CHI Health

Orthopedic Care
Knee Replacement Guide

CHI Health

Patient Guide
Knee Replacement

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Welcome

Thank you for choosing CHI Health.

Our team of professionals believe in taking an innovative and more effective approach to joint replacement surgery and recovery. Our goal is to help patients heal faster and return home sooner. We strive to deliver patient-centered care that employs evidence based practice while maintaining the highest quality standards.

Annually, over one million people undergo joint replacement surgery. Primary candidates are individuals with chronic joint pain from arthritis that interferes with daily activities, walking, exercise, leisure, recreation and work. The surgery aims to relieve pain, restore independence and return patients to work and other daily activities.

Due to advances in surgical techniques and pain control, patients recover quicker than ever. Patients start physical therapy and often return home from the hospital the same day they have surgery. Returning to driving, dancing and golf takes just a few short weeks.

Joint Replacement Team

Surgeon
- Specializes in total joint replacement following intensive training in total joint surgery
- Board Certified

Physician Assistant
- Assists the surgeon during surgery
- Assists the surgeon in preoperative and follow up appointments

Nurse Navigator
- Your “go-to-person” about your joint surgery
- Assists you with questions before, during and after surgery

Registered Nurse (RN)
- Provides much of your physical care during your hospital stay
- Implements your plan of care and monitors your progress
- Administers your medications and will be rounding every hour to anticipate your needs

Certified Nursing Assistant (CNA)
- Assists you with your personal needs at the hospital including bathing, changing clothes, getting to and from the bathroom

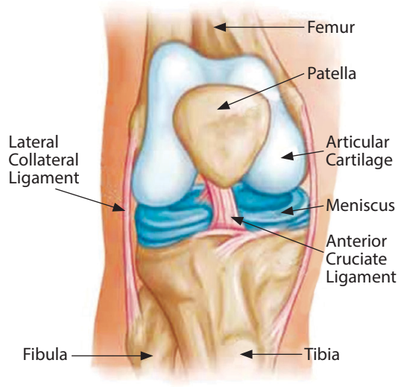
Physical and/or Occupational Therapist (PT/OT)
- Conducts your preoperative assessment in Joint Academy Class
- Coaches you on using support devices, such as walker, crutches or cane
- Teaches you exercises you need to do before and after surgery
- Instructs you on the proper way to perform stairs and car transfers
- Teaches you how to perform many of your daily activities such as dressing and showering
- Helps you learn how to use assistive devices for daily activities (ex. long handled reacher, shoe horn, dressing stick, sock aid etc.)

Total Knee Replacement

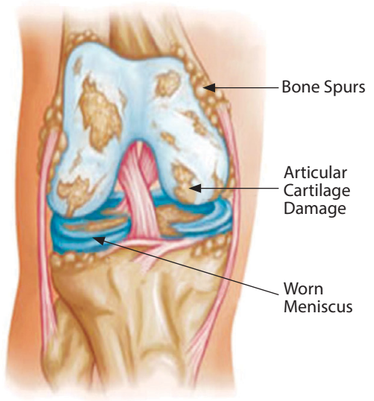
Osteoarthritis is the most common type of arthritis and is caused by the breakdown of joint cartilage. This cartilage is a substance that acts as a cushion between the bones and joints.

As the cartilage becomes damaged through wear and tear of the joints, it begins to wear away. As a result, patients experience pain in that joint and often lose mobility as the joint surfaces begin to rub against each other creating friction.

Normal Knee



Knee with Osteoarthritis



Total Knee Replacement

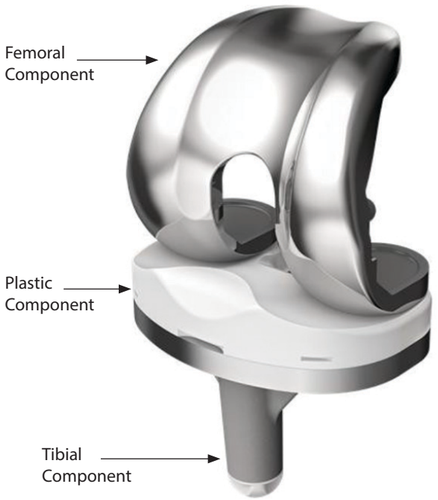
Total knee replacement involves replacing a severely damaged joint with a metal and plastic implant (prosthesis). There are three basic parts to knee prosthesis:

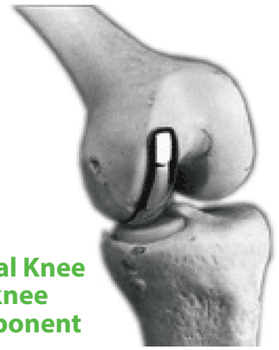
1. **Femoral component** – attaches to the bottom of the thighbone (metal)
2. **Tibial component** – attaches to the top of the shin bone (metal)
3. **Plastic component** – spacer locks into the top of tibial component (plastic)

A fourth part, the patella component can be implanted to the underside of patella (plastic), if needed.

Your orthopedic surgeon will select the type of prosthesis and its method of insertion into your bone based on your age, bone density, medications and specific shape of your bones.

Total Knee Replacement Anatomy





Partial Knee Uni-knee Component

Partial Knee (Uni) Replacement

A partial knee (uni knee) replacement involves replacing only that part of the knee that is significantly damaged.

The type of replacement joint and how it is inserted into your knee will be selected by your orthopedic physician based on your age, bone density, medications and the particular shape of your bones.

Knee Replacement

Ninety to ninety five percent of patients achieve good to excellent results after total knee replacement with relief of discomfort and significantly increased activity and mobility.However, your orthopedic surgeon along with your primary care physician can help you decide if and when joint replacement is right for you. X-rays and your response to conservative treatment will be considered. Your primary care physician will evaluate your overall health and safety for surgery. Some things they will consider may be: cardiac health, respiratory health (ex. COPD, sleep apnea), diabetic control, weight management and mobility. If you have seen a specialist for medical management it is essential to involve them in surgery preparation (ex. Cardiologist, pulmonologist, etc.) They may include further testing to clear you medically for surgery.

Most joint replacement surgeries take an average of 1 - 2 hours, some of this time is used by the operating room staff to prepare for the surgery. The scar will be approximately four to eight inches in length.

All joint replacement patients need to participate in physical therapy after discharge from the hospital. Physical therapy can be arranged at an outpatient facility (or in your home if needed) three times per week. The length of time required to participate in physical therapy will vary with each patient and depends on progress made and goals achieved.

