

Highland Hospital

Total Hip and Knee Joint Replacement Guidebook

Orthopaedics & Physical Performance



Thank you for choosing UR Medicine Orthopaedics & Physical Performance. Here, you'll receive the most advanced care from true leaders in orthopaedics who live right here, yet are invited to teach around the globe. The skill of your surgeon is matched by your joint team's efforts to make sure you are well cared for throughout your surgical journey.

In short, we'll treat you as a person, not just a procedure.

To help make your joint replacement experience as smooth as possible, we'd like you to use CareSense, an electronic, interactive tool. CareSense is available only to our joint replacement patients. It lets you connect with your joint team, and lets us share timely information. CareSense is a companion tool to MyChart, which you can use to manage all aspects of your relationship with UR Medicine outside of this surgery.

Rest assured that we will take good care of you. Our orthopaedic surgeons are all board certified and perform 78% more knee replacements and 25% more hip replacements than the national average. This is important because research indicates that surgeons with more training, and who complete more surgeries, have better outcomes.

Also, the quality of our services has been recognized by the Joint Commission, the nation's leading organization for setting rigorous health care standards.

This guide will help you feel comfortable and confident throughout your surgical journey as you move toward recovery and a life of greater mobility and independence.

For more information visit joint.urmc.edu. An electronic version of this guide is available at jointguide.urmc.edu.

Your surgeon, nurse, or therapist may add to or modify the recommendations in this guide. Always use their recommendations first and be sure to ask questions if any information or instructions are unclear.

Important Information

Register for CareSense using link in email from urmc@caresense.com

Obtain Medical Clearance

(doctor statement that I can have surgery)

Doctor _____

Date of Medical Clearance _____

Other Doctors I Need to See _____

Presurgical Screening Appointment

(we will call you to schedule)

Date _____

Time _____

Confirm Surgery Time

You will be called between 1:30 p.m. and 4 p.m. the business day before your surgery to verify your arrival time.

Watch Total Joint Replacement Education Class

Available at: jointclass.urmc.edu or point your phone's camera at the QR code to the right.



Contacts

• **Nurse Navigator Line**
(585) 353-5945

• **Presurgical Screening Questions**
Call (585) 262-9150.

Leave a message and we will return your call.

Our Treatment Team

Nurse Navigator – Acts as an educator and helps with questions throughout your surgical journey.

Orthopaedic Surgeon – Performs your surgery and directs your medical care.

Anesthesiologist – Helps manage your pain and keep you safe during surgery; will meet with you immediately before surgery to discuss your anesthesia options.

Physician Assistant (PA)/Nurse Practitioner (NP)/Orthopaedic Resident Physician – Assists during surgery and helps monitor your recovery; functions as an extension of the surgeon.

Geriatrician – Specializes in the care of elderly patients and is available to assist surgeons in managing complex medical problems as part of the Geriatric Fracture Center.

Nurse – Serves as your primary point of contact for you and your family while you're in the hospital; monitors vital signs, draws blood, places IV, monitors your pain, gives medication, and tracks your progress.

Patient Care Technician (PCT) – Assists nurses with vital signs and hygiene routine; can help you get in and out of bed.

Physical Therapist (PT) – Helps you do your exercises, walk, go up and down stairs, and get in and out of a bed and a chair.

Occupational Therapist (OT) – Focuses on Activities of Daily Living (ADL) that help you achieve independence, such as dressing and personal hygiene.

Social Worker – Coordinates your discharge needs, and works with you if you are discharged to a rehab facility.

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Surgery Preparation Timeline

Use this timeline to make sure you are completing actions in a timely manner and will be medically cleared for surgery and ready to return home.

Items in green require your strict compliance to avoid delaying or canceling your surgery.

90 days

Be weight conscious

Lose weight prior to surgery if you are overweight. Fewer pounds will put less stress on your new joint. It is ideal to get your Body Mass Index (BMI) below 40 to avoid complications.

Inquire about medical and dental procedures

Ask your surgeon's office if it is safe to have vaccinations or dental and medical procedures (e.g., colonoscopies) done within 3 months of surgery, to help decrease the risk of infection. Do the same before getting a steroid injection into the joint to be replaced.

60 days

Adopt healthy habits

Avoid contact with sick people, wash hands frequently, eat more fiber to avoid constipation, and eat healthy, smaller meals especially the day prior to surgery.

Refrain from nicotine

Stop using nicotine products (e.g., cigarettes, smokeless tobacco, and nicotine gum, patch, lozenges) for at least 2 months prior to surgery. Refraining from nicotine will help you avoid infections and promote healing. Follow your surgeon's specific instructions.

35 days

Enroll in CareSense®

CareSense is an electronic, interactive tool you can use to stay connected with us. You can use it to ask questions whenever you have them and receive a prompt reply. If you haven't already, just open the email from urmc@caresense.com to register and complete your initial questionnaires.

30 days

Obtain medical clearance

Set up and attend surgery approval (medical clearance) appointment with your Primary Care Provider and any other specialist appointments necessary. You are responsible for arranging your transportation to any medical appointments before and after surgery.

25 days

Identify support and arrange transportation

Identify a support system at home – someone to take you home and stay with you for a few days after surgery. You may also want to consider a private pay aide service for additional help.

You are responsible for arranging and providing your own transportation when leaving the hospital. Your ride home from the hospital should be available as early as 8 a.m.

Get your body ready for surgery

Your overall physical health and conditioning can affect the outcome of your surgery and recovery time. It's important that you remain aware of and manage any other health conditions, including your blood pressure and blood sugar.

If you are diabetic, make sure your hemoglobin A1c is well controlled to help avoid infections and help your wound heal faster.

Surgery Preparation Timeline

25 days

Prepare for when you return home

Catch up on laundry and housekeeping and prepare meals that can be easily reheated.

