

Texas Health Arlington Memorial Hospital Becoming a Center of Excellence

Advanced electrophysiology (EP) technology is a key component in improving patient care and physician productivity. Texas Health Arlington Memorial Hospital in Arlington, Texas, has implemented the Sensei X Robotic Catheter System in advancing a Center of Excellence.

Developing a center of excellence

Within the last two years, Texas Health Arlington Memorial became the first Texas hospital named a Cycle III Chest Pain Center and the first ever named an Acute Heart Failure Center—both by the Society of Chest Pain Centers. With an intensive outpatient clinic reaching out to the community and educating patients about heart failure, readmission rates dropped from 7.3 percent to 2.8 percent.

The 369-bed facility sits in the middle of the Dallas-Fort Worth (DFW) metroplex, serving a population of about 700,000 and offering a full range of services to the community. William Nesbitt, MD, a cardiac electrophysiologist, is key in advancing the Center of Excellence program.

Several years ago, Nesbitt surveyed the market and noted a need in the community for a comprehensive arrhythmia center. “There was a lack of EP services within the entire central DFW metroplex,” he says. “Patients had to go to either Dallas or Fort Worth. It was then that we began to enhance the program on our campus.”

“Dr. Nesbitt’s vision was closely aligned with the hospital’s vision,” says Corey Wilson, administrative director of business development and support services for Texas Health Arlington Memorial. “He researched the market, understood the community’s needs and the resources—both in staff and technology—that would be necessary to give the best care to arrhythmia patients.”

As the program grew, Nesbitt, Wilson and other hospital personnel ensured that both quality patient care and sound fiduciary judgment would be at the forefront of each decision. One technology sought by Nesbitt was a robotic catheter system that would allow the operator to manipulate a catheter inside the heart while seated at a console outside the EP lab.

Chart 1. Patient Growth Pre & Post Flexible Robotics

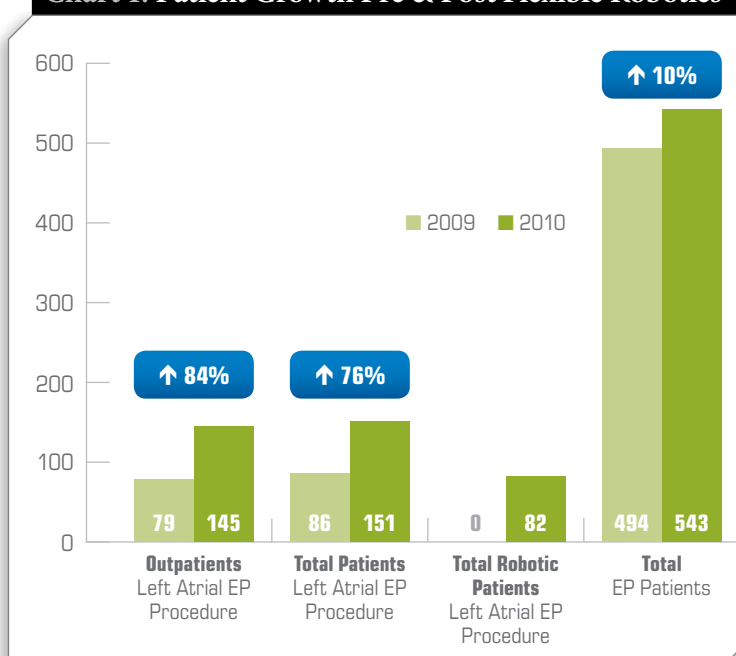


Table 1. Patient Growth Pre & Post Flexible Robotics

	Pre-Flexible Robotics		Post-Flexible Robotics	
	2009	Change	2010	% Chg YOY
Inpatients: Left Atrial EP Procedure	7	-1	6	-14%
Outpatients: Left Atrial EP Procedure	79	66	145	84%
Total Patients: Left Atrial EP Procedure	86	65	151	76%
Total Robotic Patients: Left Atrial EP Procedure	0	82	82	-
Total EP Patients	494	49	543	10%

Table 1a. Flexible Robotics Financial Analysis

	Initial Pro Forma	Adjusted Pro Forma
Net Present Value	\$1.3M	\$2.8M
Payback Period (Years)	2.5	0.9



“If you see volume growth of 10 percent in one of the highest revenue programs, there is a significant impact.”

