By 2030, the number of people turning to joint replacement surgery to end knee pain and regain mobility will increase from 700,000 to 3.5 million annually, according to the American Academy of Orthopaedic Surgeons. For many patients, recovery from knee replacement surgery can be painful and slow, and the results are often not what they expect. Multiple clinical studies have found that, on average, one in five patients who has a knee replacement is dissatisfied with the result due to post-surgical pain or because the new knee feels “unnatural.”

As a total knee surgeon at the Crystal Clinical Orthopaedic Center, I have decided after extensive research to offer our patients the option of an implant that is completely customized based on each patient’s individual anatomy. Known as the ConforMIS iT Total® CR and iT Total® PS, it is the only fully customized knee implant available. Extensive clinical data show that customized implants can provide a better fit and reduce recovery time for patients.

With the ConforMIS iT Total implant, we begin with a detailed CT scan of your knee. The CT scan allows us to take precise measurements of your knee structure to create a customized fit. We then use the CT scan to develop a 3D model of your unique knee. From that model, an implant is designed that precisely matches your specific size and shape. This provides a number of benefits, including the potential for less post-surgical pain, a more natural feel, increased stability and faster recovery.

In clinical research, patients treated with the ConforMIS fully customized knee experienced superior results, including better function and greater satisfaction as compared to those receiving more traditional “off-the-shelf” implants that come in only a limited range of sizes. With off-the-shelf implants, surgeons choose the size that most closely fits the patient’s anatomy, which may result in an implant that is too big or too small for that patient. With this system of design, the ConforMIS knee can be used for 85 percent of total knee replacements.

In July, during the 2016 SICOT International Orthopaedics Specialized Knee Surgery Conference, results from an ongoing, multi-center, prospective study of more than 300 patients treated with iT Total CR in the United States demonstrated greater satisfaction with iT Total CR than with traditional off-the-shelf implants. Additional results showed that iT Total CR patients were able to return to activities of daily living faster when compared to off-the-shelf patients.

Improved patient satisfaction and better quality care are what we strive for at Crystal Clinic. As the only facility in Summit County to offer ConforMIS implants, we look forward to providing our patients with a better treatment option in the years ahead.

By Thomas E. Bear, MD

Dr. Bear graduated from The Ohio State University College of Medicine and then trained in orthopaedic surgery at Akron City Hospital. He received additional training at Akron Children's Medical Center and the Wellesley Hospital in Toronto. He currently practices at Crystal Clinic Orthopaedic Center in Akron with offices at 437 W Portage Trail in Cuyahoga Falls, OH 44221.

To learn more, visit crystalclinic.com or call 1-888-502-3041.