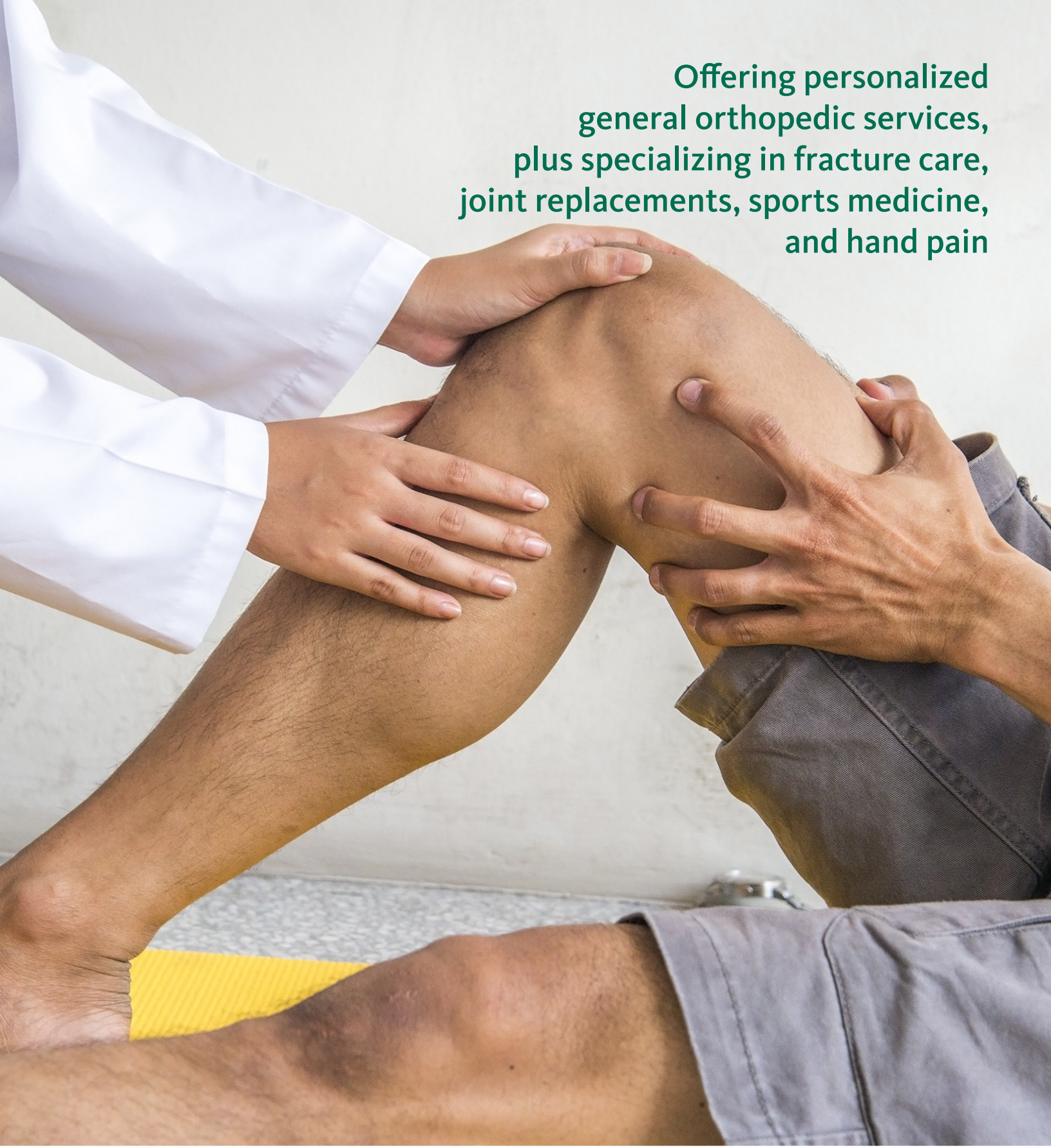


Offering personalized
general orthopedic services,
plus specializing in fracture care,
joint replacements, sports medicine,
and hand pain



SMG Charlotte Orthopedics
Total Joint Care Camp



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Important Dates & Times

Day of Surgery: _____ Arrival Time: _____

Pre-Op Call Date: _____ Time: _____

Joint Camp Date: _____ Time: _____

First Post-Op Date: _____ Time: _____

First Physical Therapy Date: _____ Time: _____

Map and Contact Information

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321 E. Harris St.
Charlotte, MI 48813

Sparrow.org/Eaton
517.543.1050

ALIVE

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Charlotte, MI 48813

MyAlive.com
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Joint Care Camp Coordinator

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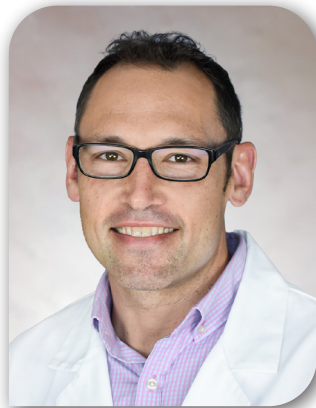
Choosing SMG Charlotte Orthopedics

Thank you for choosing SMG Charlotte Orthopedics. We believe that each patient is unique and, therefore, should have a tailored approach to their joint replacement per their particular needs. Now that you and your doctor have decided a new joint is necessary, we know you have many questions. This information, along with our Joint Care Camp, will serve as your guide throughout this process.

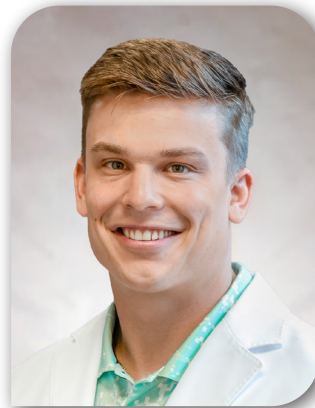
We hope this information, along with our care and one-on-one assistance, will make your joint replacement stress-free and enable you to enjoy the hospital stay while we prepare for your successful return home.

If you have any questions or concerns about arrangements or special needs, or if you would like further information at any time during this journey, please contact Derek Sanders, our Joint Care Camp coordinator, at any time at **517.543.7976**.

Sparrow.org/SMGCharlotteOrthopedics



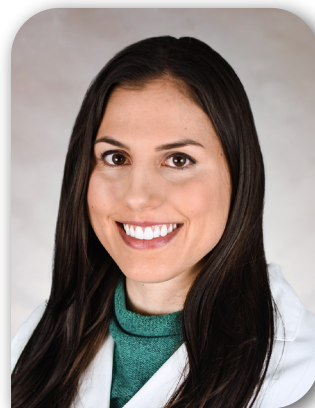
Jeremy Pascotto, D.O.



