### **ORTHOPAEDICS**



# Hip and Knee Replacement Surgery Guide

From pre-op to recovery









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Welcome. Thank you for choosing Main Line Health for your hip or knee replacement procedure. Across its four acute care hospitals, Main Line Health's surgeons perform thousands of hip and knee replacements annually. Our multidisciplinary team approach to care includes surgeons, nurses, anesthesiologists, therapists and care managers—and you can be assured that our team will communicate with you every step of the way.



We want you to be as comfortable as possible for your procedure. This requires you to plan and prepare during the days ahead. To that end, this book will help you:

- Prepare mentally and physically for surgery
- Know what to expect before, during and after surgery
- Understand how your caregivers can help during this time
- Know what equipment will be used while healing
- Know what to expect during recovery

After reading this manual, please check the "pre-op checklist" each week to ensure you're on track with your preparation. In the meantime, we look forward to taking excellent care of you.

Sincerely,

### THE MAIN LINE HEALTH SURGICAL TEAM

Lankenau Medical Center | Bryn Mawr Hospital | Paoli Hospital | Riddle Hospital

# Commonly used phone numbers

### GENERAL QUESTIONS

#### Lankenau Medical Center

Dan van der Kwast | Orthopaedic Program Manager 484.476.8523 | vanderkwastd@mlhs.org

**Bryn Mawr Hospital** Beth Mathews | Orthopaedic Program Manager 484.337.3412 | mathewsb@mlhs.org

Paoli Hospital Donna Levan | Orthopaedic Program Manager 484.565.1537 | levand@mlhs.org

**Riddle Hospital** Donna Levan | Interim Orthopaedic Program Manager 484.565.1537 | levand@mlhs.org

### **DIRECTIONS AND PARKING** mainlinehealth.org/directions

SURGERY DATE CHANGE/ ILL PRIOR TO SURGERY

Call your surgeon's office.

### PRE-SURGERY QUESTIONS

Lankenau Medical Center Preadmissions: 484.476.2530 Day of surgery issues: 484.476.2364

**Bryn Mawr Hospital** Preadmissions: 484.337.4541 Day of surgery issues: 484.337.4905

Paoli Hospital Preadmissions: 484.565.1087

**Riddle Hospital** Preadmissions: 484.227.6236

#### PRE-SURGERY BILLING/FINANCIAL COUNSELING

All hospitals 484.337.1970

#### AFTER-SURGERY BILLING QUESTIONS

**All hospitals** Billing Customer Service: 484.580.4360

# Pre-op checklist

### □ Register for pre-op education.

Call **1.866.CALL.MLH (1.866.225.5654)** or go to **mainlinehealth.org/jointeducation**. Registration is required. Classes fill up quickly and times and dates are subject to change.

- Choose a coach. Select a family member or friend who can drive you to the hospital on the day of surgery, pick up your prescriptions, drive you home on the day of discharge and drive you to medical appointments during recovery.
- Exercise! To get the best results for total hip or knee replacement, it is important to stay active in preparation for surgery (see page 8).

Plan ahead. Please refer to your surgeon and their office regarding any handouts or instructions you receive (see page 7). Talk with your surgeon about whether your procedure is an inpatient or outpatient service (Appendix 4).

#### □ Attend preadmission testing/clearances.

Follow your surgeon's instructions for preadmission testing and medical clearance, which includes a physical examination, medical history and lab tests. Most of this can be done within the hospital. (See page 6).

□ **Take preoperative shower(s).** Follow the special bathing instructions (see page 10).

# Pre-op education (required)

We strongly suggest you attend a pre-op class. These classes are helpful in preparing you for this elective procedure. During the class we will briefly discuss joint replacement basics and what you need to do before surgery as well as expectations for the day of and after surgery. You'll be able to ask questions throughout the class.

### VIRTUAL CLASS (LIVE)

You may attend a virtual pre-op class at any time regardless of which Main Line Health hospital is performing your knee or hip replacement. Classes are 1-1½ hours long and are available on different days throughout the week at varying times for your convenience. Scan this QR code with your electronic device to register for a class.



### ONLINE PRE-RECORDED PRESENTATION

Can't attend a virtual class? Want to share what you have learned with a friend/family member? Our pre-recorded online presentation can provide the support you need.

#### REGISTRATION

To register for a virtual class or pre-recorded online presentation, visit **mainlinehealth.org/jointeducation** or call **1.866.CALL.MLH (1.866.225.5654).** 

# PHONE CALL WITH ORTHOPAEDIC PROGRAM MANAGER

If you do not have a computer, you may call your campus Orthopaedic Program Manager to receive information over the phone. Please see page 2 for contact information.

### BRING SURGERY GUIDE TO THE HOSPITAL

Please make sure you bring this guide to the hospital with you for your surgery as it will be referenced by the staff during your stay.

# An introduction to hip and knee anatomy

### The hip

The hip is one of the largest weight-bearing joints in the body. It is a ball-and-socket joint made up of muscles, bones, ligaments and tendons. The ball is called the femoral head and the socket is called the acetabulum. When it is working properly, the hip allows you to walk, sit, bend and turn without pain.



Normal hip: A healthy hip with smooth cartilage.



Before joint replacement: The smooth cartilage has worn down, causing arthritis.

### The knee

The knee joint is one of the most complex joints in the body. It consists of two bones, the femur and tibia, which are connected by four strong ligaments that serve to stabilize and control the motion of the knee joint. The bones are cushioned by a gel-like substance called cartilage. All of these structures are at risk for damage. There are three compartments usually addressed in a total knee replacement: the two compartments between the tibia and femur (inner and outer) as well as the compartment beneath the knee cap.



Normal knee: A healthy knee with smooth cartilage.





After joint replacement: A new ball and socket creates a smooth functioning joint.



After joint replacement: A new surface creates a smooth functioning joint.

Before joint replacement: The smooth cartilage has worn down, causing arthritis.

## Pre-op arrangements

### SOON AFTER SCHEDULING SURGERY

- Register for pre-op education
- Arrange for a "coach"
- Complete a living will
- Avoid dental work for up to two weeks before surgery
- Preadmission testing
  - Fill out the Medication Tracker (Appendix 3)



### Arrange for a "coach"

During the weeks before your surgery, many people will be asking you about your insurance coverage, medical history, legal arrangements and support plan for when you get home. The following may help:

- Arrange for a "coach"— this is a family member or friend who will act as the first person to receive information from your doctor and health care team.
- If you have a power of attorney for medical affairs or a living will that indicates your health care decisions, you must provide copies of these documents in advance.

### Manage your medical health

Speak with your primary care doctor about staying healthy for surgery, especially if you smoke, have diabetes or are obese.

