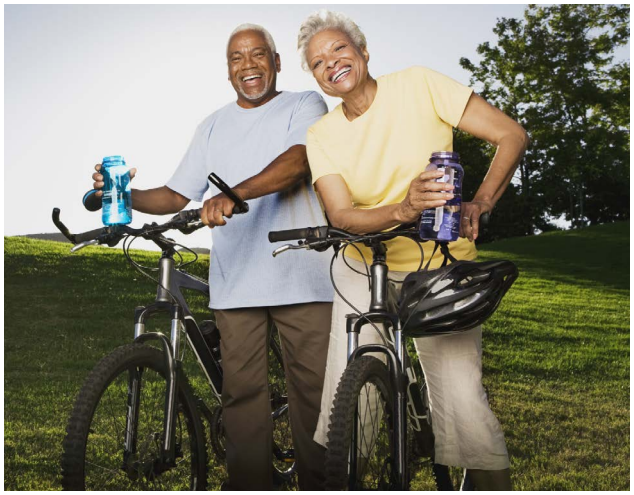
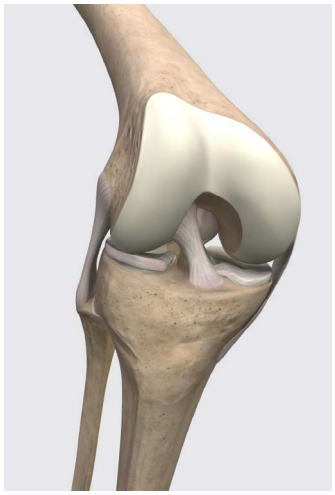
MASSACHUSETTS GENERAL HOSPITAL
ORTHOPAEDICS

HARVARD MEDICAL SCHOOL

Good as New

A Patient Guide to Total Knee Replacement





Good as New

A Patient Guide to Total Knee Replacement

EDITED BY:

Arun Shanbhag, PhD, MBA
Harry E. Rubash, MD
Lara Lind
Andrew A. Freiberg, MD

CONTRIBUTIONS BY:

Sandy Daise
Janet Dorrwachter, NP
Kristen Hill, OTR/L
Kathy Lind
Jill Pedro, RN
Pam Tobichuk, RN
Robert Dorman, PT
Anne Fiore, NP
Lauren Lebrun, MHA
Nancy Marttila
Logan Sharma, OTR/L
Kristin Wood, NP

Based on an earlier edition of Total Knee Replacement Program (2006) prepared by Janet Dorrwachter, NP in collaboration with the MGH Orthopaedic Clinical Performance Management (CPM) Team.

February 2020

Table of Contents

Joint Replacement Attending Surgeons

William W. Tomford, MD
Interim Chief, Center for Hip & Knee Replacement
ph: 617-726-8532 • fax: 617-724-3938

MD: Vanderbilt University School of Medicine
Residency: Harvard Combined Orthopaedic Residency

Hany S. Bedair, MD
ph: 617-643-7251 • fax: 617-726-8770

MD: Yale University School of Medicine
Residency: University of Pittsburgh Medical Center
Fellowship: Rush University Medical Center

John G. Esposito, MD
ph: 617-643-7251 • fax: 617-726-8770

MD: University of Ottawa Faculty of Medicine
Residency: University of Calgary
Fellowship: Massachusetts General Hospital; London Health Sciences Centre

Young-Min Kwon, MD, PhD
ph: 617-643-7436 • fax: 617-724-0718

MD: University of Sydney, School of Public Health
Residency: Concord Hospital
Fellowships: Balgrist Hospital; Massachusetts General Hospital

Christopher Melnic, MD
ph: 617-243-5155 • fax: 617-243-5090

MD: Tufts Medical School
Residency: Hospital of the University of Pennsylvania

Joint Replacement Attending Surgeons

John M. Siliski, MD
ph: 617-726-8441 • fax: 617-248-9665

MD: Harvard Medical School
Residency: Harvard Combined Orthopaedic Residency

Your Care Team

Your care team will include Orthopaedic Surgeons, Nurse Practitioners, inpatient Nurses, Nurse Case Managers, Fellows, Residents, Therapists and Social Workers. Fellows are orthopaedic surgeons in training for advanced joint replacement techniques. Residents are physicians-in-training to become orthopaedic surgeons.

In our offices, you may be seen by a fellow and/or resident. All members of our team, including physicians-in-training and Nurse Practitioners, work with direct supervision from the Orthopaedic Surgeons and communicate the unique aspects of your care.

Your Knee

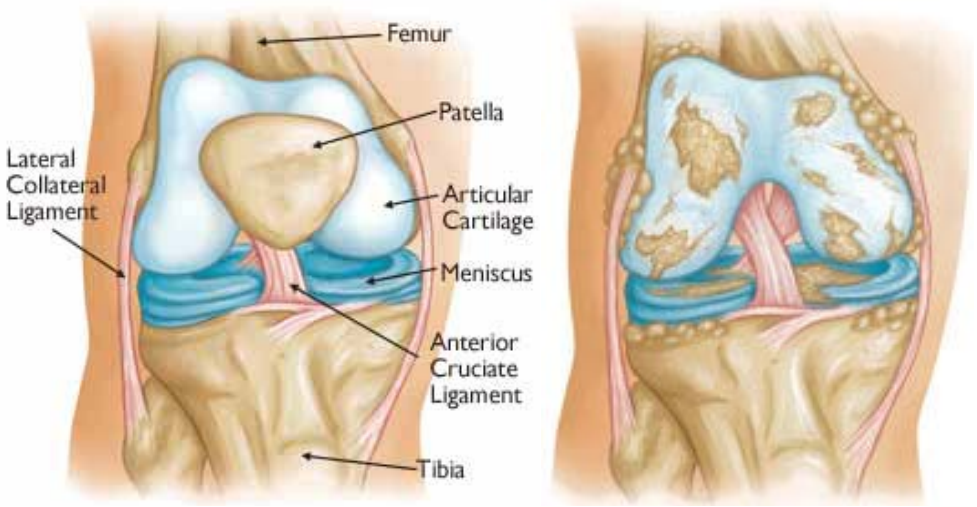
The knee joint connects the femur (thigh bone) and the tibia (shin bone). The knee can be thought of as a simple hinge-type joint permitting you to extend (straighten) and flex (bend) your knee. The actual movements of the knee are more complex and include rolling, pivoting, and small rotations on either side.

Similar to other joints, smooth articular cartilage covers the ends of these bones; uniquely in the knee, cartilaginous disks called menisci (singular: meniscus) further cushion and protect the knee. The combination of the articular cartilage and the menisci permits the knee bones to glide smoothly and effortlessly through motions of standing, sitting, jumping, running and taking stairs. Taking stairs and running for example, can exert 5-7 times your body weight on the knee joint.

The knee also has the patella bone (knee cap). The undersurface of the patella is covered with smooth articular cartilage, permitting it to easily slide up and down in a furrow on the femur and protects the inner ligaments of the knee.

As you can see in the accompanying image, the femur bone ends in two distinct half-doughnut shaped condyles: the medial (inside) condyle and the lateral (outside) condyle. In some patients, surgery may be performed under only one of the condyles or components (see uni-compartmental knee surgery on page 8).

Knee Joint (of a healthy knee) **Osteoarthritic Knee**

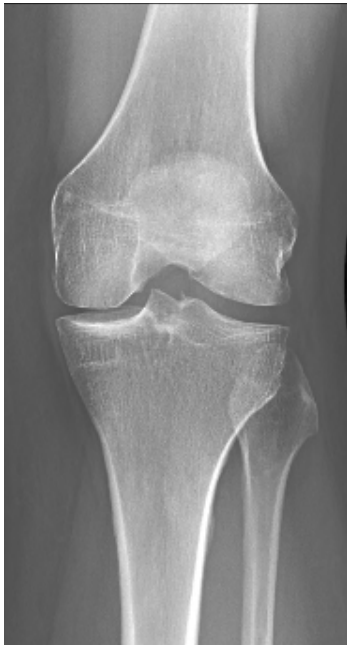


Photos courtesy of the AAOS.org

About your Knee

Knee Arthritis

As in other joints, arthritis of the knee is caused by wear-and-tear of the cartilage at the end of the bones – in this case the ends of the femur and tibia, and underneath the kneecap. As the cartilage wears away, the bone ends rub against each other causing the grinding, accompanied by pain and swelling. As the arthritis progresses, there may be swelling around the knee, tenderness, stiffness and pain with the inability to straighten the knee. In severe cases, the knee may appear deformed with knock-knee or bow-legged deformities.

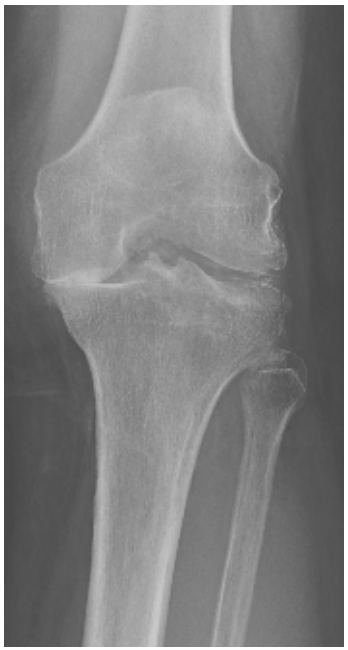


normal knee

Common Knee Problems

Arthritis is the most common cause of the breakdown of knee cartilage.

- **osteoarthritis**: also referred to as "wear and tear" arthritis; osteoarthritis affects the cartilage that cushions the ends of the knee bones. As this cartilage wears away, the ends of the bones rub together (bone-on-bone) causing a grinding feeling, knee pain and resulting stiffness.
- **rheumatoid arthritis**: a systemic disease, which affects multiple joints in the body. The synovial membrane, which lines the entire joint cavity becomes irritated and produces too much fluid. The resulting healing response damages the cartilage, leading to pain and stiffness. Rheumatoid arthritis starts in much younger patients.



knee with osteoarthritis

Appointments at Mass General

Making an Appointment

The quickest and easiest way to make an appointment with a Knee Replacement surgeon is through our online appointment request form, which you can access here (www.massgeneral.org/hipandknee). Enter information about yourself and why you are seeking an appointment. Filling in as much detail as possible helps our manager understand the severity of your disease and identify the right surgeon for you. One of our staff members will get back to you to schedule the appointment.

