## WHITE PAPER

Can Your Hospital
Afford Not to
Implement a
Comprehensive
Credentialing
Program?





## Overview

Patient safety and continuous quality improvement are top priorities for all healthcare facilities, and the pressure to improve quality and reduce costs has never been greater. The barrier of protection for patients in healthcare facilities is being challenged by two dynamics:

- 1. The expanding definition of healthcare personnel. The Centers for Disease Control and Prevention's (CDC) definition of healthcare personnel includes not only clinical staff, but every person who has direct or indirect contact with patients, including administrative staff, professional vendors, contract employees, security, maintenance, students and volunteers.
- 2. The number of satellite facilities being managed by healthcare systems. Clinics, surgery centers and a rapidly growing number of physicians' offices are finding it difficult to enforce policies and maintain standards remotely.

Healthcare leaders can improve the safety and security of patients and staff in all of their facilities by implementing a comprehensive credentialing program that ensures all support and economic visitors participate in best practices and system policies. By utilizing a comprehensive credential management solution, hospitals can provide a safe environment for their patients and staff, while dramatically reducing their direct costs and potential risks.

Since the 1999 publication of the *To Err is Human* report, more attention has been paid to preventable safety events in the hospital. This increased attention has been the catalyst for new regulations and, more recently, new enforcement through monetary penalties for preventable adverse events or "Never Events." Insurance companies are following

"While the cost of credentialing is significant, the cost of NOT credentialing is now estimated to be five times as great."

> suit, forcing hospitals to change processes and behaviors. Credentialing is a fundamental tool for transparency and controlling the healthcare environment.

Tracking and managing these regulatory requirements can mean high administrative costs for hospitals. However, failure to manage these processes leaves patients and employees at greater health and safety risk, while also exposing hospitals to major financial risks.

Adverse events, business disruptions and opportunity costs can all be traced back to noncompliance. Upon closer examination, while the cost of credentialing is significant, the cost of NOT credentialing is now estimated to be five times as great.

# What is credentialing?

Credentialing is the process of obtaining, verifying and assessing the qualifications of healthcare personnel. It is a fundamental component of regulatory compliance and is required for accreditation as well as the protection of patients and employees.

Credentialing standards are based upon recommendations by organizations, such as the Occupational Safety and Health Administration (OSHA), CDC, The Joint Commission (TJC) as well as industry and professional regulatory bodies. These organizations are committed to improving patient and employee safety, and credentialing helps operationalize this mission. Comprehensive credentialing includes verifying everyone in the hospital is properly immunized, has received the appropriate training, has been vetted through drug tests and criminal background checks and has a thorough understanding of the hospital's health and safety policies.

In the past, TJC recommended that medical staff be credentialed every two years. But as of 2007, credentialing and privileging is now on-going and evaluated in real time. Today, TJC recommends all medical and non-medical staff, contractors and volunteers comply with the hospital's education, training, immunization and other policy-driven standards and requirements.

Effective management of credentials helps hospitals comply with regulations and protect the safety and health of patients as well as the personnel who care for them.

Patients may come into contact with a wide variety of people while hospitalized. However, only a percentage of these people have been adequately credentialed to maintain the safety and health of the patient. The risk of adverse events increases with the level of exposure to non-credentialed people. An adverse event is defined as an unintended injury or complication caused by healthcare management, rather than by the patient's underlying disease. Every direct and indirect human contact could possibly result in the transmission of infections, viruses and cause adverse events.

To minimize adverse events, facilities can benefit from a comprehensive credentialing

program that reaches the entire hospital population. Hospitals must put measures in place to certify appropriate training and to monitor the adherence to industry best practices regarding the exposure of patients to risks

How much does credentialing cost? In order to truly gauge the cost of credentialing, costs should be measured across the entire organization. The investment may take the form of people, technology and credential fulfillment.

"Hospitals must put measures in place to certify appropriate training and to monitor the adherence to industry best practices regarding the exposure of patients to risks."

Anecdotal evidence from a major metropolitan hospital illustrates how the responsibility for credentialing and access control cuts across multiple departments (Exhibit 1):

- Compliance Office ensures all staff, processes and technology systems are credentialed and maintained for HIPAA.
- **2. Security** maintains access control to all areas within the healthcare facility.

