



HOW TO STOP MAKING PATIENTS PAY THE PRICE FOR POOR COMMUNICATIONS

INTRODUCTION

While science, medicine, and technology have become more sophisticated over time, communications remain an obstacle in pursuit of the best possible patient care. Frequent problems involve competing messages, errors in delivering the message to the person able to act on it, a lack of common communication platforms and procedures, and a host of other challenges that lead to inefficient care as well as gaps in understanding.

The result is a system that, at minimum, is inefficient and unpleasant for patients, but can occasionally lead to much more serious situations. Lack of communication is cited as a significant contributor to patient injuries, provider errors, and even patient death.¹

The spectrum of problems is wide and deep, and researchers, hospitals, and businesses are working on getting to the root of these challenges and finding possible solutions, including procedural changes and new technologies. In this eBrief, we will focus on three key issues and discuss possible ways to mitigate them in the near term:

1. **Care team coordination:** managing communications involving patient handoffs, admission requests, and information exchanges among clinical care team members
2. **Managing alarms:** separating important signals from the background noise of constant alarms and alerts
3. **Situational awareness of key events:** making sure the right team member is informed of important patient events—like changes in vital signs—with actionable information and accountability

**Communication
was cited as the
root cause in 21
percent of sentinel
events¹**



POOR COMMUNICATIONS: MORE THAN JUST A NUISANCE

One of the most significant reports that has looked at the matter in the past few years is CRICO Strategies' *Malpractice Risks in Communication Failures – 2015 Annual Benchmarking Report*.² This exhaustive examination of 23,658 malpractice lawsuits filed between 2009 and 2013 zeroed in on the causes of the mistakes that led to the suits. Among the key findings:



30% of cases
(7,149 lawsuits) cited
communication as a factor



57% of communication
problems were provider-
to-provider and represent
73% of the losses



52% of communication
problems arose in a hospital
setting (8% emergency
room and 44% inpatient)



As a result, **44%** of the
affected patients incurred
either a severe injury or death

Other studies suggest the communication problem may be much more severe than previously recognized. A 2015 report by Martin A. Makary and Michael Daniel of the Johns Hopkins University School of Medicine suggests that if more information was required on death certificates, medical error would be the third leading cause of death in the United States—accounting for 251,000 or more deaths annually.³ The paper proposes that communication breakdowns, diagnostic errors, poor judgement, and inadequate skill need to be specifically cited as a cause of death to properly account for and correct these problems.



1 CARE TEAM COORDINATION

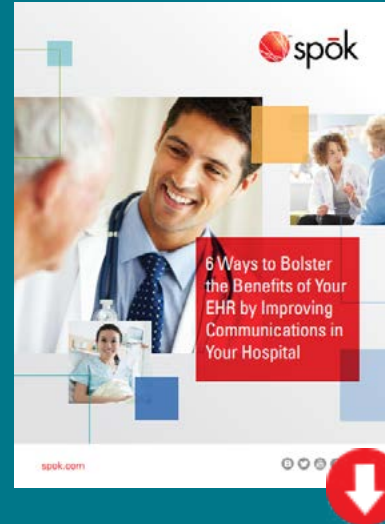
A generation ago, patient care was largely left to a single physician and small cadre of nurses. Communication options were limited to the telephone, paper records, and a pager for on-call notifications.

Today, a patient is likely to be seen by multiple physicians during the course of a hospital stay and tested or treated by various members of the nursing and technical staffs. Patient records are more complex, the histories more extensive, and coordination among all members of the patient care team is key to providing the best care.

Pagers, Wi-Fi phones, smartphones, voice badges, email—they are all used to communicate information quickly. Having access to a greater array of communication methods introduces flexibility, but that flexibility comes at the cost of increased complexity and introduces more avenues for error.

In a study by Wu, et al. published in the Journal of American Medical Informatics Association (JAMIA) in 2013, researchers assessed the effectiveness of four different communication options among clinical teams at five teaching hospitals.⁴ The communication methods included numeric paging, alphanumeric paging, Smartphones, and a task-management messaging system. The study concluded that both alphanumeric pagers and smartphones were able to convey urgency and context to message recipients. However, "...clinicians felt that the quality of communication might have deteriorated. Clinicians perceived oral discussion to be of high value that offered richness in the interactions." Clearly, verbal communications remain a highly important tool for sharing patient information, conveying urgency, and highlighting situational nuances.