Working with your physician to optimize your health reduces the risk of infections and poor wound healing.

If you are a current smoker, we advise you to:

- Quit smoking and/or using tobacco or nicotine products for at least two weeks **BEFORE** surgery.
- Avoid smoking cessation products such as Nicorette<sup>®</sup> gum, nicotine patches, nicotine vaping and second-hand smoke. Nicotine, in any form, can delay healing.

Please discuss smoking cessation plans with your doctor. There are new medications available to help with this. Also, you may use the Main Line Health Contact Center at 1.866.CALL.MLH (225.5654) to find out about other resources or cessation classes.

### Dental work

### TWO WEEKS BEFORE SURGERY

- Avoid extractions and periodontal work.
- If you require this work, please schedule well in advance of surgery.

### THE FIRST 90 DAYS AFTER SURGERY

**DO NOT** schedule any invasive procedures including dental work or dental cleaning.

### Preadmission testing and nursing assessment

### ATTEND 10-14 DAYS BEFORE SURGERY

- Routine medical test
- Review list of medications

Your surgeon will provide instructions on medical evaluations needed before surgery, such as:

- Health history and physical exam
- Blood work, EKG or X-rays
- Other medical clearances

Please have the following information filled out on the Medication Tracker (see **Appendix 3**):

- Allergies and side effects from medications and anesthesia
- Medications (prescription and over-the-counter)
- Dose of each medication in milligrams (mg), milliliters (mL) or units and when you take the medications (am vs. pm)

### QUICK TIP

To access your lab work or care summary after discharge, sign up for Main Line Health MyChart before surgery at mainlinehealth.org/connect

### MORE THAN 90 DAYS AFTER SURGERY

- Take one dose of antibiotic before receiving any dental care, if your surgeon recommends.
- Your surgeon will provide additional instructions during follow-up visit.

Please provide us with a list of dietary restrictions (e.g., vegetarian, gluten-free, Kosher).

Finally, please plan to stay about two hours for pre-op clearance at the hospital.

- Your providers will give you instructions and go through your medication list.
- Your providers will also let you know what medication you can take the morning of surgery, if any are allowed.

### Insurance and copay information

For assistance from a financial counselor, see page 2.

# Plan for surgery and recovery

### Seven to 14 days prior to surgery

Follow your surgeon's instructions on discontinuing medications during this time. Those instructions may be in your surgeon's pre-op check list; please refer to that list if you received one.

Please note that for pain, you **CAN** take Tylenol as well as any other medications specifically approved by your surgeon.

If you take blood thinners (e.g., Plavix, Arixtra, Coumadin, Pradaxa, Eliquis or Xarelto), speak with the prescribing physician before stopping any of these medications.

In addition to being discontinued before surgery, some medications may not be resumed for up to 12 weeks after surgery to allow for bone healing. Please check with your surgeon for details on which medications need to be stopped and when your medications can be safely started again.

If you are asked to stop taking medications, please do so 10 to 14 days before surgery or as instructed.

If your surgeon indicates that you need to discontinue taking nonsteroidal anti-inflammatory drugs (NSAID), some of these drugs include the following:

- Ibuprofen (Advil/Motrin)
- Naproxen (Aleve/Naprosyn)
- Meloxicam (Mobic)
- Celebrex
- Indocin
- Voltaren
- Lodine

You may also be asked to stop taking:

- Aspirin
- Osteoporosis medications (like Fosamax, Actonel)
- Vitamins, especially vitamin E and K and fish oil
- Over-the-counter supplements
- Hormone-related medications



### PLAN FOR AT-HOME CARE AFTER SURGERY

Ask yourself: While I'm recovering, who will...

- Help me prepare meals?
- Take me home from the hospital, to my doctor appointments and to physical therapy as directed by my surgeon?
- Have my prescriptions filled upon discharge?
- Care for my pet while I'm in the hospital?

**IMPORTANT:** Always wash hands well after contact with pets. Keep pets clean. No sleeping with pets after surgery.

### SENIOR SERVICES

We all desire to live as healthy and as independently as possible, and yet, adjusting to a new phase of life after surgery often requires support and guidance. Main Line Health is here to serve as your dedicated partner, offering access to an array of health care services and community-based resources.

We are committed to serving seniors, their families and caregivers by providing free information and friendly assistance that meets your specific needs or preferences. **Call 484.580.1234 or email mlhseniors@mlhs.org for questions.** 

### QUICK TIP

Frequent hand washing and daily skin cleansing promotes good health and hygiene. Daily skin cleansing helps remove microbes (germs) that may cause infections. This is especially important if you are having a surgical procedure.

### **PRE-OP EXERCISES**

Presurgery exercise is an important part of the joint replacement journey. Follow your surgeon's plan and take part in pre-op physical therapy, if recommended.

**The five exercises below** are the most important to do consistently up to the day before surgery. Repeat each exercise one to two times per day on BOTH legs. If there is any one exercise that hurts, skip it.

EXERCISES	DATE
Gluteal sets	
Hamstring sets	
Quad sets	
Ankle pumps	
Arm strengthening	

You will perform each of the leg and ankle exercises while lying down on a flat surface, such as a couch or bed, with your legs out straight.



### 1. Gluteal sets

- Squeeze buttocks together.
- Hold for 10 seconds, remembering to breathe.
- Relax your buttocks.
- Repeat 10 to 20 times.

### 2. Hamstring sets

- Dig your left heel into the bed or couch. By doing so, you will feel the muscle on the back of your thigh tighten.
- Hold for 10 seconds, remembering to breathe.
- Relax your leg.
- Repeat 10 to 20 times.
- Repeat exercise with other leg.

### 3. Quad sets

- Press the back of one of your knees down into the bed or couch. By doing so, you will feel the muscle on the front of your thigh tighten.
- Hold for 10 seconds, remembering to breathe.
- Relax your leg.
- Repeat 10 to 20 times.
- Repeat exercise with other leg.

#### 4. Ankle pumps

- Point toes toward ceiling.
- Bend your ankles up and down, as if you were pumping a gas pedal. You may do this with both feet together or alternating feet.



• Repeat 20 times.

### 5. Strengthening your arms

This exercise helps strengthen your arms for walking with crutches or a walker. It makes getting out of a chair easier and is especially helpful for patients who are having bilateral (both) knee or hip replacements.

For this exercise you will start from a seated position in an arm chair.

- Sit with your knees bent and feet flat on the floor.
- Place hands on armrests.
- Straighten arms by pushing down and raising your bottom up off the chair (if possible).
- Hold for five seconds.
- Slowly lower yourself back into the chair.
- Repeat 10 to 20 times.

