

# GIBSON AREA HOSPITAL AND HEALTH SERVICES

## NOW OFFERING HIGHLY ADVANCED ROBOTIC-ARM ASSISTED JOINT REPLACEMENT WITH STRYKER'S MAKO SMARTROBOTICS™ SYSTEM



Innovative robotic technology allows surgeons to personalize total knee, partial knee and total hip replacement procedures to each patient!

### FOR IMMEDIATE RELEASE

[Gibson City, IL, 4/7/2021] – Gibson Area Hospital and Health Services is among the first to offer Mako SmartRobotics™. This advancement in joint replacement surgery transforms the way total knee, partial knee and total hip replacements are performed, by helping surgeons know more and cut less.<sup>1-5\*</sup> Mako SmartRobotics™ combines three key components, 3D CT-based planning, AccuStop™ haptic technology and insightful data analytics, into one platform that has shown better outcomes for total knee, total hip and partial knee patients.<sup>6-8</sup>

“With Mako SmartRobotics™, I know more about my patients than ever before, and I’m able to cut less.<sup>1-5\*</sup> For some patients, this can mean less soft tissue damage<sup>3,4</sup>; for others, greater bone preservation.”<sup>2,5</sup> said Dr. Brett Keller of Gibson Area Hospital Orthopaedics. “Mako’s 3D CT allows me to create a personalized plan based on each patient’s unique anatomy before entering the operating room. During surgery, I can validate that plan and make any necessary adjustments while guiding the robotic arm to execute that plan. It’s exciting to be able to offer this transformative technology across the joint replacement service line to perform total knee, total hip and partial knee replacements.”

Total knee replacements in the United States are expected to increase 189% by 2030,<sup>9</sup> yet studies have shown that approximately 20% of patients are dissatisfied after conventional surgery.<sup>10</sup> Mako Total Knee combines Stryker’s advanced robotic technology with its clinically successful Triathlon Total Knee System, which enables surgeons to have a more predictable surgical experience with increased precision and accuracy.<sup>11</sup> In clinical studies, Mako Total Knee demonstrated the potential for patients to experience less pain, less need for opiate analgesics, less need for inpatient physical therapy, reduction in length of hospital stay, improved knee flexion and greater soft tissue protection in comparison to manual techniques.<sup>3,7</sup>

Mako SmartRobotics™ for Partial Knee replacement is a treatment option designed to relieve the pain caused by joint degeneration due to osteoarthritis that has not yet progressed to all three compartments of the knee. During surgery, the surgeon guides the robotic arm during bone preparation to execute the predetermined surgical plan and position the implant. By selectively targeting only the part of the knee damaged by osteoarthritis, surgeons can resurface the diseased portion of the knee while helping to protect the healthy bone surrounding the knee joint.<sup>4</sup> Studies have shown that robotic-arm assisted partial knee replacement, leads to greater accuracy of implant position to plan compared to manual partial knee replacement procedures.<sup>12,13</sup>

By 2030, total hip replacements in the United States are projected to grow 171%.<sup>9</sup> Mako SmartRobotics™ for Total Hip is a treatment option for adults who suffer from degenerative joint disease of the hip. During surgery, the surgeon guides the robotic arm during bone preparation to prepare the hip socket and position the implant according to the predetermined surgical plan. In a controlled matched-paired study to measure acetabular bone resection, results suggested greater bone preservation for Mako Total Hip compared to manual surgery.<sup>2</sup> MKOSYM-COM-8\_Rev-1\_26752

“We are proud to be among the first hospitals in the region to offer this highly advanced SmartRobotics™ technology in our area,” said Rob Schmitt, CEO of Gibson Area Hospital and Health Services. “This addition to our orthopaedic service line further demonstrates our commitment to provide the community with outstanding healthcare.”

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\*For the Mako Total Knee application, “cut less” refers to less soft tissue damage and greater bone preservation as compared to manual surgery.<sup>3,4</sup> For the Mako Total Hip and Partial Knee applications, “cut less” refers to greater bone preservation as compared to manual surgery.<sup>1,2,5</sup>

#### IMPORTANT INFORMATION

##### Hip & Knee Replacements

Hip joint replacement is intended for use in individuals with joint disease resulting from degenerative and rheumatoid arthritis, avascular necrosis, fracture of the neck of the femur or functional deformity of the hip.

Knee joint replacement is intended for use in individuals with joint disease resulting from degenerative, rheumatoid and post-traumatic arthritis, and for moderate deformity of the knee.

Joint replacement surgery is not appropriate for patients with certain types of infections, any mental or neuromuscular disorder which would create an unacceptable risk of prosthesis instability, prosthesis fixation failure or complications in postoperative care, compromised bone stock, skeletal immaturity, severe instability of the joint, or excessive body weight.

Like any surgery, joint replacement surgery has serious risks which include, but are not limited to, pain, infection, bone fracture, change in the treated leg length (hip), joint stiffness, hip joint fusion, amputation, peripheral neuropathies (nerve damage), circulatory compromise (including deep vein thrombosis (blood clots in the legs)), genitourinary disorders (including kidney failure), gastrointestinal disorders (including paralytic ileus (loss of intestinal digestive movement)), vascular disorders (including thrombus (blood clots), blood loss, or changes in blood pressure or heart rhythm), bronchopulmonary disorders (including emboli, stroke or pneumonia), heart attack, and death.

Implant related risks which may lead to a revision of the implant include dislocation, loosening, fracture, nerve damage, heterotopic bone formation (abnormal bone growth in tissue), wear of the implant, metal and/or foreign body sensitivity, soft tissue imbalance, osteolysis (localized progressive bone loss), audible sounds during motion, and reaction to particle debris. Hip and knee implants may not provide the same feel or performance characteristics experienced with a normal healthy joint.

The information presented is for educational purposes only. Speak to your doctor to decide if joint replacement surgery is appropriate for you. Individual results vary and not all patients will return to the same activity level. The lifetime of any joint replacement is limited and depends on several factors like patient weight and activity level. Your doctor will counsel you about strategies to potentially prolong the lifetime of the device, including avoiding high-impact activities, such as running, as well as maintaining a healthy weight. It is important to closely follow your doctor's instructions regarding post-surgery activity, treatment and follow-up care. Ask your doctor if a joint replacement is right for you.

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