

# Investing in Prevention: Hospital Acquired Conditions

*White Paper*



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The changing reimbursement trends in the current healthcare market are compelling hospitals and medical facilities to invest in ways to increase the quality of care. The objective is to compensate for the impending cuts in reimbursement, while also accommodating the growing number of patients who now have access to health insurance. An area of the healthcare spectrum, where the Centers for Medicare and Medicaid Services (“CMS”) is placing more focus is on hospital-acquired conditions (HAC), also referred to as hospital-acquired infections (HAI) that are preventable and unnecessary. Over the past several decades, the number of hospital-acquired conditions has increased across the nation. Hospitals, health systems, patients, and payers alike have spent millions of dollars providing additional care for these patients through readmissions costs and the cost of additional treatments and time expended in the hospital. Through the Accountable Care Act (ACA) and healthcare reform, CMS has begun cracking down on reimbursements related to these conditions. Effectively, hospitals are penalized for hospital-acquired conditions that are considered preventable.

## WHAT IS A HOSPITAL-ACQUIRED CONDITION?

An HAC is a condition, generally an infection or adverse effect, which a patient acquires while receiving care for another condition at a hospital or medical facility. Another term used interchangeably is HAI. The infection, or condition, is not present or incubating at the time of a patient’s admission to the hospital for another, unrelated treatment or diagnosis.<sup>1</sup> A few of the more common hospital-acquired conditions are catheter-associated urinary tract infections, surgical site infections, and pneumonia. CMS defines 11 categories of HACs:<sup>1</sup>

- Foreign object retained after surgery
- Air embolism
- Blood incompatibility
- Stage II and IV ulcers
- Falls and trauma
- Manifestations of poor glycemic control
- Catheter-associated urinary tract infections (UTI)
- Vascular catheter-associated infection
- Surgical site infections
  - Following coronary artery bypass graft (CABG)
  - Following bariatric surgery for obesity
  - Following certain orthopedic procedures
  - Following cardiac implantable electronic device (CIE)

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<sup>1</sup> [http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalAcqCond/Hospital-Acquired\\_Conditions.html](http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalAcqCond/Hospital-Acquired_Conditions.html)

- Deep vein thrombosis (DVT)/Pulmonary embolism following certain orthopedic procedures
- Iatrogenic pneumothorax with venous catheterization

These conditions can present while a patient is still at the hospital, such as after a fall or major surgery, or post-discharge from the hospital, often requiring the patient to return to the hospital in order to receive treatment, generally within 30 days of discharge. Patients in intensive care often have a higher rate of infection or other HAC, especially surgical patients. According to the CDC, one in 25 patients has at least one hospital-acquired condition.<sup>2</sup> In a study reported in the New England Journal of Medicine, the majority of patients who reported hospital-acquired conditions were between the ages of 65 to 84 years old and received care at a medium-sized hospital (150-399 beds).<sup>4</sup> These statistics indicate that more elderly patients have a harder time fighting off infections, therefore increasing their risk of hospital-acquired infections. But the risks for HACs are not reserved for just older patients or those who already have suppressed immune systems. The quality of care and ability of the hospital to prevent and treat HACs play an important role in the prevention and reduction of such risks. In 2012, CMS reported that “one in eight Medicare patients incurred a potentially avoidable complication while in the hospital.”<sup>3</sup> This is a 9% reduction in the number of patients previously reported in 2010. According to the CDC, in 2011 on any given day one in 25 patients has at least one HAC.<sup>6</sup> There were an estimated 722,000 healthcare associated infections in acute care hospitals across the United States, and roughly 75,000 patients died in 2011 due to a hospital-acquired condition. In the 2013 HAI Progress Report, as reported by the CDC, significant reductions are reported at the national level for nearly all hospital-acquired infections, with surgical site infections and blood-stream infections showing the greatest reductions.<sup>4</sup> This is largely attributed to the increase of awareness and additional prevention efforts that have been implemented at hospitals and medical facilities across the country. In the same report, the CDC reports that nationally there was an increase in urinary tract infections. This increase in certain HACs and decrease in others over time signifies a strong need for improved prevention and awareness of all hospital-acquired conditions. Patient safety and proper diagnosis and treatment are issues that must be acknowledged and resolved within the current healthcare standards, especially as healthcare reform begins to associate reimbursement with quality and cost control. According to the Trendwatch report from March 2015, hospital readmissions fell to 17.5% in 2013, indicating that hospital-acquired conditions are decreasing overall.<sup>8</sup> Although, the Trendwatch report does not specify the reasons for readmission and whether they are related to HACs that could have been prevented.

