



## Information System Improves Emergency Department Efficiency, Raises Bottom Line

### AT A GLANCE

Altoona Hospital, a VHA partner facility located in Altoona, Penn., serves a population of 100,000 to 250,000. The hospital wanted to increase the number of visits to its emergency department and applied for Level II Trauma Center status. To accommodate the potential increase in patients, hospital executives realized that the emergency department needed to improve efficiencies and become better organized. An information system tailored to meet the specific needs of emergency departments would help emergency department workers deliver better care and improve the tracking of patient charges.

Altoona benefited from its VHA membership by being able to access the technical expertise of Rosemont, Ill.-based ibex Healthdata Systems. The VHA supplier's ibex PulseCheck® is the industry's first Web-based emergency department information system, EDIS. PulseCheck's user-friendly system helps emergency departments improve patient flow, increase the efficiency and accuracy of charge capture, while providing greater access to medical information and helping to reduce medical errors.

Altoona's emergency department saved \$175,000 by reassigning its five-member dictation team to other departments. In addition, it doubled the number of charges captured and contributed to the decreased average length of stay from 3.5 to 2.3 hours.

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## Transitioning Challenges

The summer of 2001 was a period of intense change for Altoona's emergency department. The department was losing revenue because patient charges were not being documented. In addition, staff had a difficult time tracking supplies, and they needed to get patients in and out of the emergency department faster. At the same time, the department was seeking a Level II Trauma Center designation.

Hospital medical staff knew that the department needed a comprehensive, reliable information system to handle the patient load. In addition, it needed a more efficient way to track and report charges.

"We selected ibex PulseCheck because it is Web-based," said Matthew Bouchard, M.D., associate medical director for Altoona. "The likelihood of the system going down is slim, and staff can access it from home, other departments — almost anywhere."

ibex's information system is designed by an emergency medicine physician to meet the specific needs of emergency departments. In addition, clinicians and health care information technology experts created the ibex emergency department information system that tracks a patient from triage to discharge through a documentation status checklist. Emergency department staff members can record assessments, flow sheets and clinical pathways.

"I like the applications and the ease-of-use of ibex," said Bouchard. "Having physicians who know the ins and outs of the emergency department create a system is important. They understand our work."

That summer, while moving work areas and redesigning the emergency department for greater capacity, nurses were trained on the ibex system. While the user-friendly system

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was easy to install, Bouchard admits that it was a challenge to get everyone comfortable with the new system. “As expected, some nurses were not computer savvy, but people would go crazy if we went back to paper,” he chuckled.

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## A Well-Oiled Emergency Department

Two years after installation, Altoona’s emergency department runs smoothly and efficiently as a result of many of the system’s features.

Altoona has increased its ability to chart supply costs — ibex can capture charge data electronically at the point of care. The hospital has doubled its capture of charges — from \$800,000 to \$1.6 million, which also reduces denials for reimbursement and shortens the billing cycle.

The system also tracks and measures physician and nurse productivity. “I’m not spinning my wheels — I get results back quicker on patients,” Bouchard said.

In addition, records are kept in one place, which eliminates duplication and protects patients’ privacy.

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## Unexpected Benefits

Bouchard was surprised with the e-mail feature and said he underestimated how much it would be used. “We e-mail back and forth throughout the department and the hospital,” he said. “It is the instant feedback that is so helpful. No one has to wait for an answer.”

With its Web-based technology, the PulseCheck system is used easily with other hospital systems and provides greater access to information.

Medical staff members also have easy access to patients’ medical information. With just a couple of mouse clicks, physicians can access a patient’s record. For example, if a patient had an EKG during a prior visit, clinicians can compare it with the EKG just taken.

“Sometimes it would take up to an hour or more to get patient records,” Bouchard said. “Now it’s a matter of minutes.”

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## Prepared for the Future

Altoona has achieved its goals of increasing patient visits, growing revenue and having an emergency department that easily accommodates thousands of patients.

“Our goal is to increase five percent each year, which we are doing,” Bouchard said. “We were at 40,000 visits a year, and now we are at 42,000.” It’s no problem with a prepared and organized emergency department.

