

SPECIAL REPORT

Becoming an Orthopaedic
Center of Excellence.

*"Increased competition
and price sensitivity make it
difficult to attract patients
and referrals. High-quality
imaging could be your
competitive difference."*

image
quality

IN ORTHOPAEDICS

Are You Making the Right Investments in Orthopaedic Equipment?

If you work in a large hospital, you are facing some strong headwinds – several of which are causing price erosion. Patients are more price-sensitive and have easy online access to compare costs. Likewise, insurers and referrers are steering potential patients to lower-priced imaging providers. And let's not forget about reimbursement capitation.

In this Special Report, we take a close look at the challenges impacting orthopaedic providers in large hospital settings – and give you strategies to stay profitable and competitive.

In this Special Report, *Becoming an Orthopaedic Center of Excellence*, you'll learn:

- Strategies to keep patients, attract referrals and offset price erosion.
- The advantages of weight-bearing images: a surgeon's view.
- When to use 2D Radiography versus 3D CT.
- How to capture more referrals by promoting your high-quality imaging.
- How Carestream's orthopaedic imaging solutions can help you become a Center of Excellence.



Invest
Wise

High-Quality Image Capture Puts You on the Path to Becoming a Center of Excellence.

Strategies to keep patients, attract referrals and offset price erosion.

"Today's patients, referrers and insurers are price-sensitive and price-savvy."

There are several strong forces in healthcare that are causing price erosion for large hospitals. In this Special Report, we take a close look at the ones impacting orthopaedic providers in large hospital settings:

- Price erosion as more surgeries – like knee and hip replacements – previously done only in the hospital move to outpatient settings
- The number of baby boomers – along with their aging joints – moving out of private insurance and onto Medicare and its lower reimbursement rates
- Steerage by some insurers to lower-priced providers
- More price sensitivity and comparison shopping by patients who have higher deductibles – and more awareness of competing providers, thanks to the Internet

What can you do to stay competitive and remain profitable? According to the Advisory Board, "orthopaedic program sustainability now requires a shift in focus from revenue maximization and volume growth to patient acquisition and retention via cost competitiveness."¹

Strategy: Invest in High-Quality Image Capture.

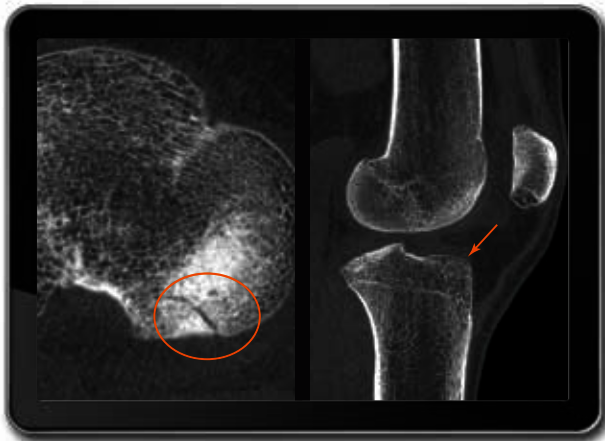
Quality image capture is an essential foundation of accurate medical diagnosis. In orthopaedics, it can mean the difference between making an accurate diagnosis the first time – or missing one of the many complex subtleties associated with musculoskeletal disorders. Additionally, making an accurate diagnosis the first time lowers your downstream costs.

shift
focus

High-Quality Imaging Lowers Downstream Costs.

Wrists, feet and ankles have very complex anatomy. Minute MSK injuries, like scaphoid fractures, can be difficult to detect. In fact, failure to identify fractures is the most common diagnostic error in the Emergency Department, according to the World Journal of Radiology.²

High-quality images help your radiologist see more, to spot injuries she or he might have missed otherwise, and to make the right diagnosis the first time. This directly affects your bottom line by lowering downstream costs. According to Radiology Business, perceived suboptimal image quality led to about 11% of costly radiology callbacks.³



With today's bundled and capitation payments, each return visit by the patient to get to the right diagnosis decreases your profits. Being able to make an accurate diagnosis from the initial image capture decreases the amount of repeat treatments needed by patients.

Controlling your downstream costs helps you keep your costs to your patients in check as well – an important differentiator in this market of price sensitivity. Thanks to the Internet, patients are very aware that there are often multiple imaging providers within driving distance. With high deductibles, price sensitivity is weighing more heavily in their decision-making. Similarly, they are voicing their cost concerns

to their referrers, who are perhaps also making note of lower-priced imaging providers.

There is yet another party monitoring the costs of imaging. Some health insurance providers are steering their members to facilities with lower-cost imaging services.

High-Quality Imaging Helps Increase Capture Rates and Referrals.

