

CASE STUDY:

Bay Pines VA Hospital

Bay Pines VA Hospital X-ray Department Consolidates from Three Exam Rooms to One and Improves Productivity and Patient Satisfaction Using Toshiba

SITUATION

In the midst of a big remodel and relocation, Bay Pines Veterans Hospital was determined to maintain the patient service that had always been its hallmark. The hospital, serving thousands of veterans throughout southwest Florida, was remodeling the emergency room and the radiology department had to consolidate to a single location. The old radiology department consisted of three exam rooms and in the new location was being



The digital technology of Toshiba's T.RAD Plus Digital produces superior image quality and greatly improves productivity and patient throughput for Bay Pines Veterans Hospital.

reduced to one. The three old machines would have to be replaced with one new X-ray system and chief technologist, John Finnegan, was tasked with the assignment. Meanwhile, patient volume at Bay Pines VA Hospital continued to increase. Bay Pines VA Hospital needed to acquire a single X-ray system that would increase patient throughput, all while performing the work of three previous systems and still producing excellent image quality to ensure good patient care.

SOLUTION

After extensive research, Bay Pines VA Hospital selected the Toshiba T.RAD Plus Digital system. The T.RAD Plus Digital uses digital technology to offer faster exam times, which reduced patient wait time at the facility from one hour to five minutes. With its advanced image quality and the elimination of film and the need for film handling and processing, the Toshiba T.RAD Plus Digital met the hospital's needs perfectly.

BENEFITS

- **Greater productivity** with one exam room instead of three, shortening patient wait times
- **Decreased operational cost** through the

elimination of film and film handling costs

- **Faster exams and fewer duplications** resulting in increased patient throughput and staff productivity and increased patient satisfaction
- **Increased patient satisfaction** as a result of shorter wait times, faster exams and better diagnosis
- **Greater visualization** of bone and soft tissue for confident diagnosis



Bay Pines Veterans Hospital utilizes the Toshiba T.RAD Plus Digital to provide the highest quality patient care.



**Bay Pines
VA Healthcare System**

Bay Pines Veterans Hospital, serving thousands of veterans throughout southwest Florida, needed to reduce space in the radiology department. The hospital was remodeling the emergency room and the radiology department was moving to a new location. Bay Pines VA Hospital had three X-ray rooms, which imaged approximately 50 ambulatory patients a day, and

in the new space, was being reduced to one exam room. They needed one machine to replace and fulfill all X-ray imaging needs. In addition to a machine that could replace the work of three, Bay Pines VA Hospital was beginning to experience long outpatient wait times with increasing complaints from patients. It was critical that the new equipment be able to reduce wait time and perform more procedures.

The search for the new equipment was led by Bay Pines VA Hospital chief technologist, John Finnegan. To meet the rising demand of patients and reduction in space, Finnegan had a challenging assignment.

"With the closure of three rooms, I was concerned with finding one piece of X-ray equipment capable of fulfilling our facility's needs," explained Finnegan. "Patients were frustrated with long waits. Our focus at Bay

Pines VA Hospital is always on patient care and satisfaction and those wait times were a problem we had to solve. I was faced with reducing the pieces of imaging equipment in the department and at the same time speeding up exam time. This was a challenging proposition."

Selecting an X-ray

The radiology department at Bay Pines VA Hospital completed an extensive survey and considered almost all of the X-ray machines available on the market that fit the hospital's needs. The radiology department at Bay Pines VA Hospital performed a wide variety of X-ray procedures and finding a versatile machine was one of the major considerations.

"I looked at many different X-ray machines that fit the needs of my department and the variety of procedures we complete," stated Finnegan.

With the varying types of patients and procedures we perform, it was crucial that we find a versatile machine that could be used for multiple applications.

— John Finnegan,
Bay Pines Veterans Hospital



Posterior Anterior (PA) Hand X-ray of pediatric patient captured by the Toshiba T.RAD Plus Digital.

"With the varying types of patients and procedures we perform, it was crucial that we find a versatile machine that could be used for multiple applications."

After its research, Bay Pines VA Hospital chose the Toshiba T.RAD Plus Digital. Prior to the T.RAD Plus Digital, Bay Pines VA Hospital worked with several older X-ray systems that used traditional X-ray film. The image acquisition of the T.RAD Plus Digital would bring cutting-edge digital technology and remove the need for time-intensive, archaic handling and development of X-ray film. By using digital images and eliminating the use of film, the radiology department would be able to perform the work of three machines using only one T.RAD Plus Digital.

Results: Quicker Exams and Increased Patient Satisfaction

After the installation of the T.RAD Plus Digital, patient wait time in the radiology department was reduced from one hour to only five minutes or less. This dramatic decrease in the time a patient spent in the waiting room dramatically increased patient satisfaction.

"The move to digital technology has been an outstanding benefit to our facility. Not using film or cassettes allows us to complete more procedures in less time. It has decreased operating costs, as well as increased patient throughput and optimized our work flow," stated Finnegan. "In addition, our problem of increasing patient wait time has been reduced to less than five minutes. When patients come in expecting a long wait and are in and out quickly we are providing better service and patient care."

The T.RAD's image acquisition is nearly instantaneous, which allows technicians to view images immediately to determine if a retake is necessary. If no retake is necessary, the patient is repositioned and imaged immediately. This has nearly eliminated the need for follow up X-rays and created a more enjoyable and less time-consuming exam.

The T.RAD Plus Digital is a single detector system that provides filmless radiography while offering exceptional system-positioning capabilities. Using a highly sensitive digital detector and uniquely designed C-arm, the T.RAD Plus Digital integrates advanced technologies to provide outstanding image quality and excellent patient care.

The T.RAD Plus Digital has met the strict and demanding needs of the Bay Pines VA Hospital. The 50 - 60 patients a day that were once being imaged on three different machines are now all completed with one system.



Posterior Anterior (PA) Skull X-ray captured by the Toshiba T.RAD Plus Digital.

Bay Pines VA Hospital completes 95 percent of its chest X-rays on the T.RAD in addition to a wide variety of other exams. For example, difficult procedures such as a bone survey, one of the most time consuming exams for a technician, now takes five minutes.

Toshiba has the industry's leading service team and they provided an easy transition for the hospital and technicians on staff with a quick installation and a thorough training program.



Posterior Anterior (PA) Chest X-ray of young female patient captured by the Toshiba T.RAD Plus Digital.



Anterior Posterior (AP) Abdomen X-ray with contrast in the right ureter captured by the Toshiba T.RAD Plus Digital.



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