Make arrangements for your pets for 2 weeks after surgery.

Other home preparation considerations:

- If you have 2 or more steps in a row, be sure there is a sturdy railing
- Remove throw rugs, electrical cords, and any other obstructions from walkways
- Install nightlights in hallways and bathrooms
- Borrow a walker to see how well you can maneuver through your home; rearrange furniture if there's not a clear path to navigate
- Consider moving your bed downstairs if it is an option

Watch our online class

Our surgeons strongly recommend that you view this class with your support person. It is available at jointclass.urmc.edu or point your phone's camera at the QR code to the right. In the class, you will learn about the procedure, your discharge plan, and the importance of having your support system in place for your recovery.



Attend your presurgical screening appointment

You will be contacted to arrange a presurgical screening appointment that you will attend about 3-4 weeks before your surgery.

Call (585) 262-9150 with any questions about this appointment. Leave a message with your question, name, phone number, best time to call you, and we will call you back.

Bring the following with you to your presurgical screening appointment:

- Medication names, dosages, how often and time(s) of day you take them; this includes vitamins and over-the-counter medications
- Insurance cards, photo ID, health care proxy, MOLST form or living will (if you have one); if you do not have a health care proxy form, we can provide one
- After this appointment, it is important that you read, understand, and carefully follow your presurgical instructions, particularly any medication changes. The instruction sheet has specific instructions for the day of surgery. Follow up with the nurse navigators with any questions.

14 days

Reduce use of pain medicine (if possible)

Reduce your use of narcotic pain relievers as much as possible. If you currently take high doses of pain medication, your pain may be more difficult to control after surgery.

7 days

Stop shaving

Do not shave below your waist for 7 days before your surgery.

5 days

Stop all anti-inflammatory medications

Unless otherwise instructed by your doctor, do not take aspirin/anti-inflammatory medications (Advil®, Motrin®, Naproxen®, Aleve®, Celebrex®, Meloxicam®, etc.) starting 5 days before your surgery. If you have any questions or concerns, contact your surgeon's office.

Surgery Preparation Timeline

4 days

Pack for your hospital stay

- Insurance cards and photo ID
- List of medication changes since your presurgical screening appointment
- A list of any questions or new concerns you want to discuss with your surgeon or anesthesiologist
- Loose, comfortable underwear, shirts, and pajama pants or shorts with elastic waistband
- Flat, sturdy shoes with a closed back (sneakers, loafers, sandals with strap)
- Your CPAP/BiPAP mask and tubing and inhaler (if you use one)
- Credit card, check, or cash to pay for medications and equipment upon discharge

3 days

Follow at home cleansing instructions

For 3 nights before your surgery, shower with an antibacterial soap (such as Dial™) and wash your whole body, head to toes. Then, while still in the shower, use the Chlorhexidine cleanser you received at your presurgical screening appointment to wash your body from the neck down. Let the cleanser sit on your skin for 2 minutes. Rinse thoroughly. (See Personal Care on page 26).

2 days

Avoid alcohol

Do not drink alcohol for 2 days before surgery. Alcohol can have a serious effect on how your body reacts to anesthesia and pain medications.

1 day

Confirm arrival time for surgery

You will be called between 1:30 and 4 p.m. on the business day before your surgery to verify your arrival time.

To help your discharge go smoothly, Social Work will call to ask you a few prescreening questions to prepare for your discharge.

Strictly follow surgeon's orders for eating

To avoid complications or cancellation of your surgery:

- Do not eat anything after midnight before your surgery.
- Do not chew gum or eat mints on the day of your surgery.
- Keep well hydrated up to 2 hours before your surgery. You are encouraged to drink clear liquids (water, clear apple juice, sports drinks) up until 2 hours before your surgery. Coffee or tea without milk or creamer is okay as well.

Day of Surgery

Follow final personal care instructions

On the day of your surgery, do not apply body lotions or wear contact lenses, makeup, lipstick, or nail polish on fingers or toes.

Do not wear jewelry or hairpins.

Understanding Anesthesia

Before surgery, your anesthesiologist will give you anesthesia to control your pain and keep you comfortable during surgery. The exact type of anesthesia you receive will depend on many factors, including the type of surgery you are having and your overall health. You will have an opportunity to talk with your anesthesiologist the day of your surgery and have any questions answered.

General Anesthesia

This type of anesthesia affects your whole body and puts you in a deep sleep. It is delivered intravenously, by inhaling, or by injection. After it takes effect and you are asleep, your anesthesiologist will insert a breathing tube that will deliver oxygen to help your breathing during surgery.

Regional Anesthesia

This type of anesthesia is typically delivered as a shot to prevent feeling in your lower body.

Peripheral Nerve Block Injections

This type of anesthesia targets nerves that surround the joint being replaced.

With any type of anesthesia, there may be some side effects:

General Anesthesia

- Nausea/Vomiting
- Confusion as you wake up
- A sore throat from the breathing tube
- Delirium in older patients

Regional Anesthesia and Nerve Block

- Nausea/Vomiting
- Headache
- Numbness, tingling, prickling in hands or feet
- Weakness in your legs, especially your operative leg – This is a serious fall risk.
- Urinary retention, especially if you have pre-existing urinary issues or have had urologic surgery

Recovering from Anesthesia

The type of anesthesia you receive will dictate the amount of time it takes to wear off. As the anesthesia wears off, you might feel tingling, burning, or aching, followed by a return of feeling to your surgical site.



Continue to use CareSense to communicate with your joint replacement team and receive important joint replacement surgery information.



