

To: Jay Reynolds, Charirman MMH Finance Committee  
 From: Wes Barnt, Vice President Operations  
 Date: November 14, 2019  
 Subject: Spine Navigation Robot Procurement

At the request of our spine surgeons, the operating room (OR) leadership team has evaluated the possibility of adding a Spine Robotics System to the current spine surgery program. The comprehensive Request for Proposals (RFP) process was completed and two reputable suppliers participated in bidding process. Their proposals are summarized in the table below:

<b>Surgical Spine Robotic Navigaation System - Comparison</b>		
<i>5-year Cost of Ownership</i>		
	<b>Mazor X Stealth Edition</b>	<b>ExcelsiusGPS</b>
<b>Total System Capital Cost</b>	\$933,157.50	\$1,055,810 (+13%)
<b>Trade-in Value (Stryker Navigation)</b>	\$75,000 (Included above)	none (not itemized)
<b>Pay-off</b>	Net 30	Net 30
<b>Delivery</b>	2-4 days	5 days
<b>Average disposable cost per case</b>	\$750, 5-yr annualized = \$780,600	\$725, 5-yr annualized = \$754,000
<b>Manufacturer Warranty</b>	12 months	12 months
<b>Service Agreement Pricinc</b>	\$117,900/yr for 4 years, starting yr 2	\$95,000/yr, starting at yr 2
<b>Instruments</b>	Navigation and Active Navigation sets (3)	2 included, one quoted seperately
<b>On-site support</b>	Provided at no-cost, trained clinicians, will be at every case they are notified of "forever"	Provided at no cost, trained robotic specialists, will be at every case until no longer needed (+/- 50 cases)
<b>Service Location</b>	Austin, Dallas, West Texas	DFW, Houston
<b>Service Time</b>	24 hours	24 hours
<b>Preventative Maintenance Schedule</b>	Twice per year	Quarterly
<b>Surgery Planning</b>	Remote (web-based) or Active in-room	Semi-Remote (Tablet) and Active in room
<b>Surgeon Training</b>	Off-site and On-site Training provided at no cost	Off-site and On-site Training provided at no cost
<b>Staff Training</b>	Off-site and On-site Training provided at no cost	On-site Training provided, and Off-site training per request at no cost
<b>Estimated cost of Ownership (5 years) - based on 4 cases/week</b>	<b>\$2,184,758.50</b>	<b>\$2,189,810.00</b>

Robotic-assisted spine surgery is an emerging technological advancement that is growing in popularity among patients and practitioners alike. Much like the DaVinci platform currently used by General, Women's Health, and Urology Surgeons in the OR, the spine robot allows surgeons to be more precise and efficient in the operating room. The spine robot uses images obtained in the hospital either using a traditional CT scan or intraoperative imaging (O-Arm) to plan and execute spine surgeries. Using these images, the robot uses its arms to guide a surgeon's tools to penetrate the patient at the exact position, angle, and depth necessary to correct the identified abnormality.

The spine robot has the capability of expanding our current spine surgery treatment options. The following spine conditions will benefit from using this new technology:

- Complex scoliosis & kyphosis
- Degenerative Disc Disease
- Herniated Discs
- Spondylolisthesis
- Repeat spinal procedures

There are currently two neurosurgeons who are committed to using this technology. We believe the new technology will provide a great benefit to the residents of our community who are currently forced to leave Midland County for these procedures if the desire to have it performed with minimal invasiveness. While we may recapture some of these cases, most of the financial benefit will be derived through efficiency in the operating room.

At this time, we would like to request the authorization to purchase a new Spine Robotics System from Medtronic to complement our existing Medtronic Spine Systems. The total capital expenditure is estimated at \$933,157.00. The Midland Memorial Foundation Board of Governors has authorized use of funds from the Foundation Endowment Capital Grant in the amount of \$1,033,429 to procure a Spine Navigation Robot.