### **REMEMBER TO BREATHE:**

- Inhale just before you start the exercise.
- Exhale while you perform the exercise.
- Do not hold your breath. Count aloud when performing holding (isometric) exercises.

#### **MODIFY YOUR HOME**

Consider obtaining or placing:

- Firmly attached bars/handrails in shower/bath
- · Stable chair with firm cushion and armrests
- Raised toilet seat with armrests
- Items used daily within arm's reach for when you are home after surgery
- Throw rugs away from walking areas, prevent tripping over them during recovery
- Handheld items and aids you may need (per therapist's advice during recovery)

Prior to discharge from the hospital, your therapists will advise you on what home modifications and aids you may need during your recovery.

Note: Not all insurers pay for assistive devices.

### PHYSICAL THERAPY (PT) ONCE YOU'RE HOME: HOW TO PLAN AHEAD OF TIME

If outpatient physical therapy will be part of your recovery plan, it is your responsibility to make appointments and coordinate rides to appointments until you have been cleared to drive by your surgeon. If physical therapy is part of your postsurgery plan, be sure to contact your insurance company in advance to find out about outpatient physical therapy coverage and copay information.

#### EQUIPMENT

The items you may need following surgery include:

- Walker with front wheels only, no brakes or seat (this can be provided for your hospital stay and may be given to you as you are discharged—insurance approval for coverage not guaranteed)
- Straight cane

Other handheld items you may need and may be available for purchase online or at a medical supply store prior to surgery:

- Grabber reacher
- Long-handled shoe horn
- Dressing stick

#### Note: Not covered by insurance.

### The day before surgery

The day before your surgery, someone will call you between 2–5 p.m. with the scheduled time of your surgery and provide any additional details you might need.

Note: If your surgery is on Monday, you will be called on Friday afternoon.

#### EVENING(S) BEFORE SURGERY

- Use the pre-op soap as directed by your surgeon (the next section reviews instructions on how to use this soap).
- Please refer to anesthesia directions for fasting guidelines prior to surgery. You will receive these directions during your Pre-Admission Testing visit. You can also review that information in your MLH MyChart record on the After Visit Summary document.

### PLAN ON BRINGING TO THE HOSPITAL (IF APPLICABLE TO YOU):

- Photo identification, insurance cards and copay
- Glasses with a case, hearing aids and CPAP or BiPAP machine with mask (write down settings)
- Power of attorney documentation (if applicable)
- Your favorite personal hygiene products
- Shoes with good heel (sneakers, loafers)
- Loose-fitting pants (loungewear or shorts) to accommodate dressings/bandages
- Patients can become temporarily confused after surgery; pictures of loved ones can help you avoid this, as can crossword puzzles or a book
- Cell phone (with charger labeled with your name)
- Walkers (bring for sizing purposes only, if your walker was not purchased and sized for you)

#### PLAN ON LEAVING THE FOLLOWING AT HOME:

- Tight-fitting clothes and flip-flops (safety hazard)
- Jewelry, credit cards, valuables, large sums of cash
- Medications, unless told otherwise

# Taking showers just before surgery

### ONE TO TWO NIGHTS BEFORE SURGERY AND THE MORNING OF SURGERY

- Read instructions provided by your health care provider.
- Use Bactoshield or Hibiclens soaps, unless allergic to these soaps.
- If allergic to these soaps, use an alternative recommended by your physician.

To prepare for surgery, wash with a special antiseptic soap, such as Hibiclens or Bactoshield. Available at local pharmacies (if not given by your surgeon's office or by Pre-Admission Testing), these soaps contain 4% chlorhexidine gluconate. If you're allergic to this or any other ingredients listed on the bottle, do NOT use these products. Talk to your provider about alternatives.

If you are positive for staph (staphylococcus/MRSA), follow the additional instructions in **Appendix 6** regarding the preoperative skin cleansing schedule.

One or two nights before and the morning of surgery, shower or bathe with Bactoshield, Hibiclens or an alternative per surgeon request. Please wash the following areas with regular soap or shampoo, rinsing thoroughly to remove residue:

- Genital area
- Face
- Hair

For all other areas, Hibiclens or Bactoshield should replace your regular soap. Use this product as a liquid soap, applying directly to the skin and washing gently. Do not rub or scrub skin. Rinse thoroughly with warm water.

DO NOT USE Hibiclens or Bactoshield in:

- Head, face, ears or mouth
- Genital area

After washing with antiseptic soap, DO NOT:

- Wash with your regular soap
- Apply lotions, powders or perfumes to areas cleaned with the antiseptic soap

### DO NOT USE HAIR REMOVAL PRODUCTS OR SHAVE AT OR NEAR THE SURGICAL SITE WITHIN 48 HOURS BEFORE YOUR PROCEDURE.

PLEASE REFER TO ANESTHESIA DIRECTIONS FOR FASTING GUIDELINES PRIOR TO SURGERY

# Day of surgery

### Morning of surgery

Take **ONLY** the medications that the preadmission nurse or preoperative physician has instructed you to take with the smallest sip of water.

### Arrival at the hospital

Please arrive on time. Upon arrival, you will meet members of our team, and our staff will ask you to provide the name and cell phone number of your designated contact (likely your "coach").

### LANKENAU MEDICAL CENTER

**100 East Lancaster Avenue, Wynnewood, PA 19096** Come to the main hospital entrance, Frankel Lobby. The registration desk will guide you to your destination.

### **BRYN MAWR HOSPITAL**

### 130 South Bryn Mawr Avenue, Bryn Mawr, PA 19010

Come to the Warden Lobby entrance on Old Lancaster Road. The surgical registration desk is located in the Buck Atrium, adjacent to the Warden Lobby. This is our surgical waiting area and where you sign in. Follow signage.

### PAOLI HOSPITAL

### 255 West Lancaster Avenue, Paoli, PA 19301

Come to the Department of Surgery desk in the Atrium lobby. The Atrium lobby is where you will check in.

### **RIDDLE HOSPITAL**

### 1068 West Baltimore Pike, Media, PA 19063

Come to whichever entrance you were instructed by the person who called you the day before surgery.



### Checking into hospital

At check-in, you'll be escorted to the holding area, where you'll be for one to two hours. A nurse and anesthesia team member will:

- Discuss final preparations for surgery
- Measure your vital signs
- Have you change into a gown and remove your undergarments
- Cleanse you with antibacterial wipes and swab your nose to prevent infection
- Place an intravenous line to administer antibiotic and pain medications

For safety, the surgeon will ask you to confirm your type of surgery (for example, knee/hip replacement), surgical site (for example, knee/hip), and side of body (left or right), before marking the site and confirming your consent. You will meet with the anesthesiologist regarding your anesthesia options (spinal vs. general).