Zachary Peterson, PA-C



Derek Sanders, AT-C



Emma Sharp, PA-C

Preparing for Surgery

Things To Do Before Surgery

When preparing for surgery, the following steps will help ensure readiness:

Choose a coach. This person is usually a spouse, relative or friend who will provide assistance during the recovery process. Whomever you choose is suggested to attend a Total Joint Class and be available for a week after you return home for support. This person also may help with exercises, provide positive encouragement and motivation, and help answer questions that may come up during the recovery process.

Arrange for help. Make sure someone will be home with you, preferably your coach, or arrange to recover at your coach's home for one week after surgery until you are stronger and able to be more independent. It's also important to coordinate help, as needed, for your home, yard, pet and vehicle for a few weeks after surgery.

Arrange for needed equipment. It is important to consider what adaptive equipment might be needed following surgery. Make plans to have the needed equipment available whether it is purchased, rented or borrowed. Adaptive equipment may include a walker, cane, grabber, shower or tub chair, etc. If you're unable to find the needed equipment, your Joint Care Camp team will help you determine what is needed and how to get it when you attend the Total Joint Camp class. We will also review this with you at the hospital prior to discharge.

Start exercising. Begin doing the exercises found on pages 7 and 8 twice daily. The stronger and more flexible you are before surgery, the better outcome you will have which will make recovery easier.

Gather personal items. Begin assembling the personal items needed during your hospital stay. These may include toiletries, reading materials, and handheld games or puzzles. Select loose-fitting clothing and sleepwear. You will use the clothing to practice dressing and undressing as you adjust to your new joint replacement. A list of suggested items can be found on page 12.

Practice relaxation. Start practicing relaxation techniques now, such as deep breathing and listening to soothing music. Practicing early will ensure you're proficient at using these techniques after surgery to help reduce pain.

Complete paperwork, including updated medications. Complete all forms included in your folder. As you update the current medication list, be sure to properly dispose of all expired medications.

Prepare for a safer surgery. Carefully review and follow the instructions and materials included within this packet.

Prepare your home:

- » Place frequently used items where you can get to them easily without reaching or bending.
- » Remove floor rugs, extension cords, and floor clutter for clear pathways to the bedroom, bathroom, and other frequently used areas. This will make it safer for walker use.
- » If your bedroom is on an upper or lower floor, consider making sleeping arrangements on the first floor, if possible.
- » A comfortable, straight-backed chair with arms, such as a dining room chair will be useful.
- » Consider a raised toilet seat and/or safety frame around the toilet if it sits low.

- » A shower or tub chair or safety grab bars to use after surgery may make bathing more safe. Note, however, that these items are not routinely covered by insurance.
- » Stock the freezer with at least a two-week supply of microwaveable meals and easy-to-make foods.
- » Clean sheets on your bed can also help.

Plan for discharge. Prior to surgery, review this book with your family and coach, and discuss the help you'll need once you return home. That way, everyone will be prepared to help you have a successful recovery.

Durable Power of Attorney for Healthcare

On the day of surgery, patients are asked to complete a form that identifies whether you have durable power of attorney for healthcare, and further clarifies healthcare desires and decisions.

Careful thought and consideration should be given to these personal and important matters.

A Durable Power of Attorney for Health Care is a document for a person 18 years or older that appoints a trusted relative or friend to speak on the patient's behalf if he or she loses communication or decision-making abilities. The appointed person is designated to make medical choices only when the patient is unable to express medical wishes or make personal medical choices. The choices made by the appointee reflect the wishes of the patient as outlined in the document.

Sparrow Eaton has paperwork available that contains forms for appointment of a Durable Power of Attorney for Healthcare that meet the requirements of State of Michigan law. You may set up a different form with your personal attorney or choose not to have one at all.

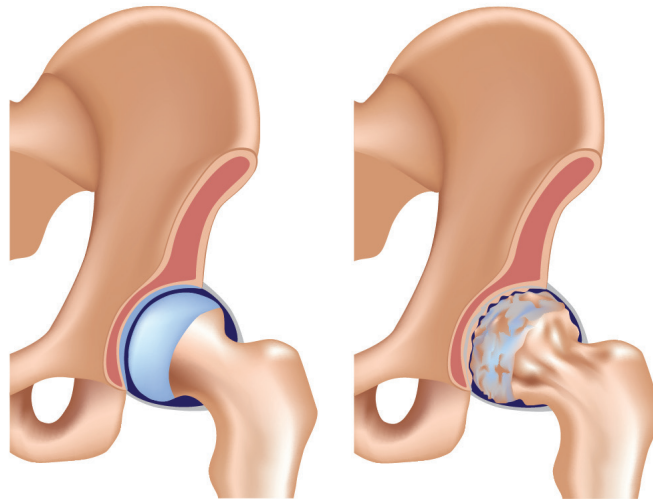
If you decide to have a Durable Power of Attorney for Health Care after sharing health care wishes with family and providers, complete the form in the presence of two witnesses. The witnesses cannot be hospital employees. The patient and witnesses will then sign the document.

It is important to note that a Durable Power of Attorney for Healthcare is different from someone who would make decisions regarding your finances. It is simply the person whom you appoint to speak on your behalf who is aware of your wishes should the need arise.



Anatomy of the Hip

A healthy hip: Notice the smooth surfaces between the ball of the femoral head and the socket of the pelvis.

