Why **Hospitality** and **Health Care** Should Meet

More high-touch patient care made possible with the right high-tech tools

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Read this white paper to learn:

- How hospitality fundamentals should inform hospitals' approach to the patient experience for **greater reimbursements and other significant ROI**

- How situational awareness provides the technology framework for **improving communication and access to information** to save time, decrease alarm fatigue and improve patient care

- How the Situational Awareness Framework for Health Care uses integration, automation and customization to **drive critical data to the right individuals, teams or entire populations via various portals and dashboards**

Status Solutions
because RIGHT NOW matters most

In this era of accountable care and shrinking dollars from traditional sources like Medicare, hospitals should think more like hoteliers than health care providers. After all, you need to provide a good experience so people will come back the next time they require health care. Technology can improve the customer experience, and that's a direct impact on your bottom line.

Wouldn't improving communication and access to information make your hospital more safe, secure and comfortable/convenient for patients? Why not take advantage of technology for 1) converging voice, data and wireless networks, 2) mobility, 3) awareness of threats as well as opportunities, and 4) self-service? What about integrating systems and automating processes to save time, decrease alarm fatigue and improve patient care? There's a framework for producing these outcomes, and it's called situational awareness.
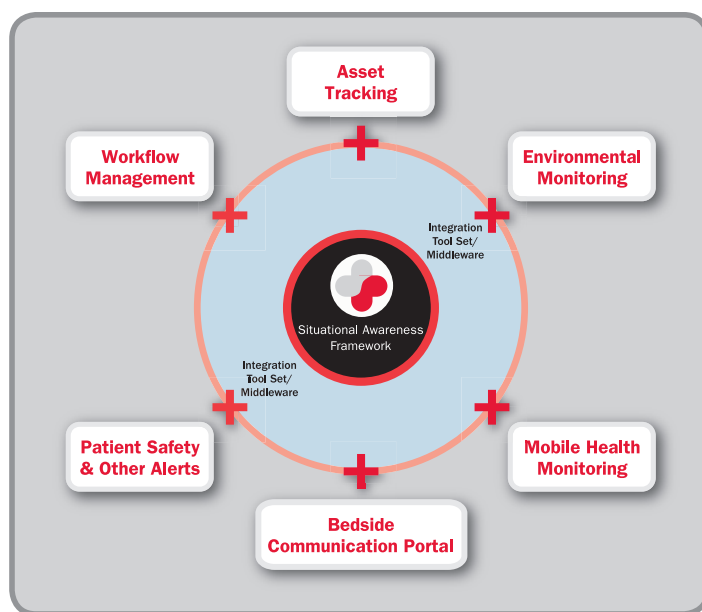
What Is Situational Awareness?

Originally a military term referring to a pilot's operational status and knowledge of immediate threats, today situational awareness refers to real-time information about what's happening within an organization, from a single building to multi-building campus. Besides emergency alerting, situational awareness also applies to business operations. It's all about turning the inefficient — alarms — into the efficient — detailed alerts delivered to the right people on the right devices so they can deal with an unfolding situation in the right way.

Alarms within a hospital originate from a number of systems, but most operate independent of one another, in silos, although alerting equipment and processes may be redundant. And because emergency code broadcasting is still a manual process in many hospitals, delays and omission of critical information can occur. But disparate alarm systems, including those for patient monitoring, can be integrated for centralized monitoring, alerting and reporting.

The Status Solutions' Situational Awareness Framework for Health Care helps clinicians and staff quickly assess, prioritize and respond to a triggering event to protect people, property, business continuity and patient and staff convenience/comfort. At the framework's core is the Situational Awareness and Response Assistant (SARA), an automated alerting engine.

SARA integrates life safety, security and environmental controls, turning alarms from the stand-alone systems into detailed alerts for delivery to virtually any screen: desktops/laptops, smartphones, tablets and digital signage, including TVs and kiosks. The solution includes a wireless sensor network, integration tools for existing alarm and communication systems, and mass notification capabilities on one powerful platform.

There's a lot of ROI associated with saving time, blood, meds and people. Better health care experiences, and reporting to back them up, will lead to greater reimbursements. Really, it all boils down to using the right technology to increase efficiency, which improves patient care. And our tools don't add bells and whistles — we actually take them away to create a more calm and hospitable environment.

Asset Tracking

Workflow Management

Environmental Monitoring

Integration Tool Set/ Middleware

Situational Awareness Framework

Integration Tool Set/ Middleware

Patient Safety & Other Alerts

Mobile Health Monitoring

Bedside Communication Portal

Status Solutions' Situational Awareness Framework for Health Care integrates existing life safety, security and environmental alarm and communication systems, with options for workflow management, mobile health monitoring and bedside communication.

Patient Safety and Other Alerts

Virtually any alarm system — nurse call, telemetry, patient monitoring, infant abduction, fire panels, access control, etc. — can be integrated with SARA for a single point of alarm management. Alerts describing the triggering event, including important details like the patient's room number, are delivered to the appropriate responders via the designated communication devices. SARA's eMessenger delivers pop-up alerts to workstations, and it turns smartphones into mobile command and control centers with intuitive dashboards for receiving and initiating alerts, including mobile duress. Clinicians and staff also can use traditional mobile duress pendants. Either way, SARA's Positioning System (SPS) with vector mapping provides location data so those needing help can be found more quickly.

Workflow Management

With SARA's Staff Assignments Module, point-of-care alerts can be delivered to clinicians via their mobile devices. Therefore, they aren't tied to a nurses' station or panel waiting for an alarm, nor will they have to manage multiple alerting devices. Valuable time is saved, and clinicians can prioritize their responses according to the unfolding situation — checking an elevated blood pressure as opposed to getting ice chips, for example. Manually updating staff assignments on whiteboards during shift changes also can be eliminated.