### In the operating room

After surgical prep, you will be transported to the operating room where we will:

- Apply leads for monitoring
- Administer anesthesia (spinal or general)

The surgeon will then perform the procedure.

A member of the anesthesia team will monitor and remain with you during the entire procedure. At the completion of your procedure, you will be taken to the Recovery Room/Post Anesthesia Care Unit (PACU).

### After surgery

After surgery you will meet the nurse who will care for you during your stay in the PACU. The nurse will:

- Apply monitors
- Take vital signs every five to 15 minutes
- Make sure you can feel your feet and wiggle your toes
- Monitor your pain level (on a 0–10 scale)
- Medicate you as needed

### ASSESSING YOUR PAIN

Staff will use a 0-10 scale to assess your pain level.



If you are staying overnight, you will be taken to your new room after you recover from anesthesia.

You will be cared for by an entire team of professionals under the direction of your surgeon. After surgery, you may be seen by the surgeon, resident, nurse practitioner and/or physician assistant to monitor and assure the best possible recovery and care from your surgery.

For Same Day Discharge see Appendix 1 on pages 27-29

### In your room

When you arrive in your room you will:

- Receive a nursing assessment
- Have your vital signs taken often for the first 24 hours and less frequently as you become more awake and alert
- Be given clear liquids and advanced to solid food as per your surgeon
- Be asked about pain

Your nurse will partner with you to always control your pain using the pain scale (0–10) as was done in the recovery room. The nurse will also assess your surgical dressing and orient you to your room and unit (for example, the nurse call light). Members of the care team will instruct you on how to perform exercises that will speed your recovery.

In your room you will also do exercises, such as:

- Ankle pumps: 10 times each hour while awake
- Cough and take deep breaths: 10 times each hour while awake
- Incentive spirometer exercises: 10 times, every one to two hours while awake

Fluid can collect in the lungs after any surgery. Using the spirometer will help you breathe in and out correctly. The staff will instruct you on how to use this effectively.

Members of the care team will be visiting you frequently throughout your stay to check on your well-being and comfort.



# Post surgery

### Pain medication and monitors

After surgery, you may be connected to monitors to ensure you're breathing and other vital signs are recovering fully. Pain medications, both scheduled and at your request, are used to help you walk with assistance as soon as possible and to keep you comfortable. Unless recently given, you will receive medication when your pain increases as well as 30 to 45 minutes before working with a physical therapist. Our goal is to **minimize** your pain so you can focus on healing. Keep in mind that:

- Pain after surgery will be different than the pain you may be feeling now.
- Pain comes from multiple factors, including muscle healing, incision, bone pain and swelling of the joint.
- You will be given different types of pain medication on a schedule. Your nurses will tell you what they are giving you.

# Notify your nurse if you feel that your pain is not well controlled.

For pain, your doctor may prescribe multimodal pain medications—a combination of medications that work together on a schedule to reduce your pain after surgery.

### Preventing blood clots

Early walking after surgery is key to preventing blood clots. The nurses and physical therapists will assist you with walking a few hours after your surgery.

 Your surgeon may or may not recommend medication for prevention of blood clots. Blood work may be needed for as long as you are taking the medication, to make certain the medicine is working properly. Medications come in oral and injection forms. The type you need will be determined by your surgeon. Be sure to follow your discharge instructions.



- Your surgeon may or may not order the use of sequential compression devices (SCD) or compression stockings to reduce blood clot formation.
- Your SCDs need to be worn as prescribed by your surgeon.

If your surgeon wants your SCDs on at all times except when you are actively walking, please partner with the nursing staff to alert them when you return from physical therapy, the bathroom or walking so that the SCDs can be reapplied.

# What you might need immediately after surgery

Based on your physician's protocol, you MAY also have any of the following not yet mentioned:

- Oxygen therapy via nasal cannula or mask
- Incision covered with a dressing
- An ACE bandage covering your dressing from your heel to thigh (total knee)
- Blood pressure monitor
- Pulse oxygen monitor

### Hand washing and hygiene

### CLEANLINESS IS KEY. ASK FOR HELP IF NEEDED!

To minimize the risk of infection, we encourage good hand hygiene and other sanitary practices. After your procedure, we encourage you to:

- Remind doctors, nurses and caregivers to wash their hands.
- Wash your hands after going to the bathroom and before and after eating.
- Ask family and visitors to clean their hands when entering and leaving the room.
- Wash your hands before and after physical therapy.
- Remind staff as necessary that during transport, legs should be covered with a clean sheet.

### Staying well in the hospital

Hospitalization can present challenges at any age. Recovering from surgery presents unique challenges for both patients and providers when it comes to maintaining mental and physical functioning during a hospital stay.

Please be sure to carefully read and follow the instructions you receive from your physicians, the hospital and this guide.

### FOCUS ON FUNCTION

Restoring and maintaining your ability to function well in everyday life should be a priority for both you and your health care providers. During your hospital stay, the nursing staff and therapists will help you do as much as you safely can for yourself.

### KEEP ACTIVE

Not using your muscles for even a few days can cause them to become weak. This is one of the main reasons that we encourage patients to be out of bed as soon as possible with a hospital staff member always present.

### SEE AND HEAR

If you use glasses or hearing aids, remember to bring them with you. Not being able to see or hear well makes it harder to understand what is happening and may slow your recovery.

### SUPPORT

Having a friend or family member call you as much as possible for a day or two can help you stay connected and on track.

### AVOID CONFUSION

Anesthesia can sometimes cause people to be confused or sleepy for up to several days. This happens more often in people who have emergency surgery, have a lot of medical problems, or have dementia or confusion before coming to the hospital. If you experience some confusion after surgery, having family or friends talk with you about your past experiences or shared memories may help you stay anchored and recover more quickly. Visitors can also help you reorient by reminding you of things like the current date, recent or upcoming holidays and other topical subjects. Having a nightlight on in your room may help if waking up in the dark in a strange place makes you feel disoriented. Ask the staff to turn this light on for you if you need it.

### DON'T FALL: CALL!

#### We are here to help you!



Please, get help before you get out of bed. Falling can cause serious injuries and delay your progress. We have found that the most common reason people try to get out of bed by themselves is the need to use the bathroom and the wish to do so in private. We recognize the importance of privacy—we also know how devastating a fall can be. Please ask for and accept help from the staff. Please do not allow your family or friends to remove the alarm.

#### **GOOD NIGHT'S SLEEP**

If possible, try to avoid using sleeping pills while in the hospital, especially if you have not used them at home. These medicines can sometimes cause confusion, poor balance and an increased risk of falling. Instead, try keeping the room bright during the day, staying out of bed as much as possible, and keeping the room quiet and the light low at bedtime. Ask for ear plugs or a warm, caffeine-free drink before bed.