In the same study, researchers collected an observational story from a new resident that illustrates the need for standardized communication methods blending technology and procedure. This physician received a page of "99" followed by four additional digits. Unaware that 99 was an informal code among the team to signal an emergency, the resident tried to dial numbers beginning with 9 or 99 and was unable to follow up on the page. It is unclear if the patient suffered harm directly from this delay, but the patient "...ended up being intubated later that day..." This example highlights the dangers of informal, non-standard procedures and processes, especially during emergency situations.



Related Resource

Electronic health records (EHRs) are fantastic repositories of patient data, but they aren't designed for supporting communications or sharing actionable information in time-sensitive situations. Learn why a dedicated, enterprise-wide communication system that complements the EHR is vital to improving patient outcomes.

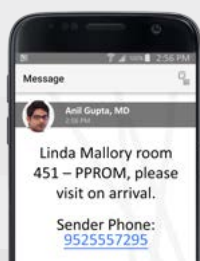
Infrastructure must be in place to support information sharing and facilitate communications among all members of a care team. While EHRs are excellent repositories of patient data and are able to transform that data into actionable information, they aren't ideal for sharing that information in time-sensitive scenarios. The examples cited on the following pages from the CRICO study highlight several different gaps in communication including: a failure to convey urgent patient details to another physician and confirm the receipt of an urgent page, and not having accurate contact information or a method to verify that an important status update was received by the intended recipient. These are just two examples of situations for which enterprise communication technologies can provide support and help prevent dangerous gaps in communications that can, and have, led to patient harm.

PROBLEM: LACK OF DETAIL AND URGENCY

An obstetrician going off duty texted the incoming OB of a woman in delivery. The text failed to include all pertinent details. The patient's nurse also paged the incoming OB, who was unavailable to answer it. A dangerous condition was ignored until too late and the baby suffered life-threatening brain damage. (Source: *Malpractice Risks in Communication Failures: 2015 CRICO Strategies National CBS Report*)

SOLUTION: MESSAGING WITH ACTIONABLE INFORMATION AND ACCOUNTABILITY

An enterprise communication solution that supports secure texting for staff can pull from up-to-date on-call schedules (to make sure the correct physician is notified), send alerts and pages to the correct device with acuity and details included, give the sender confirmation when the message is read, and support an escalation path for urgent, unacknowledged messages.



An obstetrician leaving the hospital sends a text to the incoming OB about a patient.



A few minutes later, the patient's nurse observes several decelerations in fetal heart rate and pages the incoming OB.



The incoming OB is already at the hospital attending another urgent delivery and is unable to accept either message.



After 1 minute the unacknowledged, high-acuity message from the nurse is escalated to the chief resident for response.



The text is accepted, the patient is assessed quickly, and brought to the OR for an emergency C-section.

PROBLEM: WRONG NUMBER

A nurse alerted a physician of a patient's status via text, unaware that the physician had recently changed phone numbers and did not receive the information. The patient suffered harm as a result.

(Source: *Malpractice Risks in Communication Failures: 2015 CRICO Strategies National CBS Report*)

SOLUTION: UP-TO-DATE DIRECTORY INFORMATION AND ACCOUNTABLE MESSAGING

One of the key benefits of an enterprise communication solution is an up-to-date staff directory of contact information. This repository becomes a powerful connector for care team members to share important patient information with one another. An enterprise communication solution also supports accountable messaging with embedded accept or decline buttons, letting the sender clearly see if their message was read or not. Messages that are actively declined or not accepted can be escalated automatically to another clinician to ensure the message is seen.



Patient has just had a cardiac catheterization.