Corey Wilson, Administrative Director of Business Development and Support Services for Texas Health Arlington Memorial Hospital

Chart 2. Physician Daily Case Capacity

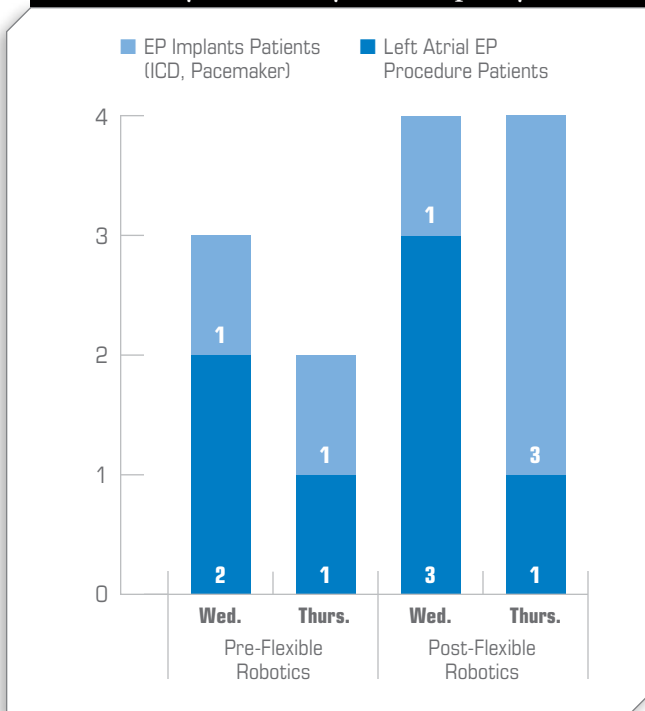


Table 2. Physician Daily Case Capacity	Pre-Flexible Robotics		Post-Flexible Robotics	
	Wed	Thurs	Wed	Thurs
Left Atrial EP Procedure Patients	2	1	3	2
EP Implants (ICD, Pacemaker) Patients	1	3	2	4

“My main criteria for selecting the technology needed for advancement of the EP program were its ability to contribute to our high standard of quality, ease of operation, ease of implementation and cost-effectiveness,” Nesbitt says.

“From a business standpoint,” Wilson says, “we wanted to increase patient capacity on the campus, because there was a six- to eight-week waiting list. The new technology had to not only allow more patients to be seen, but also needed to afford Dr. Nesbitt the energy reserve through increased ease of operation to treat those additional patients. The robotic catheter system accomplished both.”

Conservative financial pro forma

Wilson’s financial pro forma was conservative. The 2009 baseline number of left atrial EP patients was 86. He projected that the flexible robotic system would result in an additional two patients per month the first year (2010). “Because of our backlog, we knew the need was there and the market would support our conservative projection. The following year, we projected three additional patients per month and then four per month after that,” Wilson says.

“Since payors do not provide additional reimbursement for procedures carried out with the robotic system, the return on investment [ROI] was based on the incremental increase in the number of patients served,” Wilson says. The conservative pro forma did not consider the “halo effect” of any increase in the number of implant procedures resulting from the overall increase in the number of patients seen.

When comparing actual results to the pro forma, the ROI projection was exceeded. Rather than accommodating an additional 24 patients the first year, the EP lab saw an increase of 65 patients—a 76 percent year-over-year change. “Program growth exceeded all the numbers in the pro forma,” Wilson says. Of the 151 patients seen in the EP lab, 82 were appropriate for use of the robotic system (see Chart 1 and Table 1).

“As a result, our initial pro forma net present value of \$1.3 million actually increased by over 100 percent and our payback period dropped by 64 percent, from 2.5 years to 0.9 years,” he says (see Table 1a).

Market development

As the chief financial officer for Texas Health Arlington Memorial, Shelly Miland carefully considers the financial risk of new technology. She had already seen how the immediate community benefitted from the comprehensive arrhythmia program on campus. Interestingly, referrals not only grew from within the central DFW metroplex, but they also came from as far away as Dallas and Fort Worth. The EP program had struck a chord with the community.