Sign up for MyChart to view test results and more.
Visit mychart.urmc.rochester.edu

Hospital Stay

Before Surgery

Arrange to be dropped off at the main entrance of the hospital, or park in the main parking garage adjacent to the hospital and proceed to the information desk staff who will direct you. You can request wheelchair transportation if necessary. Bring your insurance card and photo ID and visit highland.urmc.edu for current visitor guidelines. Your companion can leave a cell phone number with our staff to receive text message alerts as you proceed through care.

We will keep you informed regarding your surgery time, but sometimes delays are unavoidable.

During Surgery

Your time in surgery is about 2-3 hours, but the actual elapsed time from operating room to the post-anesthesia care unit (PACU), where you will recover from anesthesia, is usually about 3-4 hours. Your companion should follow current hospital visitation guidelines.

If you are brought to a recovery unit, your companion will be notified and they should follow our visitation guidelines. We will monitor your recovery until it is safe for you to go home.

When ready, your team will prepare you for surgery. Here's what to expect:

- You will change into a hospital gown and remove your glasses, contacts, hearing aids, and dentures.
- Your nurse will answer any last-minute questions, start an IV, check your vital signs, and may need to remove hair from your surgical site with clippers.
- To minimize risk, surgical site infection prevention includes wiping your body with Chlorhexidine wipes, as well as using an oral rinse and nasal swab.
- Your surgeon will visit you to have your consent signed and mark the surgical site.
- Your anesthesiologist will consult with you to discuss your anesthesia and plan for pain control, as well as check your heart, lungs, and ability to breathe normally.
- Once settled, one adult companion may join you and stay with you until your surgery. For current information regarding companion visitors, go to highland.urmc.edu.



Hospital Stay

Your Routine Care After Surgery

Your hospital nurse and your patient care technician will check on you regularly. You may also be visited by your surgeon or his/her surgical nurse, resident, or physician assistant.

Your Nurse will:

- Assess your needs
- Review your individualized care plan
- Regularly take your vital signs
- Change the dressing on your joint
- Monitor your oxygen level
- Discontinue oxygen and stop IV fluids when appropriate
- Remind you to breathe deeply and cough to keep your lungs clear.

Physical Therapy (PT)

Physical therapy is key to your recovery. A physical therapist will evaluate you, help you to move and walk, and provide physical therapy sessions.

The goal of physical therapy is to determine if you can navigate your environment safely enough to go home. Soon after surgery, you will sit in a chair with help from your therapist or nurse. You will also learn how to use a walker. The sooner you can stand and walk with a walker, the more independent you will become and the stronger your new joint will become. Do not get up alone or with the help of your companion until the therapist has cleared you to do so.

Your Physical Therapists will:

- Teach and assist you to move
- Help to minimize your pain
- Promote independence
- Restore range of motion and strength
- Provide instructions specified by your surgeon

After your surgery, there is a greater potential for falling. Your Highland team is eager to help you get out of bed to build your strength, while avoiding any setbacks. We will assist you to move from your bed and chair, while you walk, and while doing physical therapy.

You must not get up without a staff member with you at all times; there is a call bell by each bed to call for assistance.



Occupational Therapy (OT)

Your occupational therapist will help you make a smooth transition to home and will focus on functional tasks and helping you achieve independence. They will review the use of adaptive equipment (page 12), if needed.

Your Occupational Therapist will prepare you to:

- Take care of yourself, including bathing, dressing, and toileting tasks
- Return to your normal routine at home

Pain Management

Recovering from any surgery will involve discomfort and pain, and managing that pain begins with you. We rely on a close partnership between you and your nurse. Your pain level will be monitored and an ice pack will be on your joint throughout the day. Your pain medication will be adjusted as needed.

Tell your nurse about your pain, rating it from 1-10. You should ask for pain medicine when your pain reaches a level of 4; it might take too long to get relief if you wait until it reaches a 7.

After you have taken pain medication, your nurse will reassess your pain to ensure it is being appropriately controlled.

Expect that your pain will increase the day after surgery when your anesthesia (nerve block) wears off.

Discharge Plan

A social worker will review your discharge plans with you prior to surgery. Most patients are discharged and return home 1 day after surgery, and patients who qualify can even go home the same day as their surgery. Research shows that joint replacement patients who are able to recover at home generally get better faster and with fewer complications.

The social worker will work with you to identify your support system, set up certified home health care (home physical therapy, sometimes occupational therapy and nursing), and order any necessary equipment.

Your nurse will let you know when you have met the discharge criteria. At discharge, your nurse will review your discharge instructions with you and a family member (we strongly recommend your support person be present).

Review your discharge instructions when you get home and keep them available for reference.

Your discharge is based on meeting the following criteria:

1. You can navigate your environment safely as confirmed by your physical and occupational therapists.
2. You are urinating, passing gas, and eating.
3. Your pain is being managed.

*Remember, recovering from any surgery involves discomfort and pain, and most patients still experience pain at discharge.



Discharge Medications from Highland Pharmacy

As a convenience, your discharge prescriptions will be filled at the Highland Pharmacy, located immediately off the main lobby. Not only is this easier than stopping at a drug store on your way home, this coordinated care helps ensure you are able to take your medicine when you need it and as prescribed by your surgeon. Your co-pays and price will be the same as at your home pharmacy, and we can easily send any refills there. Your list of medications can be found on your After Visit Summary or in MyChart.

Your nurse can arrange to have your medications delivered to your room. Or, they can be picked up at the pharmacy in the lobby. We are open Monday - Friday 9 a.m. to 5:30 p.m. and Saturdays and Sundays 10 a.m. to 2 p.m. Call us at (585) 341-0699.

Discharge Plan

Discharge to Home

Most patients who get discharged to home will receive in-home services. The social worker will provide information on home care agencies. Please note that your insurance plan may determine which agency you choose, the services available to you, and what is covered.

