

## Comments on PHC4 2006 Hospital Infection Report

In August 2003 Butler Memorial Hospital (BMH) set out to remove the variability of human judgment from the identification of health care associated infections (HAIs) and to identify as many potential infections as possible in order to improve care. BMH has used MedMined electronic surveillance to achieve these goals. This approach focuses on resource consumption and is not comparable to the CDC methodology. This lack of comparability is obvious as shown by the dramatic differences in our infection rates; mortality rate and costs.



However, if taken at face value, a person using this data to make a choice about where to receive care can choose between apparent higher infection rates with lower death rates (4.8%) from infection or lower infection rates but associated with higher death rates (11.8%) in our peer group.

Potential infections are called NIMs by MedMined. Generally, NIMs include clinical cultures from any site showing potential pathogens from 72 hours after admission to 2 weeks after discharge. No potential HAI is excluded based on any other patient characteristics such as the absence of signs or symptoms of an infectious disease or evidence that the infection was present or incubating on admission to the hospital: patient characteristics that would result in exclusion under CDC criteria for all HAIs except surgical site infections. BMH did perform CDC based focused surveillance on Ventilator Associated Pneumonia and Central IV Line Associated Bloodstream Infections as part of quality improvement and to partly compensate for Medmined's weakness is detecting pneumonias.

Approximately 45% of Medmined identified infections occur after discharge after accounting for the CDC criteria for surgical site infections. In collaboration with other hospitals using MedMined and PHC4, most of these post discharge infections were not reported to PHC4 for the 3<sup>rd</sup> and 4<sup>th</sup> quarter of 2006. Patients who transferred

from acute care to our internal skilled nursing facility were not registered as discharged in Medmined and therefore not excluded until 2007.

2006 was the first full year of electronic reporting, software limitation precluded the electronic differentiation of device and non device associated UTIs, blood stream infections, and pneumonias.

Based on CDC criteria, BMH had 6 device associated blood stream infections, 0.56 per thousand cases or 1.09 per thousand central line days.

BMH did have 1 ventilator associated pneumonia or 0.1 per 1000 cases or 0.49 per 1000 ventilator days for patients discharged in 2006.

By excluding potential infections occurring after hospital discharge, we can partly adjust for the differences between MedMined and CDC methods. There is no way to adjust for the differences that result in excluding patients based on their clinical characteristics that is part of the CDC method.

Respectfully submitted,

neid

A. Thomas McGill, MD V.P. Quality and Safety