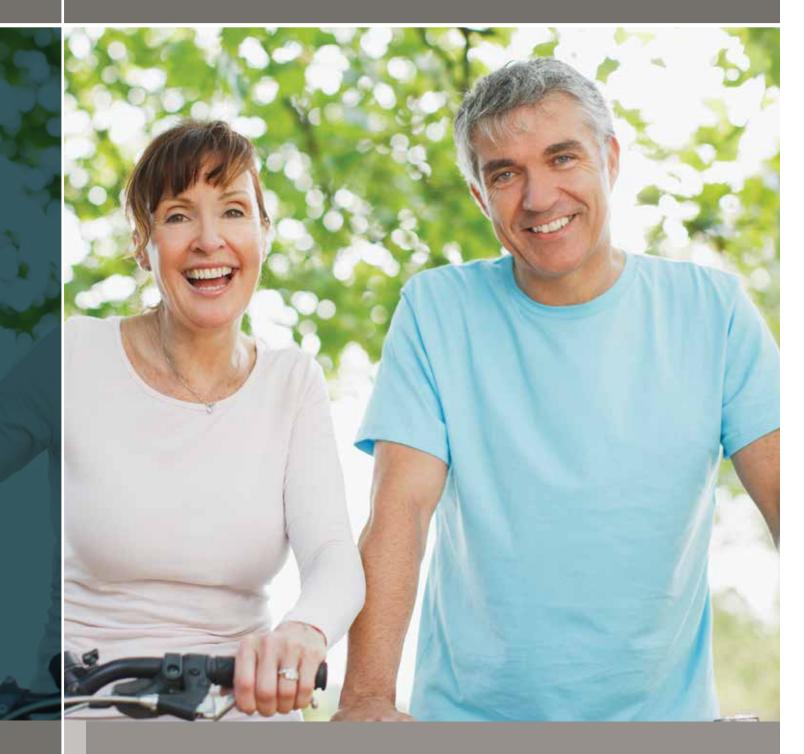
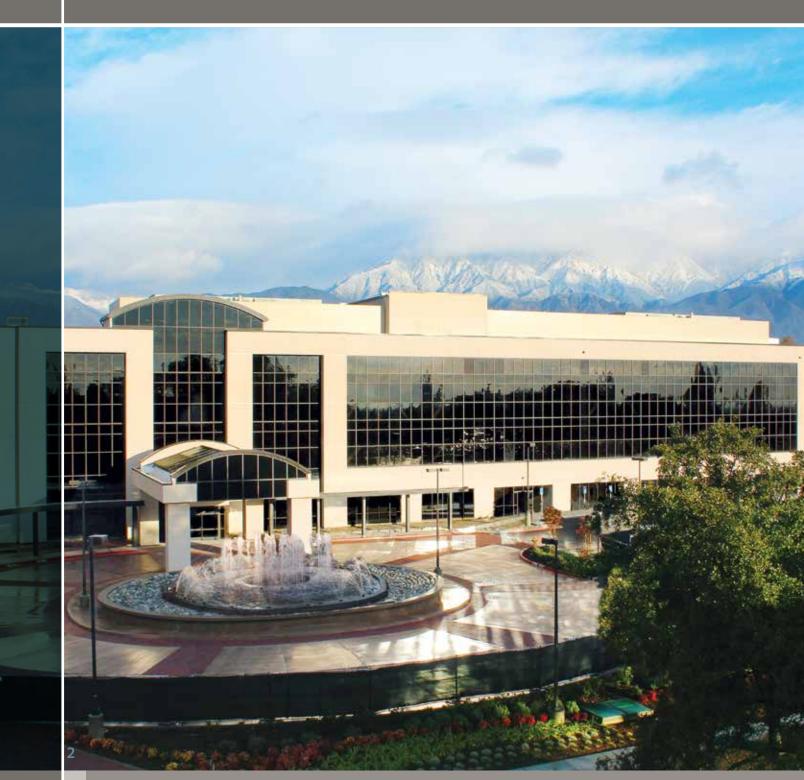


Preparing for Joint Replacement Surgery





San Antonio Regional Hospital

The healthcare team at San Antonio Regional Hospital's Orthopedic Institute would like to thank you for selecting us for your elective joint replacement surgery. We sincerely appreciate the trust and confidence you have in our doctors and staff.

Our goal is to always provide the highest quality care available. The Joint Replacement Center at our Orthopedic Institute employs the latest advances in joint replacement technology, and our healthcare team is dedicated to delivering excellence with compassion. We are confident in our ability to provide you with an exceptional patient experience.

This notebook will serve as your guide throughout your journey—before, during, and after surgery. Please bring it with you to all appointments and on the day of surgery.

As a patient at the SARH Orthopedic Institute, you are required to:

- Have a designated 'coach' (spouse, partner, son, daughter, friend) who will be at your bedside after surgery to participate in physical therapy treatments and at home with you after discharge.
- View the mandatory Total Joint Replacement video with your coach prior to surgery. The video is located on the SARH website (http://sarh.org).
- Have a discharge plan in place before your surgery (i.e., a coach who will be with you after discharge; if you live in 2-story home, you may need to create a temporary bedroom downstairs, etc.)

Length of stay in the hospital: plan to go home the same day of surgery once you have met the discharge criteria.

• Plan to go home the same day of surgery once you have met the discharge criteria. Elective joint replacement is considered an outpatient procedure by Medicare and all other payers.

You are a healthy individual having elective surgery. You should focus on thinking of yourself as being 'healthy', not 'sick' while in the hospital and at home after discharge

• After surgery, total joint patients are not on bedrest; you will be up in a chair, walking, and taking rest/nap breaks.

About the Hospital

San Antonio Regional Hospital is a 363-bed, nonprofit, acute care hospital that combines excellent clinical care with exceptional compassion. We offer a comprehensive range of general medical and surgical services, along with the latest technological advances in cardiac care, cancer care, orthopedics, neurosciences, women's health, maternity and neonatal care, and emergency services. San Antonio is recognized as a premier regional medical facility with satellite locations across the rapidly expanding Inland Empire. With a broad geographic reach, depth and breadth of services and programs, and supported by the latest medical science and technology, San Antonio is a hospital of the future, offering state-of-the-art healthcare services in a healing environment focused on the patient and family.

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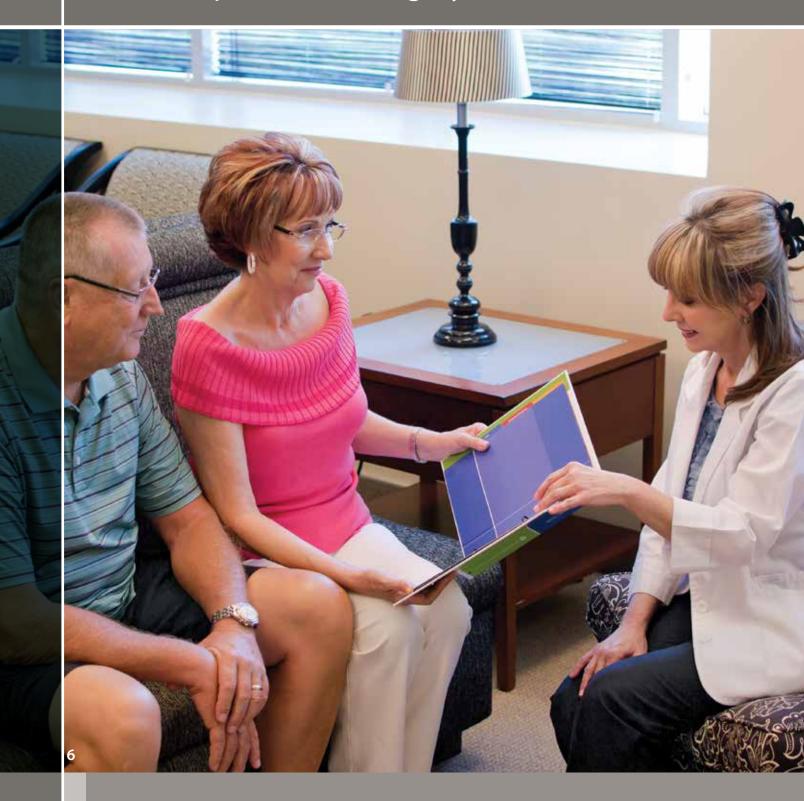
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Joint Replacement Surgery: An Overview