You are responsible for arranging and providing your own transportation if you are being discharged to home. Please make sure that you have someone who is available as early as 8 a.m. to take you home when discharged. Should you need assistance in arranging transportation at discharge, the social worker can help arrange this; you will be responsible for the expense of the transportation.



Discharge to a Skilled Nursing Facility

A small percentage of patients will be medically ready for discharge but not yet strong enough to return directly home. If medically indicated, your physician and the unit social worker will discuss with you the possibility of discharge to a Skilled Nursing Facility for short-term rehabilitation.

Please be aware that even if it is recommended by the hospital, your insurance company may disagree

with the recommendation and may not cover short-term rehabilitation. In these cases, you might be given the opportunity to privately pay for a stay at a skilled nursing facility. The cost of a stay like this is about \$400-\$700/day. Also, please be aware that patients who live alone do not automatically qualify for discharge to a skilled nursing home.

Transportation to a rehab facility is usually arranged by the social worker, but at the patient's expense.

Your Recovery

You make the difference. Being positive and proactively participating in your rehabilitation makes a real difference in your recovery. During your first few weeks at home, you will adapt what you've learned at the hospital to your own setting.

Hip and knee total joint replacements can have a tremendous impact on your quality of life. Though there is an adjustment period, you will get about 80% of the benefit in the first 3 months! Keep in mind that it will take a year for your joint to reach its full potential. After your joint replacement surgery, it is important to follow up with your orthopaedic surgeon on a regular basis, usually every 3-5 years even if you don't have any pain or problems. Not all problems are painful. Your surgeon will discuss with you how frequently you should have an appointment.

To remain safe, here are a few key reminders for when you are up and moving around:

- You must protect yourself from falling by maintaining a safe environment. Keep your home well lit, create room for your walker, remove or secure rugs and power cords, and keep your kitchen and bathroom floors dry.
- Use adaptive equipment, as necessary, to help you with tasks.
- Pictured below are adaptive equipment that will aid in your recovery, many of which can be purchased in Highland's Pharmacy. They are also available through your home care agency or a medical supply store. Discuss with your insurance company what your co-pay is.

Available in the Highland Hospital Outpatient Pharmacy



Available through your home care agency, medical supply store, or medical loan closet



Your Recovery

Follow these guidelines for a safe transition home, successful rehabilitation process, and long-term success.

- You should plan for someone to stay with you for several days when you first go home.
- You will not be able to care for other people or your pets the first few weeks after your joint replacement. Make sure you have arranged for someone to care for your pets for 2 weeks following your surgery.
- Sit in a sturdy chair with a back and arm rests. The higher the seat, the easier it will be to get out of the seat. If the seat is too low, a firm pillow may be used to increase the height of the seat.
- Be careful in the bathroom and use the recommended toileting technique (clean yourself while standing with support of a walker or grab bar), raised toilet seat or “3 in 1” commode, and safety bars or shower chair as recommended.
- You will not be able to drive until your doctor says it is okay, so you will need someone to take you to your first appointments, including any doctor’s appointments.
- Do not get any vaccinations for 4 weeks following surgery.
- You will need to avoid alcohol for a few weeks after surgery while taking pain medication and if your surgeon prescribes Coumadin to prevent blood clots.

Consult with your surgeon before dental work, surgeries, or other procedures:

- Follow your surgeon’s specific instructions before any dental work, surgeries or procedures (e.g., colonoscopies) for at least 3 months following surgery.



Your Recovery

When to Call for Medical Help

It is important that you know what to watch for as you recover and who to call if needed. When in doubt, call the nurse navigator line.

Call Your Navigators if any of the following occur:

- Fever of 101°F that doesn't get better after taking medicine
- Pain that gets worse or that you can't control with prescribed pain medicine
- Separation of the edges of the incision or unusual bleeding
- Increased redness or drainage around the incision
- Blood, pus, or a foul odor coming from the incision
- Numbness, tingling, or weakness in your arms or legs – or where you don't expect it
- Persistent headache, blurred vision, dizziness, light-headedness, or fainting
- Skin rash
- No bowel movement within 7 days after surgery
- Nausea when eating and drinking for more than 3 days

Call Your Primary Care Physician if you have:

- Concerns about your regular medicines
- Symptoms of a urinary tract infection (burning, frequency, urgency)
- Trouble controlling your blood sugar (if you have diabetes)

Go to the Emergency Room or Call 911 if you have:

- Difficulty breathing
- Shortness of breath
- Chest pain
- Signs of a blood clot
- Black or bloody stool
- Bloody vomit



Your Recovery

Blood Clots

Signs of Blood Clots in Legs

- New or sudden pain on the side where you had surgery.
- Sudden increase in pain, tenderness, redness, or warmth in calf on the side where you had surgery.
- Sudden swelling in thigh, calf, or ankle on the side where you had surgery that does not go down with proper elevation.
- If you feel you have a clot it's important to call 911 immediately.

Blood Clot Prevention

Surgery may cause the blood to slow and thicken in the veins of your legs, creating a blood clot. This is why you are prescribed aspirin or other blood thinners after surgery. Simply moving your joint by walking and regularly doing foot and ankle pumps can help prevent blood clots. Compression stockings may also be used to reduce the chance of blood clots, as well as swelling. Wear the stockings as instructed.



Incision Care

- Always wash your hands before caring for your incision.
- Keep your incision clean, dry, and covered with a light dressing if you have any drainage. Follow your surgeon's directions (outlined in your After Visit Summary) for when you may take a shower.
- Closely watch your incision and contact the nurse navigators if you have a fever that exceeds 101°F or if you see an increase in redness, presence of drainage, or if it develops an odor.

