SPOK AND INTEROPERABILITY

Improving workflows and communications in healthcare
Spok continually evaluates new ways to expand the value of Spok Care Connect® across the healthcare IT ecosystem to help your organization meet your goals in light of investments made in electronic health record (EHR) systems. Spok offers a variety of integration and interoperability options to share data and functionality with hospital systems key to patient care. We also leverage industry standards such as HL7 and participate in industry initiatives such as Integrating the Healthcare Enterprise (IHE).

With the wealth of information EHRs provide, it becomes more important to ensure that staff can respond to the most important clinical alerts quickly, without being distracted by less urgent messages. Adding detailed clinical information to an event with data from the EHR will drive faster, more efficient decision-making for providers.

The key is enabling staff with better mobile alerting and communication technology that integrates with the EHR system and helps staff address time-sensitive patient needs as soon as possible.

**INTEROPERABILITY WITH INFORMATION SYSTEMS**

**MODES OF INTEGRATION**

- **SMTP:** Generic text-based messaging
- **HL7:** Healthcare-specific formatted messaging
- **API:** Programmed integrations
- **URL:** Launch of 3rd-party application with or without context

**WHY DIRECTORY INTEGRATION IS KEY**

By bringing your organization’s contact information and on-call schedules into a centralized system, staff across the organization can find the person they need faster, particularly when a secure text messaging app is layered into the mix. Whether it’s a physician needing a consult or a member of the care team letting a physician know their patient is prepped for surgery, this integration saves time and can improve patient care in emergencies.

**Save Time**

- **For physicians:** more time with patients
- **For contact center staff:** focus on code calls and customer service
- **For patients:** better outcomes

**Improve Satisfaction**
CORE BUSINESS CHALLENGES

- Patient experience and satisfaction scores
- Staff and workflow efficiencies
- Reimbursement vs. overall costs
- Patient safety and quality outcomes
- Physician-to-physician collaboration
- Caregiver/physician collaboration

INTEROPERABILITY WITH A VARIETY OF INPUTS AND OUTPUTS

Flexibility of Inputs
- Contact Center
- Pulse Oximeter
- Nurse Call
- Patient Monitoring
- Emergency Notification
- Test Results
- Infant Protection
- ADT System
- Ventilator
- Bed Management
- Fire Alarm
- Infusion Pump

Flexibility of Outputs
- Smartphones
- Wi-Fi Phones
- Voice Badges
- EHR
- Secure Texting
- Tablet
- Wide-Area Paging
- Onsite Paging
- Desk Phone
- Web
- Wearables
- Two-Way Radios

Modes of Integration
- SMTP
- HL7
- API
- URL

INTEROPERABILITY WITH INFORMATION SYSTEMS

Integrating the Healthcare Enterprise (IHE)

Spok has been a member of Integrating the Healthcare Enterprise (IHE) since 2009 and holds a seat on the IHE Committee. This well-respected healthcare consortium promotes interoperability in the industry. Spok participates in IHE Connectathon testing events with a focus on device system integrations, and our solutions are tested against a wide variety of enterprise healthcare companies supporting EHR, patient monitoring, infusion, and OR workflow. We also participate in technical and planning committees, shaping the future of hospital system integration.
SAMPLE USE CASES

CONNECTING CALLS TO PATIENT ROOM

Call center receives call for patient Sam Jones

Operator searches patient directory

Operator Console

Connects call

ADT System

SPEEDING DISCHARGE PROCESSES

Dr. Gold is the attending physician for Jill. After visiting with her, he determines that she needs meds twice daily.

Dr. Gold enters this into Jill’s EHR

Spok can reference scheduling data to send this discharge note to Jill’s nurse, charge nurse, housekeeping, and patient placement. Her doctor puts in orders including medication reconciliation.

INCREASING THROUGHPUT FOR ADMISSIONS

Patient being admitted from ED

Patient being admitted from ED

ADT System

Transport notified of patient transfer assignment

Nurse alerted of new patient assignment
SAMPLE USE CASES

AFTER-HOURS ANSWERING SERVICE

Patient calls after hours → Answering service pages physician → Physician calls answering service for details → Physician calls patient and updates EHR

Answering service checks multiple times to see if encounter has been closed

IMPROVING CARE TEAM COLLABORATION

Patient monitoring system sends a secure message to nurse’s Wi-Fi phone showing patient has an elevated blood pressure reading → Nurse securely texts physician with detailed medication request due to elevated blood pressure → Physician enters orders via CPOE

Nurse alerted when orders are available

CONSULT REQUEST

Physician order consult via CPOE → Acknowledgment and audit trail sent to EHR → Consult request sent to consulted physician

Physicians can collaborate securely on patient care
CUSTOMER EXAMPLES

A customer cut code initiation time in half and trimmed the response time. The smoother process has shaved minutes off response time during life-threatening situations when every second counts.

One customer trimmed their door-to-balloon time for code STEMIIs down to under 62 minutes at two different facilities, nearly 30 minutes faster than the national guideline of 90 minutes.

Another customer is using automated messaging and pages sent directly to care provider devices, significantly reducing overhead pages and cutting down on the noise level. The organization frequently gets comments from happy patients about how restful the space is.

TEST RESULTS AND TREATMENT

Doctor receives critical lab results on his smartphone

Checks patient’s vitals, meds, and allergies, then places STAT order for meds via CPOE

Order published

Spok monitors for STAT orders via HL7

Nurse receives STAT order on her smart device

IMPRESS THE ANSWERING SERVICE PROCESS

Save time for physicians

Prevent transcription errors by sending information digitally

Faster care for patients

More efficient for contact center to close tickets
BENEFITS OF EHR + CLINICAL COMMUNICATIONS TECHNOLOGY:

- Enhance physician-nurse communication and care coordination
- Track critical changes in vitals and who was contacted to respond to the situation
- Share test results from the lab and radiology
- Close the loop for critical test results by writing back to the EHR the exact date and time that the ordering physician viewed a critical result for their patient
- Add clinical context to notifications to drive informed clinical decision-making about patient care events
- Reduce readmissions and protect reimbursements by sending patients their doctor’s orders from the EHR via text message
- Improve and speed the discharge process by sending physician orders from the EHR to a patient’s nurse

ABOUT SPOK, INC.

Spok, Inc., a wholly owned subsidiary of Spok Holdings, Inc. (NASDAQ: SPOK), headquartered in Springfield, 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, support administrative compliance, and provide a better experience for patients. Our customers send over 100 million messages each month through their Spok® solutions. Spok is making care collaboration easier.