You also can call one of our surgeons' offices to schedule an appointment (see contact information on page 1).

What to Expect during your Appointment

When you first check-in for your appointment, you will be asked to take new x-rays in our radiology suites. You also will fill out computer-based questionnaires about your symptoms and daily activities.

During your appointment, your doctor will go over your x-ray with you. In addition to your doctor, during your appointment you may also interact with nurse practitioners, and fellows and residents who are physicians-in-training.

During your appointment, you can expect

- A thorough evaluation and discussion with our specialists
- Review of your x-rays, MRIs and any additional medical records
- An in-depth conversation covering treatment options
- A customized treatment plan to get you back to an active lifestyle

Non-Operative Treatment

Your doctor will discuss non-operative treatment options with you. In most cases, non-surgical treatments are exhausted before operative measures are considered.

Non-surgical treatments for arthritis of the knee include:

- physical therapy
- weight-loss
- modifying your activities
- using assistive devices, such as a cane
- anti-inflammatory medicines

Talk to your doctor about a referral to physical therapy (PT). Exercise can help keep your joints flexible, strengthens the muscles around the joints, reduces pain and keeps your bone and cartilage tissue strong and healthy. If you start an exercise regimen, take a balanced approach and include aerobic activities such as walking, swimming and cycling in addition to stretching/flexibility exercises and strengthening exercises. You want to avoid exercises that place excessive stress on the joints like high-impact workouts or competitive sports activities.

Losing weight can have a surprising effect on reducing arthritic pain. With each step, you exert 4-7 times your body weight on your knee joints. So when you lose even a small amount of weight, your symptoms improve dramatically and you may be able to perform more activities and potentially put off surgery for six months or longer.

Activity modifications include reducing high-impact and repetitive activities that place increased stresses on the knee joint. Guided yoga or pilates can also help reduce pain and improve mobility.

The use of a cane, usually in the hand opposite the affected knee, can reduce the stress across the knee joint. Anti-inflammatory medicines, such as ibuprofen and naproxen, can reduce the inflammation around the knee joint that is caused by the arthritis and provide significant pain relief.

If all non-operative treatments have been attempted and fail to reduce pain, then surgery to replace the knee joint is the last option. Continue reading the next sections of this guide for more information on preparing for your surgery, your hospital stay and post-surgery recovery and rehabilitation.

Operative Treatment

Total Knee Replacement

Total knee replacement (TKR) is performed in patients with severe loss of knee cartilage due to injury or inflammation, wear and tear due to various types of arthritis or other aging-related changes in the knee.

In TKR, the worn cartilage is surgically removed and replaced with combination metal and plastic implants.

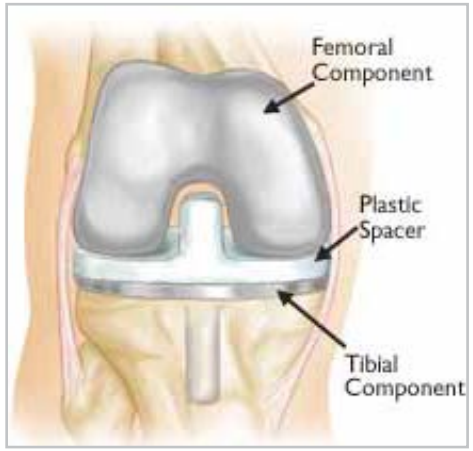


Photo courtesy of the AAOS.org

Revision Total Knee Replacement

TKR implants have a normal life span of 10-20 years. With time, the artificial components also wear out and will need to be replaced in a "revision" TKR procedure. Implants may also need replacement for infection, pain or other factors as determined by your doctor.

Bilateral Total Knee Replacement

In bilateral total knee replacement, both knees are replaced. Bilateral TKR may be performed at the same surgery on the same day or staged with a wait of several days, weeks or months between the two procedures. This procedure is usually preformed in patients who have severe arthritis in both knees.

For animations of common knee treatments, visit:
www.massgeneral.org/orthopaedics/hip-knee/conditions-and-treatments

Operative Treatment Continued

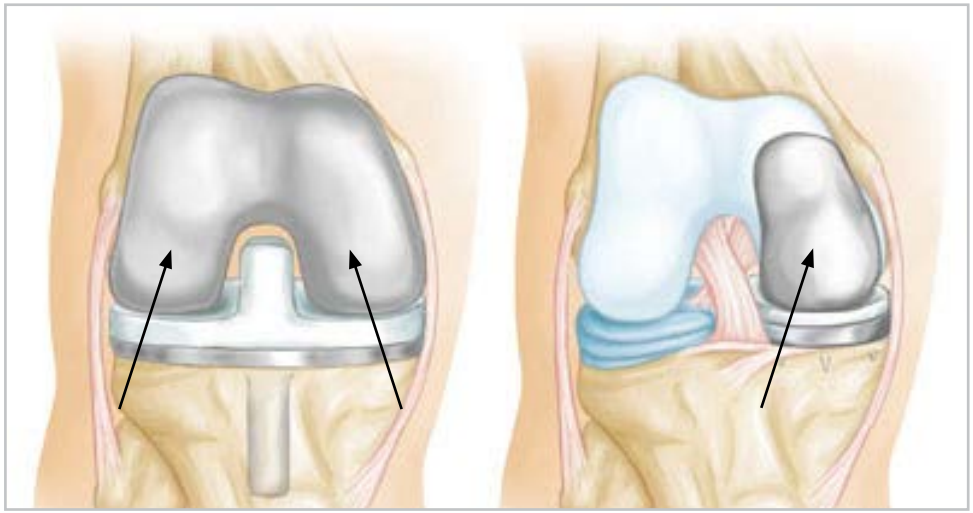
Uni-compartmental Knee Replacement

In some cases, wear and tear of the knee or arthritis is confined to a single compartment (or condyl) of the knee. If your doctor determines it appropriate for your individual case, then only the damaged compartment of the knee may be replaced and the healthy compartment of the knee is left alone. This is referred to as a Uni-compartmental knee replacement and only applicable to a small number of patients.

Because a uni-compartmental knee replacement is done through a smaller incision, the surgery is quicker, hospital stay is shorter and patients can rehabilitate and return to normal activities faster.

Both sides (or compartments) are replaced

Only one side, which is affected, is replaced



Total Knee Replacement

Unicompartmental Knee Replacement

Photo courtesy of the AAOS.org

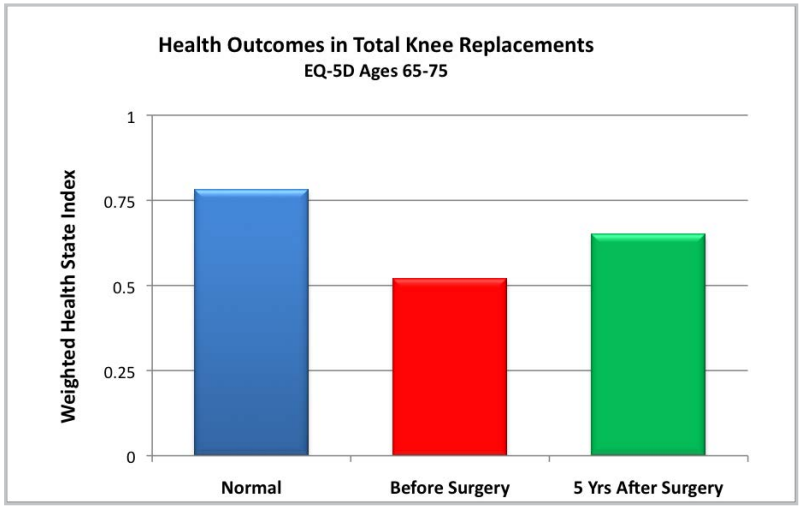
Quality After Joint Replacement

Overall Health Improves after Total Knee Replacement

The Department of Orthopaedic Surgery has a long history of surveying patients before and after their joint replacements as part of a patient registry. The results of these surveys allow our doctors and researchers to continue making improvements to implant design, surgical techniques and ultimately enhance the performance of your joint replacement.

Surveys of patients before and after their surgery demonstrate that joint replacements improve quality of life allowing patients to get back to their normal activities.

The figure below summarizes the overall health status of patients before and after total knee replacements. The first bar (blue) represents overall health status of normal adults aged 65-75. The second bar (red) shows that mobility and activity levels are significantly lower in patients with end-stage arthritis. The last bar (green) clearly demonstrates that a total knee replacement dramatically improves their quality of life.



Your Doctor Recommends Surgery

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Patient Guide to Total Knee Replacement
Read this Guide prior to your Pre-Admission Testing and Discharge Planning Interview, to help you prepare and plan for your surgery and aftercare

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have blood drawn for testing

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Pre-Admission Testing On Phone
- Speak with members of the Perioperative Nursing Team
- Review your medications
- Discuss additional consultations required prior to surgery

↓

Schedule Discharge Planning Phone Interview
617.726.3666
Speak with Pre-admission Orthopaedic Nurse Case Manager and arrange post-surgery services

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Pre-Surgery Arrangements
- Take care of required dental work (pg. 13)
- Prepare your home and bathroom (pg. 15)

↓

Your Total Knee Replacement Surgery at MGH

↓

Your Recovery at MGH
- Work with multidisciplinary team towards recovery
- Expect to stay at MGH for 1-2 days
- Discharge to home or rehabilitation facility

Your joint replacement surgery typically will be scheduled several weeks to months after it is determined to be your best treatment option. Since this is an elective procedure, the timing can vary on your unique personal or family needs.

PATA Evaluation

Prior to all procedures, all patients go through a pre-procedural evaluation (also called a PATA evaluation). This will involve a pre-arranged telephone call with a member of our perioperative nursing team.

Your PATA evaluation is important because it ensures that you are ready to undergo a surgical procedure minimizing any potential complications. Before your evaluation, you will have blood tests done at Mass General or through your Primary Care Physician (PCP). During your PATA evaluation, a member of our perioperative team will review your blood tests and discuss your anesthetic plan.

