

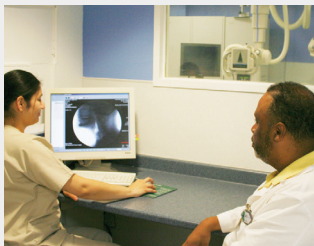
CASE STUDY:

Nacogdoches Memorial Hospital

Toshiba Kalare X-ray: Bringing Digital Efficiency to Nacogdoches Memorial Hospital

SITUATION

Nacogdoches Memorial Hospital, a 200-bed facility serving thousands of patients in East Texas, was challenged with upgrading its three X-ray rooms. As the region's only Level III Trauma Center, the hospital needed a versatile machine that would increase clinical efficiency and reduce overall exam times. The systems would serve many hospital departments, including endoscopy and the speech therapy group. Nacogdoches Memorial Hospital



Freddie Gibson, director of Medical Imaging Services, Nacogdoches Memorial Hospital, and Technologist Marisol Salaiz use the Toshiba Kalare digital workstation.



The digital technology of Toshiba's Kalare system increases productivity and workflow at Nacogdoches Memorial Hospital.

needed to upgrade its X-ray technology to more advanced, cost-effective digital X-ray systems and was tasked with completing the upgrades in three separate phases.

SOLUTION

After an extensive survey of X-ray systems currently available, Nacogdoches Memorial Hospital selected Toshiba's Kalare™ system as its first upgrade. The Toshiba Kalare's high-quality, all-digital images eliminated the need for conventional film and the associated costs of film processing. The Toshiba Kalare X-ray system reduced exam time for many procedures by more than half and significantly improved efficiency within the department. After the first installation proved successful, Nacogdoches Memorial Hospital decided to acquire another Kalare X-ray system, completing the second phase of upgrades. Toshiba's Kalare system met the needs of the hospital and resulted in repeat purchases. To date, Nacogdoches Memorial Hospital has completed the first two upgrades, with a final upgrade slated for the near future.

BENEFITS

- **Exceptional Digital Images:** The high-quality, digital images produced by the Toshiba Kalare X-ray systems have increased clinical capabilities and lowered hospital costs by

replacing archaic film systems with state-of-the-art digital imaging.

- **Versatile, User-Friendly Design:** Toshiba Kalare's user-friendly design makes it easy and comfortable for technologists to perform multiple exams on a single day with ease.
- **Efficiency and Productivity:** The speed of the new Toshiba Kalare X-ray systems has increased productivity by allowing the technologists to examine twice as many patients as before.



Nacogdoches Memorial Hospital uses Toshiba's Kalare X-ray to increase clinical efficiency.



Nacogdoches Memorial Hospital, a 200-bed hospital serving thousands of patients in East Texas and the region's only Level III Trauma Center, was challenged with the task of upgrading three X-ray rooms. The existing equipment was nearly outdated, so the hospital decided it was the right time to upgrade.

The versatility of Toshiba's Kalare X-ray system coupled with its high-quality images resulted in immediate improvements in patient care, increased overall workflow and eliminated the need for conventional film.

— Freddie Gibson,
director of Medical Imaging Services,
Nacogdoches Memorial Hospital

Nacogdoches Memorial Hospital planned to upgrade the X-ray rooms in three separate phases, starting with the first machine that needed to be replaced.

From the onset, Freddie Gibson, director of Medical Imaging Services, Nacogdoches Memorial Hospital, was determined to acquire the most advanced and versatile X-ray system on the market. Additionally, moving to digital technology was a main priority as the older machines were traditional film X-ray systems. The upgrade to digital X-ray systems would eliminate unnecessary costs and lengthy handling time associated with traditional X-ray film processing.

"Our older equipment had run its course and it was time for us to upgrade our X-ray machines," stated Mr. Gibson. "As the area's only Level III Trauma Center, we perform a wide variety of procedures. In addition to our typical work, we must be able to respond quickly in emergency

situations. We needed an X-ray machine that could produce high-quality digital images and be easy to use for our technologists."

Choosing the X-ray System

Mr. Gibson led the search for the first new X-ray system after consulting with technologists and radiologists at the hospital. The criteria for selecting the new X-ray centered around three main aspects: image quality, versatility and efficiency.

"To best serve patients and provide the high level of care the hospital is known for, the new X-ray machine needed to be versatile, easy to use and produce digital images," explained Mr. Gibson.