A lifelong regular low impact exercise program is recommended for all patients to maintain strength of the muscles surrounding the knee. Lifelong exercise also benefits overall health while helping to maintain a healthy weight. A healthy body weight is important for the longevity of your new joint; most artificial joints last 15 - 20 years. High impact exercise such
as running and singles tennis are not recommended as these exercises put too much load on the joint. High risk activities such as downhill skiing are likewise discouraged because of the risk of fracture or damage to the artificial joint.

If you have seen a specialist for medical management it is essential to involve them in surgery preparation (ex. Cardiologist, pulmonologist, etc.) They may include further testing to clear you medically for surgery.

Preparing for Your Surgery

Selecting a Coach
A coach can be a family member or friend who will take part in your preoperative education, hospital care, and home care. We encourage you to ask someone to assist or "coach" you along the road to recovery. If your designated coach becomes unavailable and you do not have a coach, notify your surgeon as your surgery may need to be postponed.

Contact Your Insurance Company
Before surgery, you may need to contact your insurance company to determine if preauthorization, precertification or a second opinion is required. Be sure to check on home health and physical therapy benefits. It is important to make this call, as failure to clarify these questions may result in a reduction of benefits or delay of surgery. If you have Medicare as your primary insurance, you do not need to call for preauthorization. Your surgeon's office is responsible for providing proof of medical necessity for your procedure. If you do not have insurance, please notify the hospital as soon as possible. We can assist you in making payment arrangements.

Diet and Nutrition
Some patients are advised to lose weight before surgery, but it is important that you prepare your body for healing by making sure you are eating a healthy balance of nutritious foods. Eat foods that are high in protein, vitamin C, iron and calcium. Lean meat, fish and poultry are good sources of protein and iron. Iron is best absorbed if combined with foods that are rich in vitamin C, such as tomatoes, citrus fruit and potatoes. Good sources of protein and iron also include cooked dry beans/peas, tofu, and cooked soybeans. Dairy products are good sources of protein and calcium. These products include milk, cheese, pudding, yogurt, instant breakfast, macaroni and cheese and ice cream. It is advised to drink at least, six – 8 ounce glasses of water the day before surgery to properly hydrate and reduce post-op nausea.

Preoperative Physical Exam
Your primary care doctor will evaluate your health to be certain that it is safe for you to undergo surgery. This visit may include laboratory tests, x-rays and an EKG. This appointment needs to be within 30 days of your surgery. If you see a specialty doctor for issues with your heart, lungs, or other conditions, you may need additional clearance before surgery. Having a thorough preoperative medical assessment will decrease your chance of having complications.

Dental Care
If you haven't seen the dentist in the last 12 months you need to make your appointment today. **It is required that you have a dental appointment prior to your surgery**. This appointment will evaluate your overall dental health and cleaning. Poor dental hygiene is linked to higher infection rates.

Spiritual Care
We recognize the importance of having your spiritual needs met during your hospitalization. Priests, sisters and hospital chaplains are available during your stay. Your family pastor, bishop or rabbi is also welcome to visit.

Motel Arrangements
Accomodations for yourself, your coach or family members can be made by contacting any local motel. Information can be provided for you upon request.

Sleep Apnea
Sleep apnea can cause or worsen many medical conditions. While you are taking narcotic pain medications, your sleep apnea can be much worse. Therefore, it is important that if you have sleep apnea it be treated, generally with a C-PAP. If you have signs of sleep apnea before surgery, you may be required to undergo a sleep study. If you test positive for sleep apnea, you need to start treatment with a C-PAP prior to surgery.

Pets
Infection prevention is extremely important before, during, and after a joint replacement surgery. One simple thing you can do to prevent infection in your joint replacement is to keep all pets out of your bedroom for 3 days and nights before surgery. Any scratch or bite from a pet, or any animal, may result in a cancellation of your surgery or potentially cause infection to your joint. Please call your nurse navigator or surgeon's office if you get scratched or bitten by an animal. Pets can be a tripping hazard in your home after surgery. Please keep this in mind and plan to have someone around to make sure your pets are kept safely away from you when you are up and walking. Caring for your pet after surgery can be challenging. Please arrange for someone to help you with the care of your pet after surgery. If there is no one to help with your pet you may consider boarding your pet for a short time.

Smoking
It is never too late to quit using tobacco. Quitting smoking preoperatively and remaining tobacco free postoperatively will decrease your risk for wound healing problems and infections. In addition, discontinuing tobacco is beneficial to your overall health. Smoking impacts the body's immune system and its ability to heal.

Preparing Your Home

Now is the time to develop a plan and arrange for help. It is recommended that your "coach" stay with you for at least the first 5-7 days after discharge from the hospital.

Things to consider:

- Put clean linens on the bed
- Pick up throw rugs and tack down loose or frayed carpeting
- Remove cords and other obstructions from walkways
- Make sure lighting is good; install night lights in hallways, bedrooms and bathrooms as needed
- Install handrails for use on stairs and in bathrooms near toilet and bath/shower
- Move household items to waist height for easier access

Equipment:

- Front wheeled walker or crutches
- Cane (for later use)
- Toilet seat riser (optional)
- Shower chair or bath bench (optional)

Medications

Please note, this list may not include all medications to discontinue. Please consult with your provider. Patients who are using narcotic pain medications prior to surgery have more pain and more complications after surgery. They also have a higher risk of readmission back into the hospital. **You should be off narcotic pain medication prior to surgery**. Ask prescribing provider when to discontinue.

Anticoagulants

- Brilinta®
- Coumadin®
- Eliquis®
- Plavix
- Pradaxa®
- Warfarin
- Xarelto®

Anti-inflammatory medication

- Advil®
- Aleve®
- Diclofenac
- Ibuprofen
- Indocin®
- Mobic®
- Motrin®
- Naproxen

Aspirin and products containing aspirin

Herbal Supplements

- Echinacea
- Fish oil
- Garlic
- Ginkgo biloba
- Ginseng
- Omega 3
- St. John's Wort
- Vitamin E

Anti-rheumatoid medications

- Enbrel®
- Humira®
- Imuran®
- Orencia ®
- Remicade ®
- Rituxan®
- Simponi®
- Taltz®
- Xeljanz®

Preoperative Instructions

- Notify surgeon if you have any open areas (open sore, cut, bite, or rash) or illness (fever, vomiting, dental pain).
- No alcohol 24 hours prior to surgery.
- No eating after midnight the night before surgery (unless instructed differently).
- No shaving below the neck for 5 days before the surgery.
- Follow showering instruction sheet.
- The day of surgery take medications instructed with clear liquids only.
- No make up, nail polish, or jewelry at time of surgery.