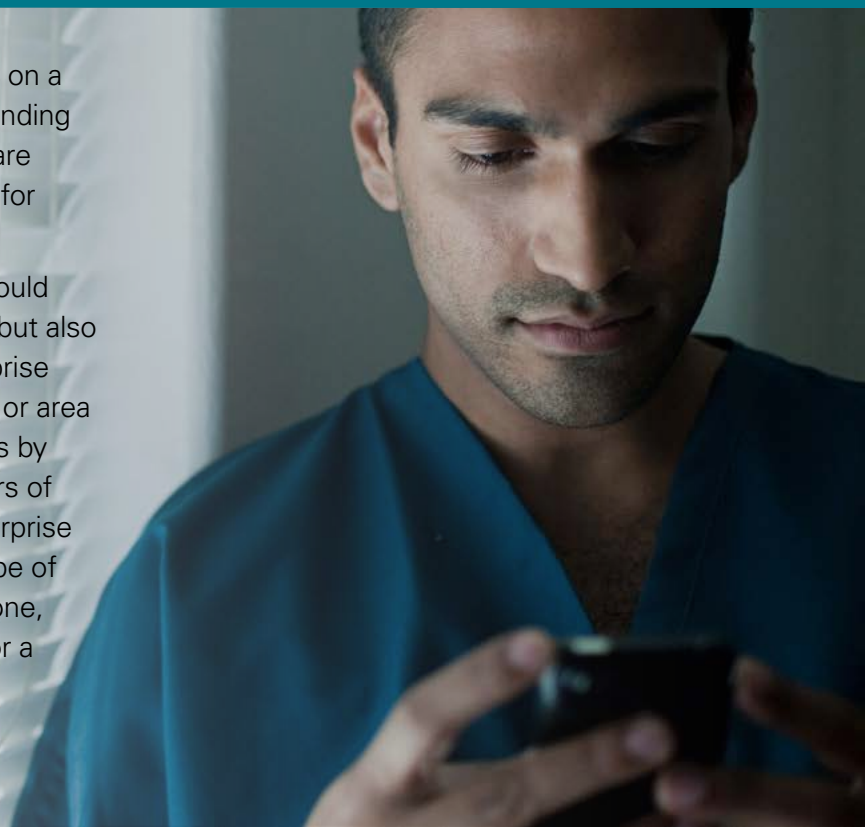
Nurse notes the patient's blood pressure is decreasing and the patient is complaining of pain in his groin.



The physician is notified, orders a hemoglobin, and goes to the patient's room to evaluate the patient for bleeding from the catheterization site.

With so many parties potentially having an effect on a patient's well-being, it's critical that caregivers sending and receiving messages are aligned, messages are informative and effective, and there are avenues for accountability and escalation.

One critical point to keep in mind: Technology should transcend barriers not only between individuals, but also between departments. A highly advanced enterprise platform will work beyond a specific department or area of specialty and serve a patient's total care needs by coordinating communications among all members of the care team. It's equally important that an enterprise system provide this support regardless of the type of device each staff member uses (pager, smartphone, tablet, etc.) and/or whether it is hospital-issued or a personal device.



2 MANAGING ALARMS

In 2006 at Johns Hopkins University Hospital, alarms were a constant, overwhelming presence. Analyzing the situation, the staff documented 58,764 alarms in a 12-day period—an average of 350 alarm conditions per bed per day.⁵ Most of the alarms were false and the team tasked with studying the issue became an ongoing task force to make improvements.

In 2012, the Association for the Advancement of Medical Instrumentation (AAMI) foundation published *Using Data to Drive Alarm System Improvement Efforts*, a report describing how the task force set out to address the alarm problem.⁶ First, leaders of the effort to curtail the incessant alarms suggested establishing a baseline norm. In so doing, the Johns Hopkins clinical team realized many of the alarms were too easily triggered, the alarms could be tough to discern, and there was little accountability to respond to them.

