PALMETTO HEALTH TUOMEY

THE CHALLENGE

Palmetto Health Tuomey faced the same problem that many hospitals today must address: how to improve the way patients' radiology exams are communicated among the many clinicians involved—particularly when results are critical.

"We needed a way to track communications between Radiology and the Emergency Department," said José Bennett, PACS Administrator, Palmetto Health Tuomey. "This included how long results took to reach the ordering physician, who received each message, what happened with it, etc."

THE SOLUTION

Tuomey evaluated several systems and decided to work with Spok to improve its critical test results process for patients and staff. "[Spok] gave us exactly what we needed to take care of patients faster," said Bennett. "We can now track all of our messages and have reduced the back and forth phone calls between Radiology and the ED."

José Bennett, PACS Administrator for Palmetto Health Tuomey

EXAMPLE

Let's say a patient goes to the ED with a severe headache, and the examining physician orders a CT scan. The physician enters this order into the emergency department information system (EDIS), which kicks off a well-oiled information-sharing process involving several integrated systems.

In addition to Spok, this integration spans the health information system (HIS) to keep track of the order, as well as the radiology information system (RIS) used to display the patient information to the Radiologist. Ultimately, the images are stored in the

OVERVIEW

For almost 100 years, Palmetto Health Tuomey has been synonymous with quality healthcare in the Sumter, S.C., area. After a century of change and progress, this multifaceted healthcare system meets the needs of the community through acute care, outpatient services and a comprehensive health promotion and disease prevention program.

The healthcare system, which is anchored by a 301-bed medical center accredited by The Joint Commission, delivers the industry's most advanced technological care with an even higher level of patient consideration. In fact, Avatar International and Press Ganey have both honored Palmetto Health Tuomey with some of their highest awards for Exceeding Patient Expectations and Patient Satisfaction.

BUSINESS DRIVERS

- Improve patient care and speed treatment or discharge with faster communication of test results
- Improve communications among physicians regarding the status of results
- Reduce time-consuming phone calls and voicemails for ED physicians and Radiologists

SOLUTION

Spok® Critical Test Results Management

RESULTS

- Improved ED patient discharge times by 11 %
- Developed a communication audit trail ready for Joint Commission visits
- Reduced time wasted by physicians calling around for test results or clarifications

> "During the three months immediately following implementation, we saw an 11% improvement in patient discharge times."
>
> José Bennett,
> PACS Administrator

Palmetto Health Tuomey developed four status cases for Radiology's findings, which are entered into the system via a speech microphone.

- **Normal results:** If a patient's scan shows no acute abnormality (the most common occurrence) a message is sent and the case is closed.

- **Radiology/ED agree:** If the Radiologist agrees with the ED doctor's interpretation of the scan, a confirmation is sent, and the case is closed.

- **Radiology/ED disagree:** If the Radiologist disagrees with the ED doctor's interpretation, a notification is automatically sent to the ED for image review and discussion.

- **Abnormal/Critical results:** If the Radiologist detects an abnormal or critical result and the ED was not involved, a notification is sent to the physician who ordered the exam.

picture archiving and communications system (PACS). All of these work together via HL7 information sharing to help ensure test results flow smoothly from one area of the hospital to another, with faster, more informed patient care in mind.

Once the Radiologist enters his or her findings, an automatic alert is sent to all ED physicians and physicians assistants. However, the ordering physician is the one responsible for closing the alert to acknowledge receipt and understanding. "Any time a staff member sees the alert on the workstation, the team works together to help the patient quickly. Staff members like that they don't have to worry about trying to reach the right Radiologist on the phone anymore; the messages with full findings are available right in the ED—no voicemail, no faxes," said Bennett.

Radiologists like the streamlined workflow too. "Just two clicks for an ED study, and no need to pick up the phone and try to reach a busy ED doctor. There's more time to review scans," Bennett said.

INCIDENTAL FINDINGS

The Spok solution enables Palmetto Health Tuomey to notify patients' primary care physicians on incidental findings discovered during exams. "If a patient has, say, pulmonary nodules that show up during a scan, these could become cancer in six months or a year," said Bennett. "We can note these findings on a CT scan and advise the patient and his or her family physician to follow up. Of added importance, [Spok] alerts the ED physician for further documentation within the EDIS."

ESCALATIONS AND REPORTING

Tuomey leaves nothing to chance with test results. If critical results are not acknowledged within the ED within 30 minutes, they are escalated to another physician for acknowledgement. After 60 minutes—an unacceptable timeframe—a violation is noted, although this is rare.

Reporting has improved as well, particularly for compliance with The Joint Commission's National Patient Safety Goal #2, which focuses on how hospitals handle critical test results. "We can quickly see the number of alerts and any violations, as well as the breakdown of normal and critical test results," Bennett said. "We're ready to generate reports any time we need to with a full audit trail of all communications back and forth between the ED and Radiology."

THE RESULTS

"During the three months immediately following implementation, we saw an 11% improvement in patient discharge times," said Bennett. "Even when test results are normal, the doctor simply knows this information a lot sooner than before."

"The [Spok] system has been very quiet," Bennett said. "I barely pay attention to it anymore because it's always working. Staff love that we've cut out the phone tag and wasted time. The results are also in the system to be accessed whenever needed."