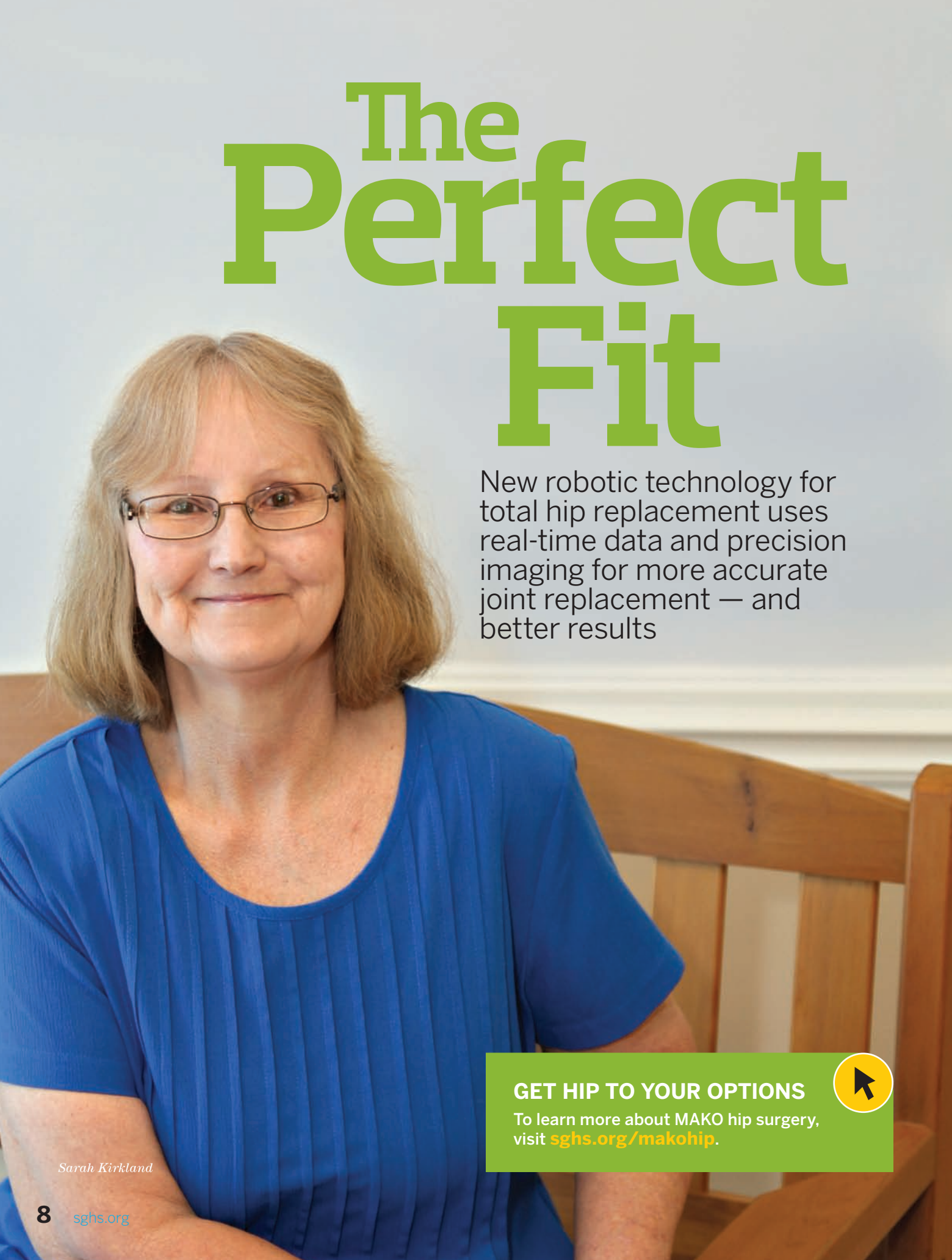
The Perfect Fit

New robotic technology for total hip replacement uses real-time data and precision imaging for more accurate joint replacement — and better results



Sarah Kirkland

GET HIP TO YOUR OPTIONS

To learn more about MAKO hip surgery, visit **sghs.org/makohip**.

When it comes to joint replacement, precision is everything. While getting implants positioned correctly is critical to improving both surgical outcomes and the lifespan of the implants used for hip replacement, it can be challenging. But surgeons at Southeast Georgia Health System are using robotic technology that helps perfect the procedure. In fact, the Brunswick Campus is the first hospital in the Southeast Georgia region to offer Mako™ Robotic-Arm Assisted Surgery for total hip replacement.