Controlling Discomfort

- Elevate your leg for short periods throughout the day to help control swelling, which can lead to discomfort. It's best to lie down and raise your foot above heart level 3 times a day for 15 minutes at a time.
- Use ice for pain control at the instruction of your surgeon. Place an ice pack on your joint for 30 minutes at a time, as needed. You can use ice before and after your exercise/walking program.
- Walk every hour that you are awake.
- To help control swelling, use compressive wraps and/or compression stockings for 2 weeks after surgery and then follow up with your surgeon.
- As your pain level improves, stop taking your prescription medication and continue taking two (2) Extra Strength Tylenol 3 times per day.

Infection Prevention

It is very important that you protect your new joint from potential infection. You must change into clean and dry clothing daily and change your sheets weekly. Some patients have increased risk following total joint surgery because infection can spread from another source in your body to your new joint.

From now on, it's important that before any dental work or any other surgery is done, you tell your dentist or surgeon that you have an artificial joint.

Always play it safe. If you're uncertain if a procedure increases your risk of infection, ask!

Your Recovery

Physical Therapy at Home

Before leaving the hospital, you'll learn about your home exercise program. Your participation in your physical therapy program is essential to the success of your surgery. The more committed you are, the quicker your improvement will be. It is normal to experience discomfort when doing your exercises and you may need to take pain medication 30 to 45 minutes prior to doing your physical therapy exercises. It is important that you perform your assigned exercises exactly as instructed by your physical therapist with the appropriate number of repetitions.



Helpful Tips

- Having a walker on each level of your home is convenient and helpful.
- Minimize stair use for the first 2 weeks after surgery.
- Applying ice can help control pain and swelling. It is important to follow directions from your surgeon or therapist regarding the use of ice.
- Remove clutter and area rugs. Tape down the edges of rugs that can't be moved.
- Place frequently used items close to you and at arm level so you do not need to bend over or reach up high.
- A stationary bike will help you bend your knee and can be very beneficial to your rehab if you had a total knee replacement. The bike only needs to be safe, not new or expensive. **DO NOT** use an elliptical or treadmill because they are too dangerous.



Your Recovery

Temporary Changes

- You might not be hungry for a little while after surgery. But it's important that you stay hydrated and eat small, balanced meals rich in protein to help your body heal.
- Especially during the first 2 weeks after surgery, you should strive to eat 100 grams of protein (about twice the daily average). Meats, fish, and peanut butter, as well as protein rich powders, drinks, and shakes are all good sources.
- Your energy level will be decreased for the first month.
- You also might become constipated, a common side effect of pain medication that contains narcotics. Drink plenty of fluids and eat more fruits, such as prunes. Follow your instructions for stool softeners or laxatives.
- It is common and normal to develop bruises in your thigh, calf, ankle, and foot because that is where blood pools in the leg. Don't worry, bruising is part of the healing process and they are rarely permanent. Bruises can be painful to touch as they resolve, and applying ice may help. The bruising will eventually clear up and it may take several weeks to disappear.

For Knee Replacement Patients

- It is common to have swelling in your knee for several months after surgery. You may also experience a stiff knee in the morning and swelling in the evening. Icing and elevation will help to decrease the stiffness and improve your knee motion. The best position to elevate your leg is to have the knee above the level of your heart and your ankle above the knee. You can place a pillow under your calf, not your knee, for comfort. Ice the knee after physical therapy and 4-5 times a day. Keep the ice on your knee for 20-30 minutes at a time.



Dressing Yourself & Managing Stairs

Pants and Underwear

- Using a reacher, catch the waist of the underwear or pants.
- Lower the item to the floor.
- Slip the clothing over your surgical leg, then the non-surgical leg.
- Pull the clothing to your thigh.
- Stand with the assistance of a walker and pull up the clothing to the waist.

Socks and Stockings

- Slide your sock or stocking onto the sock aid, making sure the heel is at the back of the aid and the toe is straight and tight on the end.

- The top of the sock should not come over the upper edge of the sock aid.
- Hold onto the cords, drop the sock aid out in front of the surgical leg, and slide your toes into the opened sock.
- Point your toes and slowly pull on the cords to pull the sock up.

Shoes

- Slip-on shoes are easier to put on than lace-up shoes. Elastic shoelaces can replace shoelaces in sneakers to allow the shoes to slip on easily without needing to be tied.
- Use the reacher to grab the shoe by the tongue and place your toes in the shoe.

- With the aid of a long handled shoehorn, push your heel into the shoe.



Going Up and Down Stairs

You will be instructed on how to climb stairs to minimize pain and promote stability following your joint replacement.

Going Up the Stairs with a Cane and One Hand Railing

- Approach the stairs with a walker.
- Put one hand on the railing and move the walker to the side.
- Position the cane on the floor next to your foot.
- Step up with your non-surgical leg while supporting your weight and maintaining balance with the assistance of the cane and the railing.
- Step up with your surgical leg.
- Bring the cane up to the step.
- Repeat.

Going Down Stairs with a Cane and One Hand Railing

- Approach the stairs with a walker.
- Put one hand on the railing and move the walker to the side.
- Place the cane on the stair below you.
- Move hand down the hand railing to be even with the cane.
- Step down with your surgical leg.
- Step down with your non-surgical leg while supporting your weight and maintaining balance with the assistance of the cane and the railing.
- Repeat.

Getting In & Out of Vehicles

Vehicles that sit high and have a wide door swing are easiest for transferring in and out. Practicing the vehicle transfer before your surgery will make it easier after your surgery. Remember that you will not be able to drive for approximately 4-6 weeks or until approved by your surgeon.

Front Seat, Passenger Side

- Open the passenger door and roll down the window.
- Move the passenger seat back as far as it will go and recline the seat to at least a 45° angle
- Back up to the seat until you feel the seat behind your legs.
- Reach back for the vehicle frame/dashboard/window/seat with your hands and lower yourself to the seat.
- Move your hips and knees farther onto the passenger seat and toward the center of the vehicle.
- Lean back, and with assistance, position your hips and knees so that you face the windshield.
- With assistance, gently position one leg at a time into the vehicle.
- Reverse this process to get out of the vehicle.

