WHITE PAPER

GETTING RIGHT WITH THE JOINT COMMISSION

THE HOSPITAL COMMUNICATION BILL OF RIGHTS

INTRODUCTION

The Joint Commission, a not-for-profit organization founded in 1951, evaluates and accredits more than 20,000 healthcare organizations and programs in the United States (currently about 82 percent of U.S. hospitals have the Gold Seal). Accreditation is strictly voluntary[1]. There are no laws requiring certification, but it is a highly desirable accolade for hospitals. It elevates their prestige by announcing to the community a proven dedication to patient safety and care quality.

The Joint Commission's mission is "To continuously improve healthcare for the public, in collaboration with other stakeholders, by evaluating healthcare organizations and inspiring them to excel in providing safe and effective care of the highest quality and value."[2]

In pursuit of this mission, beyond the accreditation process itself, the organization has published an annual list of National Patient Safety Goals (NPSG) since 2002. The purpose of this list is to highlight specific points within the healthcare spectrum that, if given a stronger focus, will have a significant impact on improving healthcare for the public.

On the original list from 2002, NPSG 2 was to: "Improve the effectiveness of communication among caregivers." Ever since, communication among caregivers has remained on the list, and was expanded in 2005 to include a more detailed focus on critical test results.

Improving communication is such a high priority because the lack of it can have serious consequences, for patients as well as hospitals. In this paper we will discuss why NPSG 2 is mission critical for fiscal health and patient safety, and then look at multiple avenues for healthcare communications through the lens of an interpretive Bill of Rights.

The Cost of Poor Communication

In addition to being a patient safety and quality issue, as will be explained in the next section, poor communication is also a financial issue. Preventable delays in treatment can cause complications that require more expensive care, longer lengths of stay, reduced reimbursements, and poor patient satisfaction results. Disorganized communication among providers causes inefficiencies with treatment planning and care coordination. Poor communication of emergencies and code calls can delay rapid response teams and hinder their effectiveness. Cumbersome notification processes of a patient being released to the transport team and environmental services can delay patient discharge and room turnover, decreasing overall turnover rates.

U.S. hospitals waste more than $12 billion annually from communication inefficiencies among care providers.[3]

[1] http://www.jointcommission.org/about/JointCommissionFaqs.aspx#298
[2] http://www.jointcommission.org/about_us/about_the_joint_commission_main.aspx

So what are the costs of these delays and inefficiencies? In a study[3] published in the Journal of Healthcare Management, the authors estimate that U.S. hospitals waste more than $12 billion annually from communication inefficiencies among care providers. Of that amount, increased length of stay accounts for 53 percent. Looking more closely at what poor communications cost an individual facility, the authors estimate a 500-bed hospital loses more than $4 million per year. The article's concluding remarks mention that, "Information technologies and process redesign may help alleviate some of this burden."

Information technologies are available to help, and leading hospitals around the globe are already successfully reducing patient length of stay, improving patient satisfaction, and tackling the critical results challenge. After discussing the impetus behind NPSG 2 we will look at a Hospital Communication Bill of Rights and explore how communications are being tackled with technology.

DECLARATION OF IMPORTANCE: SENTINEL EVENTS

In the course of evaluating quality and safety performance results over a 10-year period, the Joint Commission consistently found communication to be the leading root cause of sentinel events (unanticipated events resulting in serious injury or death).[4] However, from 2010 through the middle of 2012, leadership and human factors supplanted communication as the main root causes for all event types (Figure 1)[5].

Annual medical malpractice payouts for communication breakdowns, including failing to share test results, more than quadrupled nationally between 1991 and 2012, to $91 million.

Source: Journal of the American College of Radiology, Volume 8, Issue 11, Pages 776 -779, November 2011

Communication remains the third leading root cause overall, and is the second largest contributor to sentinel events arising from op/post-op complications, transfer-related events, unintended retention of foreign objects, and wrong-site, wrong-patient, wrong-procedure incidents (colloquially known as the original 'never events'). It is still the number one root cause of serious injury or death related to a delay in treatment.