The Purpose of a Total Joint Replacement

Living with a worn or injured joint can be painful and frustrating. Over time, even simple things, such as walking through a grocery store or getting up from a chair, may cause you pain. But you don't have to live this way. In many cases, an orthopedic surgeon (a doctor who treats bone and joint problems) can replace your problem joint. Total joint replacement helps to:

- Improve quality of life
- · Alleviate pain and better align your limb
- Restore function
- Strengthen your limb



Your Role

When it comes to preparing for recovery, much of the work is up to you. It is important to take ownership in your upcoming surgery and recovery; so, make time each day for the exercises in this booklet. Start slowly. Then try to exercise a little more each day. Also be sure to follow your surgeon's instructions for after surgery. The work and care you put into the weeks before and after surgery go a long way toward helping you recover.

How the Knee Works

The knee is a hinge joint that connects the **femur** (thigh bone) and **tibia** (shin bone). It is protected by a bone called the **patella** (kneecap). Surfaces where the three bones touch are covered with **articular cartilage**, a smooth substance that cushions the bones and allows them to move easily. Other parts of a healthy knee include:

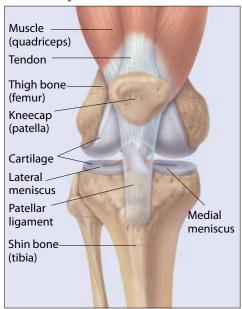
- The **meniscus**, a pad of cartilage inside the knee, serves as a shock absorber.
- **Ligaments** connect the leg bones and keep the knee stable.
- Muscles move the knee joint and help keep it strong.

How the Hip Works

The hip joint is one of the body's largest weight-bearing joints. It is a ball-and-socket joint. A healthy hip joint allows you to walk, squat, and turn without pain. It is formed where the round head or "ball" of the thigh bone (femur) joins the acetabulum or "socket" of the pelvic bone. Other parts of a healthy hip include:

- Articular Cartilage. This is a smooth layer of tissue that covers the ball and socket. It absorbs stress and allows the ball to glide easily in the socket.
- **Muscles.** These power the hip and leg for movement.
- **Tendons**. These attach the muscles to the bones

A Healthy Knee



A Healthy Hip



How the Shoulder Works

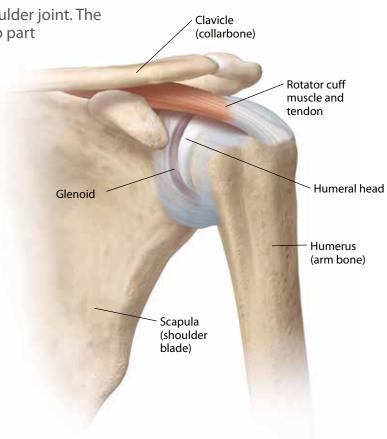
Your shoulder is the most flexible joint in your body. A healthy shoulder joint glides smoothly. It allows you to move and use your arm without pain. But if the shoulder joint is damaged, using your arm may be painful. Your arm and shoulder may also feel weak and have limited movement.

A Healthy Shoulder

The shoulder is a ball-and-socket joint. The rounded top of the arm bone (the ball) sits against a shallow cup of bone (the socket). Muscles and other soft tissues stabilize the joint and allow it to move.

 Bones are the foundation of the shoulder joint. The humeral head is the ball-shaped top part of the arm bone. It rests against the glenoid, the small, shallow socket at the edge of the shoulder blade.

- Articular Cartilage is a layer of smooth, rubbery tissue. It covers the humeral head and lines the glenoid. Healthy cartilage cushions and protects the bone and allows the joint to move smoothly.
- Muscles and tendons form the rotator cuff. This structure attaches the arm bone to the shoulder blade. It keeps the joint stable and helps move the arm.



Causes of Joint Pain

When one or more parts of the joint are damaged, joint movement suffers. Over time, cartilage starts to crack or wear away. Because cartilage cannot repair itself, the damage will likely keep increasing. Common causes of joint damage include:

- Inflammatory arthritis. A chronic disease, such as rheumatoid arthritis or gout, causes swelling and heat (inflammation) in the joint lining. As the disease progresses, cartilage wears away and the joint stiffens.
- Osteoarthritis. Years of normal use can cause cartilage to crack and wear away. As the bones rub together, they become rough and pitted. This wears down the socket.
- Injury. A bad fall or blow to the knee, hip or shoulder can injure the joint. If the injury does not heal properly, cartilage can wear away.
- Avascular necrosis. This means that bone has "died." If the artery that supplies blood to a bone (such as the femoral head) becomes injured or clogged, avascular necrosis occurs. If the bone dies, the joint will deteriorate leading to collapse as the bone will be unable to support weight. This results in a very painful joint.

A Damaged Knee





A Damaged Hip





A Damaged Shoulder



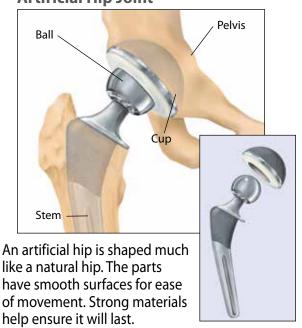


What Is Knee Replacement?

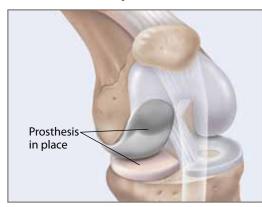
Knee replacement is when parts of your knee are replaced with an artificial prosthesis. During a total knee replacement, the surgeon removes damaged cartilage and bone from the surface of your knee joint. He or she then replaces them with three components. During a partial knee replacement, a prosthesis is placed only on one side of the knee. The components of the prosthesis include:

- The **femoral component**, which is a highly polished, strong metal.
- The **tibial component**, which is a durable plastic in a metal tray.
- The patellar component, which is also made of plastic.

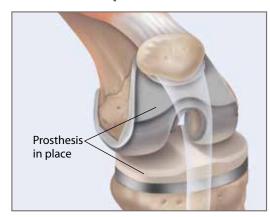
Artificial Hip Joint



Partial Knee Replacement



Total Knee Replacement



What Is Hip Replacement?

Hip replacement is when parts of your hip are replaced with an artificial prosthesis. This creates a new, smooth, functioning cushion to relieve pain.

 During a total hip replacement, a new socket with a liner is placed into your pelvis (acetabulum). For your thigh bone, the prosthesis is usually a long metal stem with a ball on the end that fits into the socket.

What is Shoulder Replacement?

Shoulder replacement is when parts of your shoulder are replaced with an artificial prosthesis that has the same parts (a ball and socket) as a healthy joint. The surgeon will choose one of several ways to replace the joint. If you have a bone fracture, fixation devices may be used during the surgery.

Partial (Hemi) Replacement

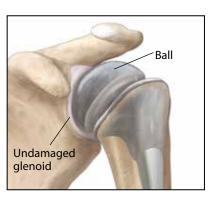
If the humeral head is damaged but the glenoid is not, only the ball may be replaced. Most often, the humeral head is removed. The stem is placed into the arm bone and a metal ball is secured to the stem. In certain cases, the natural head stays in place and is covered with a metal cap.

Total Replacement

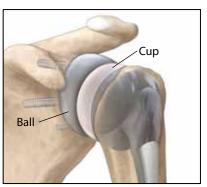
If both the humeral head and glenoid are worn, both the ball and the socket may be replaced. For this, the humeral head is removed. The stem is placed into the arm bone and the metal ball secured to it. The plastic cup is secured in place on the glenoid.