At Texas Health Arlington Memorial, new technology has to pass several tests. It has to fit within the hospital’s overall mission of providing optimal patient care; it has to have enduring value; and it has to have an acceptable ROI. Miland says the flexible robotic system passed the tests.

“Our local community has responded positively to our growth and we are able to better accommodate them in a timely and sophisticated

manner,” Miland says. “In addition, we’ve seen our market grow beyond our metropolitan boundaries.”

Increased daily capacity

Nesbitt says the primary objective of implementing the advanced technology was to enhance the quality of care for patients and provide access to technology the community needed. A secondary reason was the ability to perform the procedures at the control console located outside the EP lab. “Standing and wearing lead at the table for two hours results in fatigue and can result in injury in the longer term. Not having to do that has allowed me to see more patients, conduct rounds and finish my day in a timely manner,” he says.

Before implementing the new technology, Nesbitt’s daily case capacity was either two left atrial EP patients and one implant patient

(implantable cardioverter-defibrillator [ICD] or pacemaker) or one left atrial EP patient and three implants. With the flexible robotic system, his daily case capacity increased to three left atrial patients and two implants or two left atrial patients and four implants (see Chart 2 and Table 2).

The heart program growth, which was not included in the pro forma, included an 8 percent growth in pacemaker patients from 2009 to 2010 and a

5 percent growth in ICD patients—a 7 percent overall increase in implant patients (see Chart 3 and Table 3).

“We also have determined that the 76 percent increase in left atrial EP volumes was not gained by reducing the number of other procedures, but by an increase in total patients served,” Wilson says. “Dr. Nesbitt’s goal is for the Texas Health Arlington Memorial campus to become recognized as *the* center for arrhythmia treatment. The increase in patient volume related to left atrial EP procedures and implants over the first year may indicate a step in that direction.”

He adds, “If you see volume growth of 10 percent in one of the highest revenue programs, there is a significant impact.”

In the last quarter of 2010, Texas Health Arlington Memorial and physician investors opened the joint venture Texas Health Heart & Vascular Hospital Arlington on the campus of Texas Health Arlington Memorial. Texas Health Heart & Vascular Hospital is a 48-bed facility with four operating rooms, two cath labs, one EP lab and one procedure room. The advanced technology discussed in this article is now located at the Texas Health Heart & Vascular Hospital as a part of the vision for the campus to be recognized as an Arrhythmia Center of Excellence. **CVB**



Texas Health Arlington Memorial Hospital in Arlington, Texas

Chart 3. EP Implants Growth

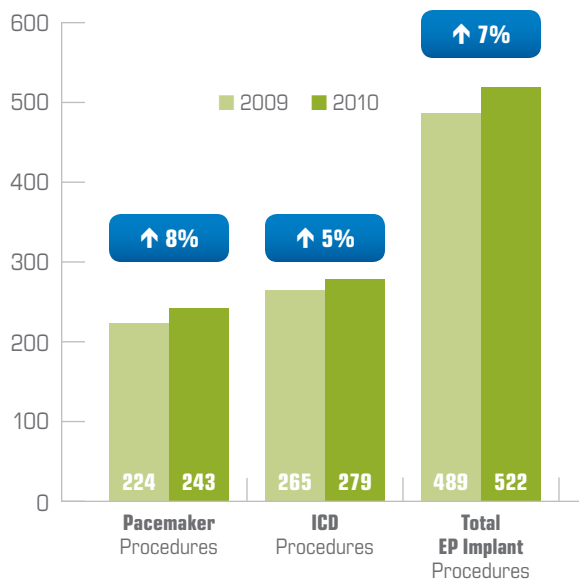


Table 3. Heart Program Growth	EP Implants			
	2009	Change	2010	% Chg YOY
Pacemaker Procedures	224	19	243	8%
ICD Procedures	265	14	279	5%
Total EP Implant Procedures	489	33	522	7%



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The safety and effectiveness of this system for use with cardiac ablation catheters in the treatment of cardiac arrhythmias, including atrial fibrillation, have not been established.

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