Communication's prominence as the leading cause of delayed treatment-related sentinel events may be what prompted specific mention of critical test result reporting in the annual safety goals. For the Hospital NPSGs that went into effect on January 1, 2013[6], the subcategory to Goal 2 reads: "NPSG 02.03.01. Report critical results of tests and diagnostic procedures on a timely basis." Acting quickly on critical results has been part of the annual goals since 2005. So why has this goal been less successfully implemented? We will explore caregiver communications within our proposed Hospital Communication Bill of Rights, including critical test

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[3] Agarwal, R., Sands, D.Z., Schneider, J.D. (2010). Quantifying the economic impact of communication inefficiencies in U.S. hospitals. Journal of Healthcare Management, 55(4), 265-82.

[4] Joint Commission. (2007). Improving America's Hospitals: The Joint Commission's Annual Report on Quality and Safety 2007. http://www.jointcommission.org/assets/1/6/2007_Annual_Report.pdf last accessed 1/4/13.

[5] http://www.jointcommission.org/assets/1/18/Root_Causes_Event_Type_2004_2Q2012.pdf

[6] http://www.jointcommission.org/assets/1/18/NPSG_Chapter_Jan2013_HAP.pdf

results reporting, and look at how to address some of the common challenges with the help of modern-day technology.

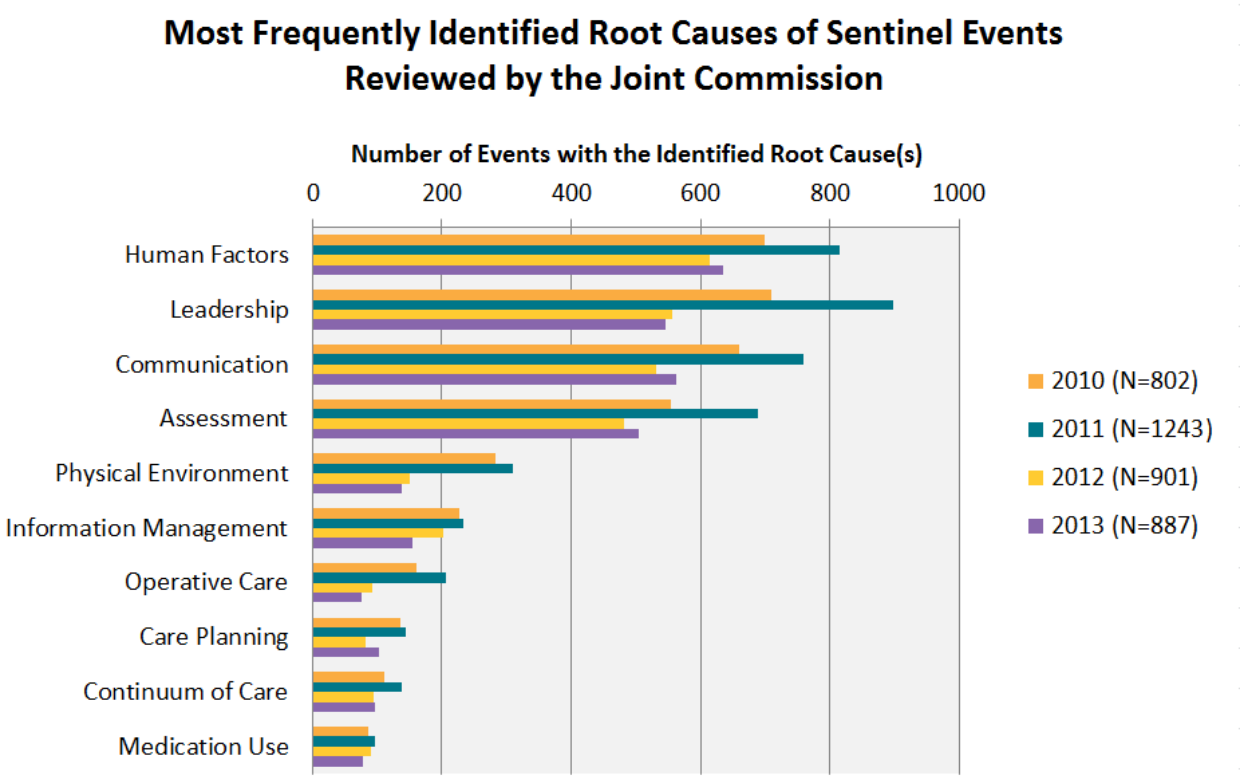

Figure 1. Root causes of sentinel events as reported to the Joint Commission from 2010 through 2013

THE PREAMBLE

Thinking about the mission of the Joint Commission and the National Patient Safety Goals, we were inspired to explore the topic from the perspective of our nation's founding fathers, with a Preamble announcing the purpose and a Bill of Rights covering currently relevant topics.

in Order to form a more perfect Healthcare System,
strive to establish Safety, ensure healthcare Quality,
and promote the general Welfare by establishing this Hospital Goal
for the United States of America:

To improve the effectiveness of communication among caregivers.

THE HOSPITAL COMMUNICATION BILL OF RIGHTS

The following is our fictional interpretation of how the Hospital Communication Bill of Rights might look in an effort to govern the communication among caregivers.

AMENDMENTS 1-8

1. **Providers shall have the ability to get the right information to the right person on the right device, now**
2. **In all cases of test results that are critical, findings shall be reported in a timely manner**