Reverse Replacement

For rotator cuff arthropathy, a reverse prosthesis may be used. For this, the humeral head is removed. In its place, a plastic cup is attached to the top of the arm bone. A metal ball is placed over the glenoid. After surgery, arm muscles other than the rotator cuff can take over moving and stabilizing the joint.







The Major Risks of Total Joint Replacement

People of all ages can have a total joint replacement. But you may have to see your family doctor, a cardiologist, or other specialist before you can be cleared for surgery. This is just to make sure that you can withstand the effects of surgery, because joint replacement, like any surgery, has possible risks and complications. These might include:

Infection

Special measures are taken to reduce the risk of infection. This means you will be given a special type of skin cleanser that helps to eliminate bacteria on your skin. You will use this to take showers the evening before your surgery and in the morning the day of your surgery. Antibiotics will be given during surgery through an intravenous line. You might be prescribed oral antibiotics to take at home after the surgery. Please let your surgeon know if you are allergic to any antibiotics. You will be given a breathing device called an incentive Spirometer to keep your lungs clear and help prevent pneumonia. Your blood glucose level will be checked every 4 hours after surgery.

Blood Clots: Deep Vein Thrombosis (DVT) or Pulmonary Embolus (PE)

As with any surgery, there is a slight risk of developing blood clots in your legs. This is because the amount of moving you can do after surgery will be limited. In some cases, these blood clots can break away to flow through the bloodstream and cause serious damage. To help prevent this, you'll be given blood thinner medication that helps prevent clots. You will also be encouraged to do ankle pumps while lying in bed. Our goal is to have you out of bed walking within 4 hours of surgery.

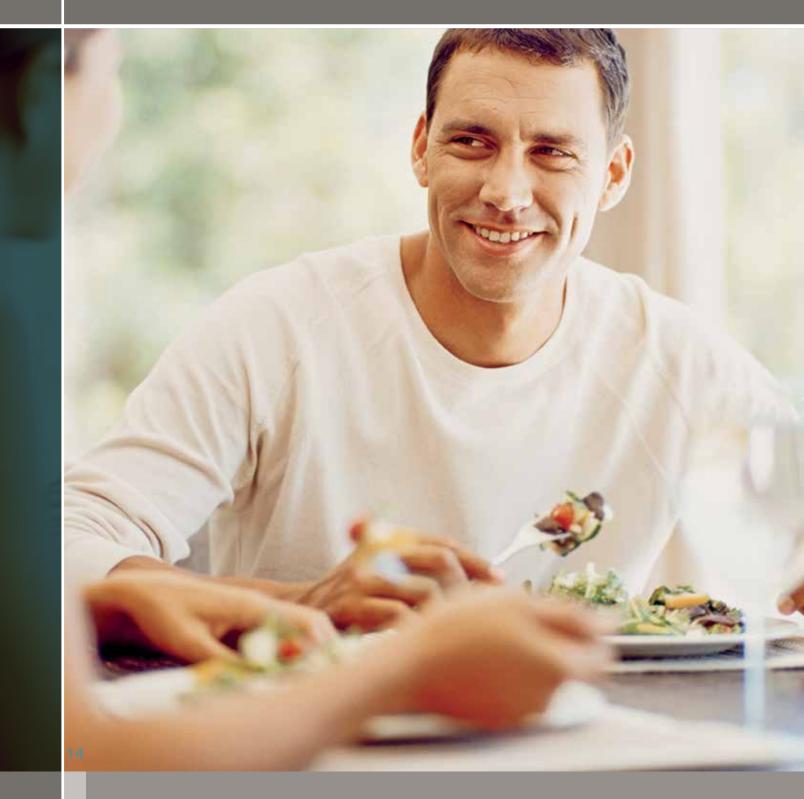
Blood Loss

Blood loss is expected after total joint replacement surgery. Although blood transfusions are rare, your surgeon will look at your lab results as well as evaluate how you are doing in order to determine if you might benefit from a blood transfusion.

Anesthesia Complications

You should inform your anesthesiologist if you or a close family member has ever had a reaction to anesthesia. The choice of anesthesia depends on many factors that your surgeon and anesthesiologist will discuss with you.

Preparing for Surgery



What You Can Do to Ensure the Safest Possible Surgery

Weight Maintenance

Excess weight makes your surgery more difficult and places you at an increased risk of complications. Speak to your primary physician about weight loss programs.

Nutrition

Eating as healthy as possible, with the right amount of fruits, vegetables, protein, whole grains, and low-fat dairy, is important for surgery. Iron is important, too. Good sources of iron include lean red meat, fortified cereals, and leafy green vegetables.

Diabetes

If you have diabetes, it is important that your blood sugar is under control. Check your blood sugar daily. Also ask your doctor about having an A1C test, if you haven't had one recently. This test measures your average glucose level over the previous few months.

Smoking

Smoking increases your risk of complications, such as delayed wound healing, blood clots, pneumonia, etc. Consider stopping now. If you would like help quitting, you can contact the California Smokers Helpline at 1-800-NO-BUTTS.

Dental Care

Bacteria that cause infections in the teeth or gums can travel through the bloodstream and settle in your new joint, so you should have a dental exam before surgery. You should also wait at least six months after surgery before having any dental procedures done, including cleaning. Speak to your surgeon and dentist about preventive antibiotic treatment before any procedure.

Alcohol

Alcohol may interfere with anesthesia and pain medications. Don't consume alcohol within one week of surgery.

Signs of Infection

If you develop a fever, infection, skin rash, cut, bite, or openings in your skin prior to surgery, contact your surgeon immediately.

Blood Clots

Hip and knee surgery increase your risk of developing blood clots. Tell your surgeon if you have a history of blood clots. Also let your surgeon know if you smoke, use birth control pills, or have any type of cancer.

Use of NSAIDs

Stop using anti-inflammatory medications (NSAIDs) 10 to 14 days prior to your surgery. These increase your risk of bleeding. Examples of NSAIDs are aspirin, Ecotrin, Advil, Motrin, ibuprofen, Aleve, and Naprosyn. You may continue to take medications that contain acetaminophen as ordered by your doctor. These include Tylenol, Vicodin, Norco, and Percocet. Check with your doctor if you have questions about any medications.

Blood Thinners

If you are currently taking blood thinners (anticoagulants), consult your physician about how far in advance of your surgery you should stop taking them. Anticoagulants include Coumadin, Pradaxa, Plavix, aspirin, Xarelto, and others.

Presurgical Exercises

Your leg muscles help support your knees and hips. Making them strong aids recovery. The exercises on these pages strengthen your muscles. They also increase range of motion and flexibility. Do each of these 10 times with each leg, twice a day until your surgery.

Ankle Pumps

1. Bend ankles to move foot up and down, alternating feet.

Quad Sets

- 1. Lie on your back with your legs extended.
- 2. Tighten the muscles in the front of your thighs (the quadriceps).
- 3. Keep them tight for five seconds, then relax.

Hamstring Sets

- 1. Lie on your back.
- 2. Keep one leg straight, and bend the other to a height of about six inches.
- 3. Tighten the bent leg by digging down and back with the heel.
- 4. Hold for five seconds, then relax.
- 5. Repeat with the other leg.

Gluteal Sets

- 1. Lie on your back.
- 2. Squeeze your buttocks together as tightly as possible.
- 3. Hold for five seconds, then relax.

Heel Slides

- 1. Lie on your back.
- 2. Bend your knee.
- 3. Slide your heel up toward your buttocks. Go as far as you can and hold for five seconds.
- 4. Then slide your heel back down until your leg is straight.
- 5. Repeat with the other leg.



Short Arc Quads

- 1. Lie on your back with a rolled towel under your knee.
- 2. Keeping your thigh on the towel, straighten your knee to lift your foot off the bed.
- 3. Hold for three seconds, then slowly lower your foot.
- 4. Repeat with the other leg.

Straight Leg Raises

- 1. Lie in bed. Bend one leg. Keep your other leg straight on the bed.
- 2. Tighten your thigh muscle and lift your straight leg as high as you can, but not higher than 12 inches. Hold for a few seconds. Slowly lower the leg.
- 3. Repeat with the other leg.