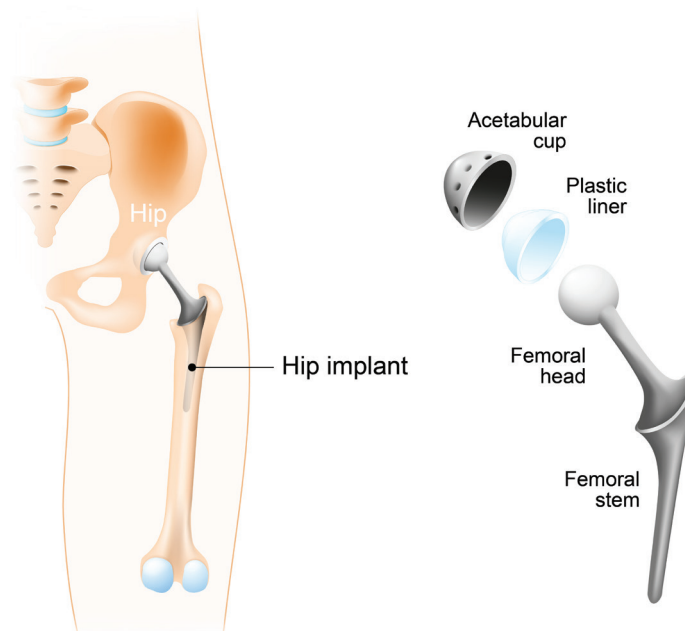


Healthy hip joint

Osteoarthritis

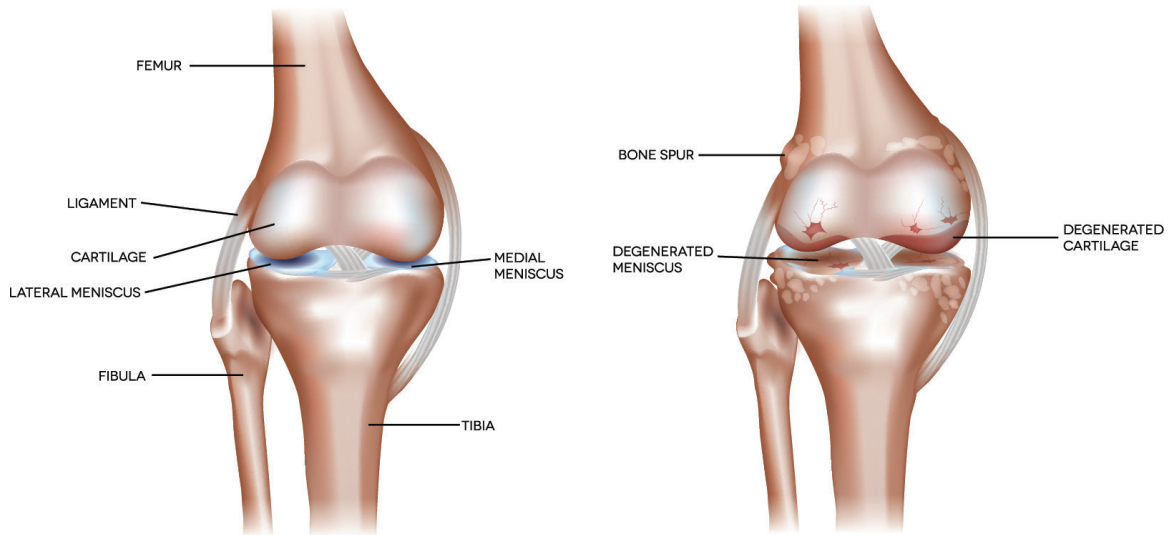
A problem hip: Notice above the irregular surfaces between the ball of the femoral head and the socket of the pelvis. This may cause difficulty walking, stiffness in the hip joint and pain not only in the hip, but also in the groin and thigh.

A new hip prosthesis in place: Notice the renewed smooth surfaces between the ball of the femoral head and the acetabulum of the pelvis.



Anatomy of the Knee

A healthy knee: Notice the smooth surfaces of the femur and tibia bones. Cartilage covers the bones evenly, and the joint bends freely.

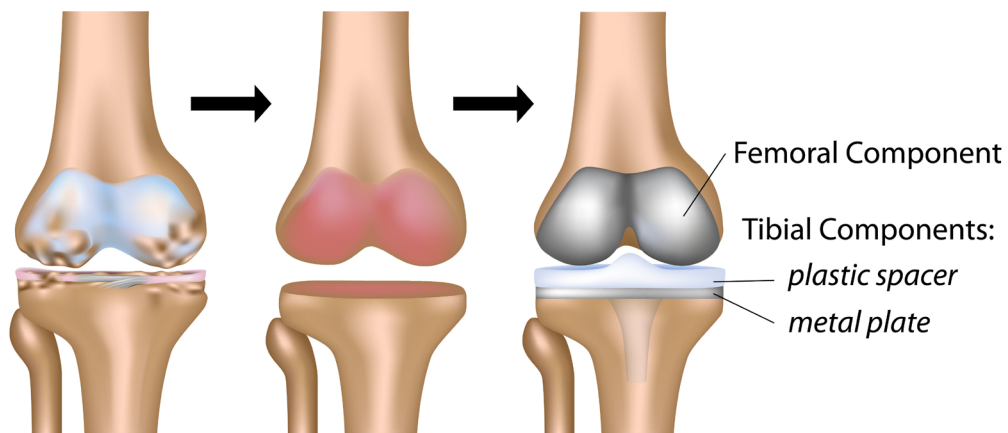


NORMAL KNEE JOINT

OSTEOARTHRITIS

A problem knee: Notice above the femur and tibia bone surfaces are rough. Cartilage may wear away and the joint may be swollen.

A new knee prosthesis: Notice the smooth surfaces of the femur and tibia bones. The joint bends freely.



Diseased joint






Bones cut and shaped

Implants in place

Exercises

Start these exercises now. Begin practicing these exercises, and continue performing them during and after surgery. For maximum progress, do all the following exercises ten to 20 times each, two to three times a day on both the surgical and non-surgical side. The stronger and more flexible you are prior to surgery will increase a favorable outcome.

Hip Home Exercise Plan

Ankle Pumps		Flex feet up and down moving at ankle. Repeat for five sessions daily.	20 times, 5x per day
Glute Sets		Tighten buttock muscles and hold for five second, then relax. Repeat for two sessions daily.	10 x 2 sets; hold for 5 seconds
Heel Slide		Lay on back with legs out straight. Bend one knee, sliding your heel toward your buttocks. Return to starting position. Repeat for two sessions daily.	10 x 2 sets
Supine Flexion (SLR)		Lay on back with one leg bent, slowly lift the other leg while keeping knee straight. Repeat for two sessions daily.	10 x 2 sets
Supine Hip Abduction		Lay on back, move one leg out to side and return to starting position. Keep toes pointing upward throughout movement. Repeat on other leg. Repeat for two sessions daily.	10 x 2 sets

Knee Home Exercise Plan

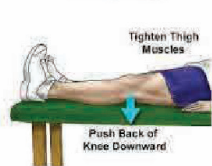
Ankle Pumps



Flex feet up and down moving at ankle. Repeat for five sessions daily.

20 times,
5x per day

Quad Set



Lay with leg straight, tighten front of thigh, pushing back of knee toward bed/floor and hold. Repeat for two sessions daily.

10 x 5 second hold

Heel Slide



Lay on back with legs out straight. Bend one knee, sliding your heel toward your buttocks. Return to starting position. Repeat for two sessions daily.

