

Facts About Hospital Hand Hygiene: A Serious Issue

Scope

- More than 1.7 million Americans became ill with a hospital-acquired infection (HAI) with an estimated 99,000 patient deaths as a result of a HAI in 2002.¹
- Hospital-acquired infections are one of the top ten causes of death in the U.S.²
- Approximately one out of every 20 hospitalized patients will contract an HAI each year according to the Centers for Disease Control (CDC).³

Costs

- Estimates of the cost of hospital-acquired infections range from \$28 billion to as high as \$45 billion per year.⁴
- A 2010 study from Duke University estimated that a 200-bed hospital incurred more than \$1.7 million in costs due to methicillin-resistant Staphylococcus aureus (MRSA) infections that could have been attributed to poor hand hygiene.⁵
- The Duke study estimated that a one percent increase in hand-hygiene compliance for a 200-bed hospital would yield nearly \$40,000 in cost savings.⁶

Regulatory Requirements

- In 2015, the U.S. Centers for Medicare and Medicaid Services (CMS) will penalize hospitals for higher-than-average HAI rates.
- The Joint Commission (The Joint Commission on Healthcare Accreditation) is also increasing emphasis on hand hygiene, now requiring hospitals to track compliance and use that data to better educate caregivers as part of receiving accreditation.

Compliance Rates and Program Effectiveness

- Many hospitals rely on a “secret shopper” method where a staff member manually monitors hand washing by colleagues. The method is time intensive and provides a sampling of compliance data.
- Study results suggest that hand-hygiene compliance rates are estimated to remain below 50 percent.⁷
- At one hospital, between 2006 and 2008, the average institutional level of hand-hygiene compliance held steady at 60%-70%. After the new program was launched in 2008, compliance reached 97% and has been maintained at this level ever since.⁸

¹ Klevens. Estimating Healthcare-Associated Infections and Death in US Hospitals, 2002.

² Health Care-Associated Infections. January 2013. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.ahrq.gov/professionals/quality-patient-safety/patient-safety-resources/resources/hais.html>

³ Centers for Disease Control website. <http://www.cdc.gov/handhygiene/Basics.html>. Accessed April 26, 2013, 11:00 a.m. *See first paragraph.*

⁴ Scott, R. Douglass II, U.S. Centers for Disease Control. The Direct Medical Costs of Healthcare-Associated Infections in U.S. Hospitals and the Benefits of Prevention. Available at http://www.cdc.gov/hai/pdfs/hai/scott_costpaper.pdf

⁵ Cummings, Keith L., Anderson, Deverick J., and Kaye, Keith S. "Hand Hygiene Noncompliance and the Cost of Hospital-Acquired Methicillin-Resistant *Staphylococcus aureus*". Infection Control and Hospital Epidemiology, Vol. 31, No. 4 (April 2010), pp. 357-364. Available at: <http://www.jstor.org/stable/10.1086/651096> Accessed: 26/04/2013 11:50.

⁶ Ibid.

⁷ McGuckin M. Waterman R. Govednik J. "Hand hygiene compliance rates in the United States — a one-year multicenter collaboration using product/volume usage measurement and feedback." *School of Population Health Faculty Papers*. March 2009 24(3): 205-213.

⁸ Son, et al. "Practically speaking: Rethinking hand hygiene improvement programs in health care setting." *American Journal of Critical Care* 2011. Vol. 39, No. 9. pp 716-724.