Knee Extension/Flexion:

- 1. Sit in a chair with both feet flat on the floor.
- 2. Slowly straighten your one leg as much as you can. Hold for five seconds.
- 3. Then slowly bend your leg under the chair, bringing it back as far as you can. Hold for 10 to 20 seconds. Return your leg to the starting point.
- 4. Repeat with the other leg.

Upper Body Strengthening Exercises

These exercises help build upper body strength. This will make using a walker or crutches easier on you.

Seated Push-Ups

- 1. Sit in a sturdy chair with armrests.
- 2. With palms flat on the armrests, press down to lift your buttocks from the chair. Hold for a few seconds.
- 3. Bend your elbows to slowly ease back down.

Arm Curls

- 1. Sit in a chair, with your back straight. With a dumbbell in each hand, keep your arms at your sides. Your palms should face forward.
- 2. Keeping your elbows close to your sides, curl the dumbbells up toward your shoulders.
- 3. Slowly, bring the weights back down.

NOTE: Use small bottles of water or cans of food if you don't own weights.











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Pre-Hospitalization Checklist

This checklist will help you prepare for your total joint surgery. Your surgeon and/or primary physician will decide which diagnostic tests you should have.

	I have made appointments with other physicians if requested to do so.
	I have called San Antonio Regional Hospital (909.920.4924) for my pre-admission
	appointment and completed my home medications sheet.
	I have completed pre-op labs and tests as ordered by my surgeon and/or physician.
	I have started my presurgical nutrition and exercise program.
	I will STOP taking aspirin, NSAIDs, or any anti-inflammatory medications on
	(date) as instructed by my doctor.
	I will STOP taking Coumadin, Plavix, or any blood thinner (anticoagulant)
Ξ.	medication on (date) as instructed by my doctor. I
н	I will STOP taking Ozempic, Wegovy, or any GLP-1 agonist medications on
	(date) as instructed by my doctor.
	I will STOP smoking cigarettes.
	I will bring this handbook on the day of my surgery.
	I will NOT bring any valuables to the hospital.
	I will NOT bring any of my medications to the hospital.
	I WILL bring the following items to the hospital:
	Glasses, dentures, and hearing aids with containers
	Closed-toe, closed-back, non-skid slippers or shoes
	Loose-fitting clothes, including socks and undergarments
	I have a coach and my discharge plan in place.
	I have my follow-up appointment scheduled with my surgeon.
	I/we have completed the mandatory online Joint Replacement video.
	I have a walker with two wheels in the front to use after surgery.
	I have picked up the prescriptions from my pharmacy that my surgeon has ordered
	to use after surgery.
	I have my initial outpatient physical therapy appointment scheduled after surgery
	as directed by my physician

Home Survey Checklist

Be aware of and repair any uneven surfaces inside and outside your home.
Remove throw rugs, phone cords, and extension cords from walkways.
Remove clutter and furniture so that you have clear walkways in your home that will accommodate you and a walker.
Prepare an area for yourself where your essentials will be close by. These might include:
 A chair with armrests and a firm, raised cushion. A small table for a cell phone and/or cordless phone, pitcher and glass of water medications, reading glasses, books and magazines, television remote, tissues, laptop, etc.
Provide a space where your pets can be confined when ou arrive home and when you are walking around your house.
Provide good lighting in all rooms, including nightlights in bathrooms and hallways.
Install safety rails in tubs, showers, and wherever additional support is needed.
Install safety mats inside and outside tubs and showers.
Use a raised commode chair over the toilet, or a raised toilet seat.
Choose shoes or slippers that stay securely on your feet, fit well, and have non-skid soles.
Avoid unnecessary and unsafe reaching by moving frequently-used items to shelves and counters that are easy to reach.
Make meals ahead of time and freeze; warm in microwave or toaster oven after you get home. Prepare simple meals using countertop appliances or the stovetop.
Purchase bed risers, if necessary, to raise the height of the bed so that the top of the mattress will be at or above your knee level.
If you have a 2-story home, prepare a temporary bedroom downstairs if you normally sleep upstairs.

Several Days Before Surgery

All of these tips will help you be better prepared for surgery. They will also make returning home easier.

- Pay bills so they are up to date through a few weeks after you return home.
- Clean up the house, including vacuuming the carpets. Do laundry.
- Go shopping. Buy food items and supplies that can be used after you return home.
- Confirm how you will get to and from the hospital. You are not allowed to drive yourself home from the hospital. Assure that the passenger seat can move fully backward.
- Confirm who will be staying with you after you return home.
- Notify your surgeon's office right away if you think you may have an infection of any kind (bladder, skin, tooth), or any illness or fever.
- **Do not** shave your legs or cut your toenails for one to two weeks before your scheduled surgery.
- Fill any prescriptions you have received from your surgeon.
- Make your 2-week post-op (after surgery) appointment with your surgeon and your first outpatient physical therapy appointment. Therapy usually begins 3-5 days after surgery (knees/hips). Please refer to your surgeon for timing and physical therapy location.

The Day Before Surgery

Follow these instructions on the day before surgery. They'll help to ensure that everything goes smoothly.

- Eat small, light meals. Avoid heavy, greasy foods.
- Shower the night before with the anti-bacterial soap given to you by the SARH Pre-Op Center. Put on clean pajamas and place clean sheets on your bed. Shower with the same soap again in the morning of your surgery. Please refer to the instructions given to you by the Pre-Op Center. Do not allow your pets to sleep with you once you start your shower.
- Follow Pre-operative Hydration Instructions given in the Joint Replacement Class or SARH Pre-Op Center.
- You may brush your teeth, but do not swallow any water.
- Have a bowel movement the night before or the morning of surgery.

The Day of Surgery

On the day before surgery you will call the hospital's surgery department. You'll be told the time that you are scheduled to arrive. It is important that you arrive on time. This allows the nurses and other staff to complete the necessary preparations for your surgery. Here are some DOs and DON'Ts for the day of your surgery.

- DO take your medications with a small sip of water as instructed by your physician.
- DON'T take your insulin unless instructed to do so by your physician.
- DON'T take other diabetes medications unless instructed by your doctor.
- DON'T bring anything of value to the hospital. Leave your cell phone/charger and other electronic devices with the person who brings you to the hospital.
- DO bring respiratory inhalers for the control of asthma. If you have sleep apnea and use a CPAP at home, bring it with you.
- DO bring your eyeglasses, contact lenses, hearing aids, and dentures if you wear them. You will be able to wear them after surgery. Please bring a case for each item. The case should be labeled with your name and phone number.
- DO bring this notebook with you to the hospital.

Your Hospital Experience



Arrival at the Hospital

It's normal to feel nervous when you arrive at the hospital. But rest assured, knee, hip and shoulder replacements tend to have very good results. The hospital staff will include you in decision-making and do whatever they can to answer your questions and make the day easier on you. Here is what you can expect on the day of your surgery.

- You will change into a hospital gown and your clothes will be put into a bag for storage until after your surgery.
- A nurse will take your vital signs. You will be asked questions regarding your name, health history, and allergies many times prior to your surgery. These questions are very important for the physicians and nurses to be sure they have identified you and your procedure correctly.
- You will be asked to sign a consent form for surgery.
- An intravenous (IV) line will be placed in your arm.
- You will meet your anesthesiologist, who will talk to you about the type of anesthesia you will receive. He or she will discuss your health history in order to determine what is best for you.
- You may be given general anesthesia. This means you will be unconscious. You will have a breathing tube in your throat that will deliver the anesthesia. Your throat may feel a little sore after surgery from the tube.
- You may be given another type of anesthesia called a spinal or epidural. This is delivered as a shot in the lower back, and it numbs you from the waist down. You will also receive IV sedation to help you relax throughout the procedure.
- You may receive both general and spinal anesthesia.
- Depending on your surgeon, first-time (primary) joint replacements take about two hours. Second-time (revision) joint replacements are more complex and tend to take between two and four hours.
- After surgery, you will be taken to the Postanesthesia Care Unit, or the PACU, for recovery. In the PACU, your vital signs will be monitored closely and your dressing (bandages) will be checked. Your circulation and nerve function will also be monitored.
- After your recovery in the PACU, you will be taken to an outpatient bed on the Orthopedic Unit or the Ambulatory Care Unit (ACU).
- Coaches are required to be present after surgery in order to participate in physical therapy instructions and to receive the transition of care to home/discharge instructions by the nurse.