EXCEL*erated* Recovery Program

Approximately half of our patients qualify for the EXCELerated Recovery Program. This program is geared for patients who are planning to be discharged to home and focuses on early mobilization, allowing you to recover from your surgery more quickly than a traditional total joint replacement recovery program. Your surgeon and case manager will determine if you qualify and will provide you with further details on this innovative program at MGH.

Planning your Discharge

Schedule Phone Interview with Pre-Admission Nurse Case Manager

Contact MGH Case Management at 617-726-3666 approximately one month prior to your surgery (or sooner if your surgery date is less than one month away) to schedule a 15-20 minute telephone interview with a Preadmission Orthopaedic Nurse Case Manager. During this interview, the Nurse Case Manager will complete an assessment of your discharge needs and assist you in making custom arrangements for your continued recovery following your hospital stay.

Read through this Guide prior to your Preadmission Testing & Discharge Planning Interview with the Nurse Case Manager. This educational tool will provide valuable information for preparing & planning your surgery and aftercare.

The Preadmission Orthopaedic Nurse Case Manager will review your discharge options. Many patients are discharged home with either home care services including visiting nursing, physical therapy and occupational therapy, or are discharged directly to outpatient physical therapy. Some patients may require a short term inpatient stay in a Skilled Nursing Facility (SNF) for rehabilitation.

The Preadmission Orthopaedic Nurse Case Manager will assist you in making tentative discharge arrangements based on your anticipated needs and your insurance coverage.

See page 31 for more information on discharge options.

Dental Work

If you have dental work done after your joint replacement surgery, you will need to take antibiotics prior to the dental procedure to prevent infections in your joint replacement. Therefore, many patients find it easier to have their dental work done prior to their joint replacement.

We recommend patients have any needed dental work completed at least two weeks before elective joint replacement. If you need to have dental work done after your hip replacement, you can find more information on page 36.

Taking Medications Prior to your Surgery

10 days before your surgery, stop taking anti-inflammatory medication. If you take aspirin because of its potential benefits, please stop that as well. HOWEVER, if you take aspirin to prevent clotting of any stent or cardiac or vascular graft or because you have known heart disease, DO NOT STOP your aspirin.

In most cases for patients on Coumadin, you will be asked to stop taking it five days before surgery and have a blood test the morning of surgery to make sure your blood is not too thin. For patients on Plavix, you should only stop if you have direct instructions from your cardiologist that it is safe to do so.

Check with your physician or nurse practitioner about the medicines you take now and any medicines you feel you will need on the day of your surgery.

Diet on the Day of Surgery

Do not eat or drink anything after 10:00 pm the night before surgery, unless otherwise instructed. You cannot have water, mints, candy or chewing gum.

If you are taking any heart or blood pressure medicine, those medications may be taken with a sip of water early on the morning of your surgery.

Some patients are given instructions that allow them to drink clear liquids up until four hours before their scheduled surgery. If you were given these instructions, the anesthesiologist will give you a list of appropriate liquids.

Showering with Antimicrobial Soap Before Surgery

Preventing a surgical wound infection is important to your recovery. One way you can help prevent infection is by bathing with an antimicrobial soap before your surgery.

Patients should shower with Chlorhexidine (also called Hibiclens) two days before their surgery and the morning of their surgery (meaning once a day for three days). Showering with Chlorhexidine before surgery may lower your risk for infection by reducing the germs on your skin. Chlorhexidine can be purchased over the counter at a pharmacy or grocery store, or it may be provided to you by your surgeon at your PATA evaluation.

Use Chlorhexidine soap instead of your regular soap - do not use both, as this dilutes the effect of Chlorhexidine. Using a sponge can help with lathering because Chlorhexidine soap does not lather as well as regular soap.

DO NOT USE Chlorhexidine:

- if you have an allergy to chlorhexidine-containing products
- on your head or face (If you get this soap into your eyes flush with water)
- on the vaginal area

Showering Instructions:

These instructions differ from what is on the Chlorhexidine package. Package instructions are meant for surgeons using this product prior to performing a surgical procedure. Please use the following instructions for showering:

- Rinse your body thoroughly with water first.
- Turn the water off to prevent rinsing the Chlorhexidine soap off too soon.
- Wash from the neck downwards. Be especially careful to wash the part of your body (back, legs, chest, etc.) where your operation will be performed.
- Wash your body gently for five minutes. Do not scrub your skin too hard. You can use a sponge to help with lathering.
- Turn water back on, rinse well and pat dry with a clean towel.
- Do not apply powder, lotion, deodorant or hair products after third shower.
- Do not shave the area of your body where your surgery will be performed. Shaving increases your risk of infection.

Preparing your Home

Prior to your surgery, there are several things you can do to make your home and bathroom safer and more comfortable when you return after joint replacement:

Your Home

- For convenience, consider keeping a cordless phone near you or carrying your cell phone.
- Move furniture to make clear paths to your kitchen, bathroom and bedroom. You may be using a walker for a few weeks after your surgery, so you will need more room to move around.
- Consider setting up a bed on the first floor of your home, if your bedroom is not already there. It is easier to manage until you are comfortable using stairs.
- Move items in your home to waist level or higher. This will prevent you from having to bend to reach items.
- Remove throw rugs that may cause you to slip or trip. Tape down any loose edges of large area rugs and extension cords.
- If possible, prepare and freeze meals before your surgery.
- Some patients arrange for a relative or friend to stay with them for 2-4 weeks after surgery.
- Stock up on necessary items like groceries, toiletries and any medications you might need.
- Make a plan to have your bills paid while you are recovering - whether that is signing-up for online bill pay or arranging with a friend or relative who can help you.
- After surgery, if you have limited knee range of motion and stretch, use a firm, sturdy armchair, and do not sit in a low/soft chair or sofa. Sit in an armchair that keeps your hips higher than your knees. Your physical therapist will discuss this.

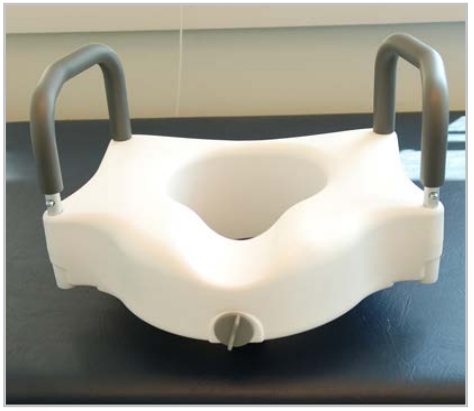
Preparing your Bathroom

Your Bathroom

- Place a rubber mat or non-skid surface in the tub to prevent slipping.
- After surgery you should only take showers, not baths for the first month. Installing a grab bar on your tub or shower wall will help you keep your balance. Do not hold onto a soap dish on the wall. Soap dishes are not meant to hold your weight.
- If you have difficulty with movement or balance following your surgery, you may want to purchase a tub bench or shower chair to decrease your risk of falling when showering. A hand-held shower head can also decrease the amount of movement required when showering.
- If needed, an elevated toilet seat (pictured below) will be provided for you at MGH, which you can bring home.

Hand-held shower head

Tub bench



Elevated toilet seat

What to Bring to the Hospital

- ☐ Insurance and prescription cards
- ☐ List of medications and allergies
- ☐ Specific medications your surgeon's office told you to bring
- ☐ If you use an inhaler, please bring it with you
- ☐ Flat, comfortable athletic or walking shoes (slip-on shoes can be helpful and easier to wear after surgery)
- ☐ Short, wrap-around bath robe (long bathrobes can lead to tripping)
- ☐ Elastic waist-band pants and pajamas
- ☐ Personal toiletries (MGH will provide basic toiletries, but if want specific products, bring them from home).
- ☐ Books, magazines or other hobbies (such as knitting)
- ☐ Eyeglasses and a case for storing them – NOT CONTACT LENSES
- ☐ Dentures or hearings aides and cases for storing them

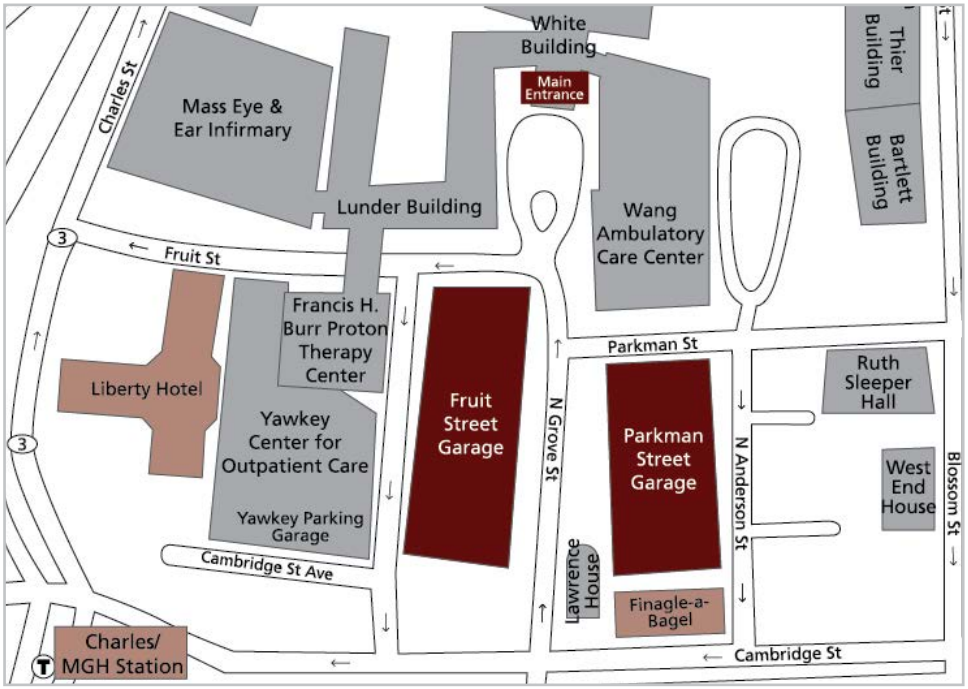
DO NOT BRING any personal valuables such as jewelry, credit cards or large amounts of cash. There are two ATMs located in the White Building (Bank of America & Citizens Bank).

