



Interoperable Communications, Alerting and Notification Systems in Healthcare

Federal Signal — Codespear SmartMsg solution for Healthcare
<http://www.alertnotification.com>

Customer Case Studies

INSIDE

Voice interoperability

Multi-device alert notification and acknowledgement

Automated incident scenario management

Wireless data and video

Multi-lingual translation with text-to-speech communication

Secure audio and data recording and logging

GPS tracking and geo-fencing

Secure chat

About SmartMSG from Federal Signal/Codespear

Easy to use, easy to implement and scalable for your needs:

The Codespear-enabled SmartMSG system features a full menu of flexible offerings, including our server platform, end-user software, dispatch console, GIS console, scenario manager console, dialing manager, lightweight radio interoperability unit and sensor board solutions.

St. Bernards Regional Medical Center in Jonesboro, Arkansas

St. Bernards Medical Center is a 400+ bed acute care hospital that has one of the busiest emergency rooms in the Northern Arkansas and Southeast Missouri region. The center recognized a need for improved personnel communications and, with the assistance of an emergency response grant for interoperable and notification solutions, deployed the Federal Signal SmartMSG critical communications system. With the SmartMSG system, St. Bernard Medical Center now has an enhanced communication system within the hospital that has improved the effectiveness of communication among hospital personnel, the safety of using high-alert medication and the effectiveness of clinical alarm systems.

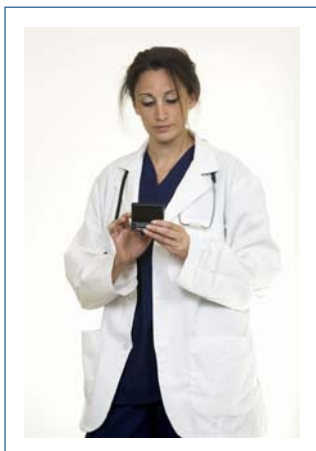
“The personnel at St. Bernards are very pleased with the ease-of-use of the new Federal Signal SmartMSG system,” stated Glenn Bridger, director of engineering and bio-medicine at St. Bernards Regional Medical Center. “It has enabled us to efficiently alert the appropriate staff members during critical and non-critical events to help us provide better service to our patient community.”

The Federal Signal SmartMSG system can send alerts to individuals and groups of staff members through a web-based program via cell phones, smart phones, email, computers, pagers and other communications devices. Additionally, the SmartMSG system tracks staff response times. If response time is too long, other groups will be alerted to assist. The St. Bernards SmartMSG system is integrated with the local Jonesboro Fire Department to enable additional communication.

Michigan District 1 Regional Medical Response Coalition

Ingham Regional Medical Center in Lansing, Michigan, is one of more than a dozen hospitals, EMS agencies and other first responder organizations within Michigan’s District 1 Regional Medical Response Coalition. In addition to sharing a common goal of providing medical care and first responder services to its citizens, these organizations are also brought together by another common thread – their disparate communications systems

"We were instantly able to communicate from any device to any device...cell phones, pagers, UHF radios, VHF radios, land lines, PC's. Voice to text, text to voice, in multiple languages...everyone was amazed." John Waters – Paramedic Supervisor at Livingston County EMS



Enabling communications with any and all devices within your facility.



were made interoperable by Federal Signal's Codespear enabled mission critical communications platform. District 1 had a goal to establish interoperability among its members, and John Waters of Livingston County EMS and chair for the District 1 pre-hospital group, took on the challenge. Ingham Regional Medical Center, McLaren Healthcare is one of the facilities within the District 1 Response Coalition.

Ingham Regional Medical Center, McLaren Healthcare

After evaluating his alternatives, John Waters, Paramedic Supervisor at Livingston County EMS, entered into the first phase of his interoperability deployment by purchasing a Codespear radio interoperability unit (RIU) and 15 licenses of the Codespear SmartMSG Interoperability Software Suite. With this initial deployment, John was able to put to rest the skepticism of many of those around him and successfully interoperated with the 800 mhz digital radios with Michigan State Police, "Establishing interoperability among different organizations with different communication infrastructures and devices is typically a very expensive proposition and usually involves a wholesale standardization to a common set of devices that communicate on the same network frequency, what attracted me to Codespear is that it allowed for me to utilize the existing communication assets of the various organizations, and simply tie them together..."