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<sup>2</sup> <http://www.cdc.gov/HAI/surveillance/index.html>

<sup>3</sup> <http://www.the-hospitalist.org/article/medicare-program-to-reduce-hospital-acquired-conditions-could-be-bettermedicare-hospital-acquired-condition-reduce-patient-safety-adverse-events-penalty/> Accessed April 4, 2015.

<sup>4</sup> <http://www.cdc.gov/hai/progress-report/index.html> Accessed March 4, 2015.

## PREVENTION OF HACs

With healthcare reform now in full swing, the push to reduce costs and to improve quality are becoming top priorities for health systems, hospitals, private practices, and payers alike. CMS has begun tying reimbursement to HACs reported by hospitals, lowering reimbursement rates if a patient is readmitted or reported for care necessitated by “never events”, which include things such as wrong-site surgeries and HACs that should never be allowed to happen.<sup>5</sup> This payment penalty program reduces the fee-for-service payments for hospital readmissions. However, it excludes critical access hospitals, inpatient psychiatric facilities, and post-acute care providers, such as long-term acute care hospitals. The intent is to encourage hospitals and health systems to provide better quality of care and reduce the rate of adverse events by implementing a reduction plan where, in FY 2013, 1% of base operating payments for all Medicare fee-for-services is reduced from payments to the hospital, a 2% reduction is implemented in FY 2014, and a 3% reduction in FY 2015 and beyond.<sup>10</sup> It doesn’t appear that CMS is actually saving as much as they predicted when this law was put in to place. However, many health systems are beginning to see the importance of shifting resources and efforts to be able to respond to the potential decrease in reimbursement should Medicare refuse payment for such conditions. The following sections outline specific ways to effectively reduce and/or prevent HACs from occurring.

## COMMUNICATION AND HER

When healthcare facilities, physicians, care teams, and other healthcare providers are aware of infection problems and take steps to prevent them, the rates of HACs can decrease by more than 70%.<sup>6</sup> With effective communication and proactivity by both providers and patients, the chances of a patient developing an HAC decreases. If providers more effectively communicate with one another across specialties, then the overall level of patient care increases. This means that if a patient has more than one provider treating them for various conditions, for example, a cardiologist and an orthopedic surgeon, it is important for the providers to be aware of what is happening with the patient to ensure the patients safety. Communicating and collaborating with other physicians allows ideas and different knowledge sets to come together to develop and implement plans and procedures that will have a positive effect on the whole organization in efforts to reduce infections and other HACs.

An efficient electronic health records (EHR) system also makes provider and patient communication easily attainable and useful. It also allows the patient to move to different facilities within a health system with ease, as all patient records and information are shared

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<sup>5</sup> <http://www.healthleadersmedia.com/content/FIN-279639/Medicares-NoPay-HAI-Policy-Reshifts-Hospital-Priorities##> Accessed March 31, 2015.

<sup>6</sup> <http://www.cdc.gov/HAI/pdfs/progress-report/hai-progress-report.pdf> Accessed March 24, 2015.

with providers and facilities within one particular health system. This allows a patient's primary care physician to also be up to date on any surgical or specialty care that the patient needs. Further, it allows any other provider who is providing specialty care services to the patient to see and have access to a patient's historical records. He or she can communicate with the primary care provider to ensure that the patient is receiving the best possible care for his or her diagnosis. By effectively sharing information regarding a patient's health history and current condition, providers can more accurately treat patients with increased risk of HACs.

A recent study, conducted by BioMed Central Medical Informatics and Decision Making, is aimed to determine if efficient EHR systems will allow physicians to identify patients that are at higher risk for readmissions after discharge, by combining multiple disease conditions and demographics to predict the risk of readmission.<sup>12</sup> The study reviews data from adult patients admitted to internal medicine services at seven large hospitals in the Dallas/Fort Worth, TX area in 2009 to 2010. The results indicate that EHR systems can be effective in predicting readmissions when used properly throughout the course of a patient's hospital stay. While this study does not conclude that EHR systems are completely accurate in predicting readmissions, the proper use of an effective EHR communication system is a step in the appropriate direction to increasing patient safety and quality of care, which in turn reduces the risk of readmissions and even mortality.