Day of your Surgery

Parking at Mass General

Validated parking rates:
0-1 hour: $10
1-2 hours: $11
2-24 hours: $12
Valet parking: $15

If the person who drops you off for surgery is planning to stay during your procedure, they should park in the Fruit Street or Parkman Street garage. MGH patients and visitors who park in these garages are eligible for discounted parking rates. Parking tickets will be validated at the Cashier in the central payment office on the ground floor of each garage. Valet parking is available after 6am at the Wang Building. Cost for valet ranges from $13-$18.



Checking-in at Mass General

When you arrive at MGH on the day of your surgery, first report to the Center for Perioperative Care (CPC).

MASSACHUSETTS GENERAL HOSPITAL
Center for Perioperative Care

How to get there:

- Go to the Wang Building (either through entrance next to the valet parking entrance or through the main lobby of the White Building).
- Use the Wang elevators and proceed to the 3rd floor.
- Follow the signs for the CPC and check-in at the reception desk

A staff member will check you into the CPC the morning of your surgery

Assistance & Information

Ambassadors wearing coral jackets, are omnipresent in MGH's main lobby and also in the Wang building lobby. Ambassadors welcome and direct patients arriving at the hospital and help patients and visitors with special assistance requests such as getting out of the car or into a wheelchair.

Ambassador Rene Thomson greets patients in the main lobby of MGH

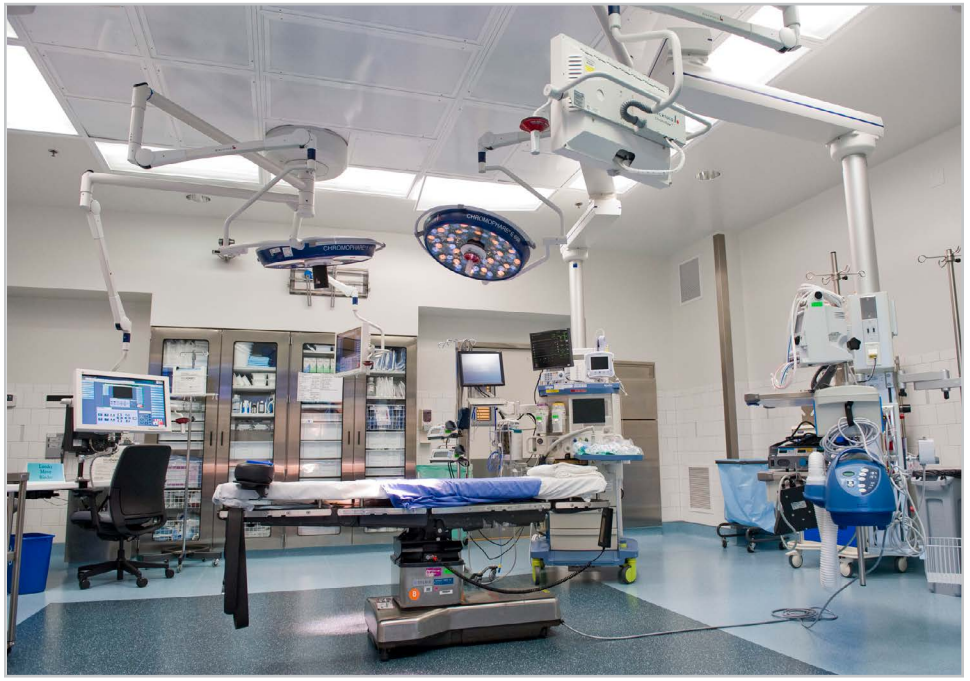
Admission to the Hospital

At the Center for Perioperative Care

You will meet with a nurse at the CPC. Please have a list of your medications and allergies ready. If you are on an inhaler, please bring it with you to the hospital. You will change into a hospital gown and be asked to use the bathroom before leaving the CPC. Your family can stay with you until you are escorted to the operating room.

As you are escorted to the operating room, family members will be directed to the Gray Family Waiting Area. It is located on the first floor of the Gray Building (Room 145). Let your nurse know if you have family members and/or friends waiting for you in this area. If somebody should be called, give your nurse the phone number to reach your contact person.

After surgery, you will be taken to the Recovery Room (Post-Anesthesia Care Unit (PACU)) where you will remain for two to four hours. You then will be transported to your assigned room. The receptionist in the Gray Family Waiting Area will update any visitors of your progress.



An operating room in the Lunder Building

Outside the Operating Room

Before you are taken into the operating room, you will:

- Check into the CPC and meet with a nurse
- Change into a hospital gown and use the bathroom
- Let the nurse know if your family members or friends will be staying during your surgery

In the Operating Room

Once you are in the operating room:

- The area around your knee will be shaved
- You will have an IV started in your vein
- You might be given medication to make you sleepy
- A urinary catheter will be inserted after you receive an anesthetic

A hip and knee replacement surgeon during surgery.

Information for Visitors

There are many amenities in and around MGH for any visitors you may have. The Gray Family Waiting Area where your visitors can wait is located near Coffee Central and the Eat Street Cafe. See the corresponding map on the next page to find out where the following amenities are located. Feel free to ask any of our jacketed ambassadors in the lobby.

Food: MGH Campus

1. Eat Street Cafe:
   Ellison Bldg, lower level
2. Coffee Central:
   Gray Bldg, main lobby
3. Tea Leaves and Coffee Beans:
   Wang Bldg, main lobby
4. Riverside Cafe:
   Yawkey Bldg, main lobby
5. Coffee South:
   Yawkey Bldg, main lobby

Drug Stores

14. MGH Pharmacy:
    Wang Building, 1st floor
    617-724-3100
15. CVS Pharmacy:
    (next to MGH T Station)
    155 Charles Street
    617-523-1028
16. CVS Pharmacy:
    191 Cambridge Street
    617-367-0441

Food: Around MGH

6. Antonio's:
   288 Cambridge Street
7. J. Pace & Sons:
   75 Blossom Court
8. Starbucks:
   222 Cambridge Street
9. Dunkin Donuts:
   106 Cambridge Street
10. Au Bon Pain:
    209 Cambridge Street
11. Finagle-a-Bagel:
    277 Cambridge Street
12. Whole Foods:
    181 Cambridge Street
13. Anna's Taqueria:
    242 Cambridge Street

Hotels

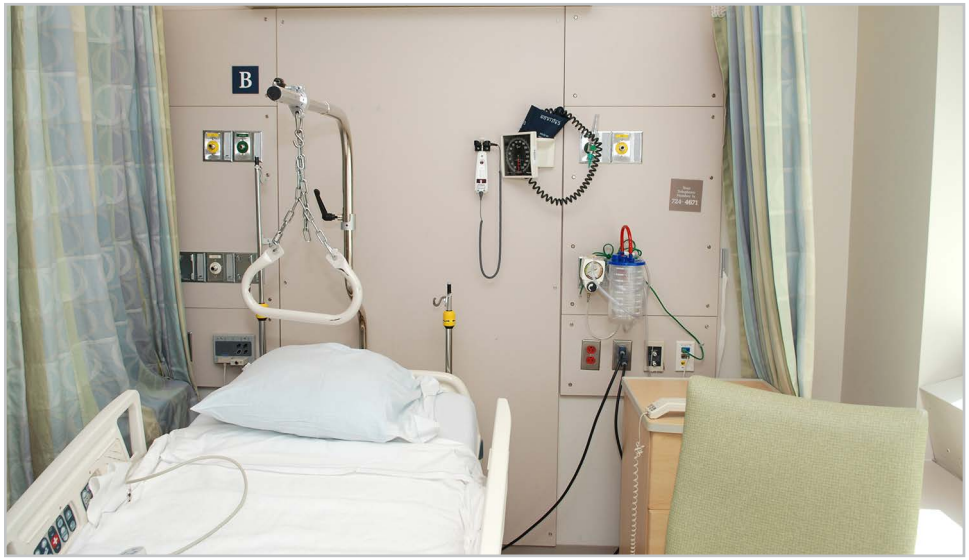
17. Wyndham Hotel:
    5 Blossom Street, Boston
    1-888-465-4329
18. Liberty Hotel:
    215 Charles Street, Boston
    617-224-4000
19. Bulfinch Hotel:
    107 Merrimac Street, Boston
    617-624-0202
20. John Jeffries House:
    14 David Mugar Way, Boston
    617-367-1866
21. Beacon House:
    119 Myrtle Street, Boston
    617-523-8295

What Happens after your Surgery

Day of your Surgery

After your surgery, you will be taken to the Recovery Room (PACU) until you are well enough to go to your assigned room. Most patients are able to walk with assistance from physical therapy (PT) or nursing the same day as their surgery.

A bay in the PACU where you go after surgery to recover from anesthesia



A typical inpatient room where you are moved after you leave the PACU

Post-Operative: Day 1

Your *urinary catheter* may be removed the day of your surgery. If not, it will be removed the next day (post-operative day 1).

The morning after surgery, a member of your doctor's team will check your dressing. They will remove any drains you may have. Your nurse will pre-medicate you with pain medication in anticipation of your morning physical therapy session. The nurse will ensure your thigh high compression stockings (TEDs) are on during the day to minimize swelling and the risk of DVT. You will also begin receiving your blood thinning medication to prevent DVT and pulmonary embolism.

You will work with a Physical Therapist who will show you how to use a walker or crutches, and give you exercises to complete while in bed. A goal for today is to walk to the nursing station and spend as much time as possible out of bed and in a chair.

Based on your progress, the Inpatient Nurse Case Manager will follow-up with you and other members of your inpatient care team to confirm or revise your preadmission discharge plans.

Jill Pedro, Clinical Nurse Specialist, explains how to use the call button

Post-Operative: Day 2

A member of your care team will come by in the morning to change your dressing. You will continue to work on your mobility, and your nurse and doctor will work together to control your pain. You may even learn to walk up and down stairs with your crutches.

If you have achieved your goals for discharge to your home and are medically stable, you will be able to continue to recover at your home and essential services will be arranged. Many of our patients discharge directly home from the hospital. Home equipment orders will be provided to the Home Care Agency, or you may be provided with a prescription for outpatient physical therapy.