ALARMS: TOO EASILY TRIGGERED

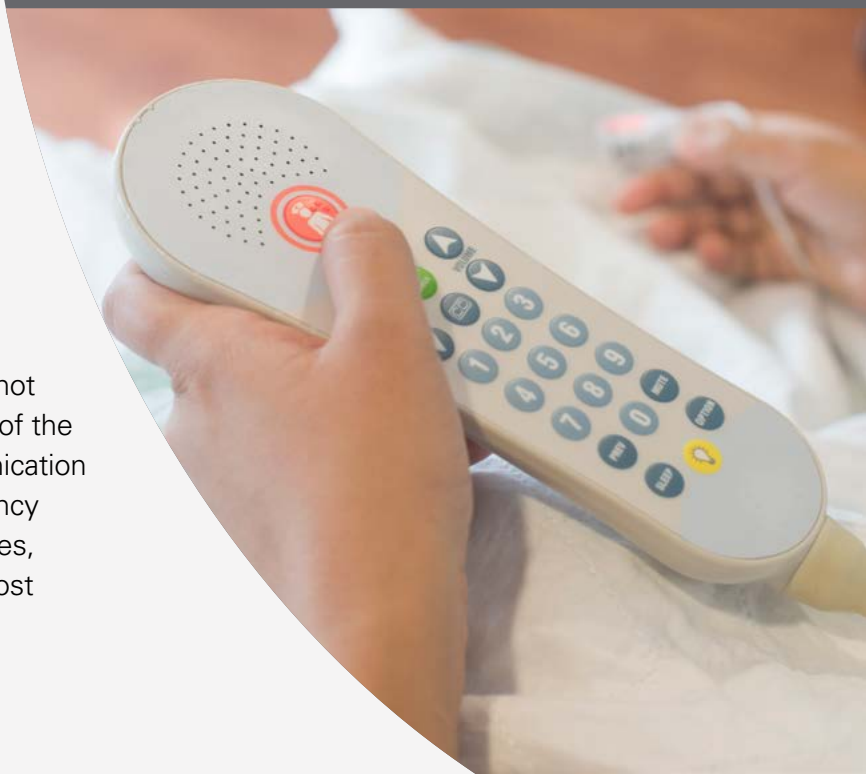
The team identified three areas for improvement to help reduce the number of false alarms: implement threshold best practices, ensure proper monitor usage, and continue to document patient alarms for further improvements. Johns Hopkins achieved a 43 percent reduction in high-priority alarms.

ALARMS: TOUGH TO DISCERN

Alarms are not all created equal, so they should not be delivered equally. To address this component of the alarm challenge, hospitals can use their communication platform to clearly convey an alert's level of urgency using different audible tones on recipients' devices, enabling staff to easily and quickly assess the most time-sensitive situations.

Reduce the number of non-actionable alarms

1. Implement threshold best practices. Set up appropriate thresholds for monitoring equipment (e.g., pediatric patients have different vital parameters than adult patients, and surgical patients are different than those in intensive care).
2. Ensure the monitors are being used properly. Loose leads, low batteries, and improper placement of electrodes can produce errant and avoidable results.
3. Carefully detail the status of alarms to make adjustments. Document where alarms come from, how long they last, how caregivers respond, and what the clinical significance of alarms is to make continued improvements.



ALARMS: LACK OF ACCOUNTABILITY

The ECRI Institute identified missed alarms as number two on the list of potential technology hazards for 2016, and with good reason.⁷ An alert sent is not necessarily an alert received, or viewed, or responded to—unless the communication method and the enterprise platform support these capabilities. Smartphones and other technological advances now offer insight into the life of a message, for the sender, the recipient, and the hospital. Senders can clearly see if their message was delivered and whether it was accepted or declined by the recipient, even if they do not receive a reply. And hospitals have access to full audit trails for each message that can be used for performance improvements, as well as to provide proof in the event of litigation. An enterprise communication solution can track a message once sent and escalate unacknowledged or declined alerts to another clinician, helping ensure important patient information is brought to the attention of a member of the care team. From bed alarms for fall risk patients, to abnormal blood pressure fluctuations, ensuring these alarms are received and acknowledged helps provide a level of accountability and create a safer environment for patients.



A patient identified as a fall risk gets out of bed, triggering a bed alarm.



The enterprise communication system alerts the patient's nurse with a high-priority sound and provides a call-back number in the message that connects to the pillow speaker.



The nurse accepts the alert, connects to the patient's pillow speaker, and instructs the patient to sit back down and wait for help.



Patient sits down, giving the nurse extra time to reach the room and provide assistance.

