

Riverside Regional Medical Center Boosts Revenues by \$1.3 Million in Six Months



Riverside Regional Medical Center is located in Newport News, Virginia. This 570-bed hospital is the Virginia Peninsula's most comprehensive medical facility and a leader in emergency care. The emergency department (ED) and Level II Trauma Center respond to more than 57,000 emergencies annually. In 2004, Riverside opened a new 42-bed, 45,000-square-foot ED/Trauma Center to better serve its growing ED patient population.

Quick Profile

Riverside Regional Medical Center

Institution profile:

Large 570-bed regional medical center with 57,000 annual ED/ trauma center visits

Key business/clinical drivers:

Moving from an ED with 12 beds to a 42-bed facility and a decentralized "racetrack" design that required better communications

Picis solutions:

- CareSuite® ED PulseCheck®
- Insight ED™ decision support tools
- Picis LYNX E/Point revenue management solutions

Interoperability:

Picis ED solution interfaces with:

- Siemens Soarian clinical information system
- GE Centricity physician office system
- Cerner Millennium lab and radiology systems

Results:

- Revenue increase of \$1.3 million in six months
- Gross patient revenue increase of \$9 million in six months
- Labor cost savings of \$225,000 per year
- 60-minute decrease in average patient turnaround time
- Significant reduction in incomplete charts



► Expansion is impetus for automating ED

Prior to 2004, Riverside's ED operated in a much smaller 12-bed facility. The move to the larger facility was the impetus to switch from paper to an automated emergency department information system (EDIS). "We knew that our old paper-based system was not going to work in this larger space that was much more decentralized," says Gary Kavit, M.D., Riverside's Medical Director of Emergency Services. "We thought we would be in big trouble without an electronic system. Plus, a long-range goal was integrating with a comprehensive electronic medical record for the whole hospital."

After looking at offerings from several vendors, Riverside selected Picis ED PulseCheck for its EDIS. "We were skeptical about what several vendors were promising," says Dr. Kavit. "We were being overwhelmed by vaporware." Impressed by the proven track record and the simplicity and intuitive interface of ED PulseCheck, Dr. Kavit convinced hospital administrators to invest in the system. ED PulseCheck was installed in 2004. In late 2008, Riverside also added the Picis LYNX E/Point revenue management solution to better capture charges for the ED care provided.

Vital to operational efficiency

ED PulseCheck has nearly 750 registered users at Riverside and is a key component to the success of the new ED/Trauma Center. "The new center is configured in a pod arrangement with no central nursing station. ED PulseCheck is fundamental to tracking patients and communicating," says Renee Rountree, Riverside's Vice President of Trauma and Emergency Services. "It really helps everybody work together."

Among the many benefits that Riverside has realized from ED PulseCheck are:

- Dramatic decrease in patient wait times
- Significant reduction in incomplete charts
- Better medication reconciliation and greater efficiencies due to computerized physician order entry (CPOE)
- Fewer illegible medical orders
- Considerable reduction in duplicate tests

Labor savings realized

ED PulseCheck has dramatically improved productivity as well. "We used to have information go back and forth from paper to electronic and back to paper five times. We have eliminated most of that inefficiency," says Rountree. In addition, lost and incomplete charts used to consume a great deal of time, money and effort. "We've eliminated lost charts and dramatically cut down on manual entry, and we no longer need to scan paper, since the record is electronic," Rountree continues. This has resulted in \$225,000 annual savings in labor costs. According to Amber Wells, System Administrator, "ED PulseCheck has helped free our staff to address patient needs faster and to **ensure that we comply with national safety goals.**"

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Dramatic revenue increase

The implementation of ED PulseCheck paid off by increasing annual gross revenue by \$600,000. But Rountree felt that there was room for further improvement. "The complexity of the patient population we are seeing has changed. We used to see about 40 percent acute patients. Now the number is closer to 60 percent. We wanted to make sure we were coding and charging for the care we were giving," she explains.

In December 2008, Riverside installed Picis LYNX E/Point revenue management solution. The solution, which is integrated with ED PulseCheck, helps health care organizations consistently and compliantly code and charge for ED/outpatient care. It allows clinicians to capture procedure charges and calculate the facility visit level as part of the clinical documentation process.

The results have been dramatic. **In the first six months after E/Point went live, Riverside's ED revenue increased \$1.3 million and it saw an additional gross patient revenue increase of \$9 million.** "I thought the improvement would be significant, but this far exceeded my expectations," says Rountree.



► Improved communications and service

Riverside's ED management has challenged staff to be creative and use the Picis solutions to their fullest. One way they have done is by taking full advantage of ED PulseCheck's "rules" capability to improve performance. Now when facility-specific criteria are met, ED PulseCheck sends an automated notification to clinicians or administrators to help the medical center proactively address departmental and clinical issues.

For example, when ED PulseCheck reports that there are eight patients or more in the waiting room, notifications are sent to the medical director and other appropriate personnel, and steps are taken to unclog the backlog. Riverside also uses **chart rules** to help them improve both patient care and communications between departments. If certain codes are entered during online documentation, the system automatically notifies the correct department. For example, if a nebulizer patient presents, the respiratory department is automatically paged. There are a number of other chart rules defined by the medical center in the system that will trigger notifications to infection control, the stroke coordinator, surgery and customer service.

Better patient and physician satisfaction

The system has resulted in a more satisfied physician community. One of the keys to this change is online charting. Physicians are no longer hunting for paper records, and since charts can be securely accessed via the Internet, they no longer have to come to the hospital to complete the record. "Our area has a large naval population, and when one of our military physicians was suddenly deployed overseas, he was actually able to complete his charts all the way from Afghanistan," says Rountree.

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The online record also allows ED physicians to deal with patient complaints much more rapidly. "Previously, looking up a record about a complaint on paper might have taken two days. Now I can look at the record in three minutes and get back to the patient right away," says Dr. Kavitt.

Another physician-based initiative that has increased physician and patient satisfaction and has helped to improve patient care is transfer management. When physicians contact the Call Transfer Center to request an office transfer, their clinical notes are placed in the ED PulseCheck record. This helps improve continuity of care. In addition, Riverside promises physicians and facilities that transfer patients will be seen in the ED within 30 minutes. To ensure that ED staff meets this transfer time frame as promised, a telephone icon appears next to the patient's name in the system.

Future plans

Riverside is continually looking for new and innovative ways to use Picis solutions to improve performance and help to promote quality patient care. "We are planning to build a transfer record in ED PulseCheck for a new ambulance service that we are starting," says Rountree. In addition, plans are under way to post the current ED wait times, as generated by the system, on an Internet crawl on the hospital's public-facing Web site. Riverside's goal is to deliver quality care that is prompt and efficient, and Picis is helping the medical center consistently meet that objective. ■

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