What to Bring to the Hospital

- This guide
- Personal hygiene items (toothbrush, powder, deodorant, razor, etc.)
- If you wear glasses, contact lenses, a hearing aid or dentures, be sure to bring a case to put them in, as well as any cleaning/storage solutions. Please label your case with your name.
- Loose fitting exercise clothes to put on over your surgical site
- Sturdy supportive shoes to wear home (no open back or flip flops)
- Walker/crutches
- A copy of your Advance Directives
- List of medications you are currently taking
- Photo identification
- Insurance cards
- Any other medical cards
- CPAP machine (if applicable)

What to Expect

Remember: You are on a surgery schedule, please arrive at the medical center at the requested time.

Day of Surgery

On the day of surgery, complete your paperwork at the hospital Admissions department. You will be escorted to our preoperative surgical area. Your paperwork and health history will be reviewed. Before surgery you must remove all dentures, glasses, hairpins and jewelry. We will tape your rings to your fingers if you prefer.

Before surgery, your knee will be scrubbed and prepped. Your surgeon will write their initials on the knee that is being replaced. A compression stocking will be put on your unoperated leg. An IV (intravenous) line is started. Antibiotics will generally be given prior to surgery. If you feel nervous or are unable to relax, tell your nurse so medication can be given. You may receive medications through your IV that will make your mouth very dry.

Anesthesia

What kind of anesthesia will I receive?

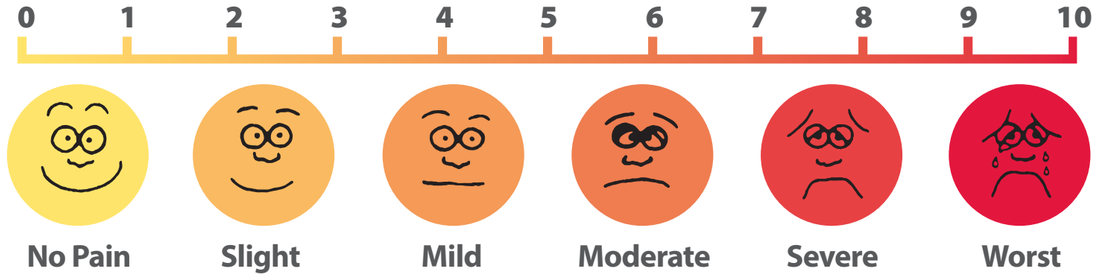
You will receive a general, spinal, and/or local (block) anesthetic for your total knee replacement surgery. Listed below is a description of each type:

Types of Anesthesia	
General	Provides loss of consciousness
Spinal	Anesthesia provided by local anesthetic injected into the subarachnoid space of your back
Local	Injected around the knee at the end of surgery to minimize pain

What are the side effects from anesthesia?

Your anesthesiologist will discuss potential side effects or complications with you in detail. It is possible to experience nausea or vomiting after any anesthesia. You will be given medication before surgery to help prevent this.

After surgery, you will be transported to the Post-Anesthesia Care Unit where you will be observed closely for 30 – 60 minutes. As you wake up, you may feel some pain in your new joint. Your recovery nurse will provide pain medication through your IV as needed. When you are awake and your pain is under control, your nurse will take you to your room on the nursing unit.



Pain Management

A question that concerns most joint replacement patients is the amount of pain they will experience after surgery — and how to manage that pain. The surgery is designed to help you eventually reduce the amount of pain caused by arthritis. You will have discomfort following surgery as your wound heals and you get used to your new joint. Your caregivers will work to ensure that you are receiving adequate pain medication. Several options may be available during your hospital stay to help manage pain:

- IV pain medicine
- Oral pain medication
- Ice
- Repositioning

You will be asked to rate your pain using the pain scale; ranging from a score of 0 indicating no pain, to a 10 indicating the worst possible pain.

After Surgery Care

A sterile dressing will be applied in surgery. Dressing will be changed and replaced with a smaller dressing according to your surgeon's orders. Instructions for dressing changes, incision care and showering will be given to you at discharge. Keep the incision clean and dry. If you have staples, they will be removed 7 - 14 days after surgery.

Using an incentive spirometer, also called a breathing exerciser, will help you to take deep breaths to open air sacs in your lungs. This helps to reduce the chance of breathing problems like pneumonia. The device and instructions will be provided during you hospital stay. Continued use at home is recommended to keep lungs clear throughout your recovery.

Physical Therapy

You will have P.T. (physical therapy) in your room starting the day of surgery. It is our goal to have you moving, at least a little, within four hours of surgery. No worries – we'll be there to help! Your physical therapist will instruct you on the proper way to perform stairs, exercises, and other skills you will utilize as you recover.

Recommended Home Medical Equipment

The occupational therapist will work with you to identify strategies to best perform activities of daily living including bathing, dressing, toileting and other activities at home. Tools to assist you at home include:

- Long-handled bath sponge
- Long-handled dressing stick
- Long-handled reacher
- Long-handled shoe horn
- Sock-aid

Discharge Planning

Most joint replacement patients go directly home from the hospital with the help of family and friends.

Your Nurse Navigator will discuss discharge planning with you prior to and after your surgery.

Your nurse navigator will continue to follow your progress at home via telephone calls. Expect to receive these calls periodically for the first few months after surgery.

Discharge Considerations

Incision Care

Upon discharge the nursing staff will give you specific instructions on changing your dressing/caring for your incision and showering. Do not apply lotion, cream, or ointments to your incision until instructed to do so.

Pain Management

A pain medication will be prescribed by your surgeon upon discharge. Please take your pain medicine as prescribed making sure it is taken approximately 60 minutes prior to physical therapy. Gradually wean yourself off pain medicine when you are able.

Swelling

Swelling is a very common and bothersome side effect of surgery. Ice and elevation are essential to help reduce swelling. Ice is recommended and can be used continuously for the first 10 days following surgery. After 10 days continue to ice following exercise and as needed. NEVER place ice directly on the skin.