Emergency Code Broadcasting

Emergency codes typically are communicated to a group of people over a public address system or radio network through the PBX switchboard operator. Because this is a manual process, notifications can be delayed and mistakes made. But with SARA, emergency codes can be communicated directly to staff via their mobile devices, saving time yet providing important details. And with SARA's eMessenger, color-coded, pop-up alerts can be received — or initiated with a single touch — via mobile dashboards.

Surveillance Video Transmission, Recording and Storage

The first minutes of an emergency are critical in determining outcomes, so the ability to view live video from surveillance cameras greatly enhances situational awareness and response. Giving SARA eyes through surveillance camera integration enables live video streams to be viewed from desktops and mobile devices. Cameras are mapped out according to facility floor plans to produce an interactive map. Hovering over any camera icon on that map instantly pulls up live video from that area. The addition of a video server also allows video to be recorded and stored.

Environmental Monitoring

SARA's environmental monitoring capabilities can prevent the loss of convenience/comfort as well as valuable equipment, inventories and infrastructure for normal business operations. A variety of wireless sensors exist for environmental monitoring, including those for checking the operational status and proper function of HVAC systems, power generators and boilers, logging temperatures within medical-grade refrigerators as required for regulatory compliance, and detecting water/humidity in server rooms. If a sudden change occurs or an acceptable threshold is exceeded, an alert goes to appropriate staff for investigation and remediation. Integrating environmental systems further centralizes alarm management and also can increase the ROI of those systems. For example, if a building management system only sends emails, SARA will extend alerting to other communication devices as needed.

Asset Tracking

Besides providing location data to support mobile duress, SPS also can be used to find the last known location of equipment. By attaching tracking devices to wheelchairs and IV pumps, clinicians and staff can quickly locate the equipment they need, again creating greater efficiency so they can spend more time attending to patients.

Reporting Tools

Response time in an acute care environment is critical, as is compliance and other data/trend analysis. SARA records triggering events and their associated alarms, the managed alerts produced, and the subsequent notifications and acknowledgements so reports can be generated for important operational insights. Hospitals can use this information to analyze response times and escalation protocols as well as demonstrate regulatory compliance. For example, histories can be generated to show that refrigeration units for medication are kept within acceptable temperature ranges.

Mobile Health Monitoring

Effective health monitoring enables mobility/independence and turns data into actionable interventions based on personalized care models — in other words, personal situational awareness. Our MIMI (Motion Into Meaningful Information) mobile health monitor establishes individual health and wellness baselines. Alerts are triggered when changes in vitals or activity occur that could indicate an underlying concern. Such early intervention can prevent re-hospitalization and gives patients and their families the benefits of a non-intrusive electronic safety net.

Bedside Communication Portal

A lot of hospitals use iPads or other tablets to access medical records, review test results, etc. Why not allow both clinicians and patients to use this technology at the bedside? With CATIE (Communication and Access to Information Everywhere), clinicians can access important patient information while patients themselves use this always-on bedside portal to communicate with clinicians and staff, control the TV and lights, order their meals and access customized content, such as recommendations for post-op care. The solution includes intercom, message center, digital signage and self-service capabilities.

Increase Efficiency, Improve Patient Care

Ignorance isn't an option in an acute care environment because a lack of information or disruptions in its flow could endanger lives. But trying to respond to alarms from multiple systems causes confusion, inefficiencies and distractions among clinicians, leading to alarm fatigue and negative impacts on patient care. Situational awareness technology can be used effectively in health care environments to keep an eye on all "the stuff," so clinicians can pay more attention to patients, providing them with quality care. This technology platform not only saves lives and property but also protects business continuity and prevents the loss of convenience or comfort.

About Status Solutions

Status Solutions pioneered the use of situational awareness technology for emergency alerting and response management in 2001, based on our founders' decades of experience in computer-telephony integration (CTI) and work with hundreds of clients in senior living and health care across North America. Our software developers and integration engineers are experts in CTI and various communication protocols (SIP, XML, HTTP, TCP/IP, UDP, SMTP, SNPP, custom APIs, RS232/RS485, etc.).

This expertise and an entire team dedicated to helping customers achieve their desired outcomes with customized solutions has enabled us to broaden our offerings to other industries. For us, situational awareness isn't just a technology or a 9-to-5 job — it's a 24-7 cause. With situational awareness, we know that any organization can better manage risk and prevent ignorance-based loss.

We'd love to partner with you in developing a customized Situational Awareness Framework for Health Care to increase efficiency and improve patient care using your current technology investments. You can reach us at 866-846-7272 or info@statussolutions.com.

Author Bio

Mike MacLeod is president of Status Solutions. Prior to co-founding the company in 2001, Mike spent more than a decade in telecommunications, pioneering CTI at Comdial. He most recently served as president of its enterprise solutions division.

With bachelor's degrees in biology and forestry, Mike combines the scientific method with business acumen to successfully bring new technologies to market. As a CTI expert and the "chief vision officer" at Status Solutions, he is passionate about harnessing the power of information through situational awareness technology to protect people, property, business and convenience.

Mike's management style is influenced by his love for sports, especially football, and a healthy sense of competition, combining intensity and teamwork with adaptability. He is a popular and entertaining speaker because of his gift of story telling, informed by 25 years of business experience.

Mike lives in Columbus, Ohio, with his wife Susan. They have three children, a daughter who is a registered nurse, a son who also works for the company, and another daughter in high school.