3. **Privacy shall be upheld and no mobile message shall remain unacknowledged**
4. **Hospitals shall assist rapid response teams with fast notification and assured support**
5. **Hospitals shall send only actionable alarms to caregivers**
6. **Hospitals and their caregivers shall have the right to decide which types of mobile communication devices make the most sense to use for the good of patients' health**
7. **Hospitals shall preserve the right of providers to talk with their peers**
8. **Processes not covered here are reserved for Hospitals or delegated to the Provider**

1. Providers shall have the ability to get the right information to the right person on the right device, now

Hospitals provide care 24 hours a day, 365 days per year. To accommodate this, hundreds or even thousands of employees work in shifts and provide on-call coverage with continually changing schedules. Knowing who is available in a particular position at any given time would be a herculean task without the support of technology to help employees quickly contact the people they need.

Beyond just figuring out who needs to receive a vital piece of information, discovering how to contact them (via their smartphone, home phone, pager, etc.) adds another layer of complexity. Ensuring that a message is received and acknowledged is also tantamount to providing the safest patient care when time is critical.

Accomplishing this amendment, determining What to send to Whom, How to send it and When it is received, is not only achievable, it can be easy. The right solution brings all of these pieces of information together, allowing staff members to quickly send messages to one another in support of better patient care.

2. In all cases of test results that are critical, findings shall be reported in a timely manner

There are currently no national standards or definitions for critical test results, which can be generally defined as any values/interpretations for which delays in reporting can result in serious adverse outcomes for patients.[7] As part of NPSG.02.03.01, the Joint Commission requires hospitals to clearly articulate their own definitions of critical results for tests and diagnostic procedures, determine the reporting structure, and define the acceptable length of time between when a result is available and when the report reaches the right individual. It further requires hospitals to implement and evaluate procedures for managing critical results.