A physical therapist works with a patient after surgery

If you made an outpatient PT appointment for sessions to begin within a few days of your hospital discharge, you may be able to discharge home and attend these outpatient sessions. You may not need any home care services.

If your care team determines you are ready and you have been approved to go to a facility, you may transfer to that facility to continue your recovery until you are able to go home. Any necessary equipment will be ordered by the facility.

Some insurance, like Medicare, require patients to have a three night qualifying stay at the hospital before they would be covered by the insurance at a Skilled Nursing Facility. Please note that, most insurance plans do not cover bathroom equipment, but you are encouraged to check with your insurance company.

Post-Operative: Day 3

On post-operative day three, the same information applies as with post-operative day two. However, for patients who have not achieved their goals or are not medically stable and need to stay another day, your Physical Therapist, Nurse and Inpatient Nurse Case Manager will continue to work with you to achieve those goals and make your final discharge arrangements to home or to a facility.

At your convenience, you should call your doctor's office to schedule your post-operative visit, which will typically occur four weeks after your surgery.

Physical Therapy (PT) & Exercise

You will continue to work with the physical therapist on exercises and functional training throughout your hospital stay.

The first day after surgery you will meet with a physical therapist who will initiate exercises and progress your mobility. The following days, you will continue to progress your activity by practicing walking/gait training, using a walker (before advancing to crutches) and stair training.

For the first four to six weeks after surgery, you likely will need to use support, usually a walker, crutches or a cane. When you progress off support depends greatly on your health, strength and stability. Along with our office, your physical therapist will help you make the right transition.

Most insurance companies permit a limited number of home visits for physical therapy. If your home PT expires before your first visit, please call the office and we will fax a prescription to the facility of your choice. If you continue with home PT until your first post-operative visit, we will give you a prescription for outpatient physical therapy at that time. Many patients continue with outpatient physical therapy for an additional four to six weeks.

See page 49 for more information on physical therapy and common exercises you will do at home.

Deep Breathing

You will continue breathing exercises using the incentive spirometer, coughing and deep breathing. It is important to keep your lungs free of fluids and mucus.

Fluids & Diet

Most patients start eating solid food the first day after surgery. Depending on your unique situation, your doctor may recommend a clear liquid diet until you are ready to eat solid food.

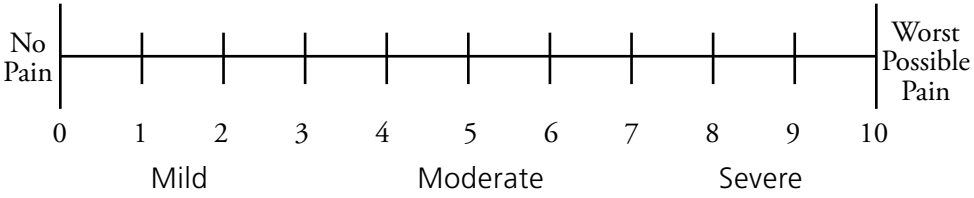
Pain Management

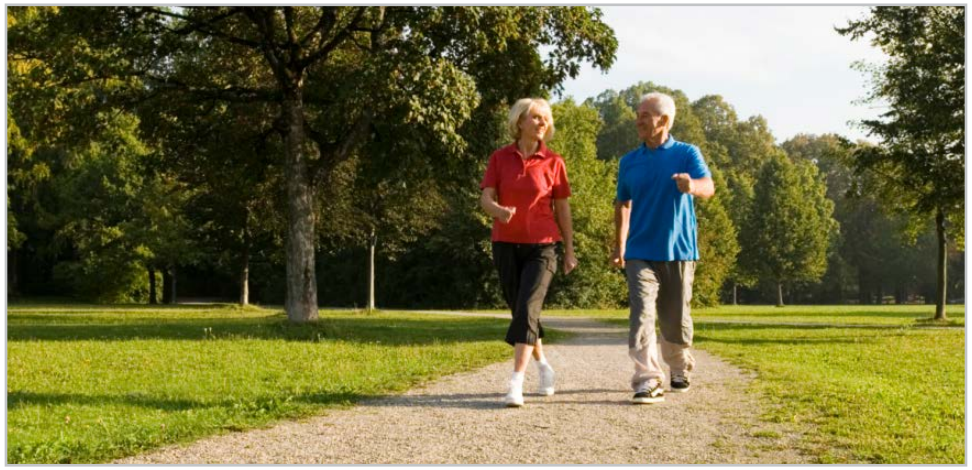
During the first 4-6 weeks after surgery, patients often need to take narcotic pain medication. Most people are able to stop taking narcotics by four weeks post-operative. If you require narcotic pain medication beyond the normal post-operative course, you will be referred to the Pain Clinic or to your Primary Care Provider for further pain management.

Acetaminophen (eg. Tylenol) or nonsteroidal anti-inflammatories (NSAIDs: eg. Ibuprofen, Motrin, Aleve, Advil) are very effective for managing post-operative pain. NSAID's are good at alleviating swelling and pain and are often more effective than narcotics. You should only take NSAIDs if they do not upset your stomach and it is okay with your doctor.

Remember: Some narcotic pain medications cannot be called into a pharmacy. Plan ahead if your prescription is running low to allow for postal delivery.

Pain Rating Scale





Your Discharge from Mass General

If you are being discharged home, any necessary home equipment will be ordered for you. If you are using a Home Health Care Agency, your care team will let the agency know what equipment you need. If you already have an outpatient physical therapy (PT) appointment scheduled, you may be given a prescription for the PT. If your surgeon feels that you should transition to outpatient PT prior to your first follow-up appointment, you may be given a prescription for PT. If you are being discharged to a facility, any necessary equipment will be ordered by the facility.

Most insurance does not cover bathroom equipment, but you can check with your insurance company. You could also borrow equipment from friends/family, or contact your local Council on Aging/Senior Center, as many of these organizations may loan you these items.

Time of Discharge

At the time of discharge, you will be provided with a discharge summary that includes:

- your current medications
- a summary of your hospital stay, and
- instructions for post-operative follow-up at Mass General

Please call your doctor's office at your convenience to schedule your post-op visit. Most patients return to the office in 4-6 weeks and see one of our Nurse Practitioners (NP) or your surgeon. During this visit, we will assess your incision, evaluate your functional mobility status, review your x-rays and address any questions you may have.

You will return to the office periodically (3-6 months, 1 year, 3 years, 5 years, 7 years, and 10 years) for repeat x-rays and a thorough evaluation. During these visits, you will participate in surveys regarding your general health, level of activity, pain and other symptoms. These "Outcomes" scores help us monitor how our patients fare before and after a joint replacement, and provides valuable information back to our clinical team to improve the care we provide. Mass General Orthopaedics is a pioneer in compiling such valuable information about the quality of our services.

Care Plan Immediately Following Discharge from Mass General

Once discharged from Mass General, one of the following will happen:

- Outpatient Physical Therapy
- Home Care
- Skilled Nursing Facility Rehab
- Acute Rehabilitation Hospital

Outpatient Physical Therapy (PT)

You need to be up and around, and doing well, to go directly home from the hospital and participate in outpatient PT. You need to have transportation to your physical therapy appointments and a plan to have your surgical staples taken out.

Some patients schedule outpatient PT appointments prior to surgery to ensure availability of an appointment after discharge. Speak with your surgeon on when and if you should make an appointment. You will need a prescription from your surgeon.

Home Care

If you are independently mobile with the assistance of a walker or crutches, housebound and independent in your exercise program, you may be discharged directly home with home care services.

Home care services are intermittent (one to several times a week depending on your needs) and are provided by a Home Health Care Agency, which is similar to ***Visiting Nurse Agency (VNA)*** that is contracted with your insurance. These services need to be ordered by your physician if medically necessary. Home care services may be provided by visiting nurses, physical and/or occupational therapists. The duration of services is determined by your home care provider and physician based on your needs and progress.

The Preadmission Orthopaedic Nurse Case Manager will identify local agencies contracted with your insurance and can initiate a referral to the agency of your choice. An Inpatient Nurse Case Manager will follow up on your progress in the hospital and confirm home care referrals.

Skilled Nursing Facility Rehabilitation (SNF)

If you are not independently mobile and do not have assistance at home, you may need an inpatient rehabilitation setting. To qualify for inpatient rehab in a SNF, you need to meet criteria for admission and have insurance coverage. SNFs are primarily nursing homes that provide short term rehabilitation in addition to long term care. They provide skilled nursing, physical and occupational therapy.

The Preadmission Orthopaedic Nurse Case Manager will provide you with options of SNFs contracted with your insurance. You, along with your family and friends, are encouraged to tour facilities and inform the Preadmission Orthopaedic Nurse Case Manager of your selections before your surgery.

Referrals per your request will be initiated by the Preadmission Orthopaedic Nurse Case Manager in an effort to secure bed availability. There is no guarantee of bed availability, unless the facility has a prebooking policy, so we encourage you to provide more than one option.

An Inpatient Nurse Case Manager will follow up on your progress in the hospital and confirm the SNF referrals, acceptance by facility, insurance authorization and bed availability.

Transportation

The Inpatient Nurse Case Manager, with your doctor and therapist, will assess the most appropriate transportation for you to travel home or to a facility. The Inpatient Nurse Case Manager will also identify insurance coverage and assess if an ambulance is medically necessary. Most patients can travel home in a car. Most insurances don't cover an ambulance home and some do not cover any ambulance transportation.

Discharge time is approximately 10:00am, but speak with your inpatient care team for the most accurate timeframe for your discharge.

Acute Rehabilitation Hospital

If you are not independent with your mobility, do not have assistance at home and have complex medical issues, you may qualify for intense medical management and rehabilitation.

It is unlikely that a patient undergoing single total joint replacement surgery will meet admission criteria for this level of care, but if so, you also need to have insurance coverage for this.

The Preadmission Orthopaedic Nurse Case Manager can provide additional information if you feel that you may qualify for this level and explore further qualifying criteria and options with you.

An Inpatient Nurse Case Manager will follow up on your progress in the hospital and confirm the acute rehabilitation referrals, acceptance by the facility, insurance authorization and bed availability.

MGH Outpatient Pharmacy

The MGH has an outpatient pharmacy, which is located on the first floor of the Wang Ambulatory Care Building.