Constipation

Pain medicine contains narcotics, which promote constipation. A stool softener and/or laxative should be taken while on pain medicine. Increase water and fiber in your diet to promote regular bowel movement.

Anticoagulation

Surgery combined with decreased mobility postoperatively may cause the blood to slow and coagulate in the veins of your legs, creating a blood clot. Anticoagulation medicines (blood-thinners) will be prescribed for a short period of time to reduce this risk.

Homemade Ice Bag Recipe

2 parts water
1 part rubbing alcohol

Place in zip-closure bag
Freeze
Place in second bag
Wrap in tea towel

NOTE: May also use small chunk frozen vegetables such as peas or corn or reusable gel packs which can be purchased from a drug store.

Surgery Risks: What to Watch For

Deep Vein Thrombosis (DVT)

A blood clot in the calf, behind the knee or groin. Symptoms include:

- Swelling in one or both legs
- Pain, tenderness or cramping that won't go away
- Warmth in the skin of the affected leg
- Red or discolored skin in the affected leg

What to do:

» Call your SURGEON

» You may need to go to the local hospital to receive treatment.

Pulmonary Embolism (PE)

A blockage, caused by a dislodged blood clot, in one of the pulmonary arteries of the lungs. It can be fatal, do not wait to see if it will go away. Symptoms include:

- Shortness of breath, can't breathe
- Elephant sitting on your chest
- Feels like a heart attack

What to do:

» Call 911!

» Let the medical team decide if it's a heart attack versus a PE

Infection of the Incision

Symptoms include:

- Increasing pain for no reason (activity can cause pain)
- Increased drainage
- Streaks of red
- Incision becomes very warm (surgery alone can cause incision to be warm for up to 1 year)
- Fever over 101.5°

What to do:

» Call your SURGEON

» If caught early, it is easier to treat. Do not let it fester. If the infection gets into the joint, the joint may need to be removed.

Pneumonia

Symptoms include:

- Shortness of breath
- Cough
- Chest pain
- Fever over 101.5°

What to do:

» Call your SURGEON

» An x-ray, as well as blood and sputum samples will help determine the neccessary treatment.

Should you have a skin infection or other type of infection, have it treated promptly to prevent complications.

The Importance of Follow-Up Visits

Follow-up with your orthopedic surgeon:

- Usually two to three times the first three months
- As needed and directed by your surgeon

Reasons for follow-up visits with your orthopedic surgeon include:

- Check your physical progress after surgery.
- Monitor integrity of prosthetic joint.
- X-rays taken at your follow-up visit may detect problems.

Precautions

Dental Precautions

We insist that you take a dose of antibiotics prior to dental work (including routine cleaning) now that you have an artificial joint.

The purpose of this dose of antibiotics is to decrease the risk of bacteria getting into your bloodstream and into your artificial joint. This is very unlikely but, if this were to occur, your artificial joint might have to be removed. Please notify and remind your dentist that you have a joint replacement prior to any treatment/ cleaning. Patients with well-fitting dentures can skip this step. Avoid non emergency dental appointments for three months postoperatively.

Driving

Do not drive until your surgeon clears you to do so. Your surgeon will permit driving once you are off narcotic pain medicine and adequate muscle strength has and coordination have returned.

Travel

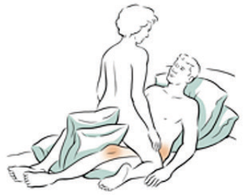
Avoid travelling for more than one hour at a time during the first 4-6 weeks after surgery. Sitting in a car or plane for long periods of time can increase your risk for stiffness, swelling, blood clots and wound healing complications.

Intimacy

Sex After Your Joint Replacement

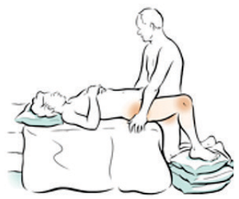
Having sex can be a little easier if you plan ahead. These illustrations are targeted more toward those with knee replacements. Typically knee replacements patients have no restrictions except to avoid anything that increases pain:

- Take a mild pain medication about 30-45 minutes before sex. This can help prevent minor aches. Avoid taking stronger medications that can mask warning pain.
- Have pillows and rolled towels nearby. They can be used for body support.
- Relax. Do a few easy stretches within a safe range of motion.



Face-to-Face
Being on the bottom is safe for a patient with a new joint. The patient on the bottom keeps his or her legs apart and turned out slightly. Use pillows to support the legs on the outside. Depending on comfort, the patient on the bottom can recline propped up on pillows or lie flat.

Sitting in a Chair
It is a safe position for a patient with a new joint. The man sits on a straight chair. His feet are supported or are flat on the floor. The partner sits on the man's lap.



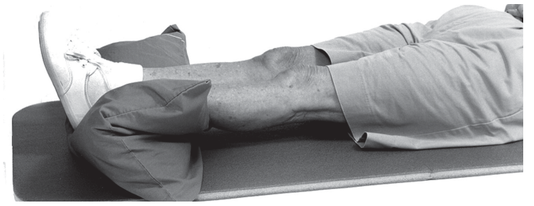
Lying and Standing
The patient lies on the bed on their back, buttocks near the edge of the bed. Both feet should be supported or flat on the floor. The partner stands in front of the patient, on pillows placed on the floor.

Man Propped on Elbows
This position is for a man with a new knee joint. He lies on top of his partner. His legs are stretched out behind him, with a pillow between his knees. He supports his weight on his elbows.

Occupational Therapy

Occupational Therapy

Activities of Daily Living



Lying in Bed — Keep Knee Straight

1. Lie in bed/sit in recliner with pillow under ankle.
2. DO NOT put a pillow under your knee.
3. Knee should be kept as straight as possible.

Transfer — Toilet

You may prefer a raised toilet seat for the first few weeks after surgery.

When getting down to the toilet:

1. Take small steps, and turn until your back is to the toilet. Never pivot.
2. Back up to the toilet until you feel it touch the back of your leg.
3. If using a commode with arm rests, reach back for both arm rests and lower yourself onto the toilet. Slide your operated leg out in front of you when sitting down. If using a raised toilet seat without arm rests, keep one hand on the walker while reaching back for the toilet seat with the other.

When getting up from the toilet:

If using a commode with arm rests, use the arm rests to push up. If using a raised toilet seat without arm rests, place one hand on the walker and push off the toilet seat with the other.

NOTE: Balance yourself before grabbing the walker.