#### PUT YOUR COACH TO WORK

Your coach should play an active role while you are in the hospital, connecting with you and your case manager if needed to discuss your discharge plan. Your coach can also help to reinforce important information from discharge paperwork.

### Physical and occupational therapy

Physical and occupational therapy typically begins the day of surgery. The role of therapy after a total joint replacement is to help you get back to doing things on your own. Unlike other therapies, therapy in the hospital focuses on function and skills to be safely discharged. Physical therapists will assist you in achieving mobility, strength and range of motion during your rehabilitative phase, such as:

- Standing up from bed, chair or toilet
- Stair climbing
- Using walkers and assistive equipment
- Car transfer

#### PHYSICAL THERAPY PLAN OF CARE

Your start date depends on doctor's order and time of arrival to the surgical unit. Therapy usually involves:

- Daily therapy
- Walking 50-200 feet
- Climbing stairs
- Learning to use a walker, crutches and/or cane for support
- Stretching of operative knee (if knee replacement)

#### **OCCUPATIONAL THERAPY PLAN OF CARE**

Occupational therapy team members will assist you in being able to perform activities of daily living, such as:

- Sitting down and standing properly
- · Getting dressed
- Bathing
- Grooming
- Toileting
- Transferring in and out of practice car

# Discharge planning

The responsibility of the care manager is to work with your treatment team to plan for a safe discharge from the hospital to home. The care manager works in your best interest with your health insurance company to obtain authorization and arrange services and equipment you may need immediately after discharge upon going home.

Many factors determine your individual recovery and equipment needs:

- General medical condition
- Progress in meeting physical therapy goals
- Ability to manage the activities of daily living such as bathing, dressing, steps, and transfers in and out of a car
- Home environment
- Insurance guidelines

Timing of discharge, usually by noon, is typically after one night for single joint replacement patients, and one or two nights for patients with both hips or knees replaced. **You should expect to go home upon discharge to continue your recovery. Follow your surgeon's discharge instructions, which may include:** 

- Home activity and exercise program
- Outpatient physical therapy
- Home care health agency (physical therapy) when necessary
- Skilled facility **ONLY** if medically necessary (living alone, having stairs, or prior surgeries are **NOT** medical reasons for needing a skilled facility)

Your physician's group may also provide additional, computerbased support.



### When you go home

**Make a follow-up appointment.** You'll need a follow-up appointment with your surgeon, so please call to arrange if an appointment is not already listed on your discharge instructions.

**Follow discharge instructions.** Be sure to follow directions for any needed post-op primary care appointments.

#### Have someone pick up any medications and new

**prescriptions.** Plan to have a friend or family member stay with you as much as possible for a day or two to help you stay connected and on track. Use **Appendix 5** to track important information when you get home.

### **POST-OPERATIVE PRESENTATION**

Scan this QR code with your electronic device to watch the presentation.



### QUICK TIP

Review post-op tips and helpful information at **mainlinehealth.org/athometips**.

# At-home tips

Follow restrictions or precautions your surgeon may have given to you. See your discharge instruction sheet and follow instructions regarding showering and dressing changes.

At home, you should expect to mostly care for yourself, allowing family members and friends to handle caring for the home and driving duties. Surgeons will clear you to drive, usually after a few weeks when you are no longer taking prescription pain medication and are consistently moving around much better. Also keep in mind:

- It is normal to use a walker for one to two weeks following surgery, transitioning to a cane as decided by your therapist or walking program. Do as your surgeon directs.
   Formal therapy, if required, can last for six to eight weeks depending on individual patient recovery.
- Use a cane for longer than you think you need to! It will assist with stability and balance.
- Swelling and bruising can last for longer than you think it should (several weeks).
- Muscle tenderness and soreness for several months is normal. It will remind you that your joint was replaced as you recover.
- Much of your physical function typically returns in the first month. Therefore, focusing on recovery in that first month is important! For an optimal recovery, it is important to follow both surgeon and therapy instructions.

### Tips for sitting

- Use a comfortable chair with armrests and a firm seat (soft and low are hard to get out of).
- Do not sit for more than 45 minutes at a time.
- Elevate your legs frequently.



### Tips for walking/exercise

- Get moving. Exercise prevents blood clotting, stiffness and swelling.
- Follow your surgeon's recommendations on walking distances and frequency.
- Walk on flat surfaces and wear supportive shoes.

### Tips for pain relief

- Take pain medication as needed 45 minutes before any home activity or exercise program.
- Use ice at least two to three times per day for the first two weeks to limit swelling and help with pain. Use ice for 15 to 20 minutes, then wait at least an hour before using again if needed.

### Tips for nutrition (bowel function)

Eating well can help you feel better as you recover! Taking in enough water and natural fiber (fruits and veggies) can keep your bowels functioning properly. Continue to take same medication for constipation until you are no longer taking pain medication.

### Tips for lying down/sleeping

- Consider lying down twice daily. Rest is important!
- Be patient. Sleeping may be hard for a while after surgery.

Do NOT sleep with a pillow underneath your knee if you've had a knee replacement.

### Tips for surgical incision care

Your incision may be closed with dissolvable stitches, staples or regular stitches. If you have visible stitches or staples, these will need to be removed in about 14 days after surgery, so be sure to make your follow-up appointment with your surgeon for this to happen.

While at the hospital, you'll wear a protective dressing. Once at home, follow your surgeon's instruction if a dressing is needed. Do not apply any ointments or lotions to the incision area while it's healing.

### YOU MAY NOT BATHE IN A TUB, SWIM OR USE A HOT TUB UNTIL YOUR INCISION IS FULLY HEALED.

### IF YOU:

- Notice any increased drainage, redness, or swelling
- Have a fever of 101 or greater
- Are unable to maintain your pain goal or have increasing pain, numbness or tingling, muscle weakness
- Have difficulty with swallowing or breathing
- Are unable to control your bowel or bladder

Please call your surgeon's office immediately or go to the emergency room.

### Tips to prevent infection

### DO:

- Eat a healthy diet and stay hydrated.
- Keep your incision clean, dry and protected.
- Notify your doctor right away of open skin irritations, infections (urinary tract, respiratory) or fevers.
- Practice good hygiene, wipe down cell phones with alcohol and keep your home clean (linens, bathroom).
- Keep pets clean and away from incision site and wash hands after coming in contact with pets.

### DO NOT:

- Use lotions or powder
- Touch your incision without washing hands first
- Wear artificial nails
- Swim or get into a hot tub
- Sleep with pets for four weeks after surgery

Be sure to ask your doctor when you can continue with these activities.