Back Seat

- Plan to enter the car to allow your surgical leg to rest flat on the back seat.
- Open the vehicle door and back up to the vehicle with your walker until you feel the seat behind your legs.
- Slide your surgical leg slightly forward and slowly lower yourself to the seat.
- Back into the vehicle and use your hands and non-surgical leg to gently push and scoot across the seat until your surgical leg is resting flat on the back seat.
- The non-surgical leg can rest in the well of the vehicle.
- Reverse this process to get out of the vehicle.

After Surgery Milestones

Within a few days

- Participate in physical therapy exercises
- Get in and out of bed/move from sitting to standing
- Walk with assistive device; get around home without being overly tired
- Go up and down the number of stairs needed to access home
- Manage daily hygiene routine
- Control pain with the use of ice packs
- Manage swelling and decrease risk of a blood clot by wearing compression stockings as advised by your surgeon

Weeks 1-2

- Independently walk at least 150 ft. with a walker, 3 times a day
- Independently go up and down a flight of stairs once a day
- Shower when approved by surgeon with assistance from 1 person
- For Knee Replacements – Bend surgical knee 90°, if able to do so prior to surgery

Weeks 3-4

- Walk at least ½ mile (total) throughout the day (not all at once)
- Go up and down a flight of stairs more than once daily
- Get into and out of a car on your own
- Shower and dress on your own
- Resume light homemaking tasks

After Surgery Milestones

Weeks 5-6

Walk with a cane

Take ½ mile walks, 3 times per week

Go up and down stairs in a normal fashion, if comfortable

If applicable, discontinue use of compression stockings, as advised by your surgeon

Drive a car with your surgeon's approval

Resume homemaking tasks

Weeks 7-12

Walk without cane or crutch support, without limping

Walk approximately 1 mile, 3 times a week

After 12 weeks

Exercise Options*

- Regular 1 to 3 mile walks
- Treadmill (walk without an incline)
- Stationary bike with proper seat elevation
- Elliptical machine
- Regular exercise or classes as directed and approved by your surgeon
- Low impact sports such as golfing, dancing, cross country skiing, snowshoeing, etc.

* Do not run or engage in high impact activities.
Ask your surgeon if you have questions about other activities.

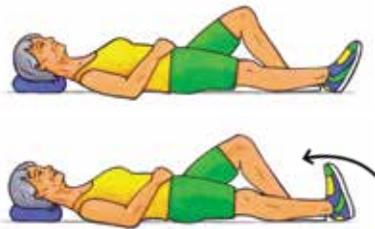
Knee Exercises

Physical therapy exercises.

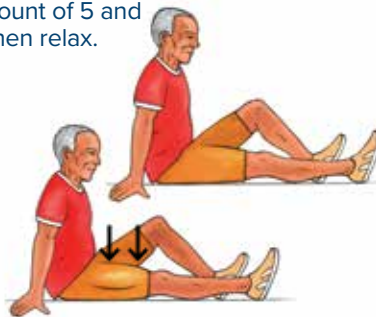
After your surgery, it will be important to perform the following knee exercises as specified by your surgeon or Highland physical therapist. It will be normal to experience some pain or discomfort while performing

these exercises. Consider taking pain medication before doing your exercises and apply ice afterward to your joint to help control your pain.

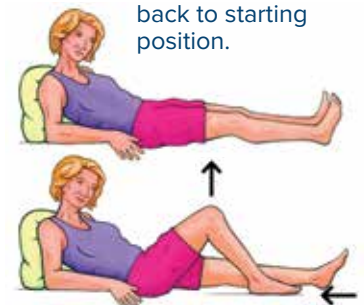
Ankle Pumps: Bend ankles to move feet up and down, alternating feet.



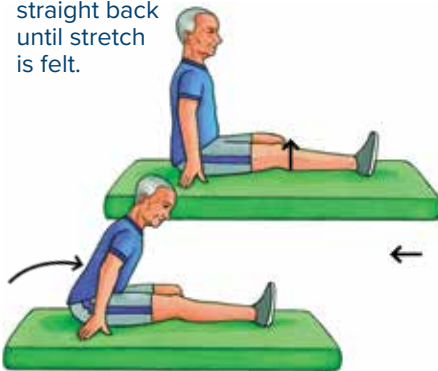
Quad Sets: Tighten muscles in front of thigh by pushing the back of your knee down into the bed. Hold for a count of 5 and then relax.



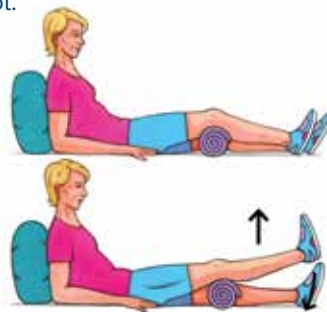
Heel Slides: Lying with outstretched legs, slowly bend the knee by sliding your foot toward you. Slide back to starting position.



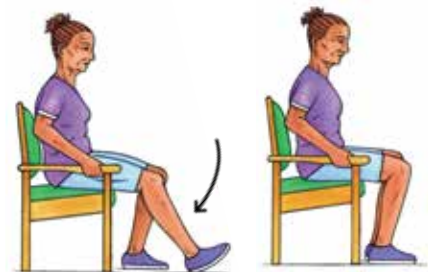
Hamstring Stretch: Sit on couch or bed with one leg out straight. Lean forward towards your foot with a straight back until stretch is felt.



Short Arc Quads: Place a rolled towel under your knee. Raise foot to straighten your knee, slowly lower foot.



Heel Digs: Sit in a chair and dig your heel into the floor towards yourself.