Acting quickly on critical results has been part of the annual goals since 2005. So why has this goal been less successfully addressed as a root cause of sentinel events than other communication failures, such as medication and equipment errors?[5]

In theory, critical test results management (CTRM) sounds simple; if a lab test or a radiology scan shows something potentially life threatening, the information is transmitted back to the physician who ordered the test, and treatment planning begins immediately. In reality, it is

[7] Hanna, Doris, R.N., C.P.N.P., Sc.D., et al. (2005). Communicating Critical Test Results: Safe Practice Recommendations. Journal of Quality and Patient Safety, 31(2), 68-80. http://www.macoalition.org/Initiatives/docs/CTRgriswold.pdf

far more convoluted. One big challenge is locating and notifying the correct provider. It can be especially difficult and time-consuming when an ordering physician in the ED is no longer on duty, or if the patient has been admitted and his or her care provider has changed. This is to say nothing of the time wasted going back and forth trying to call a provider or leave voicemails that need to be confirmed.

Situations like these make locating and calling the correct person a cumbersome process with unnecessary delays. One solution is to provide staff with a CTRM system that can help manage the craziness of on-call schedules and quickly locate the right provider on his or her preferred mobile device. This would help solve the issue of finding the correct person, but what if the right person is unavailable to answer the phone? Without a verbal connection and the ability to read back and verify results, how does the reporting radiologist or lab director know the result has been received and understood? What if the results are extremely time sensitive and a treatment must begin immediately? Closed-loop communications and escalation rules become an important part of the communication process to provide traceability and accountability, and to ensure that a qualified provider receives the message quickly and confirms it.

A comprehensive CTRM system will streamline reporting by integrating with the laboratory information system (LIS), picture archiving and communication system (PACS), electronic medical records (EMR) system and many others. This integration and the ability to automatically populate a patient record with test results eliminates administrative time spent tracking dictations, maintaining a document log, and making phone calls. An integrated CTRM system also ensures report clarity, provides an opportunity for the provider to ask questions concerning the findings, and maintains a complete audit trail that provides proof of Joint Commission compliance with NPSG.02.03.01.

Beyond compliance with the Joint Commission to ensure that critical results are reported in a timely manner, implementing a good CTRM process saves time, reduces transcriptional errors, and enhances patient safety and satisfaction. Well integrated CTRM systems are providing the additional benefit of reducing length of stay by quickly notifying physicians of normal results, too. Permitting patients with normal test results to go home sooner improves patient satisfaction and emergency department efficiency. Lastly, integrated CTRM systems are improving incidental findings reporting. Incidental findings are unanticipated results discovered while testing for something else. For example, a radiologist may be looking at a patient's brain scan for signs of a stroke, but he also notices a suspicious nodule. By flagging the nodule and reporting it to the ordering physician with a message that requires confirmation of receipt, the finding is more assured of being reviewed for follow-up or forwarded to the patient's primary care provider.

3. Privacy shall be upheld and no critical mobile message shall remain unacknowledged

> **"The cost of dealing with a security breach is greater than the cost to have secured the personal device."**
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> **- John Halamka, M.D., Professor of Medicine at Harvard Medical School and CIO at Beth Israel Deaconess Medical Center, during the mHealth World Congress, July 2012**

In today's hospitals, response tracking and closed-loop communications are needed to ensure patient safety and care. These can best be served by smartphones and other newer mobile devices that allow response acknowledgement and tracking. At the same time, HIPAA and HITECH mandate that hospitals and caregivers ensure the confidentiality and security of patients' electronic protected health information (ePHI). The challenge is to secure not only the devices and messages on them, but to also encrypt the data during transmission. Thankfully, technology exists that makes this security easy to accomplish with encrypted messaging, remote-wipe capabilities, and the ability to keep critical messages separate from less important e-mails and texts. Another big advantage of healthcare-specific messaging technology is the ability to include closed-loop communications for efficient management during critical situations.

Requiring acknowledgement of messages ensures that time-sensitive information is reviewed and responded to quickly. A pharmacist processing a STAT order may need to confirm an unusual dose with the prescribing physician, or a nurse may send a hospitalist notice that a patient's vitals have changed, triggering an alternative treatment plan. Confirmation of a message assures the sender that the information was received.