Transfer — Bed

Into Bed

1. Back up to the bed until you feel it on the back of your legs (you need to be midway between the foot and the head of the bed).
2. Reaching back with both hands, slide your operative leg out in front of you when sitting down on the edge of the bed and then scoot back toward the center of the mattress. (Silk pajama bottoms, satin sheets or sitting on a plastic bag may make it easier.)
3. Move your walker out of the way, but keep it within reach.
4. Scoot your hips around so that you are facing the foot of the bed.
5. Lift your leg into the bed while scooting around. (If this is your operated leg, you may use a leg lifter to assist with lifting the leg into bed.)
6. Keep scooting and lift your other leg into the bed.
7. Scoot your hips towards the center of the bed.

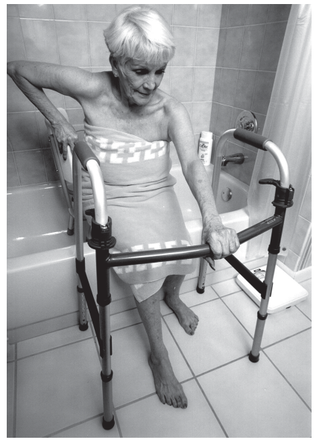
Out of Bed

1. Scoot your hips to the edge of the bed.
2. Sit up while lowering your un-operated leg to the floor.
3. If necessary, use a leg-lifter to lower your operated leg to the floor.
4. Scoot to the edge of the bed.
5. Use both hands to push off the bed. If the bed is too low, place one hand in the center of the walker while pushing up off the bed with the other.
6. Balance yourself before reaching for the walker.

Walk-in Shower Helpful Hints:

- Hang a bag on your walker for your shower/bathing supplies.
- After your shower, make sure the floor/grab bars are dry so that you do not slip.
- Place a towel on the shower floor to dry off feet to prevent slipping.
- Place non-skid adhesive strips on shower floor to prevent slipping.
- Keep floor dry in bathroom.
- Consider purchasing a hand-held shower hose.

Transfer — Tub



Getting into the tub using a bath seat:

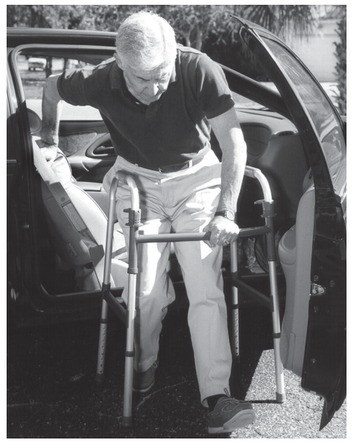
1. Place the bath seat in the tub facing the faucets.
2. Back up to the tub until you can feel it at the back of your knees. Be sure you are in front of the tub bench.
3. Reach back with one hand for the tub bench. Keep the other hand in the center of the walker.
4. Slowly lower yourself onto the tub bench, keeping the operated leg out straight.
5. Move the walker out of the way, but keep it within reach.
6. Lift your legs over the edge of the tub, using a leg lifter for the operated leg, if necessary.

NOTE: Although bath seats, grab bars, long-handled bath brushes and hand-held showers make bathing easier and safer, they are typically not covered by insurance or Medicare.

NOTE: ALWAYS use a rubber mat or non-skid adhesive on the bottom of the tub or shower.

Getting out of the tub using a bath seat:

1. Lift your legs over the outside of the tub.
2. Scoot to the edge of the bath seat.
3. Push up with one hand on the back of the bath seat while holding on to the center of the walker with the other hand.
4. Balance yourself before reaching for the walker.



Transfer — Vehicle

1. Push the seat all the way back; recline it if possible, but return it to the upright position for traveling.
2. Place a plastic trash bag on the seat of the vehicle to help you slide and turn toward the front.
3. Back up to the car until you feel it touch the back of your legs.
4. Reach back for the seat and lower yourself down. Keep your operated leg straight out in front of you and duck your head so that you don't hit it on the door. It may be necessary for you to lift your operated leg into the vehicle with your hands.
5. Avoid sports cars or cars with bucket seats because of low seat height.
6. No driving until permitted by your surgeon.

Dressing Equipment

Using a "Reacher" or "Dressing Stick"

Putting on pants and underwear:

1. Sit down.
2. Put your operated leg in first, and then your unoperated leg. Use a reacher or dressing stick to guide the waist band over your foot.
3. Pull your pants up over your knees, within easy reach.
4. Stand with the walker in front of you to pull your pants up the rest of the way.

Taking off pants and underwear:

1. Back up to the chair or bed where you will be undressing.
2. Unfasten your pants and let them drop to the floor. Push your underwear down to your knees.
3. Lower yourself down, keeping your operated leg out straight.
4. Take your unoperated leg out first and then the operated leg.

NOTE: A reacher or dressing stick can help you remove your pants from your foot and off the floor.

Using a "Sock Aid"

Putting socks on:

1. Sit down.
2. Do not bend over to put your sock on, or put your foot up on a footstool.

NOTE: Do not cross your legs when putting on your socks. Use a sock aid if you are having difficulty reaching your feet.

How to use a sock aid:

1. Slide the sock onto the sock aid with the toe completely tight at the end.
2. Hold the cord and drop the sock aid in front of your foot. It is easier to do this if your knee is bent as much as possible.
3. Slip your foot into the sock aid.
4. Straighten your knee, point your toe and pull the sock on. Keep pulling until the sock aid pulls out.

Remove socks/stockings:

1. Gently push down with edge of shoehorn or dressing stick.
2. Grasp with reacher and pull off.

NOTE: Women should temporarily wear stockings rather than panty hose.

Using a Long Handled Shoe Horn

1. Use your reacher, dressing stick or long-handled shoe horn to slide your shoe in front of your foot. Bend your knee as much as possible when doing this.
2. Place the shoe horn inside the shoe against the back of the heel. Have the curve of the shoe horn match the curve of the shoe.
3. Lean back, if necessary, as you lift your leg and place your toes in your shoe.
4. Step down into your shoe, sliding your heel down the shoe horn.

NOTE: Wear sturdy slip-on shoes, shoes with Velcro closures or elastic shoelaces. DO NOT wear high-heeled shoes, shoes without backs or flip flops. Elastic shoelaces are available which avoid the need to tie shoes each time. (The laces can remain tied in the shoes.)