A picture is not only worth a thousand words, it is also worth an increased capture rate. A quality image helps a patient understand their diagnosis better, and the need for surgery and treatment – increasing your capture rate. Dr. Anish R. Kadakia of Northwestern Memorial Hospital says he has a higher capture rate when patients can understand the image and the need for treatment.⁴ And of course, a satisfied patient is likely to return to your hospital for future imaging needs.

Conversely, a dissatisfied patient – who was misdiagnosed initially – can negatively impact considerations by potential patients. Today, many online-savvy patients research imaging and other healthcare facilities before choosing a provider. Did you know that “patient experience” is now a factor in U.S. News & World Report rankings? Also, the Center for Medicare and Medicaid Services (CMS) surveys hospitals (with HCAHPS⁵) and uses those results as part of its Hospital Value-Based Purchasing Program. In addition, radiologist and physician ratings are available via online platforms, including Rate MDs, vitals.com, and yes, even Yelp.

Speaking of satisfaction – don't overlook the appeal of pristine image quality to your surgeons and radiologists. They want to work for a top-rated orthopaedic center that understands the value of high-quality imaging software. Don't lose them to a practice that has better imaging tools.

Quality imaging also can drive more referrals from physicians. Surprisingly, some referrers don't realize there can be considerable variation in imaging quality. We recommend educating your referrers on the value of image quality and how it contributes to improved patient outcomes and satisfaction. Make them aware of your image capture software and equipment, and how it helps you take better care of their patients.

Strategy: Increase Efficiency to Capture More Revenue.

Increasing the number of imaging exams seems like an obvious solution. But quantity always needs to be balanced with quality.

Fortunately, as modality software has evolved, so have the features that enable automation and enhance workflow efficiency. But in our interactions with customers, we often find that departments are overlooking some of these time-saving features, like leveraging existing protocols and applying custom preference looks. Ask your imaging supplier to provide refresher training for your radiology staff on these time-saving features.

Also, explore new productivity options on the market – like fewer screen transitions during image capture. Numerous, small time savings can add up enough to accommodate more exams within the same time period.

Lastly, revisit your service contract with your equipment provider and ask questions about response time and equipment uptime. ■

References:

¹ Quote was taken from the Advisory Board presentation “2020 Orthopedic Market Trends.” © 2020 by Advisory Board. All rights reserved. Carestream is a member of the Advisory Board Health Care IT Forum. Inclusion of this quote does not imply the Advisory Board’s support or endorsement of other content included in this publication.

² [World Journal of Radiology](#)

³ [Radiology Business](#)

⁴ [When to Use 2D Radiography vs 3D CT](#)

⁵ [Center for Medicare and Medicaid Services \(CMS\) surveys hospitals \(with HCAHPS\)](#)

Educate your referrers on the value of image quality and its contribution to improved patient outcomes and satisfaction.

The Advantages of Weight-Bearing Images: A Surgeon's View.

A significant limitation of CT technology has been that it forces image acquisition with the subject in a supine, relaxed position. When imaging an injured knee, for example, the leg is in full extension and the muscles relaxed.



Dr. Bryan D. Den Hartog, M.D. is a surgeon with Twin Cities Orthopedics. He has 27 years of practice in foot and ankle care with a focus on sports, trauma, and reconstruction.

Dr. Bryan D. Den Hartog, orthopedic surgeon, reports that weight-bearing imaging on the CARESTREAM OnSight 3D Extremity System has been a great advantage for his practice.

"It becomes an important pre-op and post-operative assessment tool. Weight-bearing images more accurately identify ligamentous laxity, loss of cartilage space, and the degree of deformity to give me greater confidence in my care recommendations." Specifically in fusion healing or "trabecularization," the OnSight 3D Extremity Imaging System allows him to:

- Evaluate the extent of trabecular bone bridging
- Improve the visualization around hardware with metal artifact reduction software
- Visualize complex fractures, foot and ankle joints, and overlapping bone structures
- View joints under natural load, thanks to weight-bearing capability

"With this system, I can see the degree of fusion across the area of interest and determine how much surface area is connected by trabeculae. The image detail and quality are much better than traditional CT systems. These images give me greater confidence when determining when patients can go back to work and resume normal activities." ■

Read more clinical studies on our [Extremity Imaging Capture blogsite](#).

expert
advice

When to Use 2D Radiography vs 3D CT for Foot and Ankle Injuries.

Dr. Anish R. Kadakia of Northwestern Memorial Hospital has been evaluating when and whether to use 3D CT rather than 2D weight-bearing radiography for preoperative planning and post-op evaluation.



