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WHITE PAPER

TEXTING AT YOUR HOSPITAL: SIX AMATEUR MISTAKES

INTRODUCTION:

NOT ALL MESSAGES ARE CREATED EQUAL

The messages sent every day in today's hospitals are unlike communications in other industries. The vast majority are related to the care and safety of patients. They contain instructions, questions, and test results that affect people's lives. Often they are urgent and require staff to act quickly. A heart attack has occurred. A newborn is in distress. Someone is in terrible pain.

Despite the important nature of these interactions, critical messages sent using standard text messaging/SMS or email can impede care and put extra burden on staff to get the confirmations they need. When the same 'short message service' way of communicating embraced by smartphone users everywhere is employed in hospitals for critical code calls and consult requests, there is a risk that important actions could be delayed, or never happen at all.

Critical healthcare messages are a high priority and demand a recipient's attention and acknowledgement. They also need to be kept track of to know when they are opened, responded to, and what that response was. Text-and-forget isn't good practice when it comes to patient-related communications, especially if messages wind up in the same inbox as a reminder to pick up milk.

In short, critical messages regarding patient care are not equal to ordinary texts and emails. This paper will give you six reasons why regular texting methods in healthcare are inappropriate, and explain how your critical messaging can and should be so much better.

1. Standard texting does not integrate with your hospital's staff directory or on-call schedules

The last thing staff need to worry about when sending a critical communication is looking up who's on call or hoping they have the right phone number on a list at the nurses' station. Because texting plans largely exist outside the hospital's IT structure, commonly used phone numbers may be in one person's contact list but not another's. And what happens if a physician changes his or her phone number? That information will likely be given to the operator group, but is the ER nurse aware of the change when sending a text message for a consult request? What happens to the patient when the nurse sends the request and doesn't realize for quite some time that it was not received?

The right smartphone messaging app can integrate with your hospital's directory database, including on-call schedules. This means sending someone a message from your device is as easy as selecting a name from a contact list, typing the note, and hitting 'send.' It works for on-call staff, too. Knowing the person's name is unnecessary because an on-call position can be looked up by the name of the role, such as "cardiology." The mobile app can display the

provider on call, even if changes to the schedule were recently made, because the scheduling system also integrates with the app. The sender can quickly begin drafting a note that will automatically be routed to the correct provider.

Standard texting and even many secure texting apps do not maintain this level of updated contact information for the sender, so there's a lot more room for error. Staff efficiency and patient safety can suffer as a consequence.

2. Standard texting options cannot send nurses and physicians system-generated patient care alerts

Standard texting apps are not equipped to receive messages from external systems. A robust secure texting app can allow a nurse to receive patient calls for assistance and determine the patient's need using his or her mobile device, without requiring a visit to the patient's room. It can also notify the appropriate caregiver when a patient monitor's threshold has been reached or critical test results are ready to be viewed. These specialized abilities help streamline clinical workflows and eliminate redundant steps.

3. Standard texting inboxes do not separate critical hospital notifications from those sent by friends and family

In healthcare, the distinction between important and unimportant communications is black and white. A critical test result needs immediate attention. A 'meet me for happy hour' invite does not. With regular text messaging these communications get delivered to the same inbox where the urgent message could be overlooked, buried within a large volume of ordinary texts.

Smartphone apps designed for life-threatening situations address this problem and get a user's attention for critical communications. Urgent messages should be delivered to a separate, secure inbox reserved for work-related notifications of the highest priority. In addition, these messages can be set to completely take over the screen on the recipient's phone to demand their attention and response, something standard text applications cannot do. For patients, this means clinicians are seeing the right messages more quickly. For physicians, there's peace of mind in knowing that important communications are highlighted and kept separate from non-work activities.

4. Messages sent via SMS lack encryption

Electronic protected health information (ePHI) is highly sensitive, and there can be significant financial penalties for organizations that fail to protect it. Hospitals need to take every precaution. The danger with standard text messages is that they are sent unencrypted, often using simple mail transfer protocol (SMTP), which is the same protocol used for email. In addition to the lack of encryption, there is no ability to specifically lock the texting application with a PIN to prevent unauthorized access. And finally, it's impossible for

your IT team to remotely wipe clinical text messages selectively from your device without also wiping personal information you might wish to keep.

The alternative is an application that provides the security and information management lacking in the standard SMS app on mobile devices. Healthcare organizations need smartphone messaging apps that encrypt communications from the time they leave the sender's fingers until the recipient's app is unlocked and decrypts them.

Whether messages are sent using a web portal, or an integrated application such as an operator console, web directory, or emergency notification solution, security at all points in the life of ePHI is required for HIPAA and the HITECH compliance.

