performance improvement teams that address the infections; for example a critical care performance improvement team that consists of physicians, nursing, pharmacists, respiratory therapists and infection control staff. The teams monitor the infection rates, review the current literature and implement the best practices. The hospital has participated in the Institute of Healthcare Improvement Impact Critical Care Redesign Initiative and participates in the 5 Million Lives Initiative.
- We have 2 ICP's who engage in the investigation of each positive microbiological culture, report of infection by MD, nurse, receiving facility or family member on a case by case basis.
- Evidence Based Practice, CDC Guidelines and standards from professional organizations such as Association for Professionals in Infection Control and Epidemiology (APIC) and others drive the development and implementation of interventions used in this facility to prevent and mitigate infection when it does occur. Revision of policy, procedure and interventions according to evidence takes place on a regular scheduled basis and as new standards/guidelines are released. Infection prevention and control information is presented to staff members on an ongoing basis in the form of computer modules,

departmental meetings, videotapes, in-services as well as continuing education hours for nursing and MD's.

Hand hygiene is addressed on an ongoing basis with new initiatives on a yearly basis. Compliance is tracked on a monthly basis. Patients are encouraged by staff members and in their admission packet to ask their caregivers if their hands have been washed before care is rendered.

In regard to central line infections: full implementation of the IHI 100,000 Lives Campaign has been accomplished within the entire facility. In addition, within the ICU nursing staff must determine and document the necessity for central lines every 12 hours. When a line is no longer necessary, an order is obtained from the MD for removal of the line to prevent healthcare acquired infection.

The vascular access team currently developing a Vascular Access Specialist Nurse whose scope of duty will include, tracking, trending data, development of evidence based practice interventions in addition to those already present.

Surgical site infections have been targeted via the implementation of the Surgical Care Improvement Project (SCIP) recommendations and adherence to AORN (Assoc. of Operating Room Nurses) and AAMI (Assoc. for the Advancement of Medical Instrumentation) guidelines and standards.

Ventilator associated pneumonia has been addressed with the implementation of a bundled approach as well. We currently have a VAP Quality team composed of ICP, RT, ICU nurse which reviews every VAP drilling down to determine causative factors for each case. Feedback regarding the findings is given directly to the ICU director, nursing and RT staff members as to where bedside care can be improved.

A bundle approach to urinary tract infections (UTI) related to indwelling urinary catheter has been developed and is in the planning stage for facility-wide implementation by the Nursing division this year.

- Hand washing campaigns & surveillance, including soap & water as well as hand gel. Patient & Family Education including, for instance, signage for hand washing, "Cover Your Cough", patient expectations for staff precautions. Precaution implementation including, for instance, physical facility provides for all private rooms, policies/procedures enabling nursing to implement precautions during disease rule-out, ready availability of cleaning solutions and equipment, and disease alerts for MRSA or VRE. Immunizations including, for instance, new employee history for MMR, Hepatitis B, chickenpox, influenza vaccination program annually, and TB testing on hire and as determined by annual risk assessment.
- Hand Hygiene Surveillance and Education; Hand Sanitizer Usage Review; Avatar Patient Survey Review and Publication related to Hand Hygiene; urine collection on patients admitted with Urine Foley Catheters; urine collection on patients upon Foley catheter

insertion; investigating MRSA surveillance; Patient Safety Committee is looking at procedure and percentage of infection on BSI's (from a Critical Access Hospital).

- Hand hygiene bundle; ventilator associated pneumonia bundle; blood infection bundle; surgical care improvement bundle; patients with previously identified resistant organisms colonized or infectious, are identified in the computer system to properly isolate them on readmission.
- Introduced and assured compliance with full sterile barrier precautions for line insertions, compliance checklists are completed and tracked; utilize chlorhexidine for skin antiseptic; trialing an antiseptic coated catheter and chlorhexidine baths in PICU; extensive educational efforts aimed at 3rd year medical students, housestaff, nursing staff and medical staff

What infections are you targeting?

