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 possible care due to poor communication procedures. A combination of staffing shortages and alert fatigue for staff and their patients has affected both patient safety and satisfaction at many healthcare facilities. Staff members have become frustrated at the inefficiency that results from these conditions. For example, one patient's lab results come in needing attention. Another is reporting pain through the nurse call system. A third's infusion is ending and the bag needs to be replaced. Someone wants to speak with a doctor. The list goes on.

How has this happened? It's simple. Today's technology—point-of-care, safety, clinical, 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. To facilitate proper responses to patient needs, routing and appropriate notifications of important patient events to the best available resources becomes critical.

Enabling critical connectivity and fast response

Spok® Messenger is an intelligent, FDA 510(k)-cleared software 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 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 and alerts to the right people based on your hospital's procedures, including escalated communications whenever necessary. It also means you can easily manage devices and appropriately allocate staff.

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, which is vital with hospitals supporting more and more devices across the many departments and roles working within them. This capability streamlines cross-departmental alerting workflows, which enables critical information flowing securely and efficiently — 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 software device. For hospitals, this clearance means Spok is ensuring its solution is keeping pace with key industry standards and guidelines.

CASE STUDY: UPMC PINNACLE

1400 messages a day
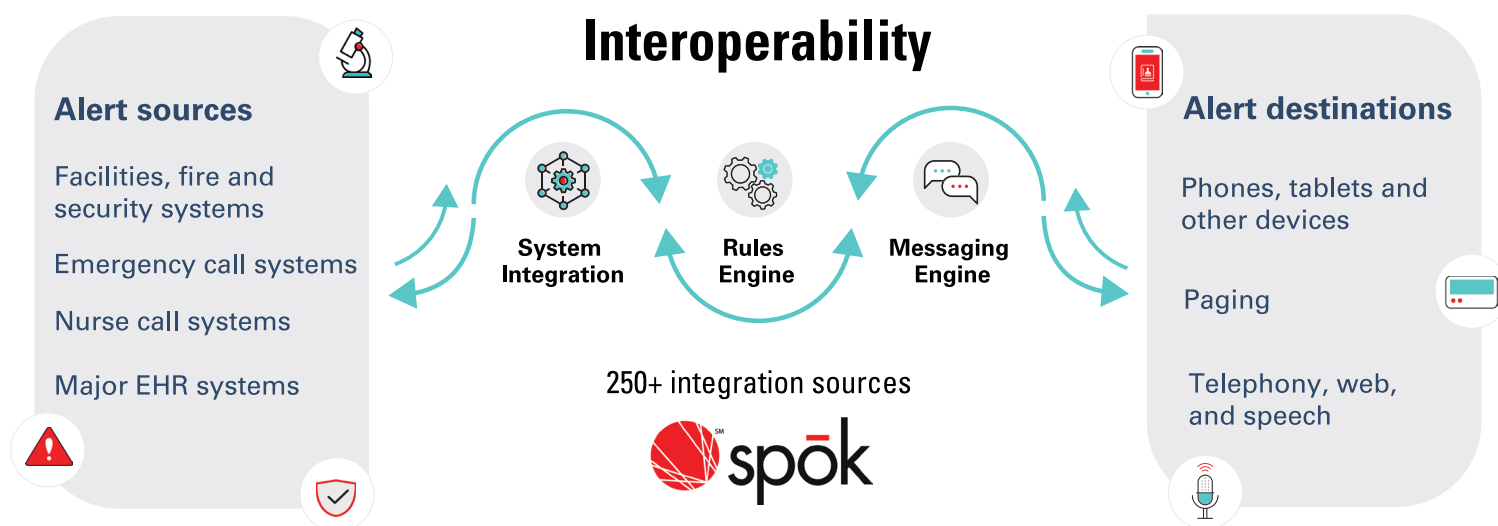converting hallway conversations and creating a more restful environment.

Read now

Managing today's sources of information

Healthcare organizations need effective ways of centralizing alert management of all clinical and operational systems and distributing alerts or messages 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 reduce alert fatigue to promote better patient care, safety, and satisfaction.

Interoperability

Alert sources

Facilities, fire and security systems

Emergency call systems

Nurse call systems

Major EHR systems

System Integration → Rules Engine → Messaging Engine

250+ integration sources

spōk

Alert destinations

Phones, tablets and other devices

Paging

Telephony, web, and speech

EBOOK

3 things you need to know about communication technology

THE INTEROPERABILITY CHECKLIST
3 things you need to know about communication technology

Read now

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 alerts and updates on the appropriate devices at all times. Spok Messenger has proven interoperability with virtually all communication output devices.

Mobile web messaging: Leverage support for mobile, web-based messaging with any Spok Messenger user or station from the mobile app.

Alert filtering: Establish rules that direct the right alerts 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 and unavailable staff can be automatically escalated around to ensure efficient response times.

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

Messages originating from patient care systems already in place today: Systems such as laboratory, PACS, nurse call, and patient care devices can be directly linked to your staff's devices for fast updates on patient conditions, general updates or status changes. Nurses can receive more real-time notification of patient needs and better ensure procedures are done on time. Doctors and nurses no longer need to call down to the lab requesting results, the lab techs no longer need to play phone tag trying to find the responsible caregiver to receive critical results, and overall patient care is improved by speeding up these communications.

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

> "We have seen improved productivity of our clinical staff and improved satisfaction, but the best result has been our ability to improve patient satisfaction. With better, more efficient communications, we have allowed our nurses to focus on making the patient experience the best it can be."

Michelle Jones
Executive Director, Customer Service Center
Presbyterian Healthcare Services

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.