- **3. Infection Control** ensures immunization for healthcare workers against infectious diseases, including influenza, tuberculosis and other common viruses.
- **4. Medical Staffing Services** deals with the credentialing and privileging of the licensed professional medical staff, including physicians and nurses.
- **5. Human Resources** verifies criminal background checks, drug screening tests and educational credentials are met for the general staff.
- 6. Human Resources/Organization
  Training provides training services
  regarding general policies and best
  practices for the healthcare organization.
- 7. Clinical Continuing Education provides educational opportunities for clinical staff assisting them to meet the license requirements for each position.
- 8. Occupational Health manages the safety of the healthcare environment by ensuing individuals are credentialed for the physical demands required for patient care.

After assessing the standard ratios and applying the percentage of time spent towards credentialing and access control, the estimated staffing cost for credentialing is \$6,020 per bed annually.

# Exhibit 1 Staffing Cost of Credentialing

Department	# per 100 beds	% Effort Allocated to Credentialing and Access Control	Annual Cost per 100 beds
Compliance Office	ŤÍ	10%	\$12,000
Security	iriririi	25%	\$150,000
Infection Control	Ť	10%	\$8,000
Medical Staffing Services	ŤŤ	50%	\$80,000
Human Resources	†††††††	10%	\$56,000
HR Organizational Training Services	Ť	20%	\$16,000
Clinical Continuing Education	iiii	50%	\$240,000
Occupational Health Services	Ť	50%	\$40,000
Total			\$602,000

# "With the proper environmental controls, clinical training and a culture of vigilance, the majority of these events can be prevented."

In addition to staffing costs, multiple information systems are used to manage credentialing and access control, including: 1) Human Resource Information System (HRIS); 2) Vendor management systems; 3) Volunteer management systems; 4) Visitor management systems; 5) Learning management systems; and 6) Immunization tracking systems. (Exhibit 2)

In general, healthcare organizations often assume the costs associated with annual employee immunizations, drug tests and background tests for new employees, as well as continuing education for clinical and nonclinical staff. These non-staffing-related costs add an estimated \$680 per year to the cost of credentialing, bringing the total estimated cost of credentialing to \$6,700 per bed annually. For an average sized hospital of 161¹ beds, implementing a credentialing program will typically be over \$1 million per year in system and personnel related costs.

# Cost of NOT Credentialing

Though a comprehensive credentialing system represents a significant investment for a healthcare facility, the cost of not credentialing is estimated to be five times as great. As shown in Exhibit 3, healthcare providers incur costs associated with not credentialing in several ways, including: (1) the direct cost associated with adverse events and theft; (2) indirect productivity and liability cost; and (3) opportunity costs and reputation impact.

Direct costs of not credentialing An estimated 3.4 million adverse events occur in acute hospitals annually, affecting nearly one out of 10 patients. More importantly, adverse events can result in a prolonged hospital stay, disability or even death. With the proper environmental controls, clinical training and a culture of vigilance, the majority of these events can be prevented.

In addition to the personal injuries that adverse events can cause, they can also create a sizable financial burden for hospitals. With recent changes in Medicare reimbursement and insurance company policies, hospitals will not be reimbursed for the costs incurred from the extended length of stay and medical treatment associated with these events.<sup>2</sup>

Hospital acquired infections (HAIs) account for 50 percent of the adverse events that occur in hospitals. Non-HAI adverse events, including falls and violent crimes as well as drug-related, diagnostic and therapeutic incidents, account for the other 50 percent.

The average direct cost of HAIs is \$27,500<sup>3</sup> per staffed bed per hospital annually, or \$4.4 million for an average sized hospital. The average direct cost of non-HAI adverse events is estimated at \$4,600 per staffed bed per hospital annually, or a yearly total cost of more than \$700,000 for an average-sized hospital. This brings the total cost of adverse events to \$32,100 per staffed bed per hospital annually.

Theft also represents a potential area of concern. Hospitals purchase and maintain a large inventory of supplies annually that are susceptible to loss through theft. These supplies include high-value drugs and medical devices as well as common products such as syringes that are targeted by criminals or drug

- <sup>2</sup> Ellen T. Kurtzman, MPH, RN, and Peter I. Buerhaus, PhD, RN, FAAN, "New Medicare Payment Rules: Danger or Opportunity for Nursing?" AJN, American Journal of Nursing, June 2008 Volume 108 Number 6, Pages 30-35
- <sup>3</sup> Emily R. M. Sydnor1 and Trish M. Perl, "Hospital Epidemiology and Infection Control in Acute-Care Settings" Clinical Microbiology Reviews, 2011 January; 24(1): 141-173.