Stairs

We recommend limiting stair climbing to one to two times per day, or otherwise instructed by your physician or therapist. Have someone with you to help. If there is no handrail, you may wish to have one installed for safety.

Going up stairs (using two handrails)

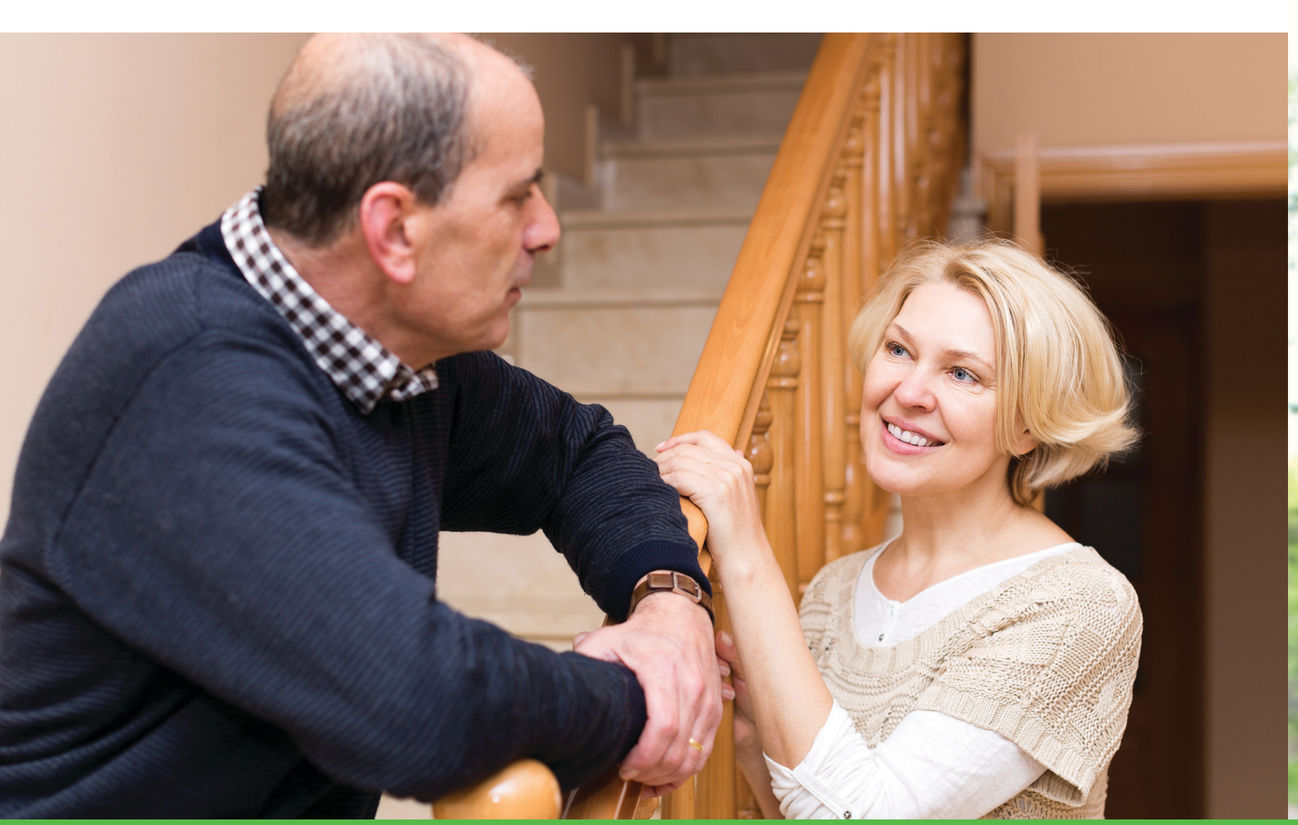
- With both hands on handrail step up with **non-operated** leg first.
- Follow with your **operated leg**, bringing it up to the same step.
- Repeat this sequence until you reach the landing.

Going down stairs (using two handrails)

- With both hands on handrails step down with **operated** leg first.
- Follow with your **non-operated** leg, bringing it down to the same step.
- Repeat this sequence until you reach the landing.

*******Remember:** Up with the good, down with the bad.******

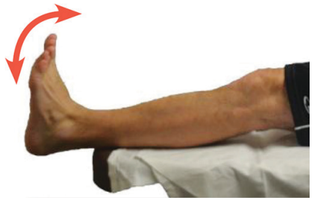
We recognize that not everyone will have the step up described above to enter their home; we will work with you on an individual basis during your acute care stay to make the appropriate modifications for you to use your stairs safely at home.



Physical Therapy

Total Knee: Pre-Operative • Week 1 - 3

Exercises:		record reps AM/PM each day for 3 weeks prior to surgery						
Ankle Pumps	Week 1: 10 Reps /	/	/	/	/	/	/	/
	Week 2: 20 Reps /	/	/	/	/	/	/	/
	Week 3: 30 Reps /	/	/	/	/	/	/	/

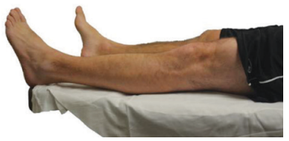


Bend ankle, bringing your toes up toward your body as far as possible. Now point toes away from your body.

Perform:
10 Reps 1st week • 20 Reps 2nd week • 30 Reps 3rd week

Exercise Feedback:

Quad Sets							
	/	/	/	/	/	/	/
	/	/	/	/	/	/	/
	/	/	/	/	/	/	/



Lie on your back with affected leg straight. Press the back of your affected knee downward by tightening the thigh muscle. Hold 5 seconds

Perform:
10 Reps 1st week • 20 Reps 2nd week • 30 Reps 3rd week

Exercise Feedback:

Gluteal Sets							
	/	/	/	/	/	/	/
	/	/	/	/	/	/	/
	/	/	/	/	/	/	/

Lie on back with legs straight. Squeeze buttock muscles. Hold 5 seconds and relax.

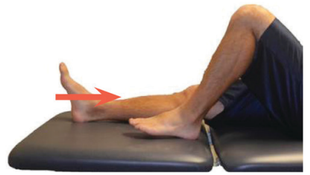
Perform:
10 Reps 1st week • 20 Reps 2nd week • 30 Reps 3rd week

Exercise Feedback:

Physical Therapy

Total Knee: Pre-Operative • Week 1 - 3

Heel Slide (Supine)							
	/	/	/	/	/	/	/
	/	/	/	/	/	/	/
	/	/	/	/	/	/	/



Lie on your back. Slide affected heel toward your buttocks, bending the knee. Hold 3-5 seconds and slowly lower.

