

DUKE UNIVERSITY MEDICAL CENTER

DEPARTMENT OF MEDICINE



March 11, 2011

President and Chief Executive Officer Example Hospital 123 Any Street Any City, NC 27777

Re: Estimated Cost of HAIs for calendar year 2010

Dear CEO:

The primary focus of Duke Infection Control Outreach Network (DICON) is to help community hospitals improve the quality of healthcare and to enhance patient safety while minimizing the costs associated with hospital-acquired infections (HAIs). While hospitals want to decrease the rates of HAIs for obvious reasons, hospital accounting systems are not designed to provide detailed information about the local costs of these infections. There are abundant published data regarding the adverse impact of HAIs upon morbidity, mortality, hospital costs, and length of stay but it is difficult to translate these published data to your bottom line. However, having data that accurately estimates the cost of HAIs in your hospital can help administrators evaluate the potential cost-savings from infection control interventions.

In order to provide the data described below, we first assessed all the available data from the literature on the costs attributable to HAIs and then selected the studies that used appropriate and correct methods for calculating the cost of specific HAIs. We then calculated a weighted average for the estimated cost of bloodstream infections, ventilator-associated pneumonia, catheter-associated urinary tract infections and surgical-site infections using data in the studies we selected. These averages were based on hospital costs (not hospital charges). Using these averages and the rate of these hospital-acquired infections at your institution, we calculated the total cost of these infections and the hospital cost per day for each type of HAI at your individual hospital. In addition, we included information that calculates the attributable savings for your hospital if you reduce each infection by only 1, 2 or 3 cases. We have also attached color graphs that show the cost information for other DICON hospitals of similar size so you can compare the cost of these infections at your hospital with similar community hospitals.

It is important to reemphasize that the attached document quantifies the economic burden of HAIs <u>your</u> hospital reported to DICON. If your hospital had other HAIs that were not reported to DICON, then the cost of HAIs and potential savings would be greater. The primary purpose of this undertaking is to quantify the real savings that can come from lowering rates of HAIs. Such reductions improve patient care and reduce un-reimbursed resource utilization. In 1985, the CDC's landmark SENIC study identified key factors of infection control programs associated with lower rates of HAIs in hospitals: organized collection and feedback of surveillance data to physicians and other healthcare providers, adequate staffing of the program by dedicated infection control practitioners, access to a trained hospital epidemiologist, and regular reporting of surgical site infection rates to surgeons. Over the intervening 25 years, the risk of developing HAIs has increased, largely due to advances in medicine: the number of immunocompromised patients and patients with implanted medical devices who are at increased risk of developing infection has risen dramatically.

Due to the complex nature of healthcare today and its associated increased risk for HAIs, we hope you agree with us that your and all other hospitals need to strengthen and expand infection prevention and control activities by developing new cost-effective strategies to cover all areas where care is being

delivered. DICON is committed to assisting you in developing better strategies to maximize the safety of our patients. If you would like further information on how we calculated these numbers or the assumptions upon which costs were calculated, please contact us. As indicated on the attached spreadsheet, if we can work with your Infection Control Department to help prevent one infection, it is possible to achieve as much as \$25,000 in cost savings at your hospital in one year.

Sincerely,

Daniel J. Sexton, MD, FACP

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DJS/DJA:rhm Attachments