



# SIX MISTAKES HOSPITALS MAKE WITH CONSUMER TEXTING APPS

# NOT ALL MESSAGES ARE CREATED EQUAL

The critical messages sent to clinicians in hospitals are unlike communications in other industries. They often contain instructions, questions, and test results that affect the care and safety of patients. In cases involving heart attacks, respiratory distress, extreme pain, and other serious medical situations, these messages are urgent and require staff to act quickly.

When time-sensitive messages are sent using consumer text messaging apps, the inability to designate them as urgent can impede care and put extra burden on staff to get the confirmations they need. This SMS—short message service—way of communicating embraced by smartphone users everywhere is dangerous in hospitals for critical code calls and consult requests because there is a risk that important actions could be delayed, or never happen at all.

Critical, high-priority healthcare messages need to demand a recipient's attention and acknowledgement. They also need to be tracked to know when they are opened, responded to, and what that response was. Text-and-forget isn't an acceptable practice for 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. Here are six reasons why using consumer texting apps in healthcare is inappropriate, and how your critical messaging workflow can and should meet a higher standard.



# 1 Consumer texting apps don't integrate with important information sources, such as your hospital's staff directory or on-call schedules

The last thing staff need to worry about when sending a critical message is digging around various systems to determine who's on call, or merely hoping they have the right phone number from a printed list at the nurses' station. Because consumer texting plans 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 when physicians change their phone numbers? That information will likely be given to the operator group, but is the ED 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 secure texting app can integrate with your hospital's directory database and 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 "cardiologist." Even if changes to the schedule were recently made, by integrating with the scheduling system, updates are available in the app right away. The sender can quickly begin drafting a note that will be routed to the correct provider.

Consumer-grade texting and even many secure texting apps do not have access to this type of current contact information for the sender, so there's a lot more room for error. Staff efficiency and patient safety can suffer as a consequence.

» "We send a lot of code calls using [a secure messaging app] instead of announcing them overhead. Our operators can see if all messages are acknowledged. The audit trail also offers proof that a message has gone through."

Margaret Quirie  
Director, Library Services  
and Telecommunications  
The Ottawa Hospital



**SEE HOW THE OTTAWA HOSPITAL** is using secure messaging to support staff communications, increase provider satisfaction, and give providers more time with patients.



Nurse in patient room needs to message patient's care team



Uses EMR app to look up patient



Selects care team directly in EMR app



Secure texting app is launched with group message for care team

## 2 Consumer texting apps can't work with clinical systems and send patient care alerts to nurses and physicians

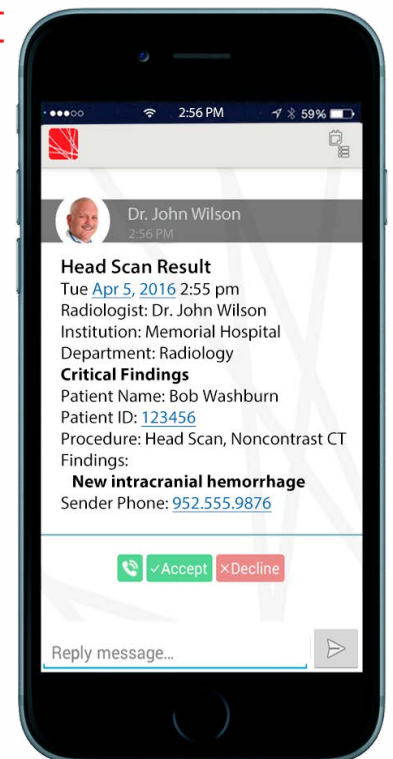
Consumer texting apps are not equipped to receive messages from external systems, and in healthcare this is a big limitation. A robust secure texting app can allow a nurse to receive nurse call alerts for patient assistance and determine the patient's need from their mobile device, without always requiring 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 from the radiology information system (RIS) or laboratory information system (LIS) are ready to be viewed. A secure texting app designed specifically for healthcare can also go above and beyond simple security for clinical communications by integration with the electronic medical record (EMR) system. Within the EMR, staff can look up the patient's name and launch a secure message that will reach the entire care team on their mobile devices, saving time once spent messaging each person individually. These specialized abilities help streamline clinical workflows and eliminate redundant steps.



## 3 Consumer texting app inboxes do not separate critical hospital notifications from those sent by friends and family

In healthcare, the distinction between important and unimportant communications is usually 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 for life-threatening situations are designed to address this problem. They get a user's attention for critical communications, and these messages can be set to completely take over the screen on the recipient's phone to demand their attention and response. That is not something consumer texting applications can do. And these urgent messages are delivered to a separate, secure inbox reserved for work-related notifications. For patients, this means clinicians are seeing the right messages quickly. For physicians, there's peace of mind in knowing that important communications are highlighted and kept separate from non-work activities.