10 x 2 sets

Supine Flexion (SLR)



Lay on back with one leg bent, slowly lift the other leg while keeping knee straight. Repeat for two sessions daily.

10 x 2 sets

Standing Marches



Stand and hold walker with both hands, alternate steps in place to stretch and repeat. Repeat for two sessions daily.

10 x 2 sets

Beyond Physical Exercise

There are other important ways to prepare your body for the journey toward a quick recovery.

Stop smoking: As soon as possible before surgery, stop, try to stop or cut back on smoking. Eliminate nicotine in all forms, including nicotine replacement methods. Patients who smoke before surgery increase their risk for infection and slow the healing process after surgery. Quitting smoking reduces the risk for respiratory and anesthesia complications after the operation. Do not smoke the evening before surgery or the day of surgery.

Alcohol use: Please do not drink any alcoholic beverages one week before surgery, including beer and wine, as alcohol use can affect surgery. Patients who regularly have more than three alcoholic drinks per day could experience alcohol withdrawal during the hospital stay. This can cause symptoms ranging from mild shakiness or sweating to hallucinations and other more serious side effects.

Eating healthy: It is important to facilitate healing by eating a well-balanced diet. This will give the body the necessary elements to help patients heal properly from surgery and expedite the recovery process.

What should I eat (before and) after surgery?

The following nutrients are important for your recovery.

- » **Protein:** helps repair and build healthy tissue
 - » Seafood, white meat poultry, milk, cheese, beans, lean meats
- » **Iron:** works in each of your body's cells to help make energy
 - » Iron fortified cereal, spinach, baked potatoes, cashews, whole grains
- » **Vitamin C:** helps your body repair damaged tissues, keeps your bones and teeth strong, and helps your body absorb iron
 - » Oranges, broccoli, tomatoes, kiwi, strawberries, potatoes
- » **Calcium:** helps build and maintain your bones, muscles, connective tissue, and your nerves
 - » Milk, yogurt, cheese, spinach, beans
- » **Fiber:** helps your body produce regular bowel movements
 - » Beans, broccoli, berries, avocados, whole grains, apples

One Week Before Surgery

- » Do not shave legs beginning five days prior to surgery. It is OK to shave the face and neck. Intact skin is the first defense for preventing infection.
- » Stop or cut back on using all tobacco products.
- » Do not consume any alcohol, including beer and wine.
- » **STOP** taking the following medications:
 - » Aspirin and products containing aspirin.
 - » Coumadin (check with the prescribing physician before stopping)
 - » Plavix (check with the prescribing physician first)
 - » Nonsteroidal anti-inflammatory drugs (NSAIDs), such as Motrin, Aleve, Advil, Celebrex, Naprosyn, Mobic, etc. Tylenol products or acetaminophen are safe.
 - » Dietary supplements and any other medications specified by a doctor. Check with the surgeon regarding specific instructions.

Two Days Before Surgery

Showering: Prior to surgery, preparing your skin properly will help reduce risks of post-operative infection.

It is very important to shower, starting two days prior to the surgery, as well as the morning of surgery with the antibacterial Chlorhexidine Gluconate (Hibiclens) soap. This soap is not to be used by patients allergic to Hibiclens.

1. Shampoo hair with usual hair products, wash face and body with usual soap, and rinse thoroughly.
2. Wash entire body from the neck down to toes, including the groin area, with antibacterial soap. Please read the soap directions. Remember not to use the antibacterial soap on the face or genital areas. Pay special attention to washing the surgical site area.
3. Wash gently for three to five minutes, paying special attention to the surgical site area.
4. If showering, turn off the water while washing to help prevent rinsing off the soap too soon. Try to leave soap on for at least one minute before rinsing off, then rinse thoroughly with water.
5. Do not use regular soap after washing with the antiseptic soap.
6. Pat dry with a fresh, clean, soft towel.

7. Do not use lotions, creams or powders after showering.

8. Dress in freshly-washed clothes. Sleeping on freshly-washed sheets and pillowcases is also recommended.

The Day Before Surgery

Sparrow Eaton will call only if there has been a change to your surgery schedule. If you have any questions or concerns, please call the perioperative nurse, at **517.543.1050, ext. 52418**.

The Night Before Surgery

Medication: Follow the instructions provided by your physician and the nurse during the pre-surgical phone interview. You may take something for sleep the night before if it has been safely used in the past.

Eating and drinking: Follow the instructions provided during the pre-surgical phone interview. This includes restricted eating and drinking past a specified hour.

Showering: Follow the same showering instructions as the previous night. (See above.)

Shaving:

- » MEN: Shave face and neck only. Please trim any beard.
- » WOMEN: Please do not shave legs or apply lotion to the surgical leg.

Inform the surgeon if:

- » You have an active cold, sore throat, toothache or symptoms of any infection (such as a bladder infection), or feel ill approximately seven days prior to surgery.
- » You have developed a rash, or have any cuts or open areas on your body. You may have to postpone the surgery until treatment is provided. Seeking prompt treatment from your primary care physician may prevent the postponement of the surgery.

The Morning of Surgery

On the day of surgery, arrive at Sparrow Eaton at least two hours before your scheduled surgical time unless otherwise instructed by your surgeon.

Smoking: Please do not smoke or use any nicotine products.

Eating and drinking: During the pre-surgical phone interview when the surgical time is confirmed, you will be instructed as to whether you can eat or drink the morning of surgery. Brush teeth as normal but do not drink any water – rinse and spit only.

Mouthwash: Use mouthwash provided.

Medications: Follow the instructions provided by your physician and by the nurse during the pre-surgical phone interview. If you are directed to take medications the morning of surgery, take them with a small sip of water only.

Showering: Shower only using Hibiclens soap.

Toiletries: Do NOT use any toiletries such as hairspray, lotion, aftershave, deodorant, perfume or talc.

Hair: Wear hair loose, without clips, bands, hair spray, wigs or hairpieces. A head cover will be provided on the way to the operating room.

Dentures: Do not use dental adhesive on the day of surgery. Bring a labeled dental container for safe storage.

Nails: Wear only a very light color of nail polish, if any, so the surgical team can accurately monitor oxygen levels during surgery.

Jewelry: Remove all jewelry, including piercings and rings.



Hearing aids: Wear the hearing aid to the hospital. Bring the case if you have one.

Eyewear: Please do not wear contact lenses, if possible. Glasses are preferred. If glasses are not available, please bring a clean contact lens case and solution for easy removal prior to surgery. Bring an eyeglasses case, if you have one.