### Tips for being around pets

- Keep pets clean and away from incision site.
- Always wash hands or use hand sanitizer after contact with pets.
- Do not sleep with pets during the post-op period. Some domestic pets have organisms like MRSA which can be transmitted to humans.

# TAKE A PROACTIVE APPROACH TO PREVENT

Notify your physicians and dentist. Let them know you've had hip or knee surgery and to update your medical history.

Take prophylactic (preventive) antibiotics prior to any invasive procedure, including teeth cleanings, if your surgeon recommends. Your surgeon will give you more information regarding how long to continue taking the antibiotic.

# Use of anticoagulants

Your surgeon might prescribe a blood thinner (anticoagulant) to prevent blood clots. This can be an aspirin or—as necessary—a stronger anticoagulant. While safe when taken as instructed, blood thinners can cause bleeding if you fall or have an injury.

Call your surgeon immediately if you experience bleeding from anywhere (e.g., urine, surgical site, nose, etc.) Please also notify your surgeon if you have the following:

- Oozing from the surgical site
- Painful swelling in your leg, foot or hip
- Dizziness, numbness or tingling
- Rapid or unusual heartbeat
- Chest pain or shortness of breath
- Vomiting, nausea, fever or confusion

### THINGS TO AVOID WHILE ON ANTICOAGULANTS

Over-the-counter drugs like aspirin-containing compounds, nonsteroidal medications (e.g., ibuprofen or Aleve) and vitamins can interact with anticoagulants and cause bleeding. Avoid these products while on a blood thinner.

For similar reasons, you should also avoid or postpone the following:

- Drinking alcohol
- Using a straight-edge razor
- Getting a procedure (e.g., dental work)\*

\*If it is not possible to postpone a procedure, be sure that your dentist or physician is aware that you are taking anticoagulants and that you have had a recent hip or knee surgery.

# Recognizing and preventing potential complications

### **Blood clots**

Do not take a "wait and see" approach. Call your surgeon immediately if you experience the following signs of a blood clot:

- Increased swelling in your thigh, calf or ankle that does not go down when your feet are elevated above heart level
- Pain and tenderness in the calf of either leg
- Increased warmth or redness in either leg

Wear compression stockings (ONLY if your surgeon prescribes them) and exercise as directed.

### Infection

While rare, call your surgeon immediately if you notice the following signs of an infection:

- Increased swelling and redness
- Increased drainage or discharge that changes color or has an odor
- Surrounding skin that is hot to the touch
- Increased pain in your incision, not associated with exercise
- Night sweats or fever greater than 101 degrees

### Blood clot in lungs (pulmonary embolus or PE)

A pulmonary embolus is a blood clot that has traveled to your lungs.

### CALL 911 IMMEDIATELY IF YOU EXPERIENCE:

- Sudden chest pain
- Difficult and/or rapid breathing
- Shortness of breath
- Sweating
- Confusion

A PE can be life threatening. Do **NOT** take the time to call your orthopaedic surgeon.

Call 911 immediately.

# At-home how-to

### **Breathing exercises**

To reduce the risk of developing a lung infection, practice the techniques below daily before surgery:

### COUGHING

Sit down and take

 a deep breath in.
 (If you have obstructive
 pulmonary disease, such
 as emphysema, take a
 shallow breath in.)



3. Repeat 10 times daily.



#### DEEP BREATHING

To keep your lungs clear and stay relaxed, lie down or sit and do the following:

 Breathe in through your nose slowly and deeply. If unable to breathe through your nose, inhale through your mouth. (If you have obstructive



pulmonary disease, such as emphysema, take a shallow breath in.)

- Exhale slowly through pursed lips, similar to blowing out the candles on a birthday cake.
   Be sure to use proper technique:
- Don't hold your breath.
- Place your hand on your stomach to confirm:
  - Breathe in: Your stomach should move out
  - Breathe out: Your stomach should move in

Once you get into the rhythm of this exercise, close your eyes and visualize a place/scene that relaxes you.

### Activities of daily living (ADL)

### HIP PRECAUTIONS (IF REQUIRED BY SURGEON)

When you see this symbol ! remember to do the activity within the limits of hip precautions, according to your surgeon's instructions.

Successful recovery after hip replacement has a lot to do with how you move your body. Here are come movements you should avoid if you are having a posterior surgical approach for your hip replacement:

### **DO NOT**

- Bend past 90 degrees at hip/waist
- Stand, sit, or lie with your legs/toes turned in (Keep toes pointed forward)
- Cross legs or ankles

If you have an anterior surgical approach to your hip replacement, here are movements to avoid:

### **DO NOT**

- Step backwards with the surgical leg (hip extension
- Stand, sit, or lie with your legs/toes turned outward
- Cross legs or ankles

#### TIPS FOR GETTING AROUND

For the next few weeks, you may have to stop and think about how to do certain activities that previously were automatic, like getting into bed or out of a chair. Soon, they will become natural again. In the meantime, follow these guidelines to help you during your recovery period.

#### WHAT TO DO WITH TWO?

If you had a bilateral joint replacement, it helps to designate one of your legs as the "operated leg"—the one you are having more pain with. Whenever you see this icon <sup>2</sup> remember to think of your more painful leg. This will help you move your body safely as you follow the activity instructions.

### IF USING A ROLLING WALKER (WITH WHEELS)

- 1. Stand inside the walker.
- 2. Grasp the handles securely with elbows bent.
- Move the walker in front of you and start walking, staying inside of the walker (similar to pushing a shopping cart.)



#### **DO NOT**

Use the walker to pull yourself up to standing position.

Push the walker too far ahead. Try to keep your body upright and avoid leaning forward.

### TRANSITIONING TO A CANE

If using a rolling walker, transitioning to a cane typically happens one to two weeks following surgery. If you are working with a physical therapist, that person will let you know when the time comes and give you direction regarding using a cane. If you are not working directly with a physical therapist, contact your surgeon's office for direction regarding readiness and guidelines for use.

### STAIR CLIMBING

#### Going up stairs with a cane:

- 1. Hold hand rail in one hand and cane in the other.
- 2. Step up with non-operated leg to the first step.
- Step up with operated leg 2, bringing the cane with you. Both feet and cane will be on the same step.
- 4. Repeat.

#### Going down stairs with a cane:

- Hold hand rail in one hand and cane in the other.
- Step down with operated leg 2 to the first step, bringing the cane with you.
- Step down with nonoperated leg. Both feet and cane will be on the same step.



4. Repeat.

### GETTING OUT OF A CHAIR

Chair with arms

- 1. Scoot forward to the front edge of the chair.
- 2. Place both feet firmly on the floor.
- **3.** Place both hands on the arms of the chair.
- **4.** Lean forward slightly and push up from the chair using both hands.