If you are being discharged home, you can get your prescriptions filled here before you go home. Please have your prescription card with you so the pharmacist may verify your insurance coverage and what out-of-pocket costs you will incur. The pharmacy accepts cash, credit cards and checks. Payment is due when medications are picked up. Your pharmacy costs cannot be added to your inpatient hospital bill.

Inform your nurse as early as possible if you are interested in utilizing the MGH outpatient pharmacy. If you are transferring to another facility, discharge prescriptions will be coordinated by the facility.

Hours of Operation:	Mon-Fri: 9:00 a.m. – 5:30 p.m. Sat-Sun: 9:00 a.m. – 12:30 p.m.
Phone Number:	617-724-3100

Taking Care of your Skin After Surgery

It is important to carefully monitor your skin after you return home from the hospital. Examine all areas of your skin, and in the areas you cannot see, ask somebody else to look for you or try using a hand magnifying mirror. Areas where your bones are near the surface of the skin can break down and cause sores. A sore will look pink or red at first, and then the skin might break open.

Areas to examine include:

- shoulders
- elbows
- hips
- buttocks
- heels

These areas should be kept clean and dry. Rub these areas with lotion to help circulation, but do not put lotion directly on your hip incision. Let your doctor know if you have any areas on your skin that are red or have an open sore.

Your Surgical Incision

You may shower at any time. It is best to keep the incision dry with a bandage while you shower. Once you are out of the shower, change the dressing. The general rule is to keep your knee incision clean and dry. A dry sterile dressing should be applied until there is no drainage at the incision site. At that point, your incision can be open to the air.

If the staples catch on your clothes, you may continue to cover it with a gauze dressing. The staples will be removed approximately 10 days after your surgery. If you go to a facility, your staples may be removed there depending on how long you stay. If you are discharged before the staples are removed, the facility will need to make arrangements for the home health agency to remove the staples in your home. If you don't require home care services, then you will need to make an appointment with your PCP or surgeon.

If you are going directly to outpatient PT, arrangements need to be made with your surgeon's office or your Primary Care Physician to remove the staples.

Many patients have their skin closed with sutures under the skin that dissolves on their own. No staples are used in such cases.

Preventing Infection - Antibiotic Prophylaxis

The word prophylaxis means prevention. If you are having any kind of medical procedure after your joint replacement surgery you need to take antibiotics to prevent infections. This includes any dental work (including cleanings), upper respiratory tract procedures such as an endoscopy, or before any genitourinary/gastrointestinal procedures such as a colonoscopy.

Joint replacements usually are very successful and patients can return to an active lifestyle soon after the surgery. Still, patients should be cautious about the potential for an infection. Infection of any joint replacement is a serious concern and may even require removal of the joint replacement components.

Bacteria from your mouth can spread to your blood and from there to your joint replacement, particularly in patients with ongoing dental problems. Thus, good oral hygiene can prevent infection of a joint replacement. Even prior to having a total joint replacement, patients should aspire to achieve good dental health and resolve their dental issues. Importantly, patients with joint replacements should be diligent in maintaining daily oral hygiene.

If you are having any dental procedures, an endoscopy or colonoscopy, tell your doctor that you have a joint replacement and may require preventive antibiotics. Your doctor will recommend appropriate antibiotics before the procedure if you are within two years from your joint replacement surgery. After two years, you may still need antibiotics before dental work if your immune system is compromised, or if you have certain medical conditions putting you at a higher risk of infection.

Your doctor will determine the specific drug and dosage appropriate for you.

Patients at Increased Risk of Joint Infections

- All patients during the first two years after joint replacement.
- Patients whose immune response is suppressed by medications, chemotherapy or radiation therapy; or patients with diseases such as rheumatoid arthritis or systemic lupus erythematosus.
- Patients with a previous joint infection, or with medical conditions, such as hemophilia; HIV infection; insulin-dependent (Type 1) diabetes or any cancer.

Driving After Surgery

Patients ask when they can begin to drive again after having joint replacement surgery. Your surgeon, nurse practitioner or physician assistant will consider several factors and advise you whether it is safe or unsafe to drive. Please discuss your driving needs with your doctor's office. In general, patients can drive 2-3 weeks after surgery when they are no longer taking any narcotic pain medications.

Preventing Blood Clots

You will be prescribed medication to prevent blood clots from developing. This medication may be an injection and/or a pill. If your doctor decides injection is your best option, your nurses will teach you how to give yourself these injections. It is important to know the signs & symptoms of a blood clot:

- Pain and tenderness in the calf of the leg
- Swelling in the leg that does not go down with rest and elevation
- Low grade fever

Remember to wear your TED elastic stockings when you are walking or sitting and have someone take them off at night when you go to bed. If either of your legs becomes swollen, get into bed and elevate your legs on two or three pillows. If the swelling does not go down, call your nurse or doctor.

When to Call a Nurse or Doctor

- If you have chills or a fever greater than 101°F (38.3°C)
- If you develop pain at your incision site that gets worse
- If you have redness, swelling, incision pain, drainage (such as blood), pus or a foul smell at the incision site
- If you develop calf pain or tenderness in either leg, swelling, redness or a low grade fever

What to do in an Emergency

- If it is an emergency, go to the MGH Emergency Room or the closest ER. If it is a life-threatening situation, call 911
- If you have chest pain and/or shortness or breath, call 911
- When you are able, have the ER physician notify your surgeon

Walking after Total Knee Replacement

After your TKR, continue using your walker or crutches until your surgeons tells you it is okay to stop using them.

When turning with a walker or crutches DO NOT PIVOT OR TURN on your operated leg. Always turn taking small, well-placed steps, and turn AWAY from your operated leg.

As you gain strength and endurance, you will advance to a two-point gait pattern. This means you will move the crutches and operated leg at the same time, and then move your good leg beyond the crutches.

In this gait pattern, you should distribute one third of the weight to each hand and one third on the operated leg. Early on it may be more comfortable to take more weight on the hands, particularly the hand opposite the operated side.

It is important to remember that while standing, the crutches should always be kept in front of you and slightly out to the side. If the crutches are even with your body when you are standing still, they will not keep you from falling. Also, do not carry your weight on the armpits when using crutches. This can be painful and can cause permanent nerve damage. The weight should be taken on your hands and good leg.

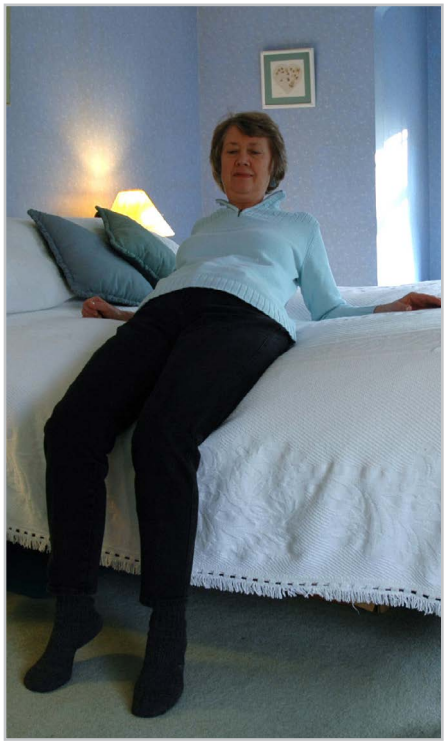
Continuous Passive Motion Device

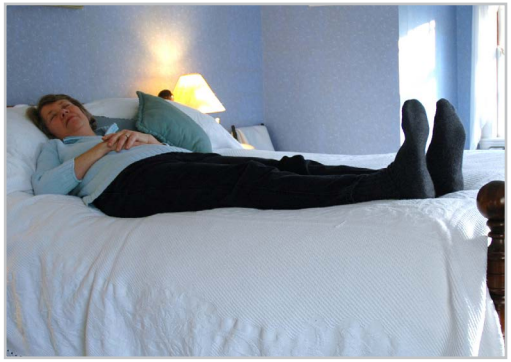
A ***continuous passive motion (CPM)*** device can be used following total knee replacement surgery to slowly and gently flex and extend the knee joint. The device moves your joint without you exerting any effort.

Ask your surgeon if a CPM device is right for you following your joint replacement.

Getting into Bed

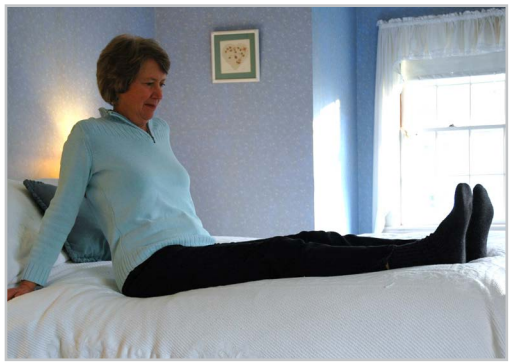
- Sit on the edge of the bed with both feet on ground
- Scoot your hips backwards as you keep your weight on your hands
- Lower yourself onto your forearms
- Slide your legs onto the bed; keep your operated leg straight
- Once in bed, keep your toes pointed up





Getting out of Bed

- Slide your legs toward the edge of the bed; keep your operated leg straight
- Push yourself up to your forearms and onto your hands
- Slide your legs so that your heels are over the edge of the bed
- Scoot your hips forward until both feet are on the ground

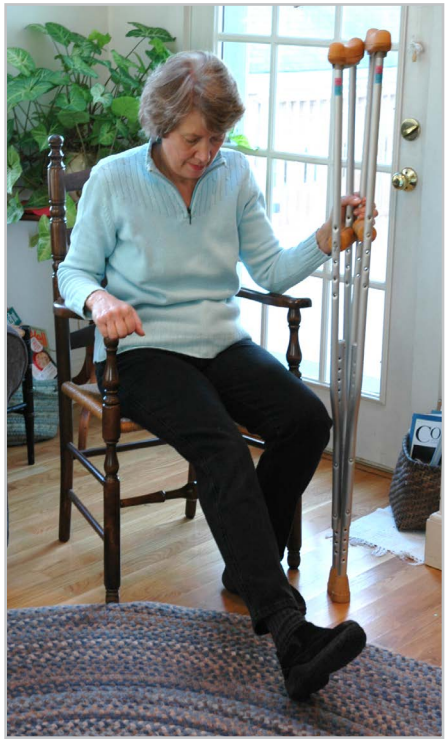


Sitting in a Chair:

To sit down in a chair*:

- Stand in front of the chair. Turn around and back-up until the back of your legs touch the chair
- Place your operated leg far out in front of you
- Place your crutches in the hand opposite of your operated side, and place your free arm on the arm of the chair
- Gently ease down into the chair
- Once you are seated, you may bring your operated leg back so your foot is under your knee

When sitting, always keep your knees lower than your hips. In the early stages, avoid sitting for long periods of time. Get up every 20-30 minutes to stretch up and down on your toes or take a walk before sitting again.



