In the era of Accountable Care, we as physicians are tasked with providing care that improves patient health, enhances patient experience and reduces healthcare spending.

Ultrasound imaging technology has made huge advances in terms of size, image quality and cost. This has made it easier for physicians to adopt this technology into their practices in a wide array of clinical applications.

In the hands of a skilled sports medicine physician, ultrasound has greatly enhanced the practice of orthopedic medicine. Properly used, physician-guided ultrasound imaging can benefit patients with orthopedic needs in many ways, including:
- In-office diagnosis of musculoskeletal injury formerly requiring MRI or other costly tools
- Precision guidance for injection therapy
- Ultrasound-guided techniques for treatment of common orthopedic problems, in many cases eliminating the need for surgery
- Faster access to definitive care, at lower overall cost

**ULTRASOUND IS COST-EFFECTIVE**
- Studies suggest that if ultrasound were substituted for MRI in appropriate instances, Medicare would save about half a billion dollars per year. Simply using ultrasound first in 30% of patients with rotator cuff (shoulder) pain would save Medicare about $31 million/year.
- A diagnostic ultrasound test of the shoulder costs Medicare an average of between $40 and $116, compared to an average cost of $260 for an MRI. There is additional cost for the radiologist interpretation and, if performed in a hospital, an additional “facility fee” is also added to the cost of the study.
- In-office ultrasound avoids additional charges that hospitals place on these tests when performed in their facilities.
- Ultrasound-guided procedures can be done at considerable cost-savings relative to surgical procedures, especially when considering the additional surgical costs related to anesthesia and facility fees.

**ULTRASOUND IS CLINICALLY EFFECTIVE**
- Ultrasound allows for visualization of images at rest and in motion (dynamically). This increases the diagnostic usefulness of ultrasound relative to other static imaging tests.
- The American College of Radiology recommends ultrasound as a first line choice over more expensive options in many clinical situations.
- Ultrasound has diagnostic accuracy equivalent to MRI for rotator cuff problems in the shoulder.
- Accuracy of ultrasound-guided joint injections vary between 90-100%, vs. 64-81% for unguided injections. Accuracy of injections around tendon sheaths varies from 87-100% with ultrasound guidance vs. 27-60% without guidance.
- The great majority of clinical studies show greater effectiveness of ultrasound-guided injections over unguided injections.

**ULTRASOUND IS PATIENT-CENTERED**
- Ultrasound is safe. Unlike CT, MRI or nuclear imaging, there is no ionizing radiation associated with its use.
- Ultrasound can be used in the office to answer clinical questions when the patient first presents symptoms to their physician. This eliminates the need for return trips for further imaging and allows diagnosis and treatment to start on day one. Patients requiring surgery are identified right away.
- Ultrasound allows imaging to occur face-to-face with the physician. Results can be viewed together and discussed in real time.
- Studies show that injection treatments performed with ultrasound guidance are less painful than similar treatments without guidance, or even with CT guidance.
- Patients prefer the quickness, lower costs and decreased pain of ultrasounds-guided injections compared to CT-guided or landmark-guided procedures.
- Ultrasound is completely portable, and can be brought to a patient who cannot be moved.