



# Infection Prevention:


## Assessing Infection Prevention Initiatives to Improve Outcomes, Reduce Costs, and Increase Patient Safety

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### Introduction

A hospital admission for some might be quite straightforward ... a surgical procedure with a few nights stay, great care, and a smooth transition home. For others, the experience might not be so simple ... a surgical procedure with a few nights stay, seemingly flawless care, a hospital acquired infection (HAI), and a complicated path home. Hospitals are institutions constructed of medical expertise, academic excellence, and best practices - all orchestrated to provide perfect patient care and exceptional patient outcomes. However, for 1 in every 25 patients, alongside this expertise, excellence, and exceptional care comes a hospital acquired infection.<sup>1</sup>

Interestingly, an estimated 687,000 hospital acquired infections occurred in U.S. acute care hospitals in 2015 and 72,000 hospitalized patients with HAIs died during their hospitalization.<sup>2</sup> These numbers are alarming, given the trust patients place in the healthcare system and their expectation of good outcomes. People rely on hospitals and healthcare systems to improve their health, not to worsen it. Moreover, the financial cost of HAIs is quite expensive. Annually, the estimated expense of the five major, frequently occurring hospital acquired infections totals more than 9 billion dollars.<sup>3</sup>




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For many years, hospitals have been implementing initiatives to eliminate or decrease HAI's. For example, hospitals have, of course, made hand hygiene a priority. Hand hygiene is one of the simplest ways to decrease the spread of HAIs and hospitals have created a culture of this. All members of the healthcare team are

reminded, again and again of the importance hospitals observe hand washing performance and adherence to policy and procedure. This information is documented and tracked to help eliminate the spread and determine the source of spread. Hand hygiene is a singular example, but many healthcare providers likely could identify other ways a hospital addresses infection prevention hot topics or initiatives, for example, cleanliness of environment and proper personal protective equipment usage. These three areas of focus can help dramatically decrease HAIs and are easily identifiable by healthcare team members.<sup>4</sup>

Understanding the frequency and impact of these infections is more than a local, state, or regional concern. It is a worldwide concern. In the United States, The National Healthcare Safety Network (NHSN) began tracking the nation's hospital acquired infections in 2005 and is the primary data source for identifying commonalities, occurrences, and prevalence of HAIs.<sup>5</sup> The Centers for Disease Control and Prevention (CDC) uses this data to direct and guide infection prevention and control techniques and strategies.



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The U.S. Department of Health and Human Services outlined infection prevention goals through the end of 2020. The goals address central line associated bloodstream infections, catheter-associated urinary tract infections, methicillin-resistant *Staphylococcus aureus*, *Clostridium difficile* infections, and surgical site infections. The expectations for decreasing infection rates vary but is set for each of the previously mentioned infections. With a range of 25% to 50% reduction, hospitals have been forced to look at their infection prevention practices on a very regular basis.<sup>6</sup> Achieving a decrease of 50% seems to be quite the challenge but well worth it. For example, central line-associated bloodstream infections, on average, cost \$46,000 per case, which is a huge financial burden, especially if reimbursement may be affected when these infections occur.<sup>7</sup>

Globally speaking, the World Health Organization has also taken aim at healthcare associated infections. Its website reveals that 1 in 10 patients develop infections, but also that nearly a third of healthcare associated infections can be prevented.<sup>8</sup> A set of well-developed resources is available for healthcare provider and institution use. Some of these resources address clean practices, infection control programs, infection monitoring, action plan creation, and ensuring enough staff is available. The World Health Organization has an available 90-page download to guide health systems across the globe. Many of these guidelines are associated with lists of recommendations for surveillance, checklists, surveys, and rounds to monitor compliance.<sup>9</sup>

A quick look at the CDC's website will also highlight the same assessment type; checklists, rounds, strategies, and guidelines that address a multitude of infection prevention topics. The topics range from disinfection and sterilization to intravascular catheter related infections and more with the goal in mind of eliminating or decreasing the number of HAIs that occur within the healthcare system each year.<sup>10</sup> Both the WHO and CDC provide similar styles of tools that allow for assessment and information gathering, leading one to believe that a consistent method of data collection and analysis can aid in efforts to limit or eliminate HAIs. The tracking of HAI information is crucial to the integrity of an infection prevention and control program.

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Measures to decrease HAIs and assess infection prevention efforts are important but also, these measures must be tracked. Data must be collected, results gathered, actionable items realized, trends identified, and meaningful process changes implemented. The cycle of data collection and action is ongoing to determine opportunities for improvement or identify successful practices.

Throughout the US and the world, one can see that proper management and control of infection prevention programs boils down to having access to meaningful, thoughtfully organized, and easily accessible data. Implementing technologically advanced methods for capturing this data can help ensure success. The use of comprehensive rounding platforms allows hospitals to assess staff adherence to infection prevention policies, hospital antibiotic use, healthcare personnel education and competency, visitor signs and symptoms of infection, and so on. Sentact's comprehensive rounding capabilities give hospitals the capacity to confidently assess and address infection prevention practices.

## Conclusion

Identify and highlight ways your hospital can provide care that continually improves the health and wellbeing of those relying on the medical community for positive outcomes. Partnering with Sentact gives hospitals the

power to be certain a patient's care plan stays the course and healing occurs with no unexpected infection prevention concern.

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