Smartphone applications that can be locked and require a PIN to access messages keep sensitive information protected far better than standard texting. These apps can also give your IT team the ability to remotely remove all in-app messages if the device is lost or stolen. This protects ePHI while preserving your personal data on the phone in the event it can be recovered.

5. Standard texting does not provide traceability, escalations, or audit trails

Achieving effective two-way communications in hospitals can be a very time-consuming task. For example, 30 or more people can be required for a code STEMI (ST-elevated myocardial infarction - commonly referred to as a heart attack). Coordinating all of them can be a web of phone tag, overhead pages, and guessing games if key staff cannot be located quickly. Likewise, many hospitals run into a 'he said, she said' situation when recreating what happened during a sentinel event or other critical patient situations where liability is involved. Did Dr. Smith get the message? Did she respond? What did she say? Without an audit trail, it's just one person's word against another's. Even for routine communications such as a consult request or lab result notification, there's often no easy way to verify that a message was actually received.

While some forms of texting can track messages sent and delivered, they cannot determine whether the recipient acknowledged the notification, or whether he or she chose to ignore it altogether. These solutions lack the ability to build in automatic escalations of a message in case the primary recipient—perhaps the first on-call cardiologist in the case of a heart attack patient—is unable to respond in time.

By contrast, leading smartphone apps track when a message is sent and delivered, as well as how the user responded. This response can be a simple yes/no acknowledgement, a free-form message, or even a call back. Some smartphone messaging apps, in tandem with emergency notification or middleware, can take communications to another level and automatically escalate an undelivered message if the user does not respond within a specified period of time. All of this adds up to a nice trail of information that is easy to

access should your legal team ask you to reconstruct the communications around a particular incident.

6. Standard texting does not have advanced ringtone and repeat notification abilities for important messages

While it's always nice to get a text from mom, physicians need to know when an incoming message is truly critical. Although standard texting apps have the flexibility to choose alert sounds for a text message, they are unable to distinguish critical messages from ordinary ones and communicate that information with separate sounds. Apps designed for healthcare providers, by contrast, can offer priority-based ring tones for incoming messages to differentiate work from personal, and clearly identify whether messages are high, medium, and low priority.

There are also times when smartphones are put in silent mode. Critical messages that arrived with a silent flash or vibrate would again be at risk for being overlooked. Leading smartphone messaging apps can override a smartphone's silent mode, audibly notifying the user of a serious message when the ringer is off for everything else.

Finally, for those urgent messages, messaging apps created specifically for critical communications can be programmed to automatically deliver repeat notifications until the user acknowledges the message. Standard texting does not offer this advanced capability beyond a second notification.

CONCLUSION: THERE'S A BETTER WAY

While the ability to send standard text messages is an effective way to stay in touch with friends and family, it's just not acceptable when it comes to patient care. Software that is specifically designed for encrypted smartphone messaging offers another level of service and security for critical healthcare communications. Secure messaging apps can offer traceability to help staff close the communication loop with confidence and accountability in mind. They also keep critical notifications separate from casual conversations to help busy clinicians prioritize their time. Ultimately, better communications mean a more efficient staff and happier, healthier patients. Hospitals—and patients—are better off leaving standard text messaging by the wayside for critical communications.

Don't U think?

SUMMARY		Standard Texting	Secure Smartphone Messaging App
Integration With Hospital Directory/On-Call Schedules			
Ability to message people using just their names versus finding exact phone numbers			✓
Ability to message to a function/role such as the on-call specialist			✓
Integration With Nurse Call and Patient Monitoring Systems			
Allows a nurse to receive and respond to a patient request			✓
Ability to receive test results and patient monitoring alerts on mobile devices			✓
Separate Message Inbox			
Critical hospital messages are separated from those sent by friends/family			✓
Messages can be set to take over the phone's screen and demand attention/response			✓
Security and Encryption			
Encrypted message transport			✓
Ability to lock application and require PIN to get messages			✓
Automatically remove messages after period of time/message threshold			✓
Ability to wipe all messages remotely in case of loss/theft without wiping whole device			✓
Message Traceability / Escalations			
Track status of message – when sent, delivered	✓		✓
Track how recipient responded			✓
Automatically escalate undelivered message if no response in set amount of time			✓
Priority Ring Tones and Repeat Notifications			
Different ring tones based on message priority			✓
Ability to override device's silent mode for critical messages	Limited		✓
Urgent messages can be set to be delivered repeatedly until the user responds			✓



ABOUT SPOK

Spok, Inc. (NASDAQ: SPOK) is proud to be a leader in critical communications for healthcare, government, public safety, and other industries. We deliver smart, reliable solutions to help protect the health, well-being, and safety of people around the globe. More than 125,000 organizations worldwide rely on Spok for workflow improvement, secure texting, paging services, contact center optimization, and public safety response. When communications matter, Spok delivers.

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