Perform:
10 Reps 1st week • 20 Reps 2nd week • 30 Reps 3rd week

Exercise Feedback:

Straight Leg Raise							
	/	/	/	/	/	/	/
	/	/	/	/	/	/	/
	/	/	/	/	/	/	/

Bend the knee of your non-affected leg. Tighten the thigh muscle of your affected leg. Point your toes up to the ceiling and lift your affected leg straight up. Slowly lower your leg.

Perform:
10 Reps 1st week • 20 Reps 2nd week • 30 Reps 3rd week

Exercise Feedback:

Chair Lift – Resisted							
	/	/	/	/	/	/	/
	/	/	/	/	/	/	/
	/	/	/	/	/	/	/

With hands on armrests, push up from the chair. Do not stand all the way up, but simply lift hips off the chair. Use legs as much as necessary. Slowly return to starting position.

Perform:
10 Reps 1st week • 20 Reps 2nd week • 30 Reps 3rd week

Exercise Feedback:

Physical Therapy

Total Knee: Post-Operative

Date							
What is my pain? (0 - no pain; 10 - worst pain possible)	/10	/10	/10	/10	/10	/10	/10
Did I take medication?							
Ice on my knee for 10-15 minutes:							

Exercises: (record reps A.M./P.M.)

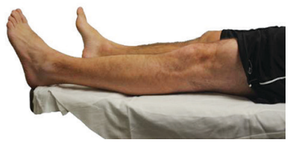
Ankle Pumps	/	/	/	/	/	/	/

Bend ankle, bringing your toes up toward your body as far as possible. Now point toes away from your body.

Perform: 10 reps working up to 20 reps as able.

Exercise Feedback:

Quad Sets		/	/	/	/	/	/	/



Lie on your back with affected leg straight. Press the back of your affected knee downward by tightening the thigh muscle. Hold 5 seconds.

Perform: 10 reps working up to 20 reps as able.

Exercise Feedback:

Gluteal Sets	/	/	/	/	/	/	/

Lie on back with legs straight. Squeeze buttock muscles. Hold 5 seconds and relax.

Perform: 10 reps working up to 20 reps as able.

Exercise Feedback:

Physical Therapy

Total Knee: Post-Operative

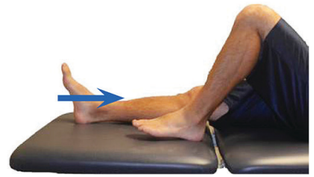
Hip Abduction/Adduction	/	/	/	/	/	/	/

Lie on back. Slowly move affected leg out to the side and return to mid-line. Repeat.

Perform: 10 reps working up to 20 reps as able.

Exercise Feedback:

Heel Slide (Supine)	/	/	/	/	/	/	/



(Goal: 90° by week 2)
Lie flat on back. Slide affected heel toward your buttocks, bending the knee. Hold 3-5 seconds and slowly lower.

Perform: 10 reps working up to 20 reps as able.

Exercise Feedback:

Short Arc Quads	/	/	/	/	/	/	/

Lie on your back with a towel roll or bolster pillow under the knee of your affected leg. Tighten your thigh muscle and lift your foot off the bed until the knee is straight. Then, slowly lower the foot back to the bed.

Perform: 10 reps working up to 20 reps as able.

Exercise Feedback:

Straight Leg Raise	/	/	/	/	/	/	/

Bend the knee of your non-affected leg. Tighten the thigh muscle of your affected leg. Point your toes up to the ceiling and lift your affected leg straight up. Slowly lower your leg.

Perform: 10 reps working up to 20 reps as able.

Exercise Feedback:

Physical Therapy

Total Knee: Post-Operative

Long Arc Quad	/	/	/	/	/	/	/

Sit with feet on floor, straighten knee fully. Pause and lower slowly.

Perform: 10 reps working up to 20 reps as able.

Exercise Feedback:

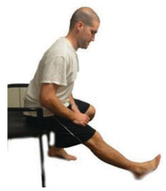
Knee Flexion	/	/	/	/	/	/	/

(Goal: 115 -120° by week 6)
Sit in chair evenly on both hips and buttocks. Slide affected heel under the chair, bending at the knee. Hold for 3-5 seconds, then try to slide back a little further, and hold another 3-5 seconds. Slide foot forward and relax.

Perform: 5 reps working up to 10 reps as able.

Exercise Feedback:

Seated Hamstring Stretch	/	/	/	/	/	/	/



Sit on edge of chair with back straight. With surgical leg straight in front and toes pointed up, bend forward at hips. Stretch is felt on back of thigh.
Hold 30 seconds. 2-3 reps per exercise.

Perform: 2 - 3 reps per exercise.

Exercise Feedback:

Heel Prop	/	/	/	/	/	/	/

(Goal: 0° by week 6)
With a rolled towel under surgical leg ankle, place a weight across knee.
Hold for up to 10 minutes as tolerated.

Exercise Feedback:

Notes

Notes

KOOS, Jr. Knee Survey

(Knee Injury and Osteoarthritis Outcomes Score)

CHI Health

Name_____

Instructions: This survey asks for your view about your knee. This information will help us keep track of how you feel about your knee and how well you are able to do your usual activities. Answer every question by checking the appropriate box, only one box for each question. If you are unsure about how to answer a question, pleasegive the best answer you can.

Stiffness

The following question concerns the amount of joint stiffness you have experienced during the **last week** in your knee. Stiffness is a sensation of restriction or slowness in the ease with which you move your knee joint.

1. How severe is your knee stiffness after first waking in the morning?

None	Mild	Moderate	Severe	Extreme

Pain

What amount of knee pain have you experienced the **last week** during the following activities?

2. Twisting/pivoting on your knee

None	Mild	Moderate	Severe	Extreme

3. Straightening knee fully

None	Mild	Moderate	Severe	Extreme

4. Going up or down stairs

None	Mild	Moderate	Severe	Extreme

5. Standing upright

None	Mild	Moderate	Severe	Extreme

Function, daily living

The following questions concern your physical function. By this we mean your ability to move around and to look after yourself. For each of the following activities please indicate the degree of difficulty you have experienced in the **last week** due to your knee.