- Surgical site infections in all NNIS classified procedures; laboratory outbreak detection of infections; Resistant organisms, that include MRSA, VRE, Clostridium difficile, Extended Spectrum Beta Lactamase organisms, and Stenotrophomonas; communicable disease surveillance; central line related bacteremia in ICU/Progressive/NICU; ICU Ventilator Associated Pneumonia-and pneumonia in trauma patients; Infections in Home health care; employee ppd conversions; Infections in Behavioral Health; Influenza and RSV infections.
- All hospital acquired infections, skin and soft tissue infections and healthcare associated MRSA, VRE and C-Diff.
- Ventilator associated pneumonia, urinary track, and central line blood stream infections.
- Infections tracked and targeted within this facility are based on those tracked in the NHSN database, reportable diseases and additional infections as related to the infection control risk assessment findings. Class 1 and 2 surgical site infections, CLABSI, VAP, UTI related to urinary catheter, sternal infections, total hip arthroplasty infections, total knee arthroplasty infections and hip fracture infections are tracked and trended. Hospital associated bacterial infections including MRSA, VRE, C-Diff are targeted.
- Central line associated infections, ventilator associated infections, catheter associated infections, and Surgical Site infections
- Surgical site infections (Class 1 & 2 procedures, C-sections); Catheter related urinary tract infections; Blood stream infections (sepsis) related to central lines; Ventilator associated pneumonia; MRSA; C. difficile; VRE; Medical/Surgical pneumonias; Peripheral IV site infections

- Central Line Blood Stream Infections, Ventilator Associated Pneumonia, Foley Catheter Related UTIs and Surgical Site Infections
- Foley related UTI's; MRSA
- MRSA, surgical site infections, ventilator associated pneumonia, catheter associated urinary tract infections

What is your evidence of success?

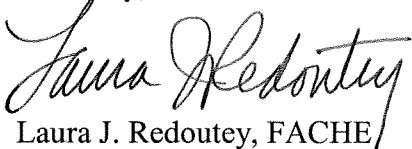
- Success is shown by a reduction in infection rates, and/or outcome measures. We are an IHI Mentor Hospital in Central line associated bacteremia prevention, and ventilator associated pneumonia. We have gone years without some of these infections in some of our ICUs. We also compare our surgical site infection rates to other hospitals through the NHSN system. We have gone over a year without an infection in cardiac, total knee, total hip, and spinal fusion cases.
- 2005 overall rate was 28/1000 patient days. The IHI bundle was implemented in 2006. The 2006 rate was 11.6/1000 patient days and continues to remain at the reduced rate of infection (from a hospital with less than 200 central line days).
- In 2005 our infection rate was 0.8; 1st quarter 2008 rate is 0.58.
- Ventilator associated pneumonia rate: in 2003 rate by 1000 vent days was 11.9; in 2007 the rate was 2.0 – currently have gone 306 days without a infection. Critical Care central line infection rate for 2006 rate by 1000 cath days was 2.6; in 2007 the rate was 0.9 – for 1st Q 2008 have 0%
- Our success is evidenced by post intervention implementation rate declines in CLABSI, VAP, Class I and II surgical site infections and by increases in the hand hygiene compliance rates post campaign.
- Reduction in rates (outcomes) , Compliance with bundles (process)
- Internal monitoring and trending; participation in CMS SCIP program with external benchmarking
- Reduction in overall infection rates and increased compliance with components of bundles (identified above). Central Line infection rates decreased from 2.96 in 2006 to 2.36 in 2007 - trending for 2007 less than 1.5.
- Hand hygiene evidence is the monitoring of data collected and the feedback from patients. Hand Hygiene compliance rates have increased, Hand Sanitizer usage has increased since the education classes were given and the Avatar patient surveys are compared with other hospitals nationwide and we are above the national average in all

categories. The urine Foley catheter data are continually being monitored and we do not have sufficient data at present. MRSA investigation is tabled for now and will be revisited in 2008 by the Infection Control Committee (from a Critical Access Hospital).

- Decreased health care associated infections, improved hand hygiene compliance, improved isolation protocol compliance, no device related infections in ICU, increased influenza vaccination compliance, no infections related to construction projects.
- Declining rates of CLABSI from 2005 to present.

Congressman Waxman, we appreciate the opportunity to provide you with this information. The NHA plans to learn more about the Michigan model, how it was implemented and funded, identify physician champions in Nebraska and discuss this with the NHA Board of Directors, the Association of Professionals in Infection Control, and the state's newly formed patient safety organization, the Nebraska Coalition for Patient Safety.

Sincerely,

A handwritten signature in black ink that reads "Laura J. Redoutey". The signature is written in a cursive, flowing style.

Laura J. Redoutey, FACHE
President
Nebraska Hospital Association