Reducing false alarms, sending actionable alerts that indicate acuity, and creating accountability for important messages helps hospitals prevent patient harm that comes from missed or overlooked information.



3 SITUATIONAL AWARENESS

Situational awareness is the term clinicians use to describe the careful cognitive ability to assess a situation and sort out the usual and ordinary from the unexpected and potentially dangerous. This skill is of particular importance in the high-pressure environment of many hospitals, where quick responses are often needed for patient care and safety. The primary challenge is to ensure the right people are informed of important patient events—like changes in vital signs—with actionable information and accountability so that a critical situation can be addressed before a patient suffers preventable harm. Clinicians cannot make decisions and accurately assess a situation without all pertinent information.

Let's look at another situation where a timely response to vital information about a patient is imperative for providing appropriate care. The example below depicts a hospital with a comprehensive enterprise communication system designed to fully leverage multiple system integrations. These integrations help provide an even safer environment for the patient by automating important alerts, pulling from updated staff contact details, sending messages with accountability, and providing escalation pathways for critical patient information.



A patient with pneumonia and shortness of breath is admitted to the hospital.



Patient's vital signs are entered into the EHR, and the assessment falls outside the normal range. The EHR flashes to alert the nurse of an elevated modified early warning score (MEWS), signaling that sepsis is a concern. Nurse acknowledges that vitals are correct.



Via integration between the EHR and the enterprise communication platform, the confirmed MEWS alert triggers a code to the rapid response team for assessment and intervention.



Rapid response team (RRT) members receive the code on their mobile devices and quickly convene in the patient room for assessment and treatment.



RRT members order a chest X-ray. The scan is received and read by a radiologist.



The radiologist finds a pneumothorax and enters the finding into the RIS/EHR. An alert of this critical finding is automatically sent to the physician assigned to that patient.



The physician is treating another patient and does not respond within 2 minutes, so the alert is forwarded to the on-call hospitalist. The hospitalist accepts the alert and urgently orders a consult for a chest tube.

The communications throughout this workflow, from the rapid response team code notifications to the critical chest X-ray finding being accepted by the hospitalist, are supported by this hospital's enterprise communication system. The system removes wasted time in the process, such as phone tag and also works to improve the patient's outcome by helping ensure a physician is quickly made aware of the dire situation. Reliability of the system and accountability for alerts work to fill the communication gaps and prevent errors or oversights that can put patient outcomes at risk.



THE COMMUNICATION REALITY

The reality in patient care is that communication among members of a care team is a complex web of people, devices, monitors, and alert sources.

Having so many ways to share important information is not necessarily better: significant gaps still remain that have contributed to patient harm and even patient death. Filling these gaps requires efforts to improve care-team coordination, manage alarms, and improve situational awareness.

Face-to-face communications are the best vehicle for relaying patient information because it is difficult for an email or text to quickly capture all pertinent details, the urgency, and the nuances of a clinician's concern. A phone call is a close second for effective communication. However, in healthcare, the pressures of time, the availability of various parties, and geographical distance mean one-on-one exchanges aren't always an option. In those situations, organizations need to use both well-planned procedures and smartly designed technical platforms to lower the risk of miscommunication and improve patient safety.

In an effort to manage alarms, hospitals can blend procedural and technological methods to reduce false alarms, prioritize alerts, and provide accountability for alerts to help ensure that critical situations are addressed quickly for best patient outcomes.

And to support situational awareness for members of the care team, clinicians need to be alerted of important patient information in a reliable fashion and with accountability. Missed messages, or messages sent to the wrong number or to an off-duty clinician can lead to dangerous results for patients. Using an enterprise-based system to manage all of the various care team communications helps prevent communication gaps and dangerous yet preventable situations for patients.

We may never reach a state of perfect communications, where all messages are properly transmitted and understood and the negative effects on care are eliminated, but we can make great strides with better technology. Healthcare, in today's complex environment, requires thoughtful management of methods and processes to prevent gaps where important patient information can get lost. With more tools available to support communications in healthcare, there is an ever-growing need to use them strategically and ensure they all work together in support of patient care.

References

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