

Amcom Software offers a series of unified healthcare communications solutions, which interface with a hospital's existing Cisco environment at multiple touch points. This allows hospitals to leverage their Cisco equipment investment when addressing the needs of the modern clinical environment.

The Challenge

Today's technology 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.

Many hospitals today face the same challenge. While everyone agrees that quality and speed of patient care are essential, the highly mobile staff at most healthcare facilities often cannot provide the best care possible due to poor communications procedures.

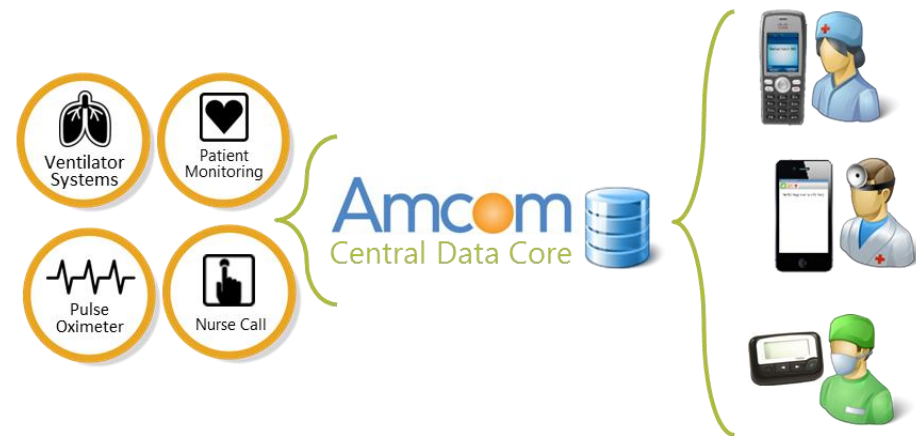
Staff members have become frustrated at the inefficiency that results with undirected updates and alerts being sent to clinicians and other staff members. One patient's lab results have come in. Another is reporting pain through the nurse call system. A third's heart monitor is beeping. Someone wants to speak with a doctor. The security system is acting up.

The list goes on.

Interface with Cisco Wireless and Other Mobile Devices

Amcom offers workflow solutions which enable third party systems such as nurse call, patient monitoring and other clinical or facility alarming and workflow systems to communicate with nurses and other staff on their wireless IP phones, such as the Cisco 7925 or 7926, as well as other mobile devices such as smartphones, tablets and pagers.

Amcom's middleware has received 510(k) clearance from the U.S. Food and Drug Administration (FDA) as a class II medical device. For hospitals, this clearance means Amcom Software is ensuring that our solution is keeping pace with key industry standards and guidelines, and that Amcom has established Quality Assurance software practices in alignment with the United States FDA.



Interface with Cisco Unified Communications Manager

Most telephony integrated consoles do not meet the specific needs of a healthcare environment. Amcom has built our operator console with specific functionality necessary for hospitals.

Amcom offers a CTI (computer telephony integrated) console system designed specifically for the healthcare contact center, and integrated with the customer's Cisco Unified Communication Manager (UCM).

With Cisco UCM integration, our console allows operators all the necessary functionality for call handling. In addition, Amcom can build in feeds from a patient data system (HL7) as well as a staff information system, to present operators with data from previously disparate systems.

Built-in on-call scheduling tools, as well as integration with onsite or wide area paging carriers, help streamline workflows.

Enterprise Web Interface

This centralized on-call and directory data can be accessed by clinical users as well via a browser-based directory, scheduling and messaging platform. This tool allows a user to authenticate in to the system (via Active Directory) and look up other system users either by name or on-call shift.

Two-way communications may be initiated right from this same view to a variety of endpoints, such as Cisco 7925 or 7926 wireless IP phones, smartphones, pagers and tablets.

Amcom's enterprise web platform serves to streamline clinical workflows by combining on-call schedules and directory look ups with communications. For the end user, this means the ability to reference an on-call schedule for a particular role, and initiate a communication with that person's mobile device. Full audit trails for these two-way communications are then made available.



Clinical Workflows

With customers, Amcom often discusses our products in terms of clinical workflows. We talk with our users about the real world challenges they experience on a daily basis, and educate them on how our broad product line can be adapted into their existing workflows to improve efficiency, satisfaction and safety for both staff and patient.

Critical Test Results Management

Most hospitals will report an issue which takes place when a lab or radiological result is critical, and a patient's ordering physician must be immediately notified. Once a Radiologist reads a critical result, he or she will attempt to contact the appropriate clinician, setting off a game of phone tag which will cost time that could be spent caring for the patient.

Amcom can significantly reduce this response time by eliminating the phone tag. Once a test result reads critical, the Radiologist inputs the results into the software, along with all related information, such as images and annotations.



Improving Efficiency of Nursing Staff

Many nursing staff will note the difficulties of receiving non-descript alarms and nurse call notifications from patient rooms. Without further information on the nature and urgency of the request, a nurse must respond to all. This leads to longer response times for truly urgent requests, a decrease in patient satisfaction, and nurses forced to walk miles per shift.

With Amcom in place, nurse call systems can be brought online with key channels of clinical communication, such as smartphones, pagers and wireless IP phones often carried by nursing staff. Now, when a patient request is made, the nurse can receive more detailed information right on his or her device, allowing the nurse to prioritize their response or escalate an urgent request to someone able to respond more quickly. Nurses may even call back the patient directly using their wireless IP phones and discuss the request with the patient themselves.



Improving Door-to-Balloon Time

The Joint Commission and the American Hospital Association recommend an average Code STEMI door-to-balloon time for heart attack patients that is 90 minutes or less. This means that a patient should be registered, evaluated, and ultimately in an operating room receiving potentially lifesaving catheter treatment (the balloon) within 90 minutes. Maintaining a door-to-balloon time under 90 minutes is a challenge many hospitals face.

Much of the challenge is related to manual call trees, manual paging procedures and unconfirmed responses from a response team that incorporates multiple different specialties.

Using Amcom, hospitals have been able to significantly cut their average Code STEMI response time to well under the 90-minute mark. Amcom can maintain a pre-built multi-disciplinary team, to which an automated notification may be sent. Manual calls and sent pages are replaced with automation, and recipients are able to respond to the message to tell the system whether or not they are immediately available. Amcom is then able to assemble a team based on these availability responses, and will do so far quicker than a manual process.



Automating Patient Admit and Discharge

With patient satisfaction being such a critical measurement in today's hospitals, many are re-evaluating the processes involved in patient admission and discharge. Inefficient processes result in longer wait times for patients, which are reflected in key satisfaction surveys such as HCAHPS and Press Ganey.

Amcom can help streamline and automate patient admit and discharge by accepting an HL7 message from the hospital's EMR with all the relevant information about the event. This information can then be transmitted to clinicians and housekeeping staff on wireless devices such as their Cisco 7925 and 7926 wireless IP phones.

As a result of this rapid notification, nursing staff can proactively perform staff assignments for incoming patients, housekeeping staff and quickly turn over beds upon a discharge, and the overall increase in efficiency allows the hospital to care for more patients while generating additional revenue.

The impact is evident to patients as well, with wait times decreasing and patient satisfaction scores increasing as a result.

