



SPOK[®] MESSENGER

Improving Staff Efficiency and Patient Care With
Timely Communications and Critical Connectivity



THE CHALLENGE OF PROVIDING PATIENT CARE WHILE MAINTAINING EFFICIENCY

Many hospitals today face the same challenge. Everyone agrees that quality and speed of patient care are essential. Yet, the highly mobile staff at most healthcare facilities often cannot provide the best care possible due to poor communication procedures. Staff members have become frustrated at the inefficiency that results with undirected updates and alerts being sent to clinicians and other staff members. One patient's lab results have come in. Another is reporting pain through the nurse call system. A third's heart monitor is beeping. Someone wants to speak with a doctor. The security system is acting up. The list goes on.

How has this happened? It's simple. Today's technology—point-of-care, safety, nurse call, and other systems—generates a lot of valuable information that needs to be shared. The trouble is that it's not being shared in meaningful ways with the right people. The result is slower response to critical events, and patient care, safety, and satisfaction can suffer.

ENABLING CRITICAL CONNECTIVITY AND FAST RESPONSE

Spok® Messenger is an intelligent, FDA 510(k)-cleared solution that sends critical information and updates from your alert systems, such as nurse call, patient monitoring, and many others to mobile staff on their wireless communication devices. At a high level, it creates an enterprise-wide approach to the management, prioritization, and response to key events. This includes the ability to send messages to the right people based on rules set up in your hospital, including escalated communications whenever necessary. It also means you can manage devices easily and allocate staff appropriately.

Ultimately, being able to reach mobile team members within seconds of a critical alert improves overall workflow, staff productivity, and the comfort and safety of everyone in your facility.

Spok Messenger works with virtually all end user communication devices on the market, including smartphones and tablets. This is key as "smart devices" have become an essential component of hospital communications. Spok Messenger sends alerts to iPhone®, Android®, and BlackBerry® phones and tablets. This capability enables a streamlined workflow where critical information flows securely from clinical machines to mobile caregivers to additional caregivers if needed, all in the interest of top-notch patient care.

> FDA 510(k) Clearance

Spok Messenger has received 510(k) clearance from the U.S. Food and Drug Administration (FDA) as a class II medical device. For hospitals, this clearance means Spok is ensuring its solution is keeping pace with key industry standards and guidelines.