Patients with diabetes:

- » If you have an insulin pump, ask your physician for instructions.
- » On the morning of surgery, do not take insulin and/or a diabetic pill, but bring the medication to the hospital.
- » If you are not feeling well, notify the check-in staff that you have diabetes and are insulin-dependent. Please review the diabetic rescue instructions given by the nurse during the pre-surgical phone interview.

What to Bring to the Hospital

Use this list to ensure you have everything you need during the hospital stay.

- » A list of medications you are taking or have recently stopped taking.
- » Refer to the Personal Medical Record form.
- » A list of medical and food allergies
- » Driver's license or photo ID.

- » Insurance cards, prescription coverage cards and pharmacy cards
- » Glasses case, or contact lens case and solution – do not wear contact lenses the day of surgery
- » Hearing aid case labeled with name
- » Patients with asthma or COPD should bring inhalers to use as directed
- » Any special devices, such as a CPAP, or appliances, such as a brace
- » Information cards for implanted devices. such as a pacemaker
- » Dentures and a case labeled with name
- » A copy of your advanced directive, if you have one

All other items listed below are to be brought in after surgery, once you arrive in your room:

- » Personal toiletries: hairbrush, toothbrush, toothpaste, deodorant, etc.
- » Comfortable, loose clothing; undergarments; enclosed walking shoes and socks; elastic waist shorts, capris or sweat pants
- » Reading materials, playing cards, crossword puzzles, etc. to use during free time, if desired
- » MP3 player or iPod

Surgery

Your Plan of Care

As soon as you arrive in the hospital room, nursing staff will monitor your pulse, respirations, temperature and blood pressure. These vital signs will be taken frequently at first. During this time, the team will also complete a brief medical history and a physical head-to-toe assessment. Then they will develop a personalized care plan.

The multidisciplinary team will follow evidence-based joint replacement practices to ensure you have the highest quality and most effective treatment. The length of stay in the hospital varies for each patient. Prior to surgery, you will have created a plan with the surgeon. Most patients arrive for surgery knowing how many days they plan to stay in the hospital. Depending on individual progress and with help from the joint replacement team, you will return home as soon as you are ready.

Nausea control: Nausea can occur after anesthesia or when taking certain medications. You will be given clear liquids after surgery until you feel you can tolerate more solid foods. If you are nauseated, the nurse will give you medication to manage it.

Constipation: Pain and anesthesia medications can slow bowel activity after surgery. Losing blood and body fluid during surgery can also cause constipation. While in the hospital, you may be given fiber supplements and a stool softener. Walking and drinking plenty of fluids after surgery will help with constipation. If you notice a change in bowel habits after surgery, please inform the nurse.

Pain management: Proper and effective pain management is very important. When you tell us you have pain, we hear and believe you. Controlling pain following surgery is essential for

a successful joint replacement. Your reports of pain will be responded to quickly.

We work with you to meet the following goals regarding pain while you are a Sparrow Eaton patient. **You have:**

1. The right to have your pain controlled.
2. The right to take an active part in your pain control plans.
3. The right to make suggestions for changes in pain management treatment.
4. The right to be informed about the risks, benefits, and side effects of the medications and treatments you will be given.
5. The right to have your pain questions answered.
6. The right to refuse treatment.
7. The right to receive pain medication on a timely basis.

You are responsible for:

1. Working with the physician and nurse to develop a pain management plan.
2. Asking the physician or nurse what to expect of pain and pain management.
3. Helping the physician and nurse assess your pain.
4. Discussing pain relief options with the physician and nurses.
5. Telling the physician or nurse about any concerns you have about taking pain medication.
6. Asking for pain relief when pain first begins.
7. Complying with physician orders regarding medication.
8. Telling the physician or nurse if and when pain is not relieved.

Tips on when to request oral pain medication:

- » Your pain is strong enough to make you feel uncomfortable.
- » You feel that you cannot participate in daily activity or physical therapy.
- » Before pain gets too severe.
- » About a half hour before a scheduled activity, such as physical therapy.
- » Regularly for the first 24 hours after surgery to allow it to build up in your system.

How will my pain be controlled after surgery?

Pain will be controlled by a team that includes anesthesiology, the surgeon and the nurses caring for you.

- » Pain control can be medicine taken by mouth or given through an IV.
- » You may have pain medications given through the IV by a nurse, if you need rapid pain control.
- » A long-acting epidural pain medication may be administered while in the operating room. In this situation, the medication may last up to two days.
- » You may have a nerve block using a long-acting medication. These can last 24 to 72 hours. Additional medications may be administered by anesthesiology.

Other methods of pain control:

Cryotherapy, or cold therapy, is almost always used after surgery to control pain. Most pain after surgery is due to inflammation, the body's natural response to healing a surgical site. Cooling the knee, hip or shoulder after surgery decreases the pain and swelling due to inflammation significantly. Ice bags or commercial cryotherapy devices are often used.

Movement of the body is much more important to controlling pain than one might think. Moving reduces pain by keeping the joint from stiffening as well as interfering with some pain signals before reaching the brain through a process called pain-gating.

Surgery – Anesthesia

Anesthesia is the practice of medicine dedicated to ensuring the patient's pain is controlled, and the surgery is medically safe. The anesthesia care team controls the body's reaction to stress, minimizes side effects and makes recovery easier. The team will meet with you to discuss medical history, perform an examination and discuss options for total joint replacement.

What type of anesthesia can be expected for your total joint replacement?

The anesthesiologist will discuss several anesthesia options for surgery. It may be one or a combination of the following:

- » General anesthesia creates a deep state of unconsciousness during which the patient does not feel nor remember. Anesthetic gases and/or intravenous (IV) medications are used in general anesthesia.
- » Regional anesthesia involves an injection near a nerve bundle to numb the area of the body that requires surgery. This technique is similar to what a dentist would do prior to working on teeth. Examples of regional anesthesia typically performed for joint replacements are spinal anesthesia, combination spinal/epidural anesthesia or a peripheral nerve block.

What is spinal anesthesia?

- » Spinal anesthesia is a type of anesthesia using a single injection of numbing medication in the lower back near the nerves that control the lower half of the body.

- » It numbs the pain sensation and makes it difficult to move the legs. The affect can last for several hours after awakening from surgery.
- » It can be combined with a light general or deep sedation anesthesia so you are also asleep during surgery.
- » Complications are uncommon. They include headache ($\leq 1\%$ risk), back ache ($\leq 25\%$ risk), nerve injury (1 in 2,000 chance), bleeding and bruising of the back, and infection at the injection site. Paralysis from this procedure is extremely rare.

What is a peripheral nerve block?