Exhibit 2 Cost of IT Systems

IT Systems	Annual Cost per 100 beds	
Human Resources Information System (HRIS) Module	\$7,000*	
Visitor Management Systems	\$5,000*	
Volunteer Management Systems	\$5,000*	
Vendor Management Systems	\$5,000*	
Learning Management Systems	\$25,000*	
Immunization Tracking Systems	\$7,000*	
Access Control Systems	\$13,740**	

<sup>\*</sup>Estimated

<sup>&</sup>lt;sup>1</sup> In 2011, average sized hospital = 924,333 total number of U.S. hospital beds ÷ 5,724 total number of U.S. hospitals = 161 beds Source: American Hospital Association

<sup>\*\*</sup>Assumed 10 access points for 100 bed hospital average cost of @\$1374 each http://www.securitysales.com/resources/ssbg10access1.pdf

addicts. It is estimated that theft of equipment and supplies cost hospitals \$4,000 per staffed bed annually, or a yearly total cost of more than \$600,000 for an average-sized hospital.<sup>4</sup> Controlling access to hospital supplies through criminal background checks and drug tests is critical in reducing these costs.

Combining costs of theft with the total cost of non-HAI adverse events, the annual direct costs of not credentialing are \$36,100 per staffed bed per hospital or a yearly total of \$1.3 million for an average-sized hospital.

To recap, for the average-sized hospital, the total direct costs including HAIs, non-HAI adverse events and theft are over \$5.8 million per year.

Indirect costs of not credentialing Additionally, there are a number of indirect costs to not credentialing. For example, if hospitals do not require employees to receive the flu vaccine as a condition of their employment, they often experience excess absenteeism and disruption of healthcare services during flu season. A survey of 221 U.S. healthcare institutions reported 35 percent of hospitals face staff shortages, costing an estimated \$100,000 per hospital annually in healthcare worker sick leave during flu season.<sup>5</sup> This cost does not include the loss of business

due to understaffing, closed units and/or replacement staff.

In addition, preventable adverse events can lead to higher malpractice litigation costs. In Malpractice Litigation and Medical Costs, researchers calculated that malpractice litigation accounts for between 2 percent and 10 percent of medical expenditures. According to the American Hospital Association, total medical expenditures for the 5,724 registered hospitals in 2011 were \$773.5 billion or an average of \$135.1 million per hospital. This would indicate that each hospital spends between \$2.7 million to \$13.5 million on malpractice litigation. These figures are supported by estimates from the American Medical Association (AMA) that calculated it costs over \$100,000 per case defending claims.<sup>6</sup> (Exhibit 3)

# Opportunity costs and reputation impact

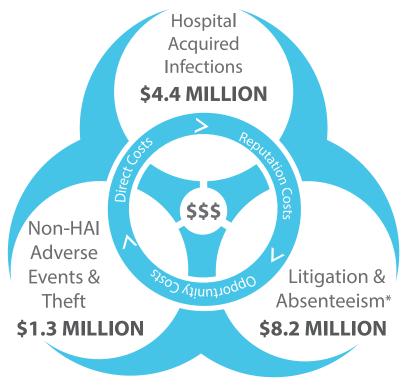
The healthcare industry is in a state of accelerated change, as a result of federal and state regulations, technology, consumer expectations and the changing demographics of consumers. These factors are contributing, and often mandating, the development of innovative healthcare delivery arrangements to improve the safety and security of patients. A cohesive

Michael Darling, Sandra Wise, "Not your Father's Supply Chain" matmanmag.com I April 2010

- <sup>5</sup> Poland GA, Tosh P, Jacobson RM. "Requiring influenza vaccination for health care workers: seven truths we must accept." Vaccine 2005; 23:2251–2255. "The Macroepidemiology of Influenza Vaccination (MIV) Study Group. The macroepidemiology of influenza vaccination in 56 countries, 1997–2003." Vaccine 2005; 23:5133–5143
- <sup>6</sup> Brandon Roberts, Irving Hoch, "Malpractice litigation and medical costs in the United States," Health Economics, December 2009, Volume 18, Issue 12, pages 1394–1419

Exhibit 3

Annual Direct and Indirect Costs of Not Credentialing for Average-Sized Hospital



strategy to manage the impact of these forces is required to successfully navigate this changing environment. A shared, credentialed workforce plays an important role in participating in Accountable Care Organizations (ACOs), where groups of doctors, hospitals and other healthcare providers come together voluntarily to improve the quality of patient care. In order to participate in these programs, hospitals are responsible for the credentialing status of all participating healthcare workers, and the cost to manage these programs.