#### QUALITY IMPROVEMENTS

As hospitals and health systems recognize the impact of reduced reimbursement, there is a push to begin improving quality standards system-wide so that providers are working to achieve specific quality and patient safety goals. Many health systems are offering quality incentives in some capacity to physicians as part of their total compensation package. The hope is that by incentivizing physicians to increase quality and patient safety for all patients, not just high risk patients, will in turn reduce the number of hospital-acquired conditions that occur. The metrics vary from specialty to specialty, but many are becoming best practices. Some examples are patient satisfaction, improved health status, and reduction in urinary tract infections (for surgical specialties). These standards of best practices are becoming more popular among health systems overall and will be more beneficial to the general community in the long-term.

Health systems, implementing quality programs for providers to participate in, are instilling in their providers a sense of requirement to treat patients with the highest quality possible achieve these goals. Hospitals and health systems may also start seeing reductions in costs as patients with HACs are decreasing, therefore reducing the cost of readmission and additional procedures that are not needed. This decrease in turn will be met with reductions in reimbursement from Medicare, and likely other payers overtime. It is important to remember

that results will not happen overnight. Like any new strategy or procedure, it takes time to ramp up and safely begin seeing results from the effort being put in to each quality program.

## PROCESS IMPROVEMENTS

Process improvements often tie to quality improvements. The improvements that are made to increase the quality of care are often improvements to processes and techniques that make organizations more efficient and productive, while also improving quality standards. There are many different ways that organizations can make improvements that will effectively decrease the number of HACs. By implementing new processes or procedures, or updating existing ones, to better care for patients, many of the HACs that are prevalent today can be prevented or avoided. For example, one process that many hospitals have revamped is the hand-washing policy. Hand-washing has always been a priority and highly monitored within the industry. Now, many hospitals are updating their procedures and processes to ensure the use of proper hand-washing techniques, as this is one of the main ways to prevent the spread of diseases.

When creating processes and policies to effect improvement across any industry, one of the most important aspects of any good improvement is data. Having metrics that are appropriate, measurable, and monitored is the key to a successful initiative. Data allows the study of trends over time and it is measurable. Without data, there is no way to track whether or not a process is improving, getting worse, or making no movement at all.

Physician involvement in determining what processes can be improved is essential to success. Physicians are on the front lines of healthcare every day and can provide valuable insight into what is working within an organization and what is not working. Their knowledge of patient care and safety is crucial to the success of any improvement plan. Additionally, physicians can, and will, provide feedback on what parts of a new process are not working or are not reaching the fullest potential.

## LONG TERM EFFECTS OF HAC PREVENTION INITIATIVES

### PATIENT AND HOSPITAL BENEFITS

While the overall long-term effects of Medicare's reimbursement reform initiative for HACs are not yet evident, hospitals and patients are already looking forward to the benefits that quality and process improvements, as well as collaboration, will soon render.

1. Patient Benefits

With increased focus on value-based care, hospitals and physicians are spending more time with patients and focusing more on solving problems the first time, rather than

taking a “test and eliminate” approach, as is more commonly used in a fee-for-service model. With providers paying more attention to detail and providing a better quality of care, patients are being treated in a more positive way. They come away from a procedure or office visit with their expectations met and fulfilled.

## 2. Hospital Benefits

While patients are reaping the benefits of increased quality of care, hospitals and providers also see the value of quality care. Patient satisfaction is becoming a popular metric used to measure quality and many providers receive additional compensation based on patient satisfaction ratings. Compensation can be a driving force in change; therefore, when providers have the potential to receive additional compensation related to patient satisfaction, there is a significant incentive to perform well and increase those scores to maximize compensation.

Hospitals are also seeing the benefits of cost-savings from improvement programs that are being implemented. Through the effort to reduce readmissions related to HACs, many organizations are seeing cost savings through the improvements made to prevent HACs. Combined with the reductions in reimbursement from CMS, this is even more important to hospitals as healthcare reform continues to take shape.

## 3. Fee-For-Service/Fee-For-Value

As discussed previously, the ACA is pushing for the culture of healthcare to change from a fee-for-service based reimbursement structure to a fee-for-value structure. For some procedures, bundled payments are being rolled out and, in the case of HACs, reimbursement is being reviewed as it relates to preventable conditions.

## CONCLUSIONS

The concerted effort by CMS to reduce the number of HACs across the nation is a reality that will have a significant impact on the bottom line of many health systems and providers. It is imperative that all parties recognize this and take action decrease the number of HACs occurring each year. Through collaboration and efficient management, providers and health systems alike can reduce the number of HACs. As always, there is a cost associated with the development and implementation of new processes and procedures. Organizations must be willing to take on these costs to see the return on investment in the future.