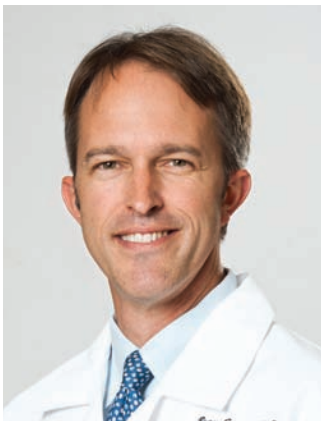
"By using Mako's innovative software and robotic-arm technology, we can achieve previously unmatched levels of personalization and reproducible precision in hip implant position," says Denny A. Carter, M.D., board-certified orthopaedic surgeon, Summit Sports Medicine & Orthopaedic Surgery, a strategic affiliate of the Health System. "We can align the implant to fit the patient's unique anatomy."

Dr. Carter became the first orthopaedic surgeon on the Brunswick Campus to use the system for performing a total hip replacement in October 2015.

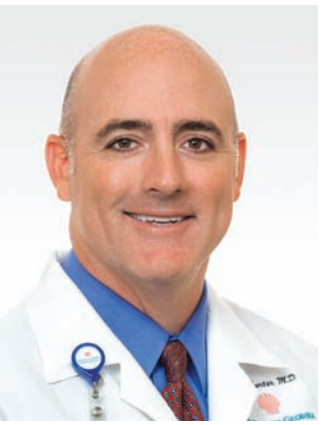
A System That Measures Up

A Mako procedure starts with a pre-operative CT scan of the patient's hip. From the scan, a 3-D virtual model of the patient's unique hip anatomy is generated. This model is then loaded into the Mako system software and used to create a personalized surgical plan. During the procedure, the highly advanced, physician-controlled robotic arm provides real-time visualization and measurements. This allows surgeons to make adjustments as needed and to control implant placement, optimizing its position and alignment.

"We can assess leg lengths in the operating room and get it within 1 or 2 millimeters — the thickness of a piece of construction paper," says Beau Sasser, M.D., board-certified orthopaedic surgeon, Summit Sports Medicine & Orthopaedic Surgery, who is also accredited to perform Mako hip replacement procedures.



Beau Sasser, M.D.



Denny A. Carter, M.D.

A Life-Changing Procedure

Using the Mako system for total hip replacements allows the physicians to achieve greater accuracy in positioning the joint during the surgery, resulting in improved patient outcomes.

"This procedure does more than just restore mobility and quality of life for our patients; it changes their life," Dr. Sasser says. Decreased pain, reduced risks, improved surgical outcomes, enhanced gait, consistency in leg length and increased longevity of the implant are among the potential benefits patients suffering from debilitating degenerative joint disease can expect as compared to traditional hip replacement.

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But beyond these advantages, the best news of all may be that virtually anyone who is a candidate for total hip replacement is ideal for this surgery — even someone who has anatomic variations or who has had previous surgery. One of the first patients to benefit from the new technology was Sarah Kirkland. She had been suffering with constant, debilitating hip pain for years when she decided to see Dr. Carter about her options.

"I was hurting pretty bad. It made it hard for me to even go anywhere," the 59-year-old says. "I couldn't pick up my leg, and it felt like I was in pain 24 hours a day. But Dr. Carter told me he thought I'd be a great candidate for a new procedure that was coming, and I'm glad I waited," she says.

Mrs. Kirkland had undergone total hip surgery on her other side a few years prior, so she was familiar with the process. But this time around, the experience was much easier.

"The pain was less, and I was up and moving a lot sooner," she says. "I was stronger than before and using the walker and cane quicker. It's only been three months, and I'm walking in my house without a cane."

Both Dr. Carter and Dr. Sasser already have extensive experience using Mako robotic-arm technology. In 2008, they were among the first physicians in the country to conduct partial knee resurfacing procedures using Mako robotic-arm technology. Since then, they have successfully completed hundreds of Mako partial knee replacements.

"Using Mako Robotic-Arm Assisted Surgery for total hip replacement further validates the Health System's commitment to providing cutting-edge technology to ensure the best possible outcomes for patients," Dr. Carter says. ●