Chair without arms or a sofa

- 1. Scoot forward to the front edge of the chair/sofa.
- 2. Place both feet firmly on the floor.
- 3. Place both hands on the chair.
- 4. Lean forward and push up using both arms.
- As you push up, reach for the walker and grasp the handles one arm at a time. DO NOT use the walker to pull yourself up to standing position.

### TOILETING 🕕



Depending on your abilities, a raised toilet seat may make it easier for you to get up and down.

Sitting down on the toilet

- 1. Take small steps toward the toilet and turn until your back is to the toilet. Do not pivot.
- 2. Back up to the toilet until you feel it touch the back of your legs.
- **3.** If using a toilet with armrests, reach back for both armrests and lower yourself onto the toilet.
- **4.** If using a regular or raised toilet seat without armrest, keep one hand on a stable surface while reaching back for the toilet seat with the other.
- Slide your operated leg 2 out in front of you when sitting down, as needed.

### Getting up from the toilet

If using a toilet with armrests, use the armrests to push up. If using a regular or raised toilet seat without armrests, place both hands on your thighs and push off your thighs. As you push up, reach for the walker and grasp the handles one arm at a time. Balance yourself before you start walking.



#### GETTING INTO THE BATHTUB USING A BATH SEAT

Place the bath seat in the tub facing the faucets.

- Walk toward the bathtub and turn until you can feel it touch the back of your legs. Be sure you are in front of the bath seat.
- 2. Hold on tightly to the walker and reach back with one hand to grasp the back rest of the bath seat.
- Slowly lower yourself onto the bath seat, keeping the operated leg (2) in front of you while sitting down, as needed.
- 4. Move the walker out of the way, keeping it within reach.
- Lift your legs over the edge of the tub, using a leg lifter for your operated leg(s) (2) if necessary.

Take care to keep your incision dry until instructed otherwise.

### **GETTING OUT OF THE BATHTUB USING A BATH SEAT**

- 1. Lift your legs over the outside of the tub.
- 2. Scoot to the side of the bath seat.
- **3.** Hold onto the seat with one hand and reach for the handle of the walker with the other hand.
- **4.** Slowly push off the tub seat and reach for the other handle of the walker.
- 5. Balance yourself before continuing to move.

Using a bath seat, grab bars, long-handled bath brushes and a handheld shower can make bathing easier and safer. Keep in mind, however, these items are not typically covered by insurance.

### GETTING INTO BED 🕕

- 1. Walk toward the bed and turn.
- 2. Back up to the bed until you feel it on the back of your legs. You will need to be positioned near the top third of the bed.
- **3.** Reaching back with both hands, sit down on the edge of the bed.
- 4. Move the walker out of the way, keeping it within reach.
- 5. Scoot back toward the center of the mattress.
- 6. Scoot your hips around so that you are facing the foot of the bed.
- Lift your leg onto the bed while scooting around. (If this is your operated leg 2, you may use a leg lifter or cane to assist you.)
- 8. Keep scooting and lift your other leg onto the bed.
- 9. Scoot your hips toward the center of the bed.

### GETTING OUT OF THE BED

- 1. Scoot your hips to the edge of the bed.
- 2. Sit up while lowering your legs to the floor.
- **3.** If necessary, use a leg lifter or cane to assist you.
- 4. Remain seated on the edge of the bed.
- Use both hands to push off the bed. If the bed is too low, place one hand on the walker while pushing up off the bed with the other. Balance yourself before reaching for the walker.

### GETTING INTO THE CAR

- Move the front passenger seat all the way back to allow the most leg room.
- 2. Walk toward the car and turn.
- Using your walker, back up to the car until you can feel it touch the back of your legs.



 Place your left hand on the dashboard of the car, reaching for the back of

the seat with your right hand. Do not hold on to the car door as it may move.

- Lower yourself down onto the seat, being careful not to hit your head. Keep your operated leg 2 straight out in front of you, as needed.
- 6. Turn frontward, leaning back as you lift the operated leg2 into the car.
- 7. Return car seat to its upright position.
- 8. Make sure you use your seat belt. We want you to arrive safely.

If your car has fabric seat covers, place a plastic grocery bag on the seat to help you slide once you are seated and remove bag after seated in the car.

### **GETTING OUT OF THE CAR**

Reverse the previous instructions for getting into a car.

#### USING A REACHER OR A DRESSING STICK 🕕

Putting on pants or underwear

- 1. Sit down.
- Put your operated leg
   in first.
- **3.** Use a reacher or dressing stick to guide the waist band over your foot.
- **4.** Pull your pant leg up over your knees so the pants are within easy reach.
- 5. Repeat for your nonoperated leg.



6. Once both feet are through your pants, stand up with the walker in front of you.

7. Pull your pants up the rest of the way.

Taking off pants or 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.
- 3. Push your underwear down to your knees.
- Sit down, keeping your operated leg 2 out straight, as needed.
- 5. Take your non-operated leg out first and then the operated leg.

A reacher or dressing stick can help you remove your pants from your foot and pick them up off the floor.

### USING A SOCK AID

- 1. Sit down.
- 2. Slide the sock onto the sock aid with the toe completely tight at the end.
- 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.



- **4.** Slip your foot into the sock aid.
- 5. Straighten your knee, point your toe and pull the sock on.
- **6.** Continue pulling until the sock aid releases.

It is better to wear lace or Velcro shoes or well-fitting slip-ons. Do not wear high-heeled shoes, backless shoes or flipflops.

### USING A LONG-HANDLED SHOEHORN

- 1. Sit down.
- 2. Using a reacher, dressing stick or long-handled shoe horn, place your shoe in front of your foot. It is easier to do this if your knee is bent as much as possible.
- Place the shoehorn inside the shoe against the back of the heel, with its curve matching the curve of your shoe.



- 4. Place your toes in your shoe.
- 5. Step down into your shoe, sliding your heel down the shoehorn.
- 6. Pull out the shoehorn.
- 7. Repeat with your other foot.

# Appendix 1: Same day discharge patient instructions

### After surgery

After surgery you will meet the nurse who will care for you during your stay in the PACU. The nurse will:

- Apply monitors
- Take vital signs every five to 15 minutes
- Make sure you can feel your feet and wiggle your toes
- Monitor your pain level (on a 0–10 scale)
- Medicate you as needed

### ASSESSING YOUR PAIN

Staff will use a 0–10 scale to assess your pain level.



When you are recovered from anesthesia and medically stable, you will be taken to the next phase of recovery.

Your nurse will partner with you to control your pain using the pain scale above, as was done in the Post Anesthesia Care Unit. After discharge, while some pain is expected after surgery, being in control of your pain early on is very important for the course of recovery and healing. Anesthesia can wear off at any point, but especially after the first 12 hours of surgery.

