



A Community Hospital Case Study North Texas Medical Center

A Texas Community Hospital Brings
Home Advanced MRI – and Much More

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A COMMUNITY HOSPITAL CASE STUDY



Background

North Texas Medical Center
Gainesville, TX
60 Bed Hospital

Challenge

Providing state-of-the-art
imaging in a rural region

Solution

Becoming a Center of
Excellence through an
expansion and upgrade of
imaging services including
a conversion of MRI from
mobile to fixed system

Proven Outcome

An increase in local patient
utilization of MRI and other
services, quality of care, and
revenues

Starting with a Vision

Five years ago, a small group of administrators and clinicians at Gainesville Hospital, an older hospital in North Texas, began pursuing a vision of improved healthcare for their region. They conceived of a new medical center with advanced patient care that would be a center of excellence. Among the planned enhancements was an upgrade to premier imaging services for the people in their community.

Led by CEO Andy Anderson, the group educated local officials in Gainesville, TX, about the importance of a commitment to first-rate healthcare. They talked about the technology, training, professionalism, and patient-centered attitude of their group that could make it happen.

Among the advantages for the 38,000 area residents was that advanced diagnostic imaging services would be available locally, and no longer would residents be tempted to travel south to the larger, more well-equipped healthcare institutions in the Dallas-Fort Worth area.

The dedication of the Hospital executives to their vision led to a proposal for a bond issue to finance construction of a new hospital. It was put forward for a vote in a general election and won enthusiastic approval. The vote was a confirmation that a local healthcare facility with state-of-the-art technology was needed.



Andy Anderson, CEO
North Texas Medical Center

Advanced MR Imaging Services Arrive in North Texas

The new Hospital was named the North Texas Medical Center (NTMC), and it has become a model in Texas for leveraging imaging equipment in a small hospital setting. NTMC leaders were fully committed to a total update in their imaging capabilities. The installation of cutting-edge CT, ultrasound, SPECT, fluoroscopy and x-ray equipment – all from Siemens was part of the plan from the beginning.

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“The new hospital raised the credibility in the community. Our relationship changed — we became not just a good place to go for healthcare, but a great place to go for healthcare. And our advanced imaging equipment played a big part.”

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North Texas Medical Center*

place to go for healthcare, but a great place to go for healthcare. And our advanced imaging equipment played a big part,” explained Anderson.

Specifically with regard to Magnetic Resonance Imaging (MRI), NTMC immediately faced a decision that has become a familiar conundrum for community hospitals across America. As consumer interest and the clinical applications of MRI have grown, medical facilities have been obliged to optimize their MR services. NTMC did have a mobile MRI unit, but there were more technologically advanced systems available in other cities. They decided to act with the help of Siemens. “The mobile unit had served us well,” explained Anderson, “but we wanted to inspire more confidence in those who came to us for imaging. The MAGNETOM Symphony installed by Siemens inside our Hospital helped facilitate that confidence.”

The move from a mobile MRI unit to a fixed one is often the upgrade needed for the community hospital – as part of a bigger overall healthcare solution. NTMC opted to make that move, and

the increased schedule flexibility, the better patient utilization, improved images, and the revenue enhancements have proven how critical advanced MRI has become to their community.

The Decision to Move to Fixed MRI: Solution Realized

The decision to move from mobile to fixed MRI was based on the desire to upgrade patient care. The necessity of leaving the main hospital to walk to the MRI trailer detracted from the overall positive experience being sought. In addition, the older age of the equipment limited the opportunity for some studies, particularly those of children, the elderly, and obese patients.

The potential out-migration of those needing an MRI exam to larger cities was a strong motivator in spurring the conversion from mobile to fixed. The advantages in terms of patient comfort and speed of procedures have enhanced both patient satisfaction and revenue flow.

The Complete Solution: Patient Care, ROI, Service

The MAGNETOM Symphony light coils that come with the Integrated Panoramic Array (IPA) are unmatched for patient comfort among all MRI systems. And IPA expands the anatomic range of coverage without coil or patient repositioning. Time savings can be up to five minutes per procedure or patient. “The patients really love the shorter scan time,” related James Hennigan, Director of Medical Imaging.

The new fixed unit is much more accommodating of larger patients, and fewer challenges with claustrophobic patients are encountered. “The closed entry of the mobile unit was something a lot of patients could not handle, so they would go to other facilities,” said Mr. Hennigan.

The increases in the quality of the images as well as the level of patient comfort and convenience with the new



James Hennigan
*Director of Medical Imaging
North Texas Medical Center*

fixed MRI equipment have been the main benefits of the change.

The impact of the Symphony in patient volume speaks for itself. "The number of MRI studies done in 2005 almost doubled from the year before," explained Hennigan.

ROI: Improvement through Higher Revenue and Better Connectivity

NTMC had parlayed the ideal combination of increased quality and reduced cost in moving from mobile to fixed MRI. The Hospital also benefits from the connectivity of *syngo*[®], the Siemens platform that links all of the workflow activities that surround imaging. The easy, intuitive, common user interface makes training and job performance as easy as it gets for the staff. Cross-training on different modalities is a snap, giving Department Managers the flexibility to adjust staffing as needed.

"The throughput of MRI patients has increased because of the improvement in scheduling and patient flow since moving the MRI in house," declares Mr. Hennigan.



Technologist Gayle Middleton assists a patient in the new NTMC MAGNETOM Symphony.

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*James Hennigan
Director of Medical Imaging
North Texas Medical Center*

The Final Piece: Excellence in Equipment and Financial Service

The installation of the newer technology was accomplished without significant downtime. Service contracts were put in place. “We have had no appreciable downtime with the Symphony or any of our Siemens systems since installation,” noted Hennigan.

The acquisition of all the Siemens systems as well as the fixed MRI was made possible in part by a customized leasing plan that matched terms to NTMC cash flow needs over a long period. Besides reducing the initial financial outlay, the lease agreement and a pre-approved line of credit through Siemens helped meet construction budgets and timelines. The agreement was a crucial factor in allowing the Hospital to make such significant and sweeping upgrades in their imaging technology.

From Mobile to Fixed MRI: Part of a New Relationship with the Community

Life in this North Texas community has been enhanced by the commitment of NTMC to its local constituency. Not only have the number of MRI studies at NTMC doubled, other services have seen similar increases. These include the Siemens CT, angiography, fluoroscopy, ceiling mounted x-ray, mobile x-ray, nuclear medicine, and ultrasound systems.

One sign of the strengthened credibility for NTMC in the community is the great increase in training being provided to medical and medical technology schools throughout the state. “It is a great feeling to have Texas schools seek us out as a training facility because of our advanced imaging technology,” explains Anderson. “We have all the latest equipment, and it is flattering to be viewed in that light. In the North Texas region, we wanted to be viewed as not just a hospital, but the hospital. It’s easy – once you have the right people and equipment in place.”

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