6. Rising from sitting

None	Mild	Moderate	Severe	Extreme

7. Bending to floor/pick up an object

None	Mild	Moderate	Severe	Extreme

PROMIS-Global Health Scale
(Patient Reported Outcomes Measurement Information System) v.10/1.1

CHI Health

Instructions: Please respond to each item by marking one box per row.

		Excellent	Very Good	Good	Fair	Poor
Global01	In general, would you say your health is:					
Global02	In general, would you say your quality of life is:					
Global03	In general, how would you rate your physical health?					
Global04	In general, how would you rate your mental health, including your mood and your ability to think?					
Global05	In general, how would you rate your satisfaction with your social activities and relationships?					
Global09	In general, please rate how well you carry out your usual social activities and roles. (This includes activities at home, at work and in your community, and responsibilities as a parent, child, spouse, employee, friend, etc.)					
		Completely	Mostly	Moderately	A little	Not at all
Global06	To what extent are you able to carry out your everyday physical activities such as walking, climbing stairs, carrying groceries, or moving a chair?					

In the past 7 days…

		Never	Rarely	Sometimes	Often	Always
Global10	How often have you been bothered by emotional problems such as feeling anxious, depressed or irritable?					
		None	Mild	Moderate	Severe	Very Severe
Global08	How would you rate your fatigue on average?					
Global07	How would you rate your pain on average?					

0 (No Pain) 1 2 3 4 5 6 7 8 9 10 (Worst imaginable pain)

Joint Replacement Center Agreement

Welcome to the CHI Health Joint Replacement Center (JRC). The goal of the JRC is to ensure you have the best possible outcomes through comprehensive preparation. You will be prepared for your surgery by gaining a better understanding of your surgery, the hospital admission process, and your plan for care after leaving the hospital. You will also be medically optimized for the best possible surgical outcomes. As a partner in the program and your success, we request that you agree to the following:

- I agree to attend the joint replacement class as scheduled.
- I agree to identify at least one 'coach' who will attend the class with me. My coach will also be available to assist me at home for at least the first 5 to 7 days after my discharge, and provide transportation to physical therapy. My coach will be _____.
- I agree to follow the instructions for medications, treatments, and testing before surgery. If I do not understand the instructions, I will call the Nurse Navigator(s).
- I understand that if I have no complications or other limitations, I will go directly home following discharge from CHI Health. Inpatient rehabilitation, home health services, and skilled nursing facilities will only be utilized if necessary.
- I have arranged for outpatient physical therapy services at _____ and agree to plan for transportation if I have knee replacement surgery. I agree to perform other physical therapy exercise at home as directed.
- I agree that I will call the Nurse Navigator(s) or Orthopaedic Surgeon for information before going to the doctor or emergency room unless it is a life-threatening emergency. I will call the Nurse Navigator(s) first for questions related to pain, swelling, redness or concern about infection, and for direction before utilizing my primary care provider or the emergency department.
- I agree that I will not have any elective surgery or invasive procedures for 90 days following my joint replacement.

By signing this agreement I am acknowledging that I have received and understand this information and the expectations of the program. I understand that failure to plan for the above may result in postponement or even cancellation of my surgery, at the discretion of my surgeon, until the conditions have been met

_____ _____

Patient Signature Date

_____ _____

Coach Signature Date

Please bring this completed form with you to your joint replacement class. If you feel you cannot meet any of these requests, please call the Nurse Navigator(s).

Thank you for choosing CHI Health.

Home Evaluation

Home Evaluation – Please complete prior to joint class

Name: (Last) (First)	How do you like to be addressed?	Who will be helping you after surgery?
Date of Surgery	Type of Surgery (please circle) Total Hip Total Knee	City or Town you live in

Please circle the responses most applicable for you

Living Situation Today	**I Live:** Alone With family With spouse Other_____ **I Live in:** A House A Senior High Rise An Apartment A Mobile home Assisted Living Other_____ **My home is:** one level split level 2-story apartment (elevator) apartment (stairs)
Steps and Railings	# of steps to get into my home: _____ Railing on right side left side both sides # of steps within my home that I will be using after surgery : _____ Railing on right side left side both sides
Bathroom	Tub height: ____inches Toilet height: _____inches Height of step into shower: ____inches I will be using a : tub only walk in shower combination tub and shower Is there a bar/support/vanity near the toilet Yes No The shower I will be using has a: Curtain Door
Equipment I currently have, am using or can borrow	Bath bench/seat Elevated toilet seat Commode Wall mounted grab bar Walker Cane Wheel chair Crutches Sock Aid Leg Lifter Dressing Stick Long shoe horn Elastic shoelaces Reacher/grabber Hand-held shower head Equipment I need: _____ ********** Will a walker fit through your doorways? Yes No (Be sure to check the bathroom doorway)
Bed Chairs and Rugs	**Bed height:** _____inches from floor to top of mattress. Is there a chair for you to use after surgery? Yes No (rocker ok for knee surgery; high/firm chair preferred for hip surgery) I have the rugs picked-up Yes No
Walking	Currently, I walk: Alone With a walker With a cane With crutches 0-6 blocks more than 6 blocks
Services I am currently using	Nursing Home Life Line Meals on Wheels Caregiver Home Health:_____ (agency name)
Discharge Plans	**There's No Place Like Home!** Home with outpatient physical therapy (knees) to be provided by: _____ I plan to stay with a relative/friend Not sure

Medications – *Please complete prior to joint class*

Will also give to Pre-Op Nurse the day of surgery

Please use this form to list **EVERYTHING** you are taking or using.
Include regularly scheduled medications, medications taken if needed, over the counter medications, vitamins, diet pills, herbal medications, supplements, nasal sprays, ointments, eye drops, etc.

Patient Name:				**To be completed by Nurse Navigator**	
Drug/Medications	**Dose/mg**	**When do you take it**	**What is it for**	**Continue to take as usual**	**Last dose to be taken on**

Medications – *Please complete prior to joint class*

Will also give to Pre-Op Nurse the day of surgery

CHI Health

Please use this form to list **EVERYTHING** you are taking or using.
Include regularly scheduled medications, medications taken if needed, over the counter medications, vitamins, diet pills, herbal medications, supplements, nasal sprays, ointments, eye drops, etc.

Patient Name:				**To be completed by Nurse Navigator**	
Drug/Medications	**Dose/mg**	**When do you take it**	**What is it for**	**Continue to take as usual**	**Last dose to be taken on**