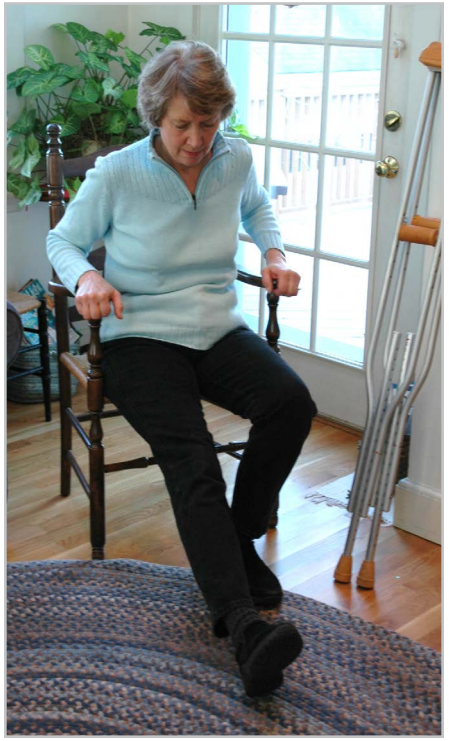
*As your pain subsides and you regain range of motion, you will be able to sit down and stand up from a chair without modifying.

Rising from a Chair:

To rise up from the chair:

- Place the foot of your operated leg far in front of you
- Bring your hips forward to the edge of the seat
- Again, place the operated leg far in front of you
- Push up on the arms of the chair and rise on your good leg
- Do not try to use your operated leg in standing up
- Place the crutches in the hand on the good side and finish standing
- Once standing, place one crutch under each arm

Do not try to get up with your hips at the back of the chair. Always first bring your hips to the front of the seat before getting up.

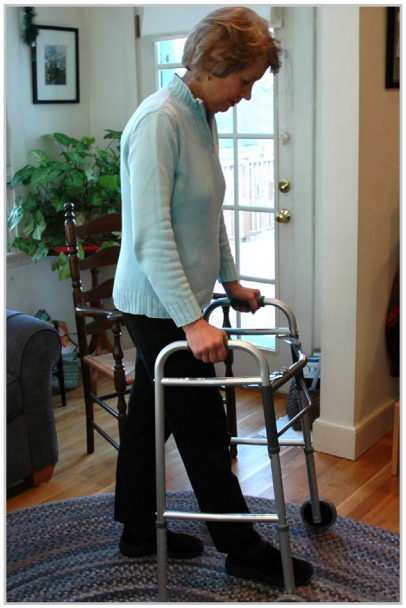


Beginning to Walk after Surgery

At first, you will use a walker as you begin to walk. Once you are steady on your feet, you will progress to crutches.

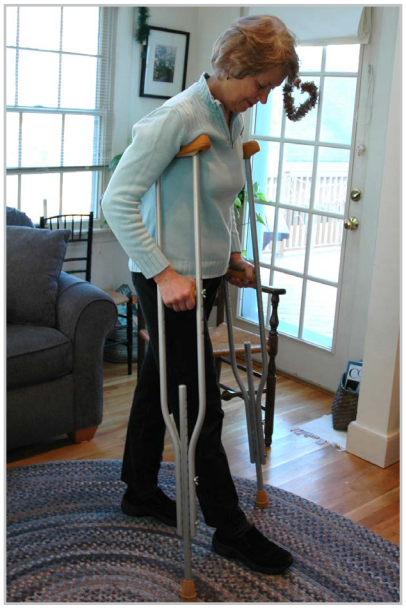
Using a walker:

- Place walker one step ahead of you
- Lean into it and pick up the operated leg, bend the knee and step forward, planting the heel down first
- Bring your good leg up to the front of the operated leg
- Repeat the process



Using crutches:

- Place the crutches one step ahead
- Place weight on your good leg and bring the operated leg up between the crutches
- Bring your good leg up beyond the crutches

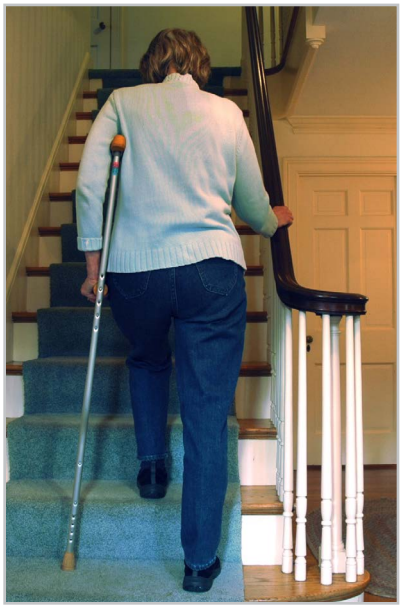


Stair Climbing

You will begin to walk stairs with a physical therapist before you are discharged from MGH.

Going Upstairs:

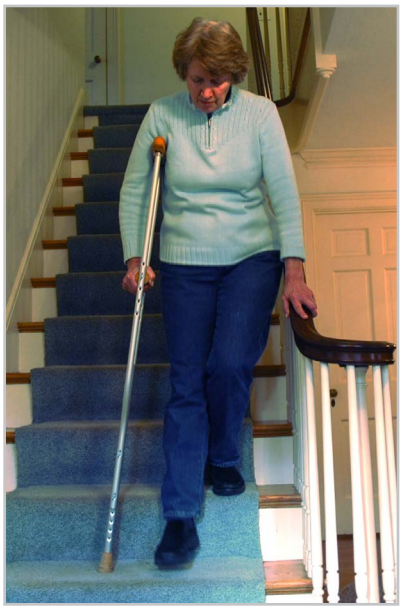
- Put one hand on banister and carry the crutch under the other arm
- Put your weight through your arms and step up with your good leg
- Then step up with operated leg
- Then the crutch



Coming Downstairs:

- Place the crutch under one arm and the opposite hand on the banister
- Start down stairs with crutches first
- Then your operated leg
- Then your good leg

A way to remember this is:
Up with the good leg and down with the operated leg.

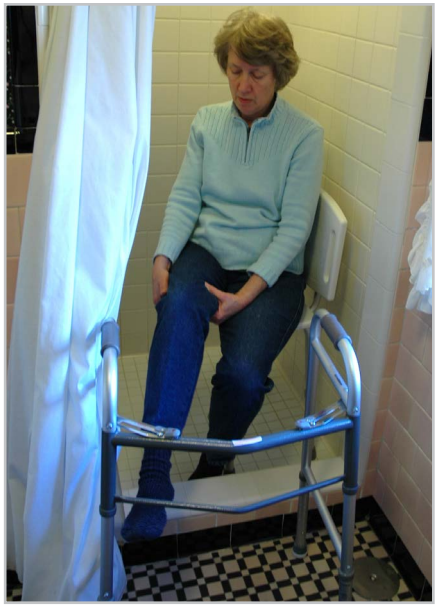


Bathing

Use a stall shower if you have one. It is okay to use a tub shower, but follow the directions given. Use a stable shower chair in both a stall shower and tub shower. Never sit in the bottom of the tub. Have someone help you the first time you shower at home. Place a non-skid mat outside the shower for your safety.

Getting in a stall shower with a chair:

- Walk to the shower with walker. Back-up to the shower stall
- Reach back with one hand for the chair while leaving the other hand on walker
- Sit down on chair and lift legs over threshold of the shower
- Turn to sit facing the faucet



If you are strong enough to stand in the stall shower:

- Walk up to the shower with your walker or crutches
- Step over the threshold with good leg followed by the operated leg

Bathing Continued

Getting into a tub shower with a chair:

- Walk to the tub with your walker and back up to the tub until you can feel the tub at the back of your legs.
- Reach back with one hand for chair; leave other hand on walker
- Sit down on the chair with your operated leg out straight
- Lift your legs into tub, helping your operated leg with your hands
- Keep your operated leg out straight

Getting into a tub shower without a chair:

- Walk to the tub with your walker or crutches
- Facing sideways, have your good leg against the tub
- Bend your good leg at the knee and side step over the tub
- Repeat with operated leg, bending your knee to clear the tub

Bathing Continued

Getting out of a tub shower with a chair:

- Place a robe or towel securely around your body after drying off
- Turn on the seat and lift your legs out of tub keeping your operated leg out straight
- Push off the back of the chair and keep one hand on the walker
- Stand up straight

<u>Assistive Devices</u> for Bathing:

A shower chair (pictured above) or a tub bench (pictured to the right) can make showering easier following your joint replacement surgery.

Getting in and out of Cars

Front seat:

- Open the front door and back up to the seat
- Put one hand on the dashboard and other on back of the front seat
- Sit down & slide back as far as possible in a semi-reclining position
- Bring legs into the car, helping the operated leg with your hands
- Swing your operated leg into car without bending knee above hip
- Reverse the procedure to get out of the car

Back seat:

- Enter the car from the side that allows your operated leg to be supported by the seat of the car
- Slide back into the seat as explained above
- Reverse the procedure to get out of the car

If you had a left total knee replacement, you would enter from the driver's side. If you had a right total knee replacement, you would enter from the passenger side.

Following your surgery, you will have many weeks of physical therapy (PT) to help ease your operated knee back into activity. PT is an integral part of your recovery and is very important in determining the success of your surgery.

After surgery it is important to work with a physical therapist. A physical therapist works with you to create an individualized exercise program that will help you achieve your goals and return to the activities you love. PT will help to improve your strength, range of motion, endurance and function. Exercise has been shown to improve function and quality of life after joint replacement.