4. Hospitals shall assist rapid response teams with fast notification and assured support

Whether rallying staff for a code blue, or a gathering a trauma team at the helicopter pad, the success of rapid response teams relies on speed. Efficiency is of the utmost importance, from notifying team members, to ensuring all team members are available.

Consider the complexity of a staff response for a code STEMI (ST segment Elevation Myocardial Infarction), used to notify and prepare team members to treat heart attack patients. Current Joint Commission guidelines set a 90-minute average door-to-balloon time, meaning that within 90 minutes of a patient arriving at the hospital he or she must be assessed, prepped, and in the Cath Lab receiving treatment. Within that hour and a half, a team of physicians, nurses and technicians from the ED, Cardiac Cath Lab, Cardiology, and Respiratory Therapy must coordinate to perform specific tasks in order, from diagnosing the patient to the percutaneous coronary interventional procedure (PCI) itself. If an individual at any point in the process is delayed or missing, critical minutes tick by and treatment can be delayed. Assurance that all the team members are available and ready to respond is imperative. A closed-loop communication system will recognize if someone fails to acknowledge the alert, and will automatically escalate the alert to another individual who can step in and keep the patient on track to receive life-saving treatment as soon as possible.

Currently available technology not only escalates an unacknowledged alert, it also maintains a complete audit trail. Audit trails are important to protect facilities and providers by documenting evidence of action (and can significantly reduce malpractice insurance premiums), and recording communications between providers that can be examined for process improvement opportunities.

5. Hospitals shall send only actionable alarms to providers

The number of alarms and alerts from hospital monitoring systems can overwhelm caregivers and disrupt patient rest and healing with too much noise. These systems often span nurse call, heart (telemetry) monitors, ventilators, pulse oximeters, and many more, all of which emit audible notification that a patient has either requested help or has a potentially dangerous change in vitals. Alarm fatigue was the topic of a Joint Commission sentinel event alert[8] in 2013 and was the driving force behind the National Patient Safety Goal (NPSG) added in 2014: NPSG.06.01.01: Improve the safety of clinical alarm systems.[9]

The key is not to overwhelm providers and patients with too many alerts or false alarms that prevent the patient from resting and the caregiver from attending to the real needs of patients. This can be done by creating an alerting hub that prioritizes alarms and sends them to the appropriate caregiver on his or her smartphone, Wi-Fi phone, or other mobile device. This can significantly reduce the incidence of beeps and buzzes and help patients get more rest. Of course, if there is a change in a patient's vital status, the appropriate nurse or clinician can be alerted via his/her mobile device quickly to speed response to the situation. All of this can add up to a quieter, more efficient hospital and improved patient satisfaction scores.

6. Hospitals and their caregivers shall have the right to decide which types of mobile communication devices make the most sense to use for the good of patients' health

Mobile communication devices have been migrating over the past decade, from the realm of "nice to have" to the land of "have to have." Whether staff carry smartphones, pagers, tablets, Wi-Fi phones, or other devices, mobile communication has become a necessity to coordinating and providing patient care, well beyond just paging a provider on call. Mobile devices help caregivers connect quickly in critical situations to discuss a treatment plan, easily arrange bedside consultations, and send secure, traceable messages back and forth.

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[8] http://www.jointcommission.org/assets/1/18/SEA_50_alarms_4_5_13_FINAL1.PDF

[9] http://www.jointcommission.org/assets/1/6/HAP_NPSG_Chapter_2014.PDF

For an individual, having a phone at his or her fingertips certainly makes calling someone faster and easier. However, the process in healthcare is more complicated than calling a pre-programmed friend. Providers needing to connect may not be looking for a specific person,

but for a position that often rotates, such as the admitting hospitalist or the cardiologist on call. This is where technology really steps forward to offer assistance, and there are several possibilities.