Pain Control After Surgery

Joint replacement surgery is painful, but it is a different type of pain than what you have been feeling. The good news is that the discomfort should lessen greatly over the first several days.

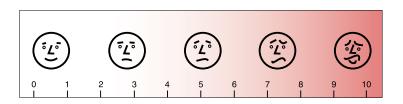
- You will be given oral pain medication to keep you comfortable.
- It is important for you to work with your surgeon and nurses on controlling your pain. When you maintain a tolerable pain level you:
 - Move better, which is important for your rehabilitation.
 - Breathe deeper, which will help prevent any lung complications.
- If you have concerns about becoming addicted to pain medications or if you've had issues with addiction to drugs or alcohol in the past, please discuss these concerns with your surgeon prior to surgery and with your anesthesiologist.

Your Incision

- Your incision will be closed with staples, surgical glue, or sutures. These will be covered with a bandage. Please discuss the care of your bandage with your surgeon and your post-op nurse before going home.
- Your incision will be vertical and about
 4 to 6 inches long. If you had previous
 surgery, the surgeon may use the prior scar.
- When healed, the scar will be red for 6 to 12 months, then it will fade to a thin white line.
- Some numbness around the scar is to be expected.
- Postoperative swelling and warmth around the incision will last for several months.

Descriptions of Pain

- O No pain or discomfort.
- **1 or 2** Minor pain or discomfort; does not interfere with participation in activities or interactions with others.
- **3 or 4** Somewhat limits or prevents participation in activities; limits ability to concentrate or interact with others; interferes with appetite or sleep; causes irritability.
- **5 or 6** Interferes with restful sleep; decreases appetite; increases heart and breathing rates, blood pressure, muscle tension, and irritability; causes nausea and depression over time; causes a desire to withdraw or severely limits interactions with others.
- **7 or 8** Continuous or frequent, even when still or at rest; causes increased breathing, heart rate, blood pressure, and muscle tension; prevents or seriously limits participation in meeting own basic needs; causes an inability to sleep or eat; prevents concentration and focus; causes depression and desire to isolate oneself from others.
- **9 or 10** Worst pain ever experienced or imagined; intolerable pain that interferes with all aspects of life; complete incapacitation that requires immediate medical evaluation and intervention.



Using an Incentive Spirometer

Working with an incentive spirometer helps keep your lungs clear. It also strengthens your breathing muscles and helps prevent health problems such as pneumonia. For best results when using an incentive spirometer, follow the steps below.

- 1. Sit up and hold the spirometer upright.

 Make sure you do not tilt it.
- 2. Relax as you breathe out. When you have exhaled fully:
 - Place your lips around the mouthpiece.
 - Be sure your lips create a tight seal around the mouthpiece.
- 3. Inhale slowly and deeply. When your lungs feel full, note the volume level reached on the spirometer. Hold your breath until the ball or disk has been raised for at least three to five seconds. Inhaling too quickly may set off an audible tone. If this happens, inhale more slowly.
- 4. Remove the mouthpiece. Exhale slowly. Take a few breaths, then repeat the exercise.
 - Do 5 to 10 repetitions. Aim for the goal set by your healthcare provider.
 Try to reach a higher volume level on the spirometer with each breath.
 - Perform this exercise every hour while awake or as often as directed.

Daily Post-Op Activities

Length of stay in the hospital: plan to go home the same day of surgery once you have met the discharge criteria.

The goal is to be discharged to a home environment. Patients who go home after discharge tend to heal and recuperate quicker, being in their own familiar environment with family, friends, and pets to encourage them.

Total joint patients are healthy individuals having an elective surgery. We encourage you to think of yourself as 'healthy,' not 'sick,' while in the hospital and at home after discharge. You will receive a complimentary set of specifically designed athletic shorts and T-shirt to wear while in the hospital and at home.

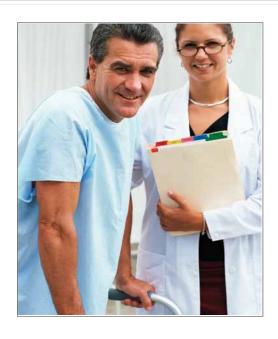
After surgery and at home, you will not be on bedrest; you will be up in a chair, doing your prescribed exercises, ambulating, and taking rest/nap breaks.

Day of Surgery

You will be up walking either with a Physical Therapist (PT) or your Registered Nurse within a few hours of arriving to your room on the Orthopedic Unit. PT or a member of the nursing staff will have you sit at the side of the bed, stand and begin walking with a front wheel walker. It is not unusual for you to feel lightheaded, weak, and sometimes nauseated the first time you get up after surgery.

On the day of surgery, you will have a physical therapist provide a safety evaluation, ambulating with a front wheel walker and stair training-your coach is required to be present during this time. The nursing staff or PT will continue to ambulate with you as needed until you are ready for discharge to home.

The goal is to prepare you to discharge home. PT will work with you and your coach and will teach you how you should get in and out of bed, how to go up and down stairs, get in and out of a car, and any precautions you might have. When you have met the criteria for discharge, and your surgeon and PT determine you are physically ready, you will be discharged to home.



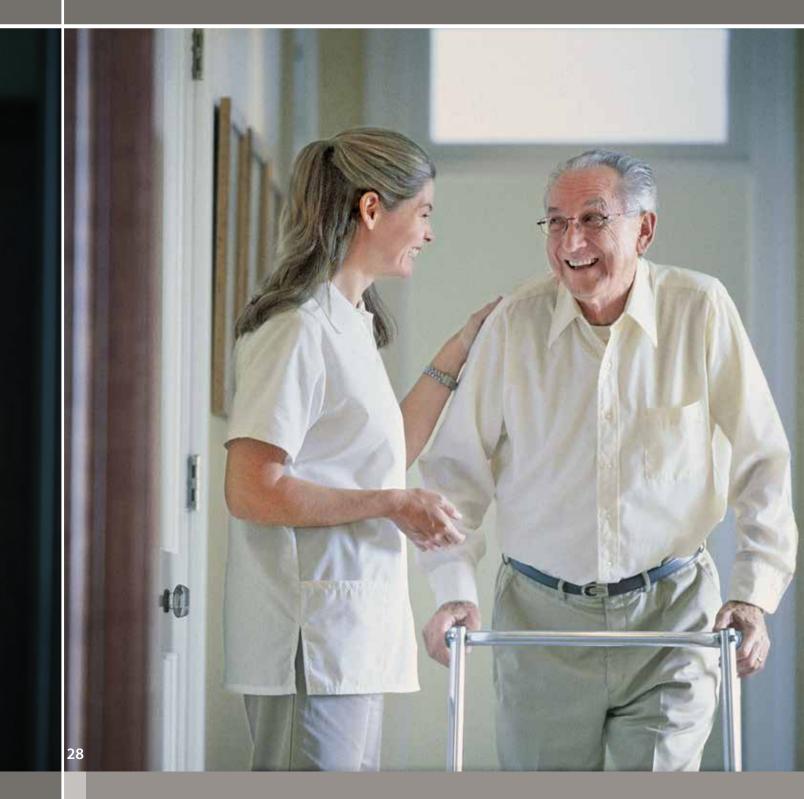


Preventing Falls While in the Hospital—Call, Don't Fall!

