

Case Study

REACT System Deployment at Santa Clara Valley Medical Center

Santa Clara Valley Medical Center (SCVMC), a 574-bed hospital located in Northern California's Silicon Valley, provides a wide range of sophisticated specialty services and is a leader in medical technological innovation. Treating over 59,000 patients each year, SCVMC is the only medical center in the region that provides advanced services including a world-class rehabilitation center, a regional burn center, a high-risk maternity program, and a trauma center.

Challenges

With over 5,000 employees located in 35 buildings throughout Santa Clara County, the Santa Clara Valley Medical Center needed a quick and reliable method for communicating vital instructions and procedures to all of its employees, both on-campus and in outlying clinics and facilities, during a critical incident. The existing public address system covered only a portion of the main campus, and phone tree calling methods were too slow to reach everyone in time.

Incomplete Notification Coverage –the existing public address (PA) system was designed to support doctors and nurses during medical emergencies, but provided little or no support to employees and staff that didn't understand, or didn't need to respond to, medical "Code" alerts. Plus, PA systems do not provide the best solution for communicating the type of plain language instructions that non-medical emergencies require. In busy hospital environments, public overhead audio messages are often unheard, or can cause unnecessary concern for patients and visitors. SCVMC needed a system that could provide detailed messages to targeted groups in different locations, at any time, without broadcasting the same message to everyone.

Slow Call Tree Systems –reliance on phone call tree methods were too time consuming and placed too much reliance on manpower to execute calls to a narrow group of recipients.

SCVMC needed a system that could immediately reach every intended recipient without placing a burden on trained emergency operators, and didn't require key personnel to be in place to pass the messages on.

Joint Commission Challenge –to meet the Joint Commission's mandate to "coordinate the organization's communications, resources and assets, safety and security, and [patient] clinical and support activities during an emergency" to all of the 5,000 plus employees throughout the Santa Clara Valley Medical Center facilities during pandemic outbreaks, earthquakes, emergency room overflows, and dangerous or belligerent person situations, SCVMC needed to find a notification system that could communicate quickly and was not devoted to just clinical staff.

SCVMC reviewed a number of mass notification systems, and the selection criteria included finding a system that could quickly reach all employees at any facility, must be easily installed and easily maintained, and should require only minimal training to use. During their research SCVMC found that some mass notification systems took ten to thirty minutes to reach recipients. Many systems sent the same message to every recipient, regardless of what their role or responsibility required. With REACT, Santa Clara Valley Medical Center found a solution that exceeded their selection criteria.

Solution

The REACT System was the only mass notification solution that could reach all of Santa Clara Valley Medical Center's employees within seconds and provided different sets of detailed instructions to different groups based on location or responsibility. Once a REACT alert was launched to a targeted group, emergency operators could manage a coordinated staff effort by adding updated information, or adding additional groups to the existing alert. Automatic logging would provide an audit trail for post-crisis analysis. REACT was easily

deployed onto the existing SCVMC network, and would seamlessly expand to include new employees and new proposed facilities.

"Administrators in the outlying buildings have used REACT to get detailed alert information, regardless of where they are located on our campus. With REACT, if we are at a different location for an emergency response, we are confident that up-to-date information will be delivered quickly."

*Peggy Albert, SCVMC Emergency
Management Coordinator*

Conclusion

Installed in 2006, Santa Clara Valley Medical Center has been using the REACT System for Hospital Incident Command System (HICS) "code" alerts, emergency room overflow alerts, IT status updates, as well as county wide pandemic response drills, and has made REACT an integral part of their communication system.

- The system is easy to use, and new emergency operators learn to manage the REACT System within their first shift while on the job.
- With the confidence that critical messages are being received, staff load has been reduced considerably and trained responders can focus their efforts on other critical tasks instead.
- Detailed instructions and procedures provide all employees with the type of guidance that is pertinent to each one's role, or responsibility – directing them to respond, or just stay put during a critical situation –and supporting vital business continuity for hospital services that cannot be interrupted at any time.

The success of the REACT System implementation has prompted expansion of the system to those Santa Clara Health and Hospital System employees who work alongside SCVMC to provide best of class service to the Silicon Valley 1.8 million residents.