Seated Knee Extensions: Sit on chair or bed. Straighten knee as far as you can, then slowly bend knee as far as it will go.



Standing Knee Flexion: Stand, holding on to a steady surface (like a dresser or countertop). Bend your knee as far as you can, then lower slowly.



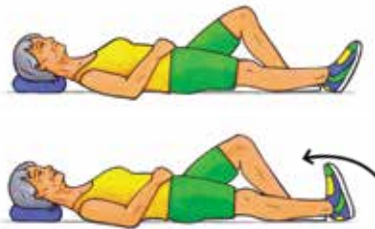
Hip Exercises

Physical therapy exercises.

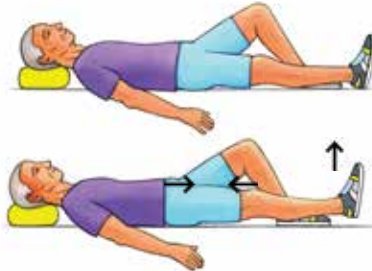
After your surgery, it will be important to perform the following hip exercises as specified by your surgeon or Highland physical therapist. It will be normal to experience some pain or discomfort while performing

these exercises. Consider taking pain medication before doing your exercises and apply ice afterward to your joint to help control your pain.

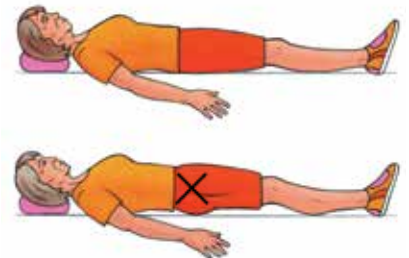
Ankle Pumps: Bend ankles to move feet up and down, alternating feet.



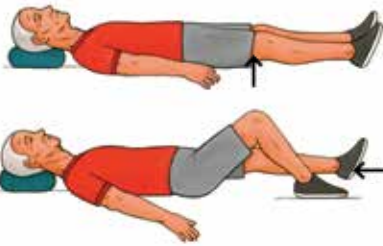
Quad Sets: Slowly tighten thigh muscles by pushing the knees down into the bed. Hold for a count of five and relax.



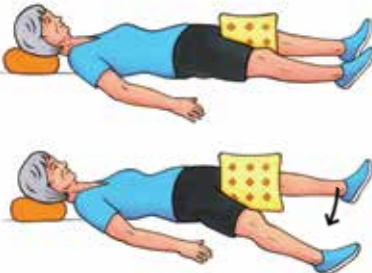
Gluteal Squeeze: Squeeze buttocks muscles as tightly as possible. Hold for a count of five and relax.



Heel Slides: Gently bring one knee up as far as possible, keeping foot on bed. Return.



Abduction: Put a pillow between thighs. Slide one leg out to the side. Keep kneecap pointing toward ceiling. Gently bring leg back to pillow.



Seated Knee Extensions: Sit on chair or bed. Straighten knee as far as you can, then slowly bend knee as far as it will go. (Do not lean forward).



Posterior Hip Precautions

1. Do NOT bend your hip more than 90°.
2. Do NOT cross your legs at the knee or ankle.
3. Do NOT rotate your knee or foot inward/outward.

Knee Replacement Procedures

In order to understand what a total knee replacement is, it is necessary to understand how a healthy knee works.

Your knee is made up of three bones: the femur (thighbone), the tibia (lower leg bone), and the patella (kneecap). Your knee joint connects the thighbone to the lower leg bone, and on top of this rests the kneecap. The kneecap protects the knee joint and slides in a groove in your thighbone when you bend your knee. It is extremely important to rebuild and strengthen the muscles around the knee before and after surgery.

An unhealthy or painful knee usually results from a degeneration of the cartilage. Without the cartilage present, there is no protection between the bony surfaces. They become rough and begin grinding against each other, causing pain, stiffness, and discomfort during movement.

What is a Total Knee Replacement?

Knee replacement is a surgical procedure to resurface a damaged knee. Metal and plastic parts are used to cap the ends of the bones that form the knee joint along with the kneecap. An artificial knee will function very much like your original knee.

Generally speaking, your surgeon removes the arthritic surfaces of your knee, replacing them with a combination of artificial parts specific to your needs. Options might include:

- Total Knee Replacement – Also called Total Knee Arthroplasty (TKA), this procedure addresses arthritis of your femur, tibia, or patella.
- Partial Knee replacement – This procedure might be appropriate for patients who have arthritis in just one area of the joint.

Surgical Approach

The knee joint is usually accessed through an incision directly over the front of the knee. An effort is made to minimize soft tissue disruption as much as possible.



Hip Replacement Procedures

In order to understand what a total hip replacement is, it is necessary to understand how a healthy hip works. The hip is a ball and socket joint. The ball (femoral head) is at the top of your thighbone (femur) and the socket (acetabulum) is at the bottom of your pelvis. There is cartilage that covers the femoral head, allowing it to move easily and smoothly in the socket.

An unhealthy or painful hip usually results from a degeneration of the cartilage. Without the cartilage present, there is no protection between the bony surfaces of the ball and socket. They become rough and begin grinding against each other, causing pain, stiffness, and discomfort during movement.

What is a Total Hip Replacement?

If your surgeon recommends a total hip replacement, he or she will choose the best artificial hip for you, which has four components:

- A cup that replaces your hip socket.
- A liner that fits into the cup.
- A ball that replaces the damaged one at the top of your thighbone.
- A stem that is attached in the shaft of the thighbone to add stability.

The components can be made from materials such as titanium, metal alloys, high-grade plastics, and ceramics and are secured using special surfaces that allow bone to bond directly to the implant. Fixation with cement is only used in special situations.



