

MY WORLD. MY STORY.

HAIs: Costing Everyone Too Much

July 2015

Healthcare-associated infections (HAIs) are serious, sometimes fatal conditions that have challenged healthcare institutions for decades. They are also largely preventable. In 2008, the Centers for Medicare and Medicaid Services (CMS) implemented a nonpayment policy for select HAIs. Now, hospitals and other healthcare institutions have direct financial incentives to minimize the occurrence of HAIs. But these same institutions remain challenged to establish reliable prevention metrics to help evaluate HAI reduction initiatives.

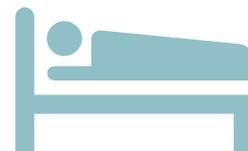
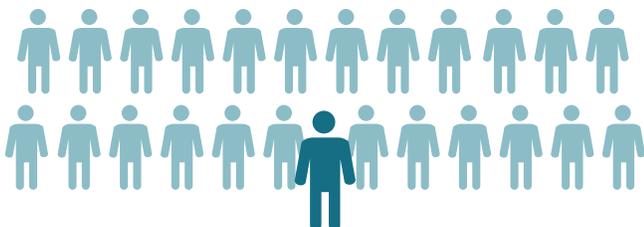
TRENDS

HAI Rates Remain High

Estimates indicate that one in every 25 patients being treated in hospitals throughout the United States has an HAI.¹ Over the course of a year, 722,000 patients contract an HAI, resulting in approximately 75,000 deaths.¹ Studies show that up to 25 percent of HAIs are likely preventable based on current medical practice and technology.² In fact, according to the U.S. Department of Health & Human Services, because HAIs are preventable, these infections can be drastically reduced to help save lives and avoid excess costs.³

One in every 25 patients

being treated in hospitals throughout the United States has an HAI.¹



722,000

Number of patients who contract HAIs each year¹



75,000

Approximate amount of deaths¹

Increasing Transparency of Performance Metrics

U.S. hospital and health systems are under pressure to improve the quality, efficiency and overall value of care. Performance metrics are not only becoming more standardized, they are now public record. For example, resources such as the Healthcare Compare website posts performance metrics such as timely and effective care, readmissions, deaths, surgical complications, HAIs and patient experience surveys for more than 4,000 Medicare-certified hospitals.⁴ Other available resources are Hospital Consumer Assessment of Healthcare Providers and Services (HCAHPS) scores, which are increasingly used to compare hospital performance.

Transitioning to a Pay-for-Performance Model

A combination of federally mandated programs managed by the Centers for Medicare and Medicaid Services (CMS) now rewards hospitals for meeting healthcare improvement targets and reduces payments for negative consequences of care that result in injury, illness or death. In 2008, CMS implemented a non-payment policy for healthcare institutions aimed at a select set of conditions including infections acquired in the hospital that could reasonably be prevented by following best practice guidelines.⁵ Since October 2012, CMS has also reduced Medicare payments when hospital readmission rates for certain conditions — including heart attacks, heart failure and pneumonia — are higher than expected.⁶ In addition, the Affordable Care Act applies a financial penalty to hospitals with high hospital acquired condition (HAC) rates.



A combination of federally mandated programs managed by the Centers for Medicare and Medicaid Services (CMS) now rewards hospitals for meeting healthcare improvement targets and reduces payments for negative consequences of care that result in injury, illness or death.

INSIGHTS

The annual price tag for direct medical costs of preventable HAIs is over more than \$28.4 billion.²



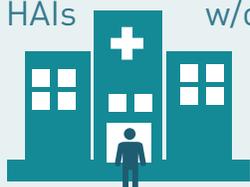
CMS payment reductions for hospitals that do not meet specific healthcare improvement targets for medical errors, serious hospital-acquired conditions, or 30-day readmission rates are averaging 1-3 percent.²

HAIs are Increasingly Unaffordable at the Local Level

Locally, high HAI rates are straining the capacities, finances and credibility of healthcare institutions. Longer patient stays associated with HAIs impact hospital capacity. CMS payment reductions for hospitals that do not meet specific healthcare improvement targets for medical errors, serious hospital-acquired conditions, or 30-day readmission rates are averaging 1 – 3 percent.² Finally, publicly posted performance statistics and patient ratings can impact the reputations of these institutions in the communities in which they are located.

41.9%
with HAIs

16.3%
w/o HAIs



In 2010, 41.9 percent of patients who acquired an HAI were re-hospitalized within 30 days for any reason, compared with 16.3 percent of patients without an HAI.⁸

Prevention Metrics and Benchmark Data are Increasingly Available

Performance standards and reporting requirements are generating nationwide reference information for institutions of every size. Multi-year studies are now available that highlight the impacts of HAIs on healthcare providers and patients. As an example, the Pennsylvania Health Care Cost Containment Council, an independent state agency, reports multi-year data showing patients who contract HAIs generally stayed in the hospital longer, incurred higher costs, and had higher in-hospital mortality and readmission rates, compared with patients without HAIs.⁸ In 2010, 41.9 percent of patients who acquired an HAI were re-hospitalized within 30 days for any reason, compared with 16.3 percent of patients without an HAI.⁸