In addition, programs like value-based purchasing and the Hospital Consumer Assessment of Health Plans Survey (HCAPHS) can have a dramatic impact on a hospital's bottom line. For example, value-based purchasing, a program authorized by the Affordable Care Act, gives the Centers for Medicare and Medicaid Services (CMS) the power to base a portion of hospital reimbursement payments on how well hospitals perform in 25 core measures. The HCAHPS survey is part of these core measures and is designed to allow consumers to rate their inpatient experiences and perception of care. Because HCAHPS scores are public, people can compare results and evaluate hospitals at the Hospital Compare website (www. hospitalcompare.hhs.gov). Low HCAPHS scores not only have a negative impact on a hospital's reputation, they can also decrease Medicare reimbursement.

TJC has identified human factors and leadership as the top two causes for adverse events that lead to unnecessary hospital costs. Human factors include staff orientation, inservice education, competency assessment and staff credentialing/privileging. Leadership is noted in regards to organizational culture, standardization (e.g., clinical practice guidelines), inadequate policies and procedures, non-compliance with policies and procedures and performance improvement.<sup>7</sup>

Exhibit 4 illustrates the underlying factors that contribute to the additional cost to hospitals.

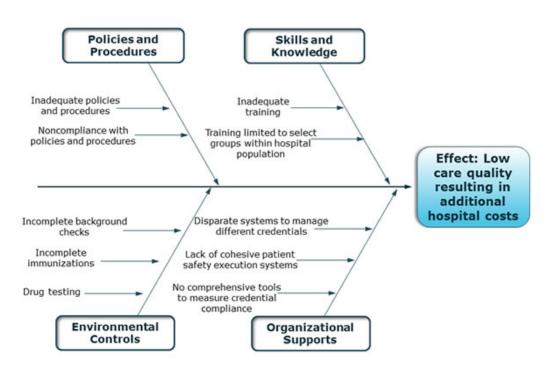
# The benefits of a comprehensive credentialing program

Successfully executed, a credentialing program can help hospitals improve clinical quality, reduce unnecessary expenses and build a reputation for safety and quality of care. It is measurable and supports continuous improvement while enabling a common set of expectations, training and accountability across the hospital's entire population. And with the sponsorship of hospital leaders, a credentialing program helps define a culture of vigilance, safety and quality. For hospital administrators charged with managing the safety requirements of their facilities, the question that must be answered is, "Can you afford not to have a comprehensive credentialing program?"

<sup>7</sup>The Joint Commission, "Sentinel Event Data - Root Causes by Event Type", September 20, 2013 http://www.jointcommission.org/ assets/1/18/Root\_Causes\_by\_ Event\_Type\_2004-2Q2013.pdf

Exhibit 4

# Underlying Factors Impacting Additional Hospital Costs



Contributing factors

#### About the Author

Teresa Finn Vice President of New Market Development

**Teresa Finn** joined IntelliCentrics in November 2012 and brings over 20 years of experience in providing customer-centric solutions for industries that include supply chain, banking, oil and gas, manufacturing and defense. Teresa is charged with identifying and capitalizing on opportunities for IntelliCentrics in new markets. Prior to joining IntelliCentrics, Teresa managed Global Operations for Viewlocity Technologies serving customers in North America, South America, Europe and Asia. She earned her Bachelor of Science in Mechanical Engineering from the University of Texas at Arlington.



## USA

1420 Lakeside Pkwy, Ste 110 Flower Mound, Texas 75028 214-222-7484

## Canada

9900 Cavendish Blvd, Suite 310 Saint-Laurent, Qc H4M 2V2 Montreal, Quebec 514-228-1240

## **United Kinadom**

Manchester Business Park 3000 Aviator Way Manchester M22 5TG 0161 266 2111