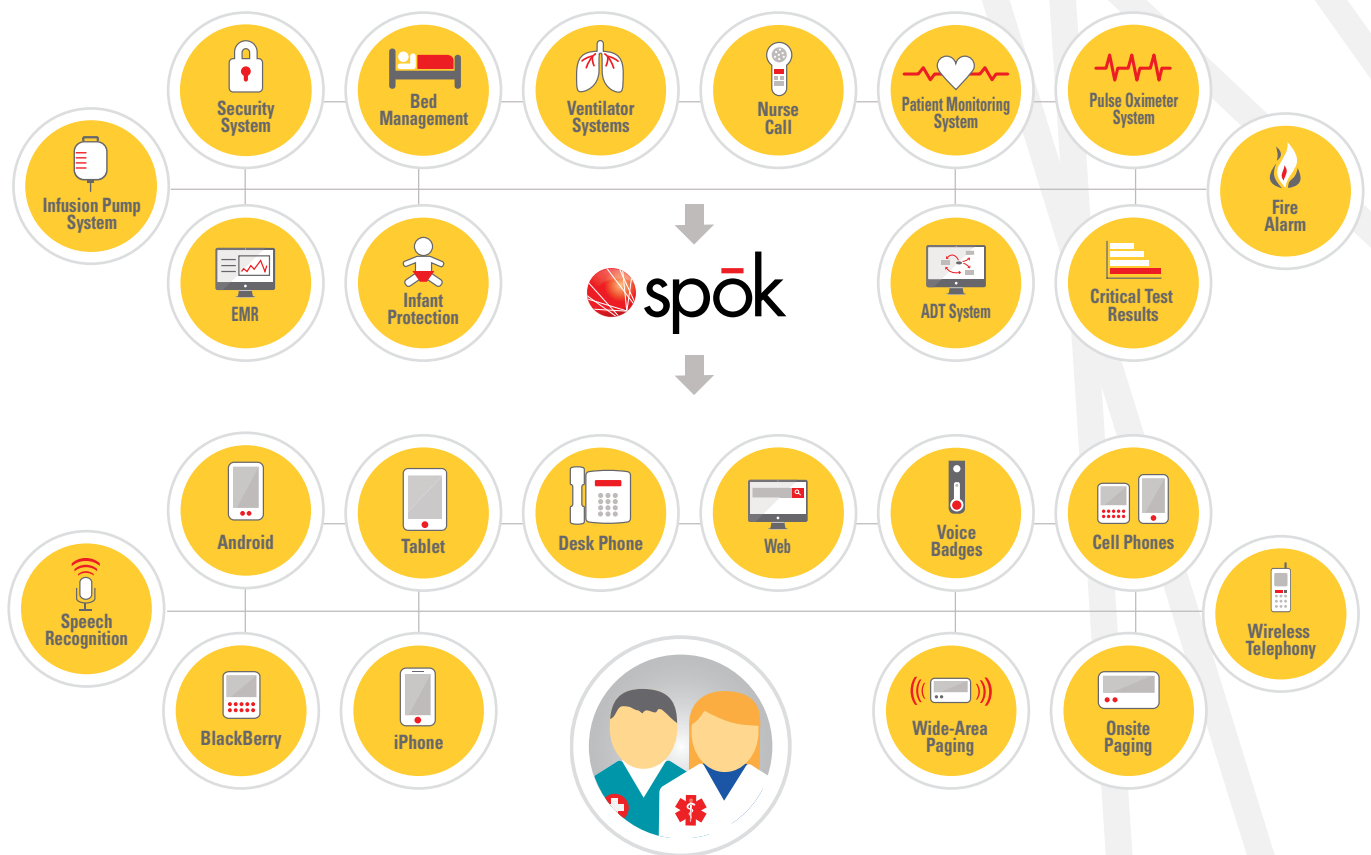
MANAGING TODAY'S SOURCES OF INFORMATION

Healthcare organizations need effective ways of centralizing all of the information generated by clinical and security systems and distributing it to the right person. They also need technology with demonstrable ROI.

Spok enables healthcare organizations to expand the possibilities of their existing communication infrastructure with a critical layer of connectivity and meaningful information sharing. As the leader in this space, Spok lets you create powerful linkages among your systems, technology, and staff. Erasing system boundaries is essential to your ability to achieve ROI, higher levels of efficiency for staff, and better patient care, safety, and satisfaction.

➤ "The [Spok] system helps us provide better patient care by letting us alert staff faster and with more relevant information than before."

Steve Ridenour
Systems Manager
MedCentral Health System



LEVERAGING BEST-IN-CLASS CAPABILITIES

PROVIDING THE FUNCTIONALITY THAT ENABLES QUICK RESPONSE

Integration to your communication devices: Whether your organization uses in-building wireless phones, LED signs, voice communication badges, pagers, smartphones, or even all of them in the same facility, send staff alarms and updates on the appropriate devices at all times. Spok Messenger has proven interoperability with virtually all communication output devices. (See the complete list on the next page.)

Mobile web messaging: Leverage support for mobile web-based messaging with any Spok Messenger user or station from Android or iPhone clients.

Alarm filtering: Establish rules that direct the right alarms to the right staff members to eliminate unnecessary alerts. Filtering also means off-duty staff aren't bothered by updates that don't occur during their shift.

Assignment client: Enhance workflows and increase efficiency with assignment and scheduling tools. This means that updates are sent to the right person based on his or her role and device preferences.

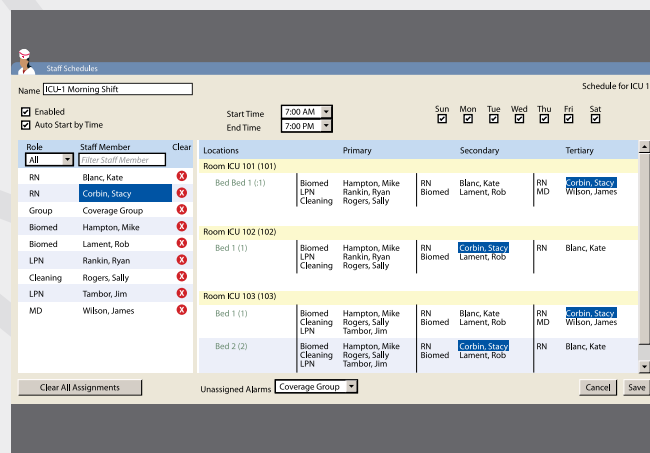
Integrated messaging using industry-standard methods for common alarm/input systems (HL7)

standards-based systems: Systems such as lab results, radiology results, and patient vitals can be directly linked to your staff's wireless devices for fast updates. Doctors no longer need to call down to the lab requesting results, the lab techs no longer need to play phone tag with the doctors, and overall patient care is improved by speeding up these communications. Spok is an active participant in the efforts of Integrating the Healthcare Enterprise (IHE) to standardize these systems for ease of implementation. Spok views this organization as the future of hospital system integration and even holds a seat on the IHE standards board.

ENABLING SECURITY AND EASE OF ADMINISTRATION

User-configured access and filtering by department: Let users see only what they need to based on their role/department. Advanced filtering means fewer broad-based alerts go to people who don't need to receive them.

Extensible messaging support: Plan for the future with an extensible system that can grow with your organization as new devices and systems are required. You won't have to forklift your entire messaging strategy every time something changes.



Staff assignment screen:
View staff assignments by shift,
including secondary and
tertiary personnel who will receive
message updates.