Surgical Approach

Your surgeon will discuss the most appropriate approach for your surgery. In all approaches, your surgeon will make a small incision to expose the joint. For all procedures, except hip resurfacing, the damaged ball is removed, the hip socket is prepared for the cup and liner, the femoral stem is inserted, and the ball component of your implant is secured on the end of the femoral stem and then fitted back into the hip socket. Both the mini-posterior approach and the anterior approach are amenable to rapid rehabilitation.

Mini-Posterior Approach

In the mini-posterior approach, the hip joint is accessed through an incision along the side of the hip, allowing the surgeon to enter the hip through the back of the joint.

Anterior Approach

The anterior approach involves accessing the hip joint via an incision more in the front of the hip. During this procedure, a special table is used to position the leg for surgery along with x-ray imaging to visualize the hip.

Hip Resurfacing

Hip resurfacing places a metal cap over your natural hip ball and an artificial liner inside the hip socket. This method is occasionally used for younger male patients.

Personal Care Instructions

Highland Hospital follows careful procedures to help prevent surgical infections, and you play a key role in that effort.

All patients have bacteria on their skin, which is typically harmless. Before surgery, however, we want to reduce it as much as possible to help prevent any bacteria from getting into your incision.

This preparation begins with you at home by thoroughly cleansing your skin using an antibacterial soap (such as Dial™) and the Chlorhexidine cleanser you received at your presurgical screening appointment. In addition, the surgeon again cleanses your skin just prior to making the incision.

At-home Cleansing Procedure

1. For 3 nights before your surgery, shower with an antibacterial soap (such as Dial™) and wash your whole body, head to toes. Use your normal shampoo on your hair. Use normal soap on your face.
2. Then, while still in the shower, use the Chlorhexidine cleanser to wash your body from the neck down. Do not use your home soap after the Chlorhexidine cleanser.
3. Let the Chlorhexidine cleanser sit on your skin for 2 minutes.
4. Rinse thoroughly.
5. After your shower, get dressed in clean clothes and do not apply lotion.

At-home Cleansing Checklist	
Surgery Date: _____	
3 Days Before Surgery: _____ Date	<input type="checkbox"/> Antibacterial soap used in shower <input type="checkbox"/> Chlorhexidine cleanser used in shower
2 Days Before Surgery: _____ Date	<input type="checkbox"/> Antibacterial soap used in shower <input type="checkbox"/> Chlorhexidine cleanser used in shower
1 Day Before Surgery: _____ Date	<input type="checkbox"/> Antibacterial soap used in shower <input type="checkbox"/> Chlorhexidine cleanser used in shower
Day of Surgery: _____ Date	Surgical team performs final cleanse.

Anesthesia Services Information **HH 10769 PE**

Anesthesia services are needed so that your operation or procedure may be performed.

All forms of anesthesia involve some risks and no guarantees or promises can be made concerning the results of your procedure or treatment. Although rare, unexpected severe complications with anesthesia can occur and include the remote possibility of but not limited to, infection, bleeding, drug reactions, blood clots, loss of sensation, loss of limb function, paralysis, stroke, brain damage, heart attack or death. These risks apply to all forms of anesthesia and

additional or specific risks have been identified below as they may apply to a specific type of anesthesia. The type(s) of anesthesia service may be used for your procedure and the anesthetic technique to be used is determined by many factors including your physical condition, the type of procedure, as well as your preference. Anesthesia techniques which involve the use of local anesthetics, with or without sedation, may not succeed completely and therefore another technique may have to be used including general anesthesia.

General Anesthesia	<p>Expected Result</p> <p>Technique</p> <p>Risks</p>	<p>Total state of unconsciousness.</p> <p>Drug injected into bloodstream, breathed into the lungs, or by other routes. Possible placement of tube into the windpipe.</p> <p>Mouth or throat pain, hoarseness, injury to mouth or teeth, awareness under anesthesia, injury to blood vessels, aspiration pneumonia.</p>
Spinal or Epidural Analgesia/ Anesthesia	<p>Expected Result</p> <p>Technique</p> <p>Risks</p>	<p>Temporary decreased or loss of feeling and/or movement to lower part of the body.</p> <p>Drug injected through a needle/catheter placed either directly into the spinal canal or immediately outside the spinal canal.</p> <p>Headache, backache, buzzing in ears, convulsions, infection, persistent weakness, numbness, residual pain, injury to blood vessels, "total spinal."</p>
Major/Minor Nerve Block	<p>Expected Result</p> <p>Technique</p> <p>Risks</p>	<p>Temporary loss of feeling and/or movement of a specific limb or area.</p> <p>Drugs injected near nerves providing numbness to the area of the operation.</p> <p>Infection, convulsions, weakness, persistent numbness, residual pain, injury to blood vessels.</p>
Intravenous Regional Anesthesia	<p>Expected Result</p> <p>Technique</p> <p>Risks</p>	<p>Temporary loss of feeling and/or movement of a limb.</p> <p>Drug injected into veins of arm or leg while using a tourniquet</p> <p>Infection, convulsions, persistent numbness, residual pain, injury to blood vessels.</p>
Monitored Anesthesia Care	<p>Expected Result</p> <p>Technique</p> <p>Risks</p>	<p>Reduced anxiety and partial or total amnesia.</p> <p>Drug injected into bloodstream, breathed into the lungs, or by other routes producing a semi-conscious state.</p> <p>An unconscious state, depressed breathing, injury to blood vessels.</p>

Evarts Joint Center at Highland Hospital

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Point your cell phone's camera
at the QR codes below to visit the corresponding web page.

UR Medicine
Orthopaedics
at Highland
Homepage



Total Hip
and Knee
Replacement
Guidebook
(electronic
version of this
Guidebook)



Watch our
Total Joint
Replacement
Education
Class



Orthopaedics & Physical Performance

