Midlands Orthopaedics & Neurosurgery enhances needle-guided imaging with the **SONIMAGE® MX1 Portable Ultrasound System**

As a leading orthopedic provider in the Columbia, SC, area, Midlands Orthopaedics & Neurosurgery has differentiated itself from other practices not just by delivering exceptional quality care, but also by providing complete price transparency. The practice posts the cost for nearly any exam or procedure on its website. According to **Ron Chorzewski, CEO**, this price transparency brings new patients to the practice, including those who are uninsured.

"People are attracted to the practice because we are a high-quality, low-cost provider compared to others in the area," Chorzewski says.

With 40 providers across different specialties, including physical and occupational therapy, Midlands covers all the major orthopedic specialties, from sports medicine and total joint replacement to pain management and adult spine/neurosurgery.

A portable ultrasound solution for confident needle placement

Chorzewski is committed to enhancing patient care with technology, including ultrasound. As part of this commitment, Midlands implemented the SONIMAGE® MX1 Portable Ultrasound System from Konica Minolta Healthcare at three different offices in 2022. According to Chorzewski, adding ultrasound to an orthopedic practice provides benefits for the patients, the physicians and the practice, particularly for ultrasound-guided procedures.

"It's a triple win," he says. "The patient and physician win because with ultrasound guidance, the physician sees the anatomy and can avoid sensitive tissues for a less painful procedure. They also know exactly where the injection goes, so it leads to better outcomes for the patient. Then, there is reimbursement that is associated with using ultrasound guidance, and that helps support our practice."

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Because the use of ultrasound to guide delivery of the injection is reimbursable with CPT code 20611, the practice can invest in technology that helps deliver better patient outcomes and satisfaction. According to Chorzewski, the additional reimbursement for ultrasound more than supports the cost and/or lease of the equipment.

Plus, while many orthopedists can do a good job delivering injections without ultrasound guidance, they can do an even better job using ultrasound, as it helps guide the injectate placement precisely where it needs to go.

Staff members at Midlands Orthopaedics & Neurosurgery.

"My experience with physicians who have transitioned to ultrasound guidance has been that they appreciate the improved accuracy with the guidance of ultrasound," Chorzewski adds. "I'm hearing from our physicians that the patient experience with ultrasound is different. Patients are impressed with the technology and are more satisfied in the interaction the physician has with them. It is influencing the patient experience in a positive way."

Previously, Midlands used fluoroscopy for some injections, such as deep hip injections. However, this requires a separate appointment for the patient and incurs additional costs. Now the practice coordinates these injections with ultrasound, which allows the injection to be performed in the exam room during the same appointment as the diagnostic evaluation. Plus, the physician can use ultrasound for the diagnosis, if needed.

Selecting the right system and vendor

Not all ultrasound systems are optimized for MSK imaging. In fact, many general imaging ultrasound systems might have more capabilities – at a higher cost – than what is needed in an orthopedic practice. Chorzewski notes that some ultrasound systems have too many knobs and buttons. While they work well for a multitude of cases, point-of-care users can get lost with all the different settings. The last thing a practice or physician wants is a setting being changed without realizing it and then trying to figure it out in front of a patient.

"My draw to the MX1 System was its simplicity and the MSK presets," says Chorzewski.

The MX1 System features one-touch image optimization to simplify operation and improve workflow. Multiple imaging parameters, such as frequency, focus and compounding, can be changed automatically by just adjusting the depth. The result of these customized settings is exceptional image quality and resolution reliably and repeatedly, enabling physicians to make a confident diagnosis, provide therapeutic needle guidance and monitor rehabilitation.

For interventions, Konica Minolta's Simple Needle Visualization (SNV®) improves needle visibility of both the tip and the shaft by highlighting the advancing needle, making it the ideal solution for ultrasound-guided injections. The SNV software incorporates an advanced algorithm that utilizes both the in-plane and out-of-plane methods to improve needle visibility, especially in steep angle approaches.

"With SNV, identifying the needle placement within the patient's anatomy is not a challenge because it appears blue on the screen," says Chorzewski. "So, the learning curve is very quick."

Portability is also important. With the MX1 System, Midlands' orthopedists can carry the unit anywhere it is needed. Because the system is so compact and ergonomic, it can be easily kept in a room without taking up much needed space that can be used for other supplies.

"My draw to the MX1 System was its simplicity and the MSK presets"

The implementation of the SONIMAGE MX1 Portable Ultrasound System at Midlands Orthopaedics & Neurosurgery has been so successful that the practice has purchased multiple units. Chorzewski recommends that other practices seeking to implement MSK ultrasound for diagnosis and interventions share the published clinical benefits with physicians who may be averse to adding ultrasound as an imaging modality.

"The clinical research is quite supportive of the use of ultrasound for increasing the accuracy of injections," he says. "Having this research on hand can be helpful when discussing it with physicians who may biased against adding ultrasound."

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Dr. Seth Molloy speaks with a patient at Midlands Orthopaedics & Neurosurgery.

Several studies have found that ultrasound-guided injections can be 20-25% more accurate than using an anatomic landmark technique only, with superior efficacy in anatomic areas.[1-4]

Chorzewski also recommends practices review the specific certification requirements that some payers may require for reimbursement in their state, as this can vary in the US. Also, be sure to clearly document the need and desire for using ultrasound guidance with the patient.

Summary

For Midlands Orthopaedics & Neurosurgery, the SONIMAGE MX1 Compact Ultrasound System brought portability and precision to MSK imaging at the point-of-care. The one-touch image optimization simplifies operation for improved workflow. Furthermore, the enhanced needle visibility advances ultrasound-guided injections for bottom-line benefits and high-quality patient care.

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