You may be unsteady while in the hospital. This might be caused by anesthesia and/or medications you are taking. We want you to be safe throughout your stay in the hospital, so please:

- Use your call light to call for help. You should always call your nurse for assistance before trying to get out of bed.
- When you call for help to go to the bathroom, let us know whether it is urgent.
- Make sure your bedside table, telephone, call light, water, and personal items are within reach.
- Wear closed-toe, closed-heel, skid-resistant footwear.
- You must use your walker 100% of the time while you are in the hospital and at home. Your outpatient physical therapist will help you determine when you can eliminate your walker or transition to a cane.
- Even if your coach is with you at your bedside, **you must have a staff member present** when getting up out of bed or to the bathroom.

Transitioning Home After Your Surgery



After You Go Home

The time to prepare for your arrival home is before surgery. Having a coach is essential for the first week or so. In choosing a coach, consider that this person should be willing to do the following activities:

- Make sure you are safe when showering and toileting
- Encourage you to do your exercises, and make sure you are following the "Do's & Don'ts" as instructed by your surgeon and physical therapist
- Assist you while you are walking or using stairs
- Take you to appointments, shop for you, and prepare meals

Outpatient Physical Therapy

You will go to an outpatient physical therapy facility as arranged by your surgeon. Therapy usually begins 3-5 days after surgery and with sessions twice a week for a minimum of 6 weeks. You will need to arrange your own driver or transportation.

Special Equipment at Home

You might need some special equipment for your home while you recover. This equipment will be delivered to you at your home prior to surgery. The most common equipment for home includes:

- A walking aid, such as a front-wheel walker
- An elevated toilet seat
- Equipment is arranged by your surgeon's office in collaboration with your insurance payer. Please discuss at your Pre-Op appointment with your surgeon.

Discharge Instructions

Day of Discharge

- Make sure you have your walker with you during discharge. You will need it to get in and out of the car.
- Be sure that the vehicle you go home in is comfortable for you to get into. It should be neither too low nor too high, and it should have plenty of leg room.

Activity at Home

- Your level of activity at home will vary according to your individual abilities and the type of surgery you had. Before you go home, your therapist will instruct you on your specific activities, exercises, and restrictions for the first weeks following surgery.
- The sooner you become active, the sooner you will get back to normal. You also need to protect your new joint so it can heal. So plan frequent rest periods throughout the day and do not overdo activities.

Medications

- You may take oral pain medication your surgeon has prescribed as needed. If you have any unusual symptoms from the medication, such as nausea or stomach upset, call your physician's office. Taking pain medications with food or milk may help prevent stomach upset. Do not drink alcohol when taking pain medications.
- Pain medications and decreased physical activity contribute to constipation, so it is recommended that you use a stool softener and/or a bulk laxative.
- Your nurse will tell you what home medications you may resume taking.

Blood Thinners

- You will be taking a blood thinner, or anticoagulant medication while you are in the hospital and when you go home. There are various types of medications that your surgeon might order. Enteric-coated aspirin once or twice a day with food may be ordered by your surgeon. You will continue taking this medication and dosage for 4-6 weeks after you go home. If you cannot take aspirin, your surgeon might order another type of anticoagulant.
- There is a small risk of bleeding with this medication. If you have minor bleeding from gums, nose, or skin, use firm pressure for five minutes to stop the bleeding.
- If you have major bleeding, coughing, are passing bright red, bloody or black stools, have pink or red-tinged urine, chest pain, shortness of breath, or are vomiting blood, go to the nearest Emergency Department.

Diet

You may resume your normal diet. A well-balanced diet high in iron, protein, and vitamin C will promote healing.

Incision Care and Hygiene

- After surgery, your surgeon will apply a bandage to your incision. You will keep this bandage on until you return to your surgeon for your first post-op appointment unless your surgeon tells you otherwise. Please discuss this with your post-op nurse before going home.
- You may shower with the dressing in place after you go home, but cover it with plastic to prevent water leaking under it. Avoid direct spray from the shower on the area.
- **Do not** take a bath or to into pools or spas for four to six weeks after surgery as determined by your surgeon.
- Keep your dressing clean and dry; avoid using creams and ointments around the area. Ask your coach to check your dressing each day. A small amount of drainage is normal, but bleeding to your incision is not. You may have swelling to the surgical leg for several weeks or months after surgery. Call your surgeon if you have bleeding to the incision, increased swelling, redness, warmth, calf swelling or tenderness, temperature of 101°F or above, and any other question or concerns you may have. If you have chest pain and/or shortness of breath or any life-threatening emergencies, call 9-1-1.

Sexual Activity

Discuss with your surgeon any questions or concerns about when to resume sexual activities. Follow any and all precautions as instructed.

Driving

Your surgeon will decide when it is safe for you to drive, but generally you'll be able to drive in four to six weeks. Never drive while taking narcotic pain medications.

Exercise

Do your exercises in the back of this book as instructed by the physical therapist 2–3 times a day doing 10 repetitions of each exercise. Walking is also important for muscle strength. Try to pace yourself each day so you do not overdo, and increase your activity each day.

Returning to Work

This depends on what type of work you do, so discuss it with your surgeon.

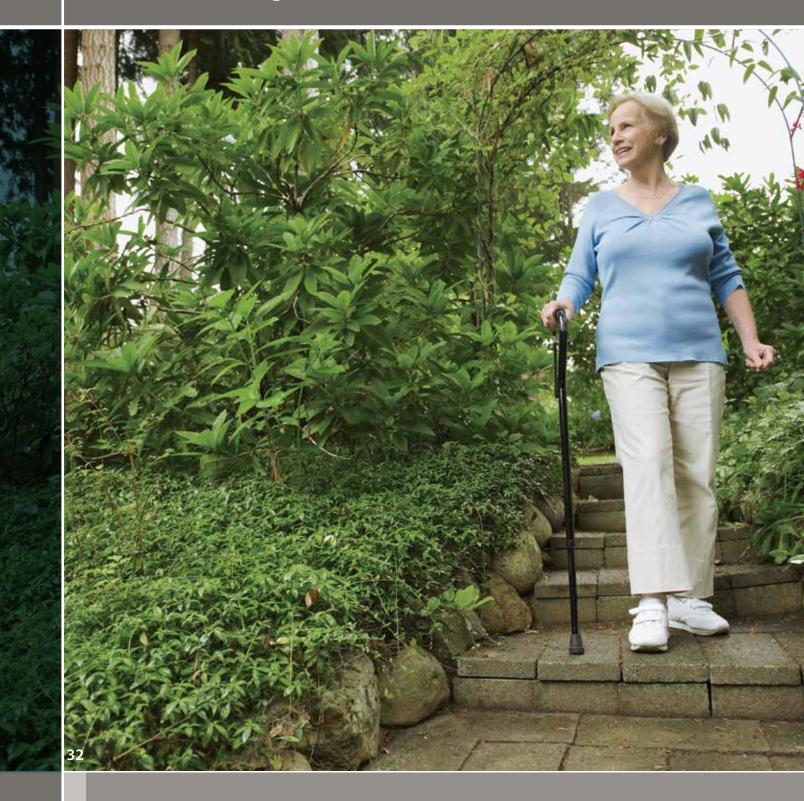
Reminder About Dental Work and Minor Surgery

Before having any dental work or minor surgery, tell your dentist or physician that you have a total joint prosthesis. Antibiotics will usually be prescribed. The general rule is no dental work for one month before and six months after your surgery.

Follow-Up Appointment

It is very important that you return to your surgeon's office for your follow-up appointment. Your appointment is usually two weeks after your surgery. At this visit, you will have the staples removed from your incision, if applicable. Do not hesitate to call your surgeon if you have any questions or concerns before your appointment.

Transitioning Home with Walkers and Canes



Using a Walker

To use your walker, you will need to learn a new way to walk (gait). This will be either a non-weight-bearing gait or a weight-bearing gait. Follow any instructions given to you by your healthcare provider.

Weight-Bearing

Roll the walker (or lift it if you're using an unwheeled walker) forward about 12 inches.



Bring your other foot forward to the center of the walker.