- » A peripheral nerve block involves injecting local anesthesia near a nerve controlling the pain in the area where surgery is to be performed.
- » The correct nerve is found using a tiny electrical pulse causing the muscles to twitch in the surgical area. Once the nerve is found, numbing medication is injected near the nerve.
- » The most common peripheral nerve block involves the femoral nerve at the top of the thigh, which numbs the knee.
- » A nerve block usually lasts eight hours, but can last longer (12 to 24 hours) depending on the medication used, as well as other factors.
- » Complications are uncommon and include the risk of nerve damage ($\leq 1\%$ risk), infection at the injection site, and bleeding/bruising at the top of the thigh.

When is a patient not a candidate for regional anesthesia?

- » Allergic to local anesthetics or narcotics
- » Disease or deformity of the spine or nervous system
- » Bleeding tendency or disorder
- » Infection in the lower back or groin region

- » Previous lower back surgery
- » Very overweight

What will be monitored in the operating room during surgery and in the recovery room after surgery?

- » EKG or heart monitor
- » Blood oxygen levels
- » Blood pressure
- » Breathing patterns
- » Pain
- » Sedation level
- » Nausea

What are the normal side effects of anesthesia?

- » Dry throat/mouth
- » Sore throat
- » Sore jaw
- » Nausea and vomiting
- » Short-term memory loss

What is the risk of complications of anesthesia?

The risk and complications of anesthesia are dependent on the patient's overall health. Healthy individuals have a very low risk and few complications. Individuals with medical conditions such as high blood pressure, heart disease, lung disease, kidney disease, sleep apnea and other such diseases may have a higher risk of complications.

Those with medical conditions may be required to see their primary care physician or another medical specialist prior to surgery to ensure their health is properly addressed and managed before, during and after surgery.

Surgical complications can be greatly reduced with proper pre-surgical treatment of any

medical conditions, the use of new anesthesia medications and techniques, and the use of specialized monitoring equipment during and after surgery. Patients with sleep apnea are encouraged to bring their CPAP.

You can obtain additional information from our perioperative nurse at **517.543.1050, ext. 52418**.

What Are All These Gadgets

When looking around while in the hospital, you may notice unfamiliar apparatus. Here are some

of the “gadgets” that may play an important role in the healing process.

IV access device: You will notice an intravenous access device (IV). This is fluid in a bag connected by tubing to the arm vein that keeps you supplied with fluids. The nurse or anesthetist starts the IV, and it will be continued until you are drinking and eating well. This also provides a route for the administration of pain medications, antibiotics, anti-inflammatory products, blood and/or blood products, if needed, and other medications.



Antibiotics: You will be given several doses of antibiotics through the IV in the first 24 hours. The first will be given even before the surgical incision is made so that the antibiotic is ready and working in your blood system. This is to help prevent an infection from starting. You will get two additional doses within 24 hours after surgery. Oral antibiotics may be needed when you go home.

Oxygen: You may require short-term use of oxygen the day of surgery. This is to provide the optimal level of oxygen needed for healing. The nurse will remove the oxygen temporarily and monitor levels to ensure you are getting enough oxygen. When the optimal level is reached, supplemental oxygen will be discontinued.

Dressings: There may be a large dressing on the operative site. This is to keep the incision clean and protected while it heals. You may notice some bloody drainage on the surgical dressing – we will reinforce it with additional dressing if necessary. Depending on the type of surgical dressing, it may or may not be changed while you are in the hospital.

Foley catheter: You may have a Foley catheter, or urinary catheter, placed in your bladder during surgery. This is to drain urine and keep a more accurate record of the kidneys' urine production. It will be removed early the first morning after surgery, unless otherwise ordered by the doctor. With any bladder catheter, there is an associated risk of bladder infection. If you experience a sensation of bladder fullness, discomfort, burning upon urinating or frequency of urination after the catheter is removed, let the nurse know. Getting out of bed to use the bathroom is therapy and that means you are even closer to achieving independence. Remember to call for assistance first!

Surgical drains: Some orthopedic surgeons insert a small tube alongside the hip or knee during surgery. This tube is then connected to a small round suction container. This is a surgical drain and is used to collect excess fluid, wastes and blood from the surgical wound to decrease congestion around the hip or knee joint. This allows the wound to heal more quickly and is typically removed one to two days after surgery.

Checking your blood: The health care team may draw blood to measure potential blood loss. Some blood loss is expected during every surgery. While your body has a remarkable ability to replenish lost blood, let the nurse know if you feel short of breath, weak, have chest palpitations, or feel lightheaded or dizzy every time you're out of bed. This may mean your blood count is low. If it's too low, the doctor may order an iron tablet or a blood transfusion.

Anti-Coagulations or Blood Clot Prevention

All surgical patients have an increased risk of developing large blood clots for a period of time after surgery. A blood clot that forms in one of the deep veins presents a significant danger to your health as it can move suddenly and block blood flow to the heart.

Blood clot prevention devices are used following total joint replacement because they improve blood flow. Blood that moves is less likely to clot.

- » **Compression socks:** TED hose, or white stockings, may be fitted on legs to improve blood return from the lower legs to the heart.
- » **PAS devices:** These devices are air-pumping leg wraps, which alternately squeeze lower legs. This improves circulation by squeezing the large veins located deep within the calf muscles.

Ankle pumps are an exercise to make calf muscles work. When calf muscles contract, they squeeze the veins in the lower legs pumping the blood back toward the heart.

Anti-coagulants are medications used after surgery to interfere with the blood's ability to clot excessively. There are various types of anti-coagulants, and the surgeon will inform you of which medication you will receive.

Prior to surgery, check with your insurance company to verify coverage of anti-coagulants.

Prevention of Pneumonia: Incentive Spirometer

The nurse will instruct you and remind you when it's time to use this breathing exercise device. The spirometer is one of three ways to prevent pneumonia and other lung complications. Use the spirometer for 10 breaths every hour when awake.

First, blow out all your air. Place the mouthpiece in your mouth with a good seal. Slowly inhale at a steady rate until you are unable to expand your lungs any further, and then hold the breath for a moment. Now, remove the mouthpiece and exhale slowly. Take a moment to rest and catch your breath before continuing so you do not hyperventilate. After the tenth round of inhaled and pauses, try to produce a strong cough. This will clear the secretions that may have been loosened with the exercise.

The second method is simple: coughing and deep breathing exercises. Every hour, take a deep breath, hold and exhale. After several breaths, try to produce a strong, deep cough. Try to remember this on an hourly basis by coordinating it at the top of the hour or on the half-hour.

The third method is spending more time out of bed by sitting in a chair or walking with the therapy and nursing staff.