These PT exercises are important to your overall recovery – preventing blood clots, improving circulation, improving flexibility and knee movement, and strengthening muscles. While they may feel uncomfortable at first, they will become easier with time and help you return to normal activity.

We have compiled a list of commonly used exercises, but your surgeon and physical therapist may prescribe a specific set of exercises that is best for your unique case.

- ☐ Ankle Pumps
- ☐ Quad Sets
- ☐ Short Arc Quads (Terminal Knee Extension)
- ☐ Heel Slides (Hip & Knee Flexion)
- ☐ Assisted Knee Flexion & Extension
- ☐ Long Arc Quad (Knee Extension & Flexion)
- ☐ Straight Leg Raises

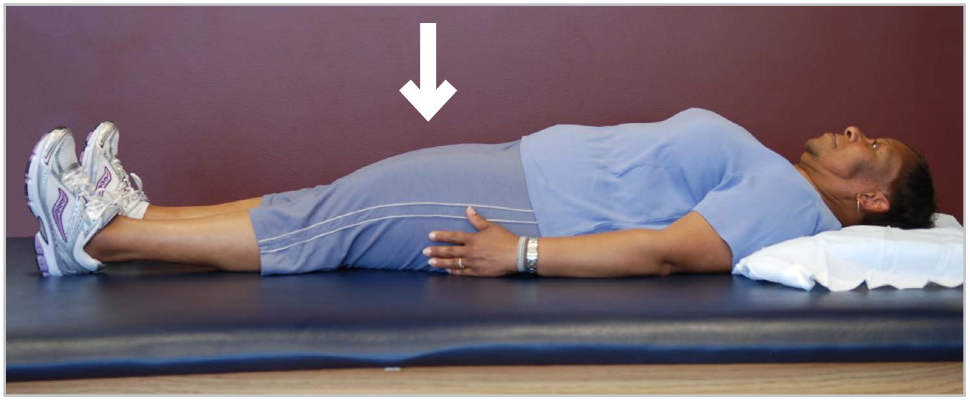
Ankle Pumps:

This exercise will help you increase your ankle flexibility, strengthen your calf muscles and improve blood circulation in your legs. Strengthening the muscles in your lower leg will help support your hip as you recover.

- Lie on your back with your legs extended
- Support operated leg with a folded towel or pillow under your ankle
- Engage your calf muscles, and move your ankle towards your shin
- Hold for five seconds
- Move your ankle away from your shin
- Hold for 5 seconds
- Perform one set of 10 repetitions 3 times a day

Quad Sets:

Quad sets are an important part of your PT regimen because they increase strength in your quadriceps muscle without straining your joint replacement. This is an exercise that uses your muscles without moving your hip or knee.



- Lie on your back with your legs extended in bed
- Tighten the quad muscle on the front of your leg
- Push the back of your knee into the bed
- Hold for 5 seconds
- Perform one set of 10 repetitions 3 times a day

Short Arc Quads / Terminal Knee Extensions:

Short art quads take your quadriceps muscle through a short motion to develop and strengthen this important muscle, improving range of motion in your hip and knee. The quadriceps muscles are a group of four muscles that control your knee joint while you are standing and prevent your knee from buckling.

- Lie on your back with your legs extended in bed
- Support your operated leg with a pillow to keep knee bent at 45°
- Straighten operated leg at knee by lifting only your heel off the bed
- Hold for 5 seconds
- Lower leg back to resting position
- Perform one set of 10 repetitions 3 times a day

Heel Slides / Hip & Knee Flexion:

Heel slides are an important component of your recovery because they stimulate both your quadriceps and hamstring to improve range of motion in your knee and hip. As you build strength throughout your physical therapy, you will be able to bend your knee more comfortably and completely.

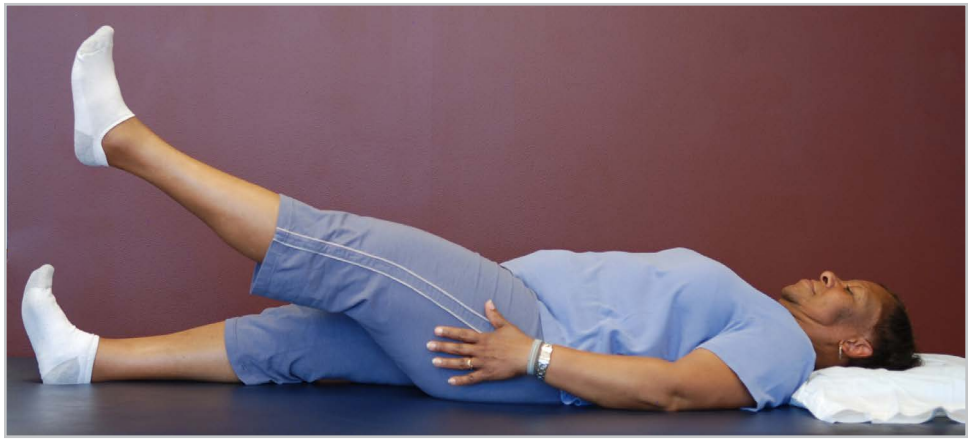
- Lie on your back with your legs extended
- Slide the heel of your operated leg toward your buttock so that your knee and hip bend
- Hold for 10 seconds
- Slide your heel back so that your leg is flat
- Keep the opposite leg flat
- Perform one set of 10 repetitions 3 times a day

Long Arc Quad / Knee Extension:

Active ***knee extension*** increases your knee flexibility range of motion and improves quadriceps strength.

- Sit upright in a firm chair
- Raise your heel forward until the knee is straight
- Hold for 5 seconds
- Slowly lower and bend your knee as far you can
- Perform one set of 10 repetitions 3 times a day

Straight Leg Raises:
Straight leg raises strengthen your quadriceps and help you increase your knee stability.



- Lie on your back with your non-operated knee bent and foot flat.
- Lift your operated leg one foot off the ground.
- Keep your knee straight and toes pointed up.
- Hold for 5 seconds, then relax.
- Perform one set of 10 repetitions 3 times a day.

Following is a list of terms you may hear regarding your surgery:

Aspirin: Aspirin is considered a nonsteroidal anti-inflammatory drug (NSAID) and it is often used to manage pain from arthritis.

Assistive Devices: Items provided by an occupational therapist, which help you maintain your activities of daily living. Examples include a reacher, long-handled show horn, sock aid, dressing stick, long-handled sponge and elastic shoelaces.

Continuous Passive Motion (CPM) Device: A device can be used following TKR surgery to slowly and gently flex and extend the knee joint. The devices moves your joint without you exerting any effort.

Coumadin: Generic name: warfain; coumadin is blood thinner that reduces the formation of blood clots.

Deep Vein Thrombosis (DVT): Formation of a blood clot inside of a body part, often in the legs. DVT usually impacts large veins, and the clot can cause swelling and pain.

Extension: Straightening or extending a flexed limb.

Flexion: Bending a joint or limb; flexion decreases the angle between two adjoining bones.

Hemovac: A drain that is placed at your surgery site to drain blood and fluid from the area.

Incentive Spirometer: A device you use to exercise your lungs; it helps you to take deep breaths. It is used after surgery to help keep fluid from building up in your lungs. Using this device will help to keep you from getting pneumonia. Your nurse will teach you how to use it.

IV (intravenous) or heplock: A small, soft plastic tube inserted in your vein to give IV fluid or medication

Post-Anesthesia Care Unit (PACU): Recovery room where you are taken following your surgery before going to your assigned room.

Patient Controlled Analgesia (PCA): Pain medicine that is in a pump attached to your IV. You control the amount of medicine you receive by pushing a button attached to the pump. Your nurse will teach you how to use it. Depending on your unique care, your surgeon may or may not recommend PCA.

Pneumatic boots: A tubular device that is placed around your legs which inflates and deflates to keep the blood moving in your legs. This helps improve circulation and prevents the formation of blood clots. Depending on your unique care, your surgeon may or may not recommend a pneumatic boot.

PO: Medications taken by mouth.

Prophylaxis: Prevention; antibiotic prophylaxis is the use of antibiotics to prevent an infection.

Plavix: Generic name: clopidogrel; Plavix is used to keep your platelets from clotting to prevent unwanted blood clots.

Skilled Nursing Facility (SNF): A facility (often a nursing home) where patients who are not independently mobile and do not have assistance at home may go for inpatient rehabilitation.

Surgical Dressing: A sterile gauze pad placed over the incision to keep it dry and clean.

TED Stockings: Elastic stockings that increases blood return to the heart, prevents swelling in the legs and prevents blood clots from forming.

Urinary Catheter (Foley): A soft tube placed in your bladder to measure the amount of urine you make. It also prevents retention of urine in your bladder.

VNA nurse: A nurse who is part of a home care agency like a Visiting Nurses Association (VNA). The Home care agency has different healthcare providers including nurses, physical and occupational therapists who can provide intermittent services at home to supplement a patient's independent home exercise program.

Steps to complete *before* your surgery

☐ Read the information from your surgeon's office. Call the office if you have any questions.

☐ Schedule appointments with other doctors (like a cardiologist or PCP) if advised by your surgeon.

☐ Prepare for your Pre-Admission Testing evaluation by gathering your health information including:
- Allergies
- Medications
- Implanted devices
- Medical history

☐ Complete blood work, tests, and other doctor visits.
- Go to the 2nd floor of the Wang Building for blood work & ECGs.
- On weekends, go to the Medical Walk-In Unit (1st floor, Wang Building)

Hours:	Monday	6:00am-6:00pm
	Tues/Wed/Thursday	6:00am-6:30pm
	Friday	6:00am-5:00pm
	Saturday & Sunday	9:30am-3:30pm

☐ Complete your Pre-Admission Testing evaluation either by phone or in-person. Your surgeon will decide which is best for you.

☐ Prepare your after-surgery arrangements:
- Prepare your living space
- Ensure your prescriptions for your usual medications are filled prior to your surgery
- Stock up on prepared foods and groceries prior to your surgery
- Arrange rides

☐ Follow the instructions for the day of surgery as advised by your surgeon.

Note: If necessary, any post-operative recovery like physical therapy, home care, or skilled nursing facility will be arranged by your healthcare team.