Sitting Down

Back up until you feel the chair behind you. If you have an injured leg, knee, or hip, place that leg out in front of you.



Bend forward at your hip. With one hand, reach behind you and grab the armrest or side of the chair. Do the same with your other hand.



Lower yourself onto the center of the chair, then slide back.



Up Curbs

- Move your feet and the walker as close to the curb as possible.
- Put your weight on both your legs, then lift the walker onto the sidewalk.
- Step onto the sidewalk with the unaffected foot. Using the walker to support your weight, bring up the affected foot.



Down Curbs

- Move your feet and the walker as close to the edge of the curb as you safely can.
- Lower the walker onto the street, keeping its back legs against the curb.
- Using the walker to support your weight, lower the affected foot. Then step down with the other foot.



Up and Down Stairs and Steps

Do not try the instructions below without permission from your healthcare provider. Also, ask for different instructions if your walker has wheels.

Up Stairs

Turn the walker sideways so the crossbar is next to you. Place the first two legs on the step above you. Hold the walker with one hand and the handrail with the other.



Support your weight evenly between the handrail and walker. Step up with your good leg.



Bring your injured leg up. Then lift the walker to the next step.



Down Stairs

Turn the walker sideways so the crossbar is next to you. Place the back two legs on the step beside you. Hold the walker with one hand and the handrail with the other.



Support your weight on your good leg. Step down with your injured leg.



Support your weight evenly between the handrail and your walker. Slowly bring your good leg down. Then move the walker down to the next step.



Precautions

- At first, always have someone below to "guard" you. A guard can stop you from falling if you lose your balance. The guard can hold on to a special belt (called a gait belt) that you wear. A gait belt can be bought at a medical supply store.
- When climbing curbs, hold the walker with both hands. Lift all four legs of the walker onto the sidewalk. Step up with your good leg.

TIP: Up with the good leg and down with the bad: an easy rule to remember.

Using a Cane

A cane helps support some weight. The most common type of cane has a single tip. But if you have balance problems, a quad (four-point) cane may be recommended. Hold your cane on the unaffected side, unless told otherwise.

Walking

Put all your weight on your unaffected leg. Find your balance. Move the cane and your affected leg forward.



Support your weight on both the cane and the affected leg. Then step through with your unaffected leg. Put your weight on the unaffected foot and start the next step.



When using a quad cane, place the cane so that all of the tips touch the ground.



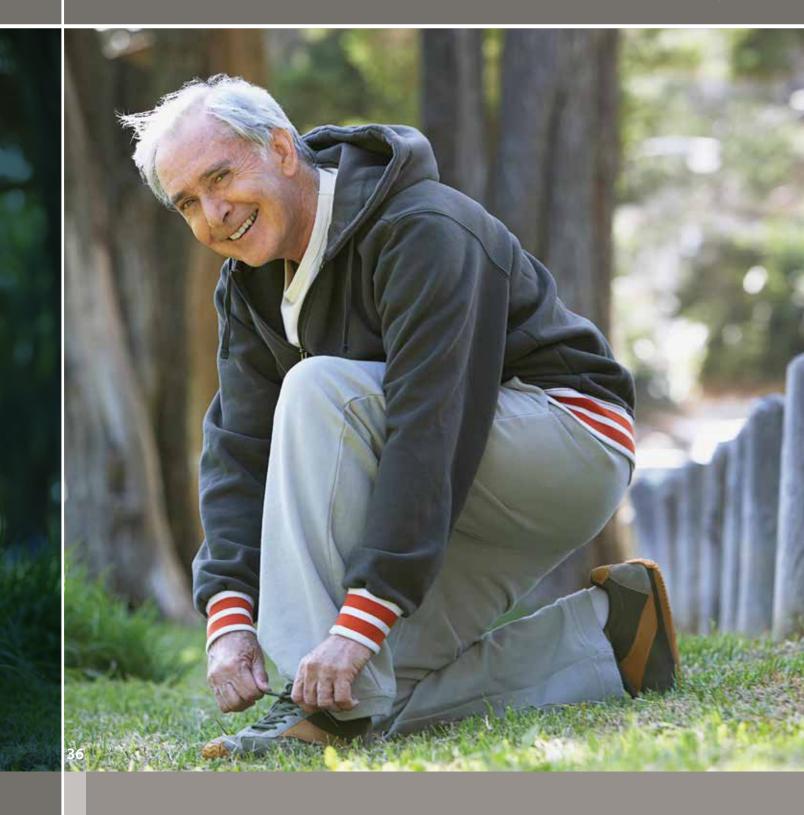
Up Stairs and Curbs

If there is a railing, hold on to it with your free hand. Step up with your unaffected leg first. Then move the cane and affected leg together as a unit.





Total Knee Replacement: Returning to Activity



Special Equipment

With total knee replacement, you'll probably have to use special equipment during your hospital stay.

Cold Therapy Machine

Cold therapy cools your joint and decreases pain and swelling after surgery of the knee. After you go home, you may use ice packs (or a cold therapy machine if you have one). This is most important for the first three days after surgery. In general, ice packs should be applied frequently for the first three days (20 minutes on/ 20 minutes off) and then as needed. **Always have a barrier between your skin and the ice pack to avoid burns.**

Total Knee Patients

DO:

- Practice the exercises in this book as instructed by your therapist
 2-3 times a day, 10 repetitions each exercise, in order to strengthen and maximize the function in your new knee.
- Walk as much as is comfortable, but don't overdo it. Wear good shoes for stability.

DON'T:

- Twist your knee. *Instead*, turn your whole body.
- Put a pillow under your knee or keep your knee bent while resting.
- Sit in chairs with roller wheels. *Instead*, use a chair with arms to help you stand.
- Sit in a bathtub. *Instead*, use a shower seat for safety.
- Try to carry anything while walking with your walker.
- Wear high-heeled shoes.
- Have clutter in your home's walkways.
- Use throw rugs.
- Do high-impact activities such as running or jumping.

Exercises After Total Knee Replacement

Quadriceps Setting

This is a good beginning exercise as it strengthens the quadriceps muscle and helps increase your ability to straighten your knee. Be sure to do this with both legs because both legs will be weakened after the procedure. Try to do this exercise several times every hour, but keep in mind your level of comfort will determine how many repetitions you do.



- Lie in bed with your legs straight. Tighten the muscle at the front of the thigh as you press the back of your knee down toward the bed.
- Hold for a few seconds. Then relax for a short period.
 Repeat 10 to 20 times for each leg.

Terminal Knee Extension

This exercise also helps promote muscle activity and increases knee extension. It should be repeated 10 to 20 times.

- While lying in bed place a pillow or rolled-up towel under the operated knee to raise the knee joint to about a 40-degree angle from full extension.
- Tighten the quadriceps muscle and straighten the knee by lifting the heel off the bed.
- Hold this position for 5 to 10 seconds, then slowly lower the heel to the bed.
- Repeat 10 to 20 times.



Heel Slides (Knee Flexion)

This exercise will promote muscle activity of the hamstrings and increase the flexibility of your knee.

- While lying in bed on your back, keep your legs straight and together and your arms at the side.
- Slide the heel of your operated leg toward your buttocks while keeping it on the bed. Move it as far as you comfortably can.
- Hold this position to a count of 10 then return slowly to the starting position.
- Repeat 10 to 20 times.

Straight Leg Raising

This is another excellent exercise to promote strength in the quadriceps and the flexor muscles. Both of these will help you walk.

- Lie in bed on your back. Bend the non-operated leg, raising the knee and keeping the foot flat on the bed. Keep your operated leg straight on the bed.
- Lift your straight leg about 6 to 10 inches off the bed. Hold this position (operated leg) for 10 seconds, then lower the leg slowly to the bed.
- Repeat 10 to 20 times.

Pillow Squeeze

This is a good exercise to help strengthen the hip abductors, or groin muscles.