As the proof of the new communication platform was being proven out among the users, the SmartMSG software was also gaining in popularity. Initially used for its chat communication functionality, and for basic alerting and messaging to the 15 users, other uses were quickly found by Byron Callies, Environment of Care Manager for Ingham Regional Medical Center. "The ease of use and intuitiveness are amazing. Everyone is able to use it, and wants to use it when they understand the capabilities," states Byron.

The SmartMSG software is now being used in many areas of the hospital, and finding new uses for it has become a routine part of Byron's role. "I come across communication problems everyday, and I'm now in the mindset of 'how can Codespear help with this. Much of the time, with Codespear, I'm able to find a solution," Byron commented.

Current applications of Federal Signal SmartMSG system at Ingham Regional Medical Center include:

- Open shift notification – Managers are able to broadcast open shift notifications to all off-duty employees with the click of a button.
- Emergency paging codes – The SmartMSG system can push out a voice message (either computer generated or pre-recorded) to the hospital paging system, while simultaneously sending the notice directly to doctors, nurses, or other individuals involved in the emergency response via cell phone, pager, PDA, e-mail, or any combination.
- Panic / Duress Alarms – Using the SmartMSG sensor board, panic and duress buttons are now interfaced into the SmartMSG system, enabling real time, reliable notification to security personnel.
- Monitoring of Hospital Fire System – A SmartMSG sensor board is triggered when the fire system goes down for any reason, and an alert is sent out letting everyone know that the system is down. To aid in the compliance with NFPA 101 Life Safety Code, a second alert is sent.

The system has grown rapidly due to the satisfaction and success seen by its users. The Region 1 system now has almost 2,500 users on the Federal Signal SmartMSG interoperability system to broaden the community of first responders and improve communication. In addition to the original users, the system now includes dive teams, civil air patrol, SWAT teams, hostage negotiation teams, canine units, county boards of trustees and anyone else that may need to be brought into communications during an incident.

Byron comments, "It is so easy to scale...and it can grow with you, as you have the need and the funding. The fact that it's not tied to devices eliminates any concerns about buying enough radios on the front end...in six months, when you need to add users, you buy the latest and greatest radio, and you know it will work with everything else you have. That makes us feel really good about the Codespear decision, and gives us peace of mind for the future."

Crittenden Regional Hospital in West Memphis, Arkansas

Crittenden Regional Hospital needed advanced interoperability technology to meet the challenges of complex emergencies that cross various organizational boundaries," said Roy Rogers, manager of information technology at Crittenden Regional. "This Federal Signal critical communications system pairs instant interoperability with urgent notification to bring our first responders together easily and quickly in minutes."

With the Federal Signal SmartMSG system, communications equipment is linked to enable various entities to work together seamlessly during emergency incidents and planned events. The system also provides distributed instant messaging architecture that features instant scalability, redundancy and automated fail-over in support of thousands of users across hundreds of servers.

Fully integrated alert notification reaches PCs, wireless handheld devices like pocket PCs, PDAs and cellular phones, along with landline phones, pagers, video enabled devices and radios.

The Federal Signal SmartMSG system offers secure and encrypted communication for alert notifications, voice-over-IP (VoIP) communication, radio linked talk groups and two-way text or voice communication.

SmartMSG in Healthcare

- Emergency Paging/Color-Codes announcements
- Open Shift Notification and Documentation
- Clinical Alarm Systems
- High Alert Medications
- "Single Click" Paging Codes
- Patient Elopement
- Video (Motion Detection and Surveillance)
- Safety Alerts (Bomb Threats, Building Evacuation)
- Decontamination Alert and Response
- Severe Weather Alerts
- Crisis / Mass Casualty Alert, Management and Response

The Codespear enabled SmartMSG system provides a mission-critical communications and nerve center platform, supporting secure communications interoperability, urgent alert notification, incident scenario management and execution, event monitoring, cross-agency data sharing and collaboration. The solution is a redundant system that can be rapidly deployed in stationary and mobile configurations, and occupies a small and agile footprint.

For more information please visit us at <http://www.alertnotification.com>
You can also reach us anytime at: 1.800.548.7229

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