

ORTHOPEDIC

# New hips, shorter trips

**Hip replacement procedures used to involve a week-long hospital stay. Now patients can get in and out on the day of the operation.**

By Wendy Haaf

It's hard to imagine Sharyn Shell, 67, doing anything slowly. "I've always been active - I have ADHD, and I talk too fast and move too fast," explains the Toronto retiree, who spent much of her career teaching children with vision loss. But not long ago, when the severe arthritis in Shell's hips was at its worst, unrelenting pain brought her pace to a crawl, interfering with every facet of her life, including beloved pastimes like hours-long walks visiting Toronto's beaches with friends and bargain hunting. She also had to quit her consulting job. "It was hard to get onto the subway and carry my materials," she says.

After two hip surgeries, **SHARYN SHELL** can once again walk Toronto's Beltline pain-free.



Yet the prospect of a second hip replacement surgery – she needed two separate procedures – and another hospital stay made Shell anxious. “You worry about what’s going to happen. Will they be able to fix it?” As it turned out, not only did Shell get her former life back thanks to the way University Health Network’s (UHN’s) Arthritis Program and the Sprott Department of Surgery have transformed their approach to hip replacement, but she was able to return home within hours of the operation.

### THE PREVIOUS APPROACH

While hip surgery is now fairly routine, the recovery process has traditionally been long and difficult. It was normal for patients to be in hospital for a week. They would arrive two days before surgery to do blood work and an electrocardiogram, and have an anesthesia consult, and then spend five or so days post-operation recovering in bed.

Six years ago, the Ontario government asked hospitals to shrink the average length of stay after a hip replacement to four-and-a-half days. “We thought that was crazy,” says Dr. Rod Davey, an orthopedic surgeon within the Sprott Department of Surgery and Head of Patient Safety and Quality in the Arthritis Program at UHN. Not only did they hit that target, but two years ago they reduced the time in hospital even further. Now, most patients are out within a day.

### CONNECTED CARE FOR A FASTER TIMELINE

Making same-day hip replacement surgery possible involves a multidisciplinary effort that incorporates every available advancement in anesthesia and surgical technique, while connecting and streamlining the way care is delivered. It includes everything from the education patients receive before their operations to the availability of experienced healthcare providers who can answer any questions that arise after returning home, and integrating rehab services into the patient’s journey after surgery.

“We try to achieve the same goals, which are that patients are medically stable, getting around safely enough for the home environment, and eating and drinking well, with pain well controlled,” says Dr. Michael Zywiell, a Sprott Surgery orthopedic surgeon. “We’re now able to get patients there much quicker. It’s also abundantly clear from the science that the sooner you can get someone home, the better it is for their physical recovery and their mental health.”

That was the case for Shell, who found even the overnight stay after her first operation, which took place in 2018, unnecessarily confining. “I said, ‘What do I have to do to go home the same day?’”

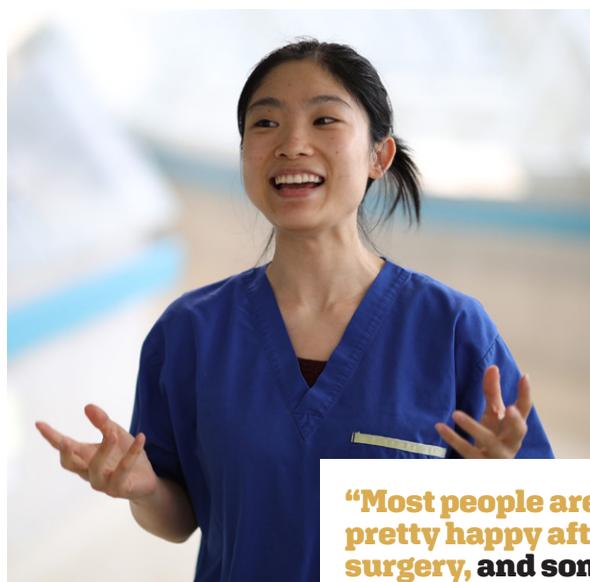
### ASSESSMENT AND EDUCATION

Deciding whether someone is a candidate to go home on the day of surgery – some still stay in the hospital for two or three days – begins with assessing whether they need an operation in the first place. UHN’s Arthritis Program has developed a comprehensive care process that begins with an assessment at the Hip and Knee Rapid Access Clinic within two weeks of referral. A surgeon and an advanced physiotherapy practitioner consult with each individual patient to determine whether surgery or another treatment, such as joint injections or a specialized exercise program, is the best option. “Based on the data we have, and the patient’s situation, we try to give them a sense of the likelihood that they will get a meaningful benefit from each of these treatments,” Dr. Zywiell explains.