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 9-1-1, emergency and incident management, smartphone communications, critical test results management, and paging.

Clinical context: Spok Messenger allows for additional patient information from the EHR to be delivered along with the message from third-party systems such as nurse call. This helps the clinician by giving additional clinical context for these messages, such as patient name, diagnosis detail, live waveforms, and physician observations. Using alert surveillance technology, care teams can also use smartphones to remotely view real-time patient data (including waveforms) from the various patient care devices.

Monitor and optimize communication methods

Spok Messenger's reporting and dashboard features provide a user-friendly way to showcase operational metrics for enterprise communications. These dashboards enable users to access historical data to understand system health, performance, and staff response times to crucial patient safety or workflow matters.

- Reduce alert fatigue by prioritizing alerts that necessitate human interaction.

- Provide swift access to data and insights regarding communication effectiveness

- Enable feedback and collaboration among stakeholders

- Support decision-making and optimization of communication resources and configurations

- Enhance transparency and accountability of communication performance, which directly impacts patient outcomes

- Enable critical connectivity and rapid response
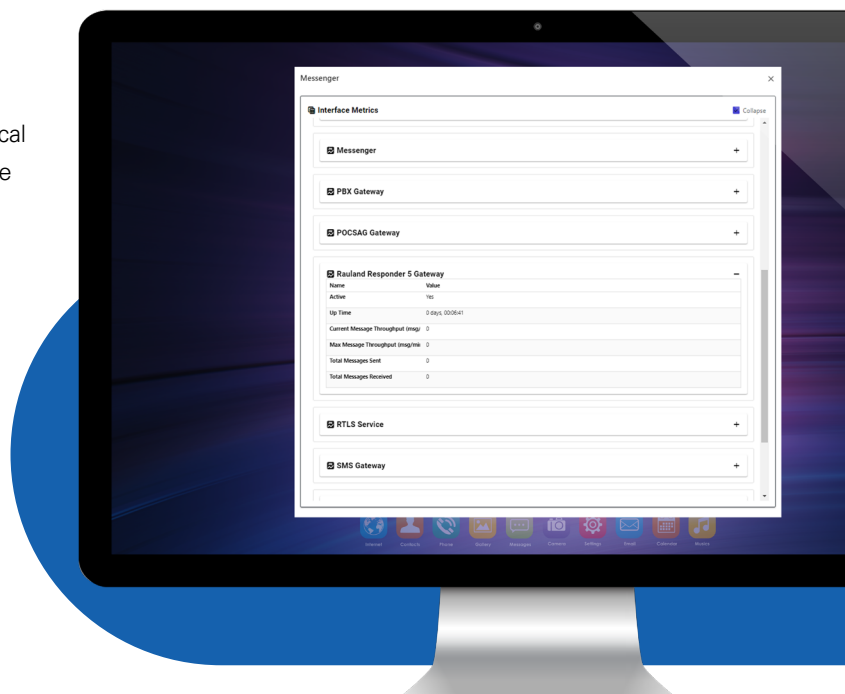
Proven interoperability and integrations

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 and tablets
- Voice communication badges
- Two-way pagers
- Pagers (onsite and wide area)
- In-house wireless telephones including, Zebra®

- LED signs
- SMS
- Plasma / LCD
- Email interface
- Operator consoles
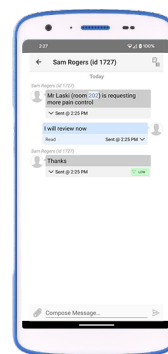
Zebra HC50

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
- Highly scalable system architecture, supporting extensibility and redundancy
- Compliant with VMware®
- Supports storing data on customer SAN
- Multi-user, IP-based messaging platform operating 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 software device
- Spok is committed to working with a wide array of device vendors, always adding new integrations
- 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, Minnesota, is a forward-looking organization designed and built to live up to its mission of delivering healthcare as it ought to be. This includes using communication technologies and workflows that 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.

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Messenger
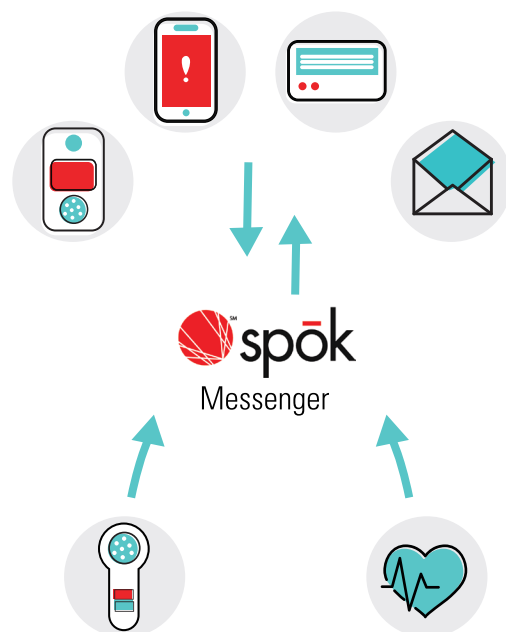
Examples of the communication flow at Maple Grove Hospital

3032:
In Pain

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 receives the request and provides assistance quickly, increasing the patient's comfort.

3236:
Exchange Tray 1

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 Alexandria, Virginia, is proud to be a global leader in healthcare communications. We deliver clinical information to care teams when and where it matters most to improve patient outcomes. Top hospitals rely on the Spok Care Connect® platform to enhance workflows for clinicians and support administrative compliance. Our customers send over 70 million messages each month through their Spok® solutions. Spok enables smarter, faster clinical communication.

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