## 4 Most messages sent via consumer texting apps aren't secure

Electronic protected health information (ePHI) is highly sensitive, and there can be significant financial penalties for organizations that fail to protect it. Everyday text messages are sent without encryption, 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 lock the texting application separately with a PIN to prevent unauthorized access. And finally, your IT team cannot remotely wipe clinical text messages from a mobile device without also wiping personal information the device's owner might wish to keep. These precautions are a must in healthcare.

The alternative is an application that provides the security and information management lacking from the consumer texting app found on most phones. Whether messages are sent from a smartphone, 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 HITECH compliance. Healthcare staff need a messaging app that encrypts communications from the time they leave the sender's fingers until the recipient's app is unlocked and decrypts them.

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 personal data on the phone in the event it can be recovered.

## 5 Consumer texting apps don't 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. And what if there is a sentinel event or other critical patient situation where liability is involved? Without an audit trail to verify that messages were received and acknowledged, 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 fail to reveal whether the recipient acknowledged the notification, chose to ignore it, or never responded at all. Aside from this uncertainty, consumer texting apps also lack the ability to escalate a message to the next-available clinician in case the primary recipient—perhaps the first on-call cardiologist in the case of a heart attack patient—is unable to respond quickly.

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 secure texting apps, in tandem with emergency notifications, 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 an easily accessible trail of information should your legal team ask for a reconstruction of the communications that unfolded during a particular incident.



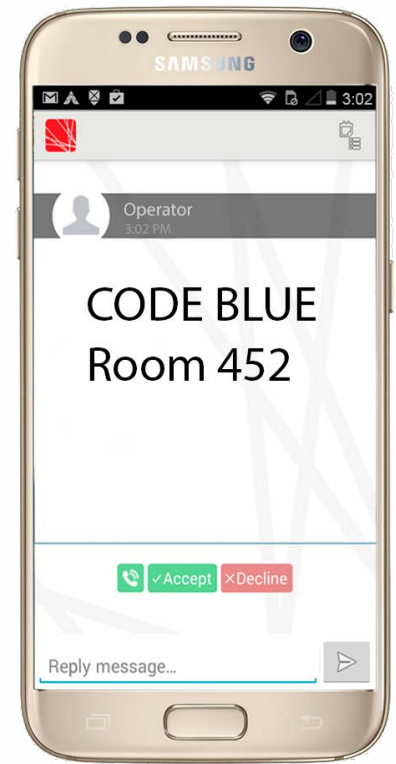
**READ HOW  
FROEDERT  
HOSPITAL** improved  
provider satisfaction,  
enhanced staff  
communications, and  
increased the assurance  
of delivery and receipt  
of messages.

## 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. Consumer texting apps have the flexibility to choose alert sounds for a text message, but they are unable to distinguish critical messages from ordinary ones and relay that information with separate sounds. Apps designed for healthcare providers, by contrast, can offer priority-based ringtones that differentiate incoming work and personal messages, and clearly identify whether messages are high, medium, or low priority.

There are also times when smartphones are put in silent mode. Critical messages that arrive with a silent flash or vibrate are at risk for being missed. Leading smartphone messaging apps can override a smartphone's silent mode and audibly notify the user of a serious message when the ringer is off for everything else.

Finally, for those urgent messages, apps created specifically for critical communications can be programmed to automatically deliver repeat notifications until the user acknowledges the message, to escalate a message to the provider's other devices, or to escalate critical notifications to another provider altogether if the first recipient fails to respond quickly. Consumer texting does not offer these advanced capabilities beyond a second notification.



## Conclusion: There's a better way

While the ability to send text messages is an easy way to stay in touch with friends and family, this method of communication needs to be considered in a different light within a healthcare environment. A solution specifically designed for encrypted 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 can help staff reach the right on-call clinicians and rest assured they have the latest contact information right in the app. 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 consumer text messaging by the wayside for critical communications.

SUMMARY	Consumer Texting Apps	Strategic Secure Messaging Apps
<b>Integration with Hospital Directory/On-Call Schedules</b>		
Ability to message people using just their names versus finding exact phone numbers		✓
Ability to message a function/role, such as the on-call specialist		✓
<b>Integration with Nurse Call and Patient Monitoring Systems</b>		
Allows a nurse to receive and respond to a patient request		✓
Ability to receive test results and patient monitoring alerts on mobile devices		✓
<b>Separate Message Inbox</b>		
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		✓
<b>Security and Encryption</b>		
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		✓
<b>Message Traceability/Escalations</b>		
Track status of message—when sent, delivered	✓	✓
Track how recipient responded		✓
Automatically escalate unacknowledged message to intended recipient's alternate device, or another individual, if no response in set amount of time		✓
<b>Priority Ringtones and Repeat Notifications</b>		
Different ringtones 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, INC.

Spok, Inc., a wholly owned subsidiary of Spok Holdings, Inc. (NASDAQ: SPOK), headquartered in Springfield, Va., 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. Organizations worldwide rely on Spok for workflow improvement, secure texting, paging services, contact center optimization, and public safety response. When communications matter, Spok delivers.