**“We’re doing the same procedure, with a much smaller incision and much less damage to the muscles that control the hip.”**

Dr. Rod Davey



**“Most people are pretty happy after the surgery, and some of them are amazed that they can walk right away, and go up stairs.”**

Amanda Ma, registered nurse

JOINT OPERATIONS

**17.4%**

**Increase in hip replacement surgeries in Canada between 2014 and 2018**

SOURCE: CANADIAN INSTITUTE FOR HEALTH INFORMATION

Once this process, which involves questions and medical tests, is complete, the patient and doctor can decide how best to proceed. Shell originally opted to enrol in GLA:D Canada, an education and exercise program created in Denmark that’s been proven to reduce osteoarthritis pain in 60 per cent of patients. It helped her regain muscle strength, resulting in a speedier post-op recovery.

Those who decide to go ahead with surgery attend an education session with a nurse



**“For years, these patients had to stay overnight. Now it’s, ‘Wow, we can do this.’ They can go home, and they’re excelling.”**

Kendra Willis, registered nurse and patient care coordinator



**“We said, ‘How can we do this in a way that’s going to have everyone walking as quickly and safely as possible, recognizing that motion is life?’”**

Dr. Michael Zywiell

practitioner and a volunteer who’s been through joint replacement and who can bring up questions participants might not think of asking otherwise – such as when they can resume having sex. That last addition was made thanks to Shell, who discovered during her second round of pre-operative education that her fellow participants weren’t raising such issues, but were relieved when she did. “I have no filter,” she says with a chuckle.

Education is important, explains Dr. Davey,

because it reassures them they don’t need to stay in the hospital to recover, and helps drive home the need for post-op rehab. Pre-op tests and an anesthesia consult take place 10 to 14 days before surgery, and physiotherapists help patients organize aids they’ll require while recovering at home, such as walkers and raised toilet seats.

### **ADVANCES IN ANESTHESIA, SURGICAL TECHNIQUE**

As for the operation itself, the orthopedic surgeons at Sprott Surgery, and their colleagues in anesthesia, have used every tool at their disposal to minimize its negative impact on the body. Over the course of Dr. Davey’s career, for example, the average incision size has shrunk to 3.5 inches from roughly 14.5. Dr. Davey and his colleagues also use a medication that prevents bleeding, which then eliminates the likelihood of needing a blood transfusion. As well, anesthesiologists now use spinal anesthesia that wears off quickly, rather than heavy narcotics, and the orthopedic surgeons infiltrate the area around the incision with local anesthetic to control pain, which then allows patients to regain use of their legs within hours.

Following a short stay in the recovery room, hip replacement patients go to the day surgery unit – something that didn’t happen before – where nurses monitor their progress. Rehabilitation starts immediately, with physiotherapists helping patients walk up and down a portable staircase.

Before discharge, Amanda Ma, a registered nurse at UHN, and her colleagues teach patients how to move, dress wounds, and manage their pain and nausea. “We also have a nurse practitioner who’s a pain expert coming in to explain further how to manage their pain,” she explains. The day after discharge, the day surgery team will do a followup call to ensure the patient’s pain is well managed. “Most often, they’re feeling fine, and they’re always happy to be home,” adds Kendra Willis, a registered nurse and patient care coordinator at UHN.

If an unexpected situation arises at home – maybe swelling or bruising – expert help is just a phone call away. “You can talk to a person 24-7,” Dr. Zywiell says. “And not just any person, but an orthopedic nurse, a physician assistant or a surgeon.”

### **INTEGRATED REHAB CARE**

The post-op rehab that patients can access once they’re home, and the new referral process, also streamline their recovery. The process was designed by UHN’s Altum Health, alongside the Arthritis Program, to ensure patients have a seamless transition after surgery. Before their surgery, patients are referred to a local Altum clinic – there are 12 across Ontario – where they will be seen by a variety of specialists, such as physiotherapists, chiropractors, kinesiologists and massage therapists, instead of one practitioner. “You get physiotherapy that’s connected with the hospital where you had your surgery and your surgeon’s office,” says Dr. Rajiv Gandhi, an orthopedic surgeon at the Sprott Department of Surgery and Medical Director of Altum Health. “We know patients are getting good quality aftercare.”

After Shell’s second operation in August 2019, she immediately started feeling better. She’s now back to her old self, regularly walking and swimming, and she can’t wait to travel again, once the pandemic ends. Shell is effusive about every aspect of the care she received. “It was outstanding,” she enthuses. “I tell everyone to go to UHN’s Arthritis Program and the Sprott Department of Surgery because they’re fantastic.” ■