IMPLICATIONS

Individual Institutions Need to Calculate Institution-Level HAI Costs

Denise Murphy, vice president, Chief Safety and Quality Officer for Barnes-Jewish Hospital at Washington University Medical Center and co-author of the Association for Professionals in Infection Control and Epidemiology (APIC) briefing *Dispelling the Myths: The True Cost of Healthcare Associated Infections*,⁹ suggests working with clinical infection prevention and control specialists and financial experts to quantify the effect of HAIs and readmission rates in individual organizations. “Use the results to target specific procedures, conditions, or patient populations for improvement,” says Murphy. Murphy advises hospitals to identify possible issues with care processes and practices along with controlling HAIs through implementation of best-practice prevention protocols. “Track your progress and fine tune interventions as needed to reduce HAIs in your organization.”⁹

“Track your progress and fine tune interventions as needed to reduce HAIs in your organization.”⁹

Best Practices Form the Foundation of Effective HAI Reduction Initiatives

Research suggests HAIs can be significantly reduced by adherence to environmental and hand hygiene guidelines. According to the Centers for Disease Control (CDC), hand hygiene is one of the most important ways to prevent the spread of infections.¹⁰ The CDC's Guideline for Hand Hygiene in Health Care Settings cites numerous studies indicating that the contaminated hands of healthcare personnel are important contributors to direct and indirect transmission of pathogens in the patient environment.¹¹

Benefits Count Too

The benefits of eliminating or reducing HAIs spread by unclean hands and other means are often expressed in "soft" or qualitative terms. Examples include increased patient safety, higher patient satisfaction scores, enhanced reputation, increased patient care capacity and an improved bottom line. However, naming and quantifying the benefits of reduced HAIs at the institution level may provide powerful incentives that help drive change.

FAST FACTS



\$28.4B

Annual cost to the U.S. economy in direct medical costs of preventable HAIs²



1 in 25

Number of hospital inpatients with a hospital-related infection at any given time¹



25%

Percent of all HAIs that are probably preventable based on current medical practice and technology.²



40%

Average rate at which health-care workers follow recommended hand-hygiene procedures as observed in numerous studies (mean baseline rates 5% - 81%) preventable HAIs¹²

CMS "Non-payment Conditions"

CMS is encouraging improved quality of care by withholding payment for select hospital-acquired infections and conditions that might reasonably be prevented by following the federal Healthcare Infection Control Practices Advisory Committee's best-practice guidelines, available at cdc.gov/hicpac/pubs.html. These conditions include:

- Catheter-associated urinary tract infections
- Central line-associated bloodstream infections
- Select surgical site infections
- Pressure ulcers
- Complications from blood transfusions

In the future, MRSA Bacteremia and *C. difficile* will also be targeted, along with healthcare worker influenza vaccination rates.*

*Centers for Medicare and Medicaid Services, et al. Medicare.gov Hospital Compare, the Official U.S. Government site for Medicare. Healthcare associated infections. Web page. medicare.gov/hospitalcompare/Data/Healthcare-Associated-Infections.html. Accessed Dec 21, 2013.



Georgia-Pacific Professional provides healthcare facilities with a family of hygienic product solutions that compliment infection control and prevention programming. We are committed to delivering hygiene solutions that work seamlessly with healthcare personnel, allowing them to focus on what matters most: patients. ■

Footnotes:

1. Centers for Disease Control and Prevention. Healthcare-associated Infections (HAIs). Accessed July 14, 2015.
2. Centers for Disease Control and Prevention. Scott RD. The medical costs of healthcare-associated infections in US hospitals and the benefits of prevention. 2009;7- 8. Accessed August 22, 2013.
3. Harbarth S, Sax H, Gastmeier P. The preventable proportion of nosocomial infections: an overview of published reports. *J Hosp Infect* 2003;54:258-266. Accessed November 15, 2013. (NOTE: Permission granted by author.)
4. U.S. Department of Health & Human Services, National Action Plan to Prevent Healthcare-Associated Infections: Roadmap to Elimination. Web page. Accessed November 14.
5. Centers for Medicare and Medicaid Services, et al. Medicare.gov Hospital Compare, the Official U.S. Government site for Medicare. Healthcare associated infections. Web page. Accessed November 14, 2013
6. 109th Congress of the United States of America. Deficit Reduction Act of 2005 (Pub. L. 109 – 171) (DRA). Sec. 5001. February 8, 2006. Social Security Act Section 1886(d)(4). Accessed November 14, 2013.
7. Department of Health and Human Services. Changing reimbursement elements and rates for readmission Federal Register, Vol. 78, No. 160, August 19, 2013, pages 50495-51040, Accessed November 14, 2013.
8. Pennsylvania Health Care Cost Containment Council. The Impact of Healthcare-associated Infections in Pennsylvania 2010. February 2012. Accessed November 14, 2013.
9. Murphy, D and Whiting, J. Dispelling the Myths: The True Cost of Healthcare-Associated Infections. APIC Briefing, February 2007. Copyright Association for Professionals in Infection Control and Epidemiology. Accessed November 14, 2013.
10. Centers for Disease Control and Prevention. Hand hygiene in healthcare settings, Hand hygiene basics, web page. Accessed November 15, 2013.
11. Boyce JM, Pittet D. Guideline for Hand Hygiene in Health-Care Settings. Recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force. Society for Healthcare Epidemiology of America/Association for Professionals in Infection Control/Infectious Diseases Society of America. *MMWR Recomm Rep* 2002;51(RR-16):1-45. Accessed August 28, 2013.
12. Centers for Disease Control and Prevention. Guideline for Hand Hygiene in Health-Care Settings: Recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force. *MMWR* 2002;51(No. RR-16): 22. Accessed August 16, 2013.