- Place a pillow between the knees (or slightly above the knee joint line if pressure at this area is uncomfortable).
- Squeeze the pillow and hold for a count of 10.
- Relax for a short period.
- Repeat this exercise 10 to 20 times.

Note: Continue your pre-op Upper Body Strengthening Exercises from page 13.





Total Hip Replacement: Returning to Activity



Special Equipment

With Posterior Total Hip Replacement, you'll probably have to use special equipment during your hospital stay. You'll also be given special tools for your home. You will not need special equipment or tools for Anterior Total Hip Replacement.

Abductor Splint (Pillow)

You may have a special foam pillow that will help to keep your legs apart (abducted).

ADL (Activities of Daily Living) Kit

You will be given an ADL Kit while you are in the hospital. The physical therapist will teach you how to use each of the three tools in the kit, consisting of a reacher/grabber, a sock aid, and a dressing stick.

DO:

- Practice the exercises given to you by your therapist to strengthen the muscles in your leg.
- Mild to moderate exercise; excessive exercise can cause harm. If you experience increased soreness that lasts more than two days, decrease your activity until you are ready.
- Take regular walks. Start with shorter distances.
- Do follow the hip precautions specific to your approach, see page 42.
- Begin pre-surgery home exercise routine once cleared by your surgeon and/or physical therapist such as your treadmill, stationary bike, golf, gardening, swimming, etc.

DON'T:

- Bend your hip more than 90 degrees.
- Cross your legs while standing, sitting, or lying.
 DO: Keep a pillow between your legs when sitting or lying down.
- Turn your hips inward or outward. DO: Keep your hips in a straight position when you are lying in bed and walking.
- Sit on low stools, low chairs, low sofas, or low toilets. DO: Use cushions on your chairs and use a raised toilet seat.
- Sit in a bathtub.
- Sit in chairs with roller wheels.
- Lie on your side.
- Try to carry anything while walking with your walker.

- Wear high-heeled shoes. DO: Always wear low or flat closed-toe and heel, supportive shoes.
- Get up from a chair until you have first moved to the front edge of the chair. DO: Place your operated leg in front of you, with your other leg well under the chair. Keep your operated leg in front of you while getting up.
- Have clutter in your home's walkways.
- Use throw rugs.
- Try to put on your shoes and socks without a long-handled reacher or sock aid.
- Pick up objects from the floor or reach into lower cupboards or drawers unless you use a reacher.
- Walk on ice, run, or engage in high-impact activities.

Check with your surgeon for the type of approach you will have for your total hip replacement surgery (i.e., posterior, anterior, direct lateral). Posterior approach and direct lateral approach will have one set of precautions, whereas anterior approach will have a different set.

Posterior and Direct Lateral Hip Precautions

1. DON'T move your operated hip toward your chest any more than a right angle. This is 90 degrees.



2. DON'T turn your kneecap inward when sitting, standing, or lying down.



3. DON'T cross your operated leg across the midline of your body



Anterior Hip Precautions

Do not turn your leg or foot out away from the body. Instead, keep your operated leg in a neutral position.



DON'T



Keep your toes pointed straight ahead.



DON'T



Don't stretch you hip or leg back behind your body. When walking, don't allow your surgical leg to extend behind your body (as in taking long strides.)



DON'T



Exercises After Total Hip Replacement

Ankle Pumps

This exercise strengthens the calf muscles in your lower leg.



- Lie in bed on your back.
 Bend your ankle and pull your foot and toes toward your head.
- Push your foot back down and point your toes away from you as far as possible, as if you are pushing on the brake pedal of a car.
- Repeat with both legs 10 times every two hours throughout the day.

Quad Sets

This exercise strengthens your upper leg or thigh muscles.



- Lie in bed on your back with your legs straight. Tighten the muscle at the front of the thigh as you press the back of your knee down toward the bed.
- Think about trying to raise your heel ½ inch off the bed.
- Hold for five seconds. Then relax for a short period.
- Repeat 10 times for each leg, three times a day.

Gluteal Sets

This exercise strengthens the gluteus maximus (buttocks) muscles, which are important for walking and stair climbing.



- Lie in bed on your back. Squeeze your buttocks together.
- Hold for a count of five. Relax and repeat. Do
- a total of 10 repetitions, two times a day.

Heel Slides



This exercise will strengthen the muscles in the back of your thigh.

- Lie in bed on your back. Slide your foot along the bed toward your buttocks and slowly bend your knee up. Do not bend your hip more than 90 degrees.
- Slide your foot away from your buttocks and slowly straighten your leg.
- Relax and repeat; do 30 repetitions, resting as needed.
- · Repeat with the other leg.

Standing or Lying Abduction

Do this exercise with your operated leg.



- Lie in bed on your back with your feet slightly apart. Keeping your knee and foot pointing toward the ceiling, slowly slide your leg out to the side.
- Slide your leg back to its original position without crossing the midline of your body. Do 30 repetitions, resting as needed.
- If this exercise is too painful, try moving your leg out to the side while standing and holding on to a walker or firm surface. Make sure to keep your toes pointed straight ahead.

Note: Continue your Upper Body Strengthening Exercises from page 13.

Total Shoulder Replacement: Returning to Activity



Special Equipment

With total shoulder replacement, you'll probably have to use special equipment during your hospital stay.

Shoulder Abduction Sling

Before your surgery, you will want to practice using your non-surgical arm to complete tasks that you would normally do with the arm you are having surgery on.

After your surgery, your surgeon will apply an immobilizer to your arm. You will need to wear it at all times in order to keep your shoulder in the proper alignment for healing. Your surgeon will advise you when you can come out of the immobilizer/sling to begin exercises and ADL's.



Cold Therapy

Cold therapy has two functions: to keep swelling down and help minimize pain. After surgery, you may use ice packs (or a cold therapy machine if you have one). This is most important for the first three days after surgery. In general, ice packs should be applied frequently for the first three days (20 minutes on/20 minutes off) and then as needed. **Always have a barrier between your skin and the ice pack to avoid burns.**

Total Shoulder Patients

DO:

- Wear your sling at all times (including sleeping) except when showering and dressing.
- Keep your elbow "tucked in" to your side whenever you are out of your sling for showering or dressing (make sure your arm is comfortably at your side with the elbow slightly forward).
- Exercise your fingers, wrist, and elbow (wiggle your finger, move your wrist up and down, squeeze a soft ball, and use your other arm to bend the elbow up and down).
- Place a pillow behind your elbow when seated or lying down to keep the arm forward to help decrease pain.
- Practice your exercises as instructed by your surgeon and/or physical therapist.
- Wear front opening clothes. Always dress your operated arm first. Sit on the edge of a chair or stand with your arm hanging by your side. Slide your operated arm into the garment first using your non-operated arm. Do not assist with your operated arm, just let it hang loose. Once this arm is fully in the sleeve, bring the garment around your back and put the other arm in. Any fasteners must be fastened only with your non-operated arm. Once you have dressed your upper body, place your arm back in the sling.

DON'T:

- Actively flex your shoulder (lifting arm away from body).
- Externally rotate your arm (extending lower arm out to the side while your elbow is at your side bent in "L" shape).
- Move your shoulder until your surgeon tells you to (usually 2-4 weeks after surgery).
- Hold anything heavy in the hand of your operated arm (you may use the hand for holding objects like a cup of coffee or newspaper, <u>but</u> nothing heavier than 1-2 pounds).
- Push up from the bed, chair, and toilet using operated arm.

Exercises After Total Shoulder Replacement

Your Exercise Program

A day or two after surgery, you'll start a program of exercises. These help you regain strength and movement in your shoulder and arm. Your surgeon or a physical therapist (PT) will work with you. Do your exercises as instructed. They are vital for you to regain movement and strength in your arm. Do not start any exercise until instructed to do so by your surgeon.

The pendulum is an exercise you may learn soon after surgery. Do this exercise as often as your therapist prescribes. To do it: Stand next to a table or other support. Bend slightly forward and hold on to the support with the hand of your unoperated arm. Let your operated arm hang down. Slowly swing the arm in a circle.