[Watch Dr. Kadakia's video presentation.](#)

Anish R Kadakia, MD is a Professor of Orthopedic Surgery at Northwestern University/Northwestern Memorial Hospital. Kadakia is certified by the American Board of Orthopaedic Surgery.

In general, Dr. Kadakia uses weight-bearing CT imaging for cases where it is difficult to determine the primary problem, and/or when he wants to see the actual structure of a joint. Specifically:

Preoperative Surgical Planning

- Deformity and extent of arthritis for the midfoot
- Hindfoot, midfoot, and ankle nonunion/malunion
- Hindfoot deformity
- Flat foot deformity, especially for obese patients
- Nonunion/malunion of a fracture
- Fractures where the 3D anatomy is critical to fixation (trimalleolar ankle fractures, talus/calcaneal fractures, midfoot fracture)
- First MTP/Great toe pain to determine the cause of pain. Many patients presume it is a bunion when in reality, arthritis is the problem. The images make the problem clear to them and help them understand that they need a fusion

Postoperative Evaluation

- Malunion and/or nonunion and syndesmotic incongruity
- Following arthrodesis to determine whether any growth and union have occurred

When Not to Use 3D CT for Orthopaedic Surgical Planning and Post-op Evaluation

In the cases below, Dr. Kadakia orders weight-bearing 2D X-rays:

- When a patient is clear that they do not want surgery, regardless of diagnosis
- Toe fusion – unless Dr. Kadakia needs the image to educate a patient who insists the problem is a bunion
- Post-op at six weeks, with some exceptions ■

weight bearing

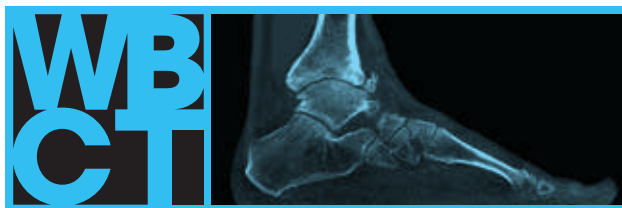
Become an Orthopaedic Center of Excellence.

Invest in high-quality imaging – and market your competitive difference to your referrers.

Learn More about Weight-bearing CT from Your Peers.

Are you familiar with the Weight-Bearing CT International Study Group? The group is dedicated to enhancing diagnosis and understanding of weight-bearing foot and ankle conditions.

Learn more on how to promote dialogue and collaboration for weight-bearing CT research initiatives at wbctsociety.org



International WBCT Society

Promote Your High-Quality Imaging to Capture More Referrals.

High-quality imaging software contributes to improved patient outcomes and satisfaction. Make sure your referrers are aware of your quality image capture software and equipment, and how it helps you take better care of their patients.

Carestream can help you market your competitive advantage. Contact us for an OnSight Marketing Kit.



patient
care

Carestream's Solutions.

To attract and retain patients, secure referrals and offset price erosion, the ability to capture pristine, high-quality orthopaedic images can be an important differentiator. Look to Carestream. We offer a range of hardware and software solutions designed to help you remain both profitable and competitive – while upholding your high standards for patient care.



3D Extremity Imaging

With true 3D-imaging and Weight-bearing exam capabilities, the [CARESTREAM OnSight 3D Extremity System](#) reveals the truth of orthopaedic injuries – and provides the image quality you need to stand out from the competition.

An Advanced X-ray Room

Our flagship X-ray room, [CARESTREAM DRX-Evolution Plus](#), utilizes a wireless, shareable DRX Detector and EVP Plus image-processing to deliver superb image quality, increased latitude and high-contrast image detail.

The addition of our advanced low-dose software options – [Dual Energy and Digital Tomosynthesis](#) – make our DRX-Evolution Plus a market-leading premium room solution for orthopaedic imaging.

Dual Energy is our patented differential filtration software that materially separates bone and soft tissue structures, providing improved assessment of bone abnormalities. Our Digital Tomosynthesis software spatially separates overlapping structures, helping with evaluation of knee joints and fracture reductions, and depiction of fine fractures.



An Affordable X-ray Room

The [CARESTREAM DRX-Ascend](#) delivers high performance and quality imaging at an economical price. It also provides a simple and affordable upgrade pathway – allowing you to step up to the next level without replacing your existing equipment.

Orthopaedic-Minded Software



Powered by Eclipse image processing, Carestream's [Image Suite and ImageView Software](#) solutions are designed to support the workflow and diagnostic accuracy of orthopaedic practices of all sizes. Both software solutions provide pristine images that will help paint a clear orthopaedic image for you and your patients. Additionally, user-friendly interfaces and advanced orthopaedic measurement tools, including the coxometry, gonstead and gonionmetry tools, will help increase your workflow and measurement accuracy.