A hospital's call center is the backbone of connectivity, and operators play a significant role in facilitating provider location. Operators' effectiveness is enhanced with technology that allows them to quickly look up a specific individual or position. Many hospitals are utilizing this capability to connect caregivers and improve provider satisfaction and patient care.

Progressive hospitals are also implementing web-based on-call schedules and allowing employees to access and update employee directory information straight from their computer or mobile device. This cuts the time it takes to connect and reduces the call volume for operators, freeing them for more specialized capabilities.

Beyond placing calls to other providers, mobile devices are mission critical for rapid response teams and other dedicated groups. Traditionally these types of code calls were announced over the intercom, or staff may have been paged individually. In the case of larger emergencies or disasters, time-consuming call trees were initiated to coordinate people and confirm availability. Now incident communications and emergency notification technology can alert the entire group at once, track responses, and escalate automatically to the next provider on call.

Hospitals recognize that providing a quieter environment for patients is important for healing and patient satisfaction, and many are turning to mobile devices as the gentle alternative to overhead announcements. Newer mobile technologies such as smartphones, Wi-Fi phones, and two-way pagers are the most desirable personal communication devices for healthcare because they offer the ability to track recipient responses.

7. Hospitals shall preserve the right of providers to talk with their peers

Hospitals want to encourage their staff to talk to one another to coordinate patient care. Personal communication greatly enhances a number of common situations such as consultations with peers about a patient, patient handoff during shift changes[10], and preparations in the operating room.

Supporting communication among peers involves integrating up-to-date on-call schedules and accommodating contact preferences. These options help prevent contacting someone

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[8] Chapman, Kimberly B., M.S., R.N., C.N.L. (2009). Improving Communication Among Nurses, Patients, and Physicians. American Journal of Nursing, 109(11), 21-25.
http://journals.lww.com/ajnonline/fulltext/2009/11001/improving_communication_among_nurses,_patients,.6.aspx

unnecessarily during their time off (increasing provider satisfaction on the receiving side of messages), and ensure that providers can be easily reached when others need to get hold of them (increasing satisfaction on the sending side).

8. Processes not covered here are reserved for Hospitals or delegated to the Providers

Communications technology is perpetually evolving, and methods of applying it within the healthcare setting will also change. In consideration of the unknown future, rights not already addressed in this Bill will be delegated to Hospitals (such as whether or not to allow Bring-Your-Own-Device environments) and to the providers themselves (whether to choose a tablet, a smartphone, or a newer device yet to hit the market).

CONCLUSION: IMPROVING THE EFFECTIVENESS OF COMMUNICATION AMONG CAREGIVERS

Technologies exist today that can significantly improve communication efficiency throughout a hospital and make giant strides toward the Joint Commission's goal to improve the effectiveness of communication among caregivers. More specifically, solutions are available to facilitate hospital compliance with NPSG 02.03.01 to report critical results on a timely basis. The ability for staff to instantly connect with one another on their mobile devices gives providers a leg up in the fight against time in critical situations. Overall, efficient communications increase patient safety and satisfaction, promote healthcare quality, and improve the delivery of care.

Tips when researching communication solutions:

1. **Ask about integration capabilities with existing hospital systems (LIS, PACS, the EMR, etc.) and the ability to attach images, text and/or audio clips**
2. **Explore the capabilities for ensuring protection of patient data (encryption, remote wipe, etc.)**
3. **Make sure the system includes receipt acknowledgement and audit trail support**
4. **Ensure the ability to escalate unacknowledged notifications**
5. **Ask whether you can send alerts/alarms from clinical alerting/monitoring systems right to caregiver's mobile devices for fast resolution**
6. **Determine whether messages can be sent to the variety of mobile communication devices used by different roles; this should include smartphones**
7. **Inquire if on-call schedules can be integrated and provider contact preferences accommodated**
8. **Establish compliance with Joint Commission NPSG 02.03.01 and strive to improve the effectiveness of communication among caregivers**

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