Keep in mind that all three are exercises you can do to prevent getting pneumonia.

Prevention of Surgical Site Infections

The increased risk for surgical site infection is because the incision to the hip or knee breaks the protection your previously intact skin provided against infections. By working together, we can greatly reduce this risk. Remember the following:

1. Do not shave legs or any other area except your face for five days before surgery.
2. Use the antibiotic soap according to the instructions given.
3. You will receive IV antibiotics within 24 hours of surgery.
4. Surgery will be performed under strict sterile conditions.
5. If you do not see staff use hand sanitizer prior to providing care, please remind them to do so.
6. When performing dressing care, be sure to wash hands first and do not touch or feel the suture line until it is healed.
7. Until the suture line is healed and it's been approved by the surgeon, do not immerse in a bathtub, swimming pool, hot tub or any standing water. It is perfectly OK to shower.
8. Tell the surgeon if you experience any change in the look or feel of the incision after you leave the hospital. This includes any increased drainage, redness or odor. Remember, bruising and swelling are expected.
9. Eat a well-balanced, nutritious diet to help your body heal.
10. Clean clothes and clean sheets.

Post-Surgery

After Surgery – Day One

Diet: You will start with ice chips and water to see how well you can tolerate fluids. Most people are ready to resume a normal diet by the evening or the next morning. If at any time you feel sick to your stomach, let the nurse know as medication is available to help. All patients have access to “Room Service.” A menu is available at the bedside.

Sitting up and getting out of bed: After surgery, the nurse or physical therapist will help you to sit up on the side of the bed. This movement will help increase blood circulation, expand lungs and increase tolerance for activity. It also helps reduce some of the stiffness you may be feeling after prolonged inactivity.

We will advance activity by helping you to sit in a chair at the side of the bed. Unless otherwise noted, you will be able to put as much weight as you can tolerate on the surgical leg. This is a first step toward rehabilitation. It will also get you ready to begin the first physical therapy session, which may be on the day of surgery or the next morning. Getting in and out of bed will become easier each time.

The nursing staff will also assist you to the bathroom. You will use a walker whenever you are out of bed to help with balance and mobility.

Physical therapy: You will begin working with a physical therapist the day of surgery. The therapist will help you perform early strengthening exercises, as well as range of motion exercises, that are vital for a successful recovery. They will also demonstrate proper techniques for transfers from bed to chair.

After Surgery – Day Two

Getting ready: You may be going home today and there is a lot of work to do to prepare. The first task is getting out of bed. With help from staff, you’ll move into a chair. You may need frequent repositioning, just as you did in bed, but try to stay in the chair at least through breakfast. You can alternate periods of bed rest with physical therapy sessions and sitting in the chair for all meals. This will help you regain mobility and help reduce the risk for developing blood clots and pneumonia. You will also use the bathroom with help from the walker and



your care team. The nursing team will help with washing and getting dressed in your own clothing.

Planning for the return home: It's important that your recovery continues at home. If you haven't done so already, today you will meet with a discharge planner so services at home can begin. You will receive in-home physical therapy and care from a registered nurse as well. Services will be scheduled to start the day after the return home.

Home health care will work to make sure that trained professionals provide and monitor care at home while keeping your physicians fully informed of progress made. The entire team is dedicated to your needs and your recovery.

The discharge planner will finalize plans for going home. You will be going home with home health care and outpatient physical therapy. The home care nurse will also monitor your medical status and surgical incision. The physical therapist will see you several times a week and help you advance activities as you continue to regain physical function, strength and range of motion with the new knee, hip or shoulder joint.

Sub Acute Rehabilitation: If you think you will need Sub Acute Rehab instead of home care, please let our office know ASAP.

Any other special needs that were identified during the hospital stay will be addressed and plans will be finalized between you and your family by the time you're ready to leave.

Goals for the day: Even though there is a lot of work to do today, try to take frequent rest periods and remember you're recovering from surgery. If you feel pain, let the nurse know so your care team can help before it becomes severe. Getting plenty of rest and managing pain will help you keep a positive attitude, which is essential for a strong recovery.

Discharge

When the doctor agrees you are ready to leave, you will receive morning therapy and be able to leave soon afterward.

Make sure you have all your personal belongings assembled and packed, and the coach, a family member or friend is available to take you home.

You will receive detailed verbal and written instructions before discharge. These instructions are important to help you continue to safely recover at home. Please take time to reread them to make sure you haven't overlooked any important details. The discharge instructions will include:

- » A list of all current medications, times, doses and special precautions.
- » Prescriptions for pain medication, blood thinner medication and anything else your physician may order. These can be filled and delivered prior to discharge.
- » A description of how to take care of the healing incision, and how to recognize signs and symptoms of infection.
- » A full review of any activity restrictions, as well as any appointments and when to call the doctor.
- » The name and contact information for home care services.
- » Any other special instructions.
- » Our best wishes and assurance that we're still here for you. Call if you have any questions.

Remember, bruising and swelling is expected, and tends to get worse after you are home. Avoid emergency room visits by calling the care team to determine if a visit is necessary.

Farewell: You will be taken by wheelchair to your vehicle at the entrance. Please make sure you have the walker in the car to help get into your home.

Living With A New Joint

To achieve the best outcome, think of therapy as your full-time job for the upcoming weeks. Home care and outpatient physical therapy will provide you with a home exercise plan to perform. It is very important to perform your home exercise plan to restore range of motion, strength and function.

Adaptive equipment resources: If you need additional adaptive equipment, check with the local pharmacy, senior citizen's centers, Veteran's Administration, service groups, garage sales, thrift shops, friends or family, and online stores (search for "home health equipment").

Keep working: During the first week, you will work with home care services in your home, including a nurse and physical therapist. The second week, you will start outpatient physical therapy. You should be going to physical therapy three times per week. Both your home and outpatient therapists should provide a home exercise program for you to consistently perform in order to aid in your recovery.

Think before you move: Once you're out of the hospital and in a familiar setting, it's easy to return to old habits. You may be used to bending or standing up from a chair quickly. But because of the new knee/hip, you won't be able to move as spontaneously as you used to, especially during this period of early recovery. Always think before you move to avoid injury. Remember these guidelines over the next three months.

Things to do:

1. Put as much weight on your leg as the doctor has instructed.
2. Always slide the operated leg forward before sitting down or standing up.
3. Sit in higher chairs rather than lower ones — preferably chairs with arms.