"In conducting the search, I spoke with a majority of the X-ray vendors on the market," said Mr. Gibson. "When purchasing this first piece of equipment, it was critical I select the right one to set the stage for the rest of our upgrades. Additionally, the new X-ray should improve our

CASE STUDY: Nacogdoches Memorial Hospital *continued*



Lower GI with barium/air contrast captured by the Toshiba Kalare

patient care and also improve efficiency in our department.”

After completing a detailed, thorough search, Nacogdoches Memorial Hospital selected the Toshiba Kalare X-ray system for its first upgrade.

Toshiba Kalare X-ray

“The versatility of Toshiba’s Kalare X-ray system coupled with its high-quality images resulted in immediate improvements in patient care, increased overall workflow and eliminated the need for conventional film,” stated Mr. Gibson.

“In regards to installation, training and integrating into our IT system, our experience could not have been smoother,” stated Mr. Gibson. “We were up and running quickly and Toshiba’s service team ensured everything was completed on time.”

The Toshiba Kalare combined a superior user interface and feature set with true all-digital imaging for fluoroscopic, fluorographic and radiographic examinations. With its high-resolution, removable, large field-of-view digital detector, all-digital images can be captured and displayed instantly on dedicated digital workstations. The Toshiba Kalare seamlessly integrated into Nacogdoches’ PACS system and allowed them to begin imaging patients without delay.

Acquiring Another Toshiba Kalare X-ray System

After the installation of the first Toshiba Kalare, Mr. Gibson and Nacogdoches Memorial Hospital were ready to acquire the next system in the upgrade. For the second installation the decision and process was much easier.

“In the next phase of our upgrades, we decided to purchase a second Kalare X-ray system almost immediately,” said Mr. Gibson. “The technologist and radiologist feedback was excellent, our exam time was reduced while patient care was dramatically improved. There was no reason to consider any other X-ray system.”

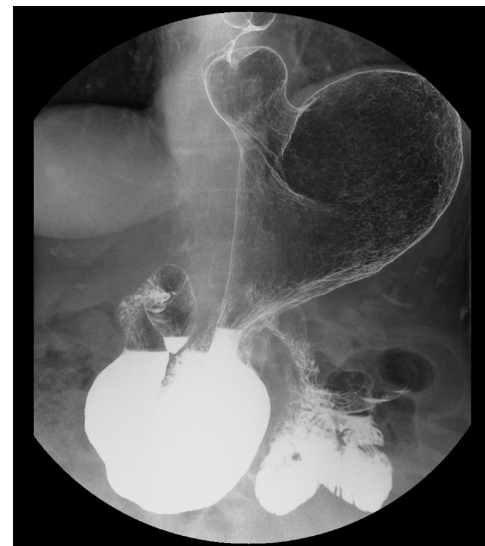
Improvements Across the Board

Nacogdoches Memorial Hospital experienced a significant improvement in its fluoroscopic procedures and esophagrams. In comparison to its older X-rays, the hospital is completing these procedures in half the time, while obtaining superior digital image quality. The speech therapy department also benefited from the Kalare, as it uses the equipment frequently to complete swallowing studies.

Due to the Toshiba Kalare’s rapid processing and instant access to digital images, exam times have been streamlined and the need for retakes reduced. Additionally, the removable DR panel of

the Toshiba Kalare allows the hospital to perform a wide variety of examinations, increasing room utilization and overall operational efficiency. In such a high volume trauma facility, streamlining exam time allows Mr. Gibson and the staff to see a larger number of patients.

“The Toshiba Kalare has saved my department an enormous amount of time,” said Mr. Gibson. “On average, we are completing most of our studies twice as fast as we used to. The Kalare is extremely user-friendly, making it comfortable for technologists to perform multiple exams within a day with little fatigue. Some exams that used to require two technologists can now be performed by one. Additionally, the chief technologist now has more time to oversee the entire department and work one-on-one with staff.”



Upper GI with barium/air contrast captured by the Toshiba Kalare

In today’s healthcare environment, maximizing imaging resources and improving patient throughput is critical to success. Toshiba’s Kalare X-ray systems helped Nacogdoches Memorial Hospital accomplish these goals while lowering costs and improving patient care.

“With the first two upgrades complete, the Toshiba Kalare systems fit our needs perfectly,” stated Mr. Gibson. “The difference in digital images and efficiency in our department has been astounding. We will seriously consider acquiring another Kalare to use in the future.”



Left shoulder arthrogram with iodinated contrast captured by the Toshiba Kalare



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