Innovations in surgical techniques, anesthesia, and equipment, along with the drive to decrease healthcare costs, are increasing the number of patients and procedures deemed suitable for outpatient surgery. Among the elective procedures now being performed at ambulatory surgery centers (ASCs) are total joint replacements.

The buzz at recent conferences has been the increase in ASC-performed hip implants. Sending patients home hours, rather than days, after a hip replacement was once a startling notion but is now considered an achievable alternative, especially for those who are young and healthy.

Because of lower ASC costs and reimbursements, the savings could be tremendous; in 2010, 332,000 total hip replacements were performed in the US, according to the Centers for Disease Control and Prevention (CDC). Although most were inpatient procedures, an increasing number of ASCs are adding the specialty. The catch is that ASCs may not keep patients overnight, defined by the Centers for Medicare & Medicaid (CMS) and many states as more than 24 hours. For total joints, ASCs use the term “overnight” to mean the longer stay that extends after dark, but not more than 24 hours.

Extra precautions
At Mississippi Valley Surgery Center in Davenport, Iowa, which has been doing total hips since 2007, patient charts list discharge times as 22 hours post surgery. “That gives the nurse a heads up,” says surgical services director Nancy Jipp, ARNP, CASC. The extra 2 hours provide flexibility in case a patient needs more time. The surgery center also hired extra staff to monitor implant patients during the overnight stay.

Northern Wyoming Surgical Center in Cody, Wyoming, performed 5 hip replacements in 2013. The surgeon’s office arranges for patients to visit a physical therapist before surgery to learn how to use crutches and walkers because they will need such aids when they return home. According to Sandy Livesay, director of nursing, “Our patients do very well because they are well informed ahead of time on what to expect and how to prepare for their homecoming.”

Even with such precautions, it’s likely that hips, along with shoulders, knees, and other joint replacements, would have remained exclusively inpatient were it not for the development of less-invasive surgical techniques.

Managing pain
For qualified patients, surgeons now implant hips using an anterior approach. The front incision is about 4 inches long, rather than the usual 8 to 12 inches for a posterior approach.

The anterior approach allows the surgeon to separate muscles, rather than cutting them, to reach the hip joint. This leads to faster healing.

However, the main reason patients are now able to almost literally walk away from hip surgery is advanced pain management. Instead of general anesthesia, pa-
tients receive regional nerve blocks, which are precisely placed using ultrasound imaging equipment. A total hip replacement calls for a major conduction block, and a total shoulder receives an interscalene block.

In addition, oral medication is administered before and after surgery, with staff keeping a close eye on patients. “We get ahead of the game,” Jipp says.

For total knees, anesthesiologists use a combination of sciatic, femoral, and spinal blocks.

At Mississippi, the combination of techniques has led to the best outcomes, according to John Hoffman, MD, an orthopedic surgeon there.

“We are employing surgical techniques that are sparing patients’ muscle tissue,” Dr Hoffman says. “We have also fine-tuned regional anesthetic and pain management protocols. All of these factors come together, allowing most patients to be walking within a day of their procedure.”

**Investment and commitment**

In order for complex orthopedic procedures to be performed at an ASC, the facility’s surgeons and anesthesiologists must have proper training, as well as a commitment to support the program. For example, they may have to be on call overnight.

Additional staff may be needed to provide recovery care and initial physical therapy before discharge.

ASCs also may need to invest in power tools, protective apparel for OR staff, and adjustable hospital beds for patient recovery. The Mississippi Valley outpatient hip and knee program, launched in 2008, required an outlay of $200,000 for 6 sets of power tools. The air-conditioned “space suits” worn by OR staff for orthopedic procedures cost about $1,500 each.

Implants and the instruments used with them are expensive, and ASCs rarely have access to the volume discounts enjoyed by hospitals. Medicare does not reimburse ASCs for total hip or knee replacements, although it does cover implants for some other procedures. Insurance companies may restrict coverage, or patients may not be able to afford the copay amounts.

**Who is eligible?**

Patient selection for complex cases such as hip implants is based on health, motivation, and home environment. The ideal patient is healthy and relatively young, gen-

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**Home improvement for the postop patient**

A total knee or hip replacement, whether done on an inpatient or outpatient basis, is a serious matter. Recovery does not end when the patient leaves the postanesthesia care unit (PACU), nor when the patient arrives at home. Ambulatory surgery centers contemplating performing total joints must train not only surgeons, anesthesiologists, and nurses but also patients for a new level of postoperative self-care.

The staff at Northern Wyoming Surgical Center, Cody, have developed a comprehensive checklist for surgeons to discuss with patients before total hip or knee replacement. In addition to the medical and physical preparation, such as medication use and diet restrictions, the patient is asked to prepare his or her home. The advice includes details an individual might not think of that can make a difference in a successful recovery.

Following are the checklist items for homecoming:

- Arrange for someone to take you home and to stay with you for several days after your surgery.
- If you do the cooking, make double batches of everything for a week or 2 before your surgery. Freeze half, and you’ll have 2 weeks of ready-made meals when you go home. Or, stock up on ready-made foods.
- Throughout the house, place items you use regularly at arm level so you do not have to reach up or bend down.
- Practice with your walker or crutches to see how well you can maneuver through your home. You may need to rearrange furniture or temporarily change rooms (make the living room your bedroom, for example).
- Remove any throw or area rugs that could cause you to slip. Securely fasten electrical cords around the perimeter of the room.
- Consider obtaining a shower chair and raised toilet.
- Shop for things that will make your life easier after surgery. Your list might include a long-handled shoehorn, a long-handled sponge, a grabbing or reaching tool, a footstool, and a big-pocket shirt or soft shoulder bag for carrying things.
- Set up a “recovery center” where you will spend most of your time. Things like the phone, TV remote control, radio, facial tissues, waste-basket, reading materials, and medications should all be within reach.
- If you do not already have a parking permit for a disabled person, apply for a temporary permit several weeks prior to your surgery. Contact the Department of Motor Vehicles or your doctor’s office for an application form.

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eraly age 65 or younger. He or she must be otherwise medically stable and must understand and agree to local anesthesia and a shorter-than-usual stay following the surgery. The patient also must be able to tolerate regional anesthesia.

Discharge planning is essential, and the patient must be able to take responsibility for following home care instructions and recognizing complications.

A caregiver must be available to provide home care for at least the first 48 hours following discharge. At Northern Wyoming Surgical Center, surgeons give discharge instructions to caregivers ahead of time, including how to change dressings as necessary.

The home must be cleared of obstacles and loose rugs. Shower supports and raised toilet seats are prescribed. The building must be accessible to someone using crutches, so stairs may present an obstacle. Referring physicians and surgeons are responsible for this aspect of patient selection. The surgery center staff have developed a list of instructions for surgeons to give patients. A patient who cannot comply might not be considered appropriate for the outpatient setting.

—Paula DeJohn

References