

What's New in the Patient Safety World

October 2013

HAI's: Costs, WHO Hand Hygiene, etc.

Healthcare-associated infections (HAI's) have been a major focus of quality improvement and patient safety initiatives as well as pay-for-performance initiatives over the last decade. Recently, a study sought to quantify the financial impact of HAI's ([Zimlichman 2013](#)). Many prior publications on the financial impact of HAI's have looked at total costs. The current study looked at costs attributable to the HAI's (that is, costs that would not have been incurred had the HAI not occurred). They found that the average cost for HAI's was as follows:

CLABSI (central line-associated bloodstream infections)	\$45,814
VAP (ventilator-associated pneumonia)	\$40,144
SSI (surgical site infections)	\$20,785
C. diff (Clostridium difficile infection)	\$11,285
CAUTI (catheter-associated urinary tract infections)	\$ 896

Taking into account the frequency of the various HAI's they estimate the total annual costs for the 5 major HAI's to be \$9.8 billion, with SSI's and VAP each accounting for almost a third of that.

But who is currently footing that bill? In some cases in the current reimbursement world there is actually little incentive to improve. A recent study ([Hsu 2013](#)) evaluated the impact of a central line-associated bloodstream infection (CLABSI) initiative on costs, reimbursements, and margins for a hospital and its payers. They concluded that hospitals reduce costs by preventing CLABSIs but also decrease their margins by preventing CLABSI's, creating a perverse incentive.

The trend for Medicare and other payors to no longer reimburse hospitals for potentially preventable complications has not yet had a significant impact on HAI rates. However, over the next several years value-based purchasing programs and penalties under the Affordable Care Act will begin to include more weight to HAI's and should serve as an incentive for hospitals to prevent HAI's.

One of the interventions usually touted to reduce HAI's is handwashing. There have been a variety of programs designed to improve compliance of healthcare workers with handwashing (see our Patient Safety Tips of the Week for January 5, 2010 "[How's Your Hand Hygiene?](#)" and May 24, 2011 "[Hand Hygiene Resources](#)"). One of the more widely

known initiatives has been that espoused by the World Health Organization (WHO). Recently results of a study on the WHO hand hygiene program at six pilot sites in Costa Rica, Italy, Mali, Pakistan, and Saudi Arabia was published ([Allegranzi 2013](#)). Implementation had a major effect on compliance of health-care workers across all sites and healthcare workers' knowledge of microbial transmission and hand hygiene principles improved as well. The positive results have been sustained over time. However, what is still missing is data on the actual impact of these improvements on the rates of various HAI's.

References:

Zimlichman E, Henderson D, Tamir O, et al. Health Care–Associated Infections A Meta-analysis of Costs and Financial Impact on the US Health Care System. *JAMA Intern Med* 2013; Published online September 02, 2013 doi:10.1001/jamainternmed.2013.9763
<http://archinte.jamanetwork.com/article.aspx?articleid=1733452>

Hsu E, Lin D, Evans SJ, et al. Doing Well by Doing Good: Assessing the Cost Savings of an Intervention to Reduce Central Line–Associated Bloodstream Infections in a Hawaii Hospital. *American Journal of Medical Quality* 2013; 1062860613486173, first published on May 7, 2013 as doi:10.1177/1062860613486173
<http://ajm.sagepub.com/content/early/2013/04/22/1062860613486173.abstract>

Allegranzi B, Gayet-Ageron A, Damani N, et al. Global implementation of WHO's multimodal strategy for improvement of hand hygiene: a quasi-experimental study. *The Lancet Infectious Diseases* 2013; Early Online Publication, 23 August 2013 doi:10.1016/S1473-3099(13)70163-4
<http://www.thelancet.com/journals/laninf/article/PIIS1473-3099%2813%2970163-4/abstract>

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