Name	Unit	Location	Duration	Assignment	Alarm Source	Status
VTACH	West Tower 3	Room 3004 Bed 2	0:00:24	B.Arnsen, J. Tomas	Patient Monitoring	Delivered
Shower Call	West Tower 3	Room 3012 Bed 1	0:00:32	J. Timons	Nurse Call	Read
Normal Call	West Tower 2	Room 3018 Bed 2	0:00:47	M. Walters	Nurse Call	Read
Bed Exit	West Tower 3	Room 3005 Bed 1	0:00:22	J. Tomas, B.Arnsen	Bed Management	Delivered
HR Alarm	West Tower 2	Room 3009 Bed 2	0:00:10	K. Andrews	Patient Monitoring	Queued

Active Alarms screen:
View all active alarms on the Spok Messenger system with duration and configurable colors for alarm types or priority.

Web-based administration: Many functions within Spok Messenger can be accomplished securely online. This centralized, thin-client approach makes the solution easier to deploy and maintain.

Integration with the full Spok suite: As a leader in critical communications, Spok offers healthcare organizations a broad suite of integrated solutions. In addition to Spok Messenger, this spans communication tools for contact center management, web-based employee directories, on-call scheduling, speech recognition, enhanced 911, emergency and incident management, smartphone communications, critical test results management, and paging.

PROVEN INTEROPERABILITY AND INTEGRATIONS

SPOK MESSENGER SENSES SYSTEM ALERTS AND SENDS MESSAGES

- Bed management
- Building automation
- Computer-aided dispatch
- Computerized physician order entry (CPOE)
- Critical test results management
- Electronic medical records
- Fire alarms
- HVAC
- Infant abduction
- Infusion pumps
- Lab information systems
- Location-based services
- Medication management
- Nurse call
- Operator consoles
- Patient information systems
- Patient monitoring
- Pneumatic tubes
- Pulse oximeters
- Security
- Ventilators

COMMUNICATION DEVICES RECEIVING MESSAGES AND FACILITATING RESPONSE

- Smartphones (iPhone, BlackBerry and Android)
- Tablets
- Voice communication badges
- Two-way pagers
- In-house wireless telephones
- Pagers (onsite and wide area)
- LED signs
- SMS
- Plasma / LCD
- Email interface
- Operator consoles

ENTERPRISE-READY ARCHITECTURE

- High reliability, scalability, and failover capabilities mean less downtime, you won't suffer from slow response, and you won't outgrow the system.
- The Spok Health Status Monitor improves solution resiliency by detecting potential issues and sending notifications to both Spok and the customer. This module is included with Spok solutions to help with suite-wide reliability, monitoring, and notification.
- Highly scalable system architecture, supporting extensibility and redundancy
- Compliant with VMware®
- Supports storing data on customer SAN
- Multi-user, IP-based messaging platform operating under Microsoft® Windows®
- Client software is browser-based and has no need for fat clients on machines

WORKING WITH THE LEADER IN CRITICAL HEALTHCARE COMMUNICATIONS

- Spok Messenger is field-proven and in use at hundreds of locations worldwide
- Spok Messenger is FDA 510(k) cleared as a class II medical device
- Spok is committed to working with a wide array of device vendors, always adding new integrations
- Spok Messenger is a strategic focus for Spok and thus receives R&D spend for product enhancement
- Full suite for critical communications
- 24 / 7 / 365 in-house support

SPOK MESSENGER: BOTTOM LINE

- Improve care and safety
- Improve satisfaction of staff, patients, and family members
- Improve staff efficiency
- Work with a company with proven experience and referenceable customers



SPOK MESSENGER IN ACTION AT MAPLE GROVE HOSPITAL

Maple Grove Hospital in Maple Grove, Minn., is a forward-looking organization designed and built to live up to its mission of delivering healthcare as it ought to be. This included using communication technologies and workflows that would help increase patient safety and staff efficiency.

Maple Grove uses Spok Messenger to communicate important messages from patient monitoring and nurse call systems to the right staff member via voice communication badges, pagers, Wi-Fi phones, and email. At Maple Grove, processes are smooth, chaos is low, and patients are pleased. In fact, the facility is among the top-ranking hospitals in the nation for its patient satisfaction scores regarding willingness to recommend.



EXAMPLES OF THE COMMUNICATION FLOW AT MAPLE GROVE HOSPITAL



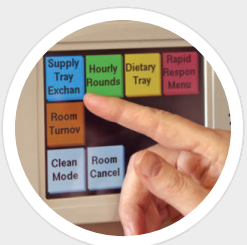
Using the nurse call system, the patient can select options for nurse, pain, water, or toilet.



Depending on the selection, the message is routed to the appropriate person. This may be a nurse, orderly, or other person.



Here the patient's nurse received the request and provides assistance quickly, increasing the patient's comfort. Maple Grove Hospital ranks in the top 14% of HCAHPS scores for Nurse Communication.



A nurse realizes a patient's room supplies are running low and presses the Supply Tray Exchange button. As the choices show, there are multiple actions a nurse can request from a patient's room.



A notification immediately goes to an on-duty supply technician.



The message displays the location and tray to be exchanged.



The technician efficiently refills the tray, allowing the nurse to stay with the patient and reducing noise on the floor.



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. 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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