4. When sitting in a car, it may help to push the entire seat back and then recline the seat. Sit on the edge of the seat and pull your legs in afterward.
5. Continue to use a walker or cane until the physical therapist or your doctor tells you it's no longer needed.
6. Take a shower rather than a bath.
7. Use ice therapy for 20 minutes hourly. Place a cloth barrier between the ice and skin. You may apply ice many times throughout the day.

Things NOT to do:

1. For hip replacement patients, do not bend the surgical hip beyond 90 degrees. No bending over or raising the surgical leg as you might do to put on socks or tie shoes. The surgical leg should never have the knee higher than the hip. These restrictions may be different for anterior-approach patients.
2. Initially, take small steps to turn around to avoid twisting or turning at the hip. Try to turn away from the surgical hip.
3. Do not lie on the surgical hip.
4. For knee surgery patients, do not place a pillow under the knee.
5. Do not apply heat to the surgical site.

Call the surgeon if you have:

- » Severe pain or increased drainage from the incision.
- » A consistent fever over 101 degrees.
- » Chest pain or shortness of breath.

Going upstairs:

1. Face the stairs and hold onto the handrails.

2. Lift the non-surgical leg onto the first step. Press down on the handrails to relieve weight off the surgical leg.
3. Lift the surgical foot onto the same step.
4. Repeat.

Going downstairs:

1. Hold onto the handrails.
2. Lower the surgical leg onto the step. Press down on the handrails to relieve weight off the surgical leg.
3. Lower the non-surgical leg onto the same step.
4. Repeat.
5. The physical therapist can help you with alternate stair climbing methods if side rails are not available.
6. Always have someone with you when using the stairs.

Bathroom Safety

Toilet: Depending on how tall you are, you may need to raise the height of the toilet seat. This will help avoid flexing the hip beyond 90 degrees. You can do this by adding a removable raised toilet seat or placing a toilet safety frame or bedside commode over the toilet. If, when sitting, the knee is not above the height of your hip then you may not need to adjust the seat height. If you cannot access the bathroom, you will want to get a bedside commode.

Bathing: Sit on a bath or shower chair when taking a shower. Typically, shower doors on bathtubs must be removed to use a bath chair. Be sure the bath chair you select is the correct style for your bathtub or shower, has rubber tips on the bottom and has the correct weight capacity.



Standard bathtubs: Sit on the edge of a transfer bench and carefully lift your legs into the tub without flexing the hip more than 90 degrees. A shower chair can be used if you can safely step in and out of the bathtub and follow all applicable precautions.

Walk-in or stall shower: Use a shower chair. A wall-mounted grab bar may be needed for support stepping in and out of the shower.

Bathing safety tips:

- » If possible, receive additional instructions from the in-home physical therapist before attempting to bathe for the first time at home.
- » You may need to have grab bars next to the toilet and on the shower walls. They must be securely attached to the wall, typically in the studs. (Consult a construction expert.)
- » Do not use towel racks as grab bars. They are not securely attached to the wall to provide a safe weight support.
- » Have someone available to assist until you are independent.
- » Put non-slip suction mats or rubber silicone decals in the tub to prevent falls.
- » Start with a dry bathtub or shower floor.
- » Use a non-skid bath mat outside the tub for firm footing.
- » Keep the floor outside the tub or shower dry.
- » Place soap and shampoo where you do not need to stand up, reach or twist.
- » Use a long-handled sponge to wash your legs and feet.
- » Use a handheld shower hose.

Dressing Tips and Techniques

If you have stiffness or pain in the knee/hip that interferes with getting dressed, you may want to use some of the equipment and techniques listed below.

1. Begin by putting pants/slacks/underwear on the operated leg first.
2. Using a dressing stick or reacher, catch the waist of the garment and lower it to the floor. Step into the leg hole with the operated leg first.
3. Pull the garment up to your hips and then take over pulling them up with hands.
4. After a hip replacement, it is recommended that a sock aid be used to put on the sock of the surgical leg, or both legs. To use a sock aid: slide the sock onto the device and then lower it to the floor by the cords. Slip your foot into the device and pull the sock on by the cords.
5. Use a dressing stick or reacher to remove the sock from the operated leg.
6. To avoid tying, consider wearing enclosed slip-on style shoes.
7. If needed, use a long shoehorn to slip on shoes.
8. If needed, a dressing stick or long-handled shoehorn can be used to remove shoes.

Driving may resume when you are no longer taking narcotic pain medication and with approval from the surgeon. Return to drive time estimates are:

- » **Hip replacement:** four to six weeks
- » **Knee replacement:** four to six weeks

This may differ depending on the side involved and each individual case.

Sex can be resumed four to eight weeks after surgery with approval from the surgeon. Taking a mild pain medication 20 to 30 minutes prior to sex can help prevent minor aches.

Car transfers:

1. Make sure the car seat is all the way back and the backrest is as flat as it goes.
2. Lower yourself onto the seat, allowing it to support you, with the surgical leg forward.
3. Slide back in a semi-reclined position toward the driver's seat.
4. Pivot your body and legs around front.
5. Reverse the order to get out.

Anticoagulant: Your doctor may decide an anticoagulant or blood thinner is necessary when you return home. As activity increases, the risk of forming a blood clot decreases and the need for blood thinners will also decrease.

Your doctor will let you know when it is safe to stop taking this medication. Some examples of anticoagulants include Coumadin, Lovenox, Xarelto and aspirin.

While taking an anticoagulant:

1. Follow the dose and time carefully. Take the medication at the same time every day.
2. Read the instructions provided with the medication thoroughly.

3. Unless instructed by a doctor, do not take any other medications containing aspirin. Read all medication labels carefully.
4. Avoid all herbal medicines and teas for one month.
5. Use an electric shaver— not razor blades.
6. Avoid large servings of green leafy vegetables and alcohol.

Infections: There is much evidence that bacteria in the bloodstream can cause total joint implant infections. See your primary care doctor promptly if you have any type of infection. Any infection — sinus infection, tooth infection, urinary tract infection or chest infection — left untreated can become present in the blood and settle in the new joint. In the worst cases, infected joints must be treated with many weeks of antibiotics and replaced.

In addition, any surgery or dental work, including routine cleanings, should be considered as possible sources of infection. Call your surgeon a week or two prior to any dental procedure, including routine cleanings, for recommendations regarding ordering an antibiotic to guard against possible infection. This medication should be taken for the duration of the prescription as instructed by the surgeon.

If you have any of these signs or symptoms, call the doctor immediately:

1. **Bleeding from gums or nose**
2. **Blood in urine or stool**
3. **A cut that does not stop bleeding**
4. **Chest pain, shortness of breath or heart palpitations (CALL 911)**



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