Patients who take pain medication earlier at the first signs of pain find they are in better control of pain from the start and may need less medicine overall. Good pain control will also allow you to fully participate in your therapy and/or exercise program. Take pain medication 30 min – 1hr before working with therapy or doing your exercise program for best results.

### Recovery

In the next area of recovery, you will:

- Be evaluated by nursing and an orthopaedic team member from your surgical staff (surgeon, resident, nurse practitioner, physician assistant)
- Have your vitals taken often, then less frequently as you become awake and alert
- Be given liquids and advanced to solid foods per your surgeon
- Be monitored for return of bladder function
- Be asked about pain
- Be evaluated and trained by therapy for safety and discharge
- Be instructed on activities such as ankle pumps to prevent blood clots <u>and</u> breathing exercises with an incentive spirometer to prevent pneumonia (perform both 10x every hour while awake)

If all of these areas are stable and satisfied, patients can expect to be discharged home on the day of surgery from this area of recovery.

# Appendix 1: Same day discharge patient instructions

### Therapy

Physical and/or occupational therapy at the hospital will see you in the recovery unit and focus on function and skills needed to be safely discharged. Early walking after surgery is key to improved recovery outcomes and preventing complications like blood clots.

Physical therapy can evaluate and teach you how you perform activities such as getting in and out of bed, chairs, walking, stair climbing and knee stretches for knee replacement patients.

Occupational therapy can evaluate and teach you how to perform activities of daily living such as dressing, bathing, toileting and car transfers. For hip patients who have hip precautions, they will instruct you on them and alternative ways of being independent. They may also recommend additional equipment for at home to make these tasks easier and safer.

### Discharge planning

Before surgery, you received instructions about setting up a plan for a support person (coach) at home for after surgery. Patients who go home should expect to care for themselves, but in the first day or two it is recommended to have someone who is available to stay or regularly check in. Your coach should continue to be available as a resource to you for the first two weeks if you should need them.

Depending on your surgeon's plan of care, <u>some</u> patients may be ordered additional services including lab work, therapy and/or equipment. It is the responsibility of the care manager to work with your treatment team to plan for a safe and smooth discharge to home. If ordered by your surgeon, the care manager will obtain insurance authorizations and arrange for any of these potential services as needed.

### When you go home

### 1. Make a follow-up appointment.

You'll need a follow-up appointment with your surgeon so please call to arrange if an appointment is not already listed on your discharge instructions.

### 2. Follow discharge instructions.

Be sure to follow directions for any needed post-op primary care appointments.

### 3. Have someone pick up any medications and new prescriptions.

Plan to have a friend or family member stay with you as much as possible for a day or two to help you stay connected and on track. **Use Appendix 5 to track important information when you get home.** 

### Important considerations and requirements for same day discharge joint surgery

### Joint coach/support person

The first 48 hours after replacement surgery is a time of adjustment where patients are typically trying to find a balance of activity and comfort. In order for this to be a success, it is necessary for you to have a coach or someone you have identified as a support, who will be available to assist you. This person could be a family member, a friend – someone you feel comfortable to help you in the initial few days if you should need it.

In the two weeks after surgery we encourage patients to be mobile and perform a recommended amount of exercise/ activity as instructed. However, we do not suggest taking on household tasks such as cleaning, cooking, yardwork. Excess activity in the first two weeks is beyond what is recommended and will cause extra stress and inflammation resulting in more swelling and pain and will slow your recovery and healing.

Plan ahead and have someone else available to help you after surgery. It is preferred that you plan to have someone physically stay with you the first 24 hours after surgery, if possible. Beyond that, your coach should handle caring for household activities, shopping, running errands or providing rides to appointments in the early weeks after surgery.

### Pain Management

Pain is to be expected. It is a normal part of healing after surgery caused by surgical inflammation that will improve in the weeks after. It varies for everyone, but all will have some degree of discomfort the first 24 hours after surgery as anesthesia wears off, so it's <u>very important</u> to stay ahead of your pain\*. Some patients (depending on surgeon) may receive additional anesthesia in the form of a nerve block. These pain relief effects are only temporary, will be gone by the morning after surgery and you will likely notice a normal increase in pain.

Patients after surgery will be on a combination of prescription and over the counter medications that safely work together to provide relief. This is referred to as a multimodal pain management approach. You will be instructed on how and when to take these medications. \*Once you start to feel pain after surgery, **we strongly recommend you take one of the pain relievers prescribed to you**. Certain patients may require several doses in the first 24 hours to regain comfort.

Some patients try to avoid stronger pain medicine for a number of reasons. However, this is the time and the type of pain they are designed for, acute surgical pain. By taking it in advance of worsening pain, patients find they are in better control of pain from the start and may need less medicine overall.

Medications effective in preventing constipation that can occur after surgery will also be recommended. Following the first 72 hours, many patients will notice pain starts to lessen slightly each day and may not need as much pain medication or they may not need it as regularly as right after surgery. Commonly, patients will gradually need less over time and will not need it beyond the first 1-2 weeks after surgery.



# Appendix 2: Postoperative care team

### **ORTHOPAEDIC SURGEON**

You picked your orthopaedic surgeon because you trust them to do their best job on your hip or knee replacement. Your orthopaedic surgeon will direct your care and lead a team of dedicated professionals that includes physician assistants (PAs) and orthopaedic residents who will make sure you have a great experience.

#### **MEDICAL PHYSICIAN**

The cardiologist and/or physician who cleared you for your surgery will monitor your medical care after your surgery. These skilled physicians work closely with our hospital care team. They are experienced in caring for patients with medical issues after surgery.

### PHYSICIAN ASSISTANTS (PAS) AND NURSE PRACTITIONERS (NPS)

These team members are an important part of the surgery team, both in the OR and post-operatively. They will be in constant communication with your surgeon to make sure that you get the best care possible, and that you are informed about your medical status at all times.

### NURSING CARE

When you arrive in your room, your nurse and patient care technician will help you get settled in. He/she will show you where your call bell is located, help you change into your gown, take your vital signs, make sure all of your belongings have been transferred from the pre- and post-op area, assess your pain level and treat appropriately and provide you with a snack and something to drink until your meal arrives.

#### **PHYSICAL THERAPY**

Physical therapy will begin within 24 hours of your surgery. You may get out of bed on the day of your surgery (with help) if your anesthesia has worn off, if your vital signs are stable and if your pain is under control.

#### **OCCUPATIONAL THERAPY**

Occupational therapy will begin within 24 hours of your surgery. The occupational therapist will review the activities of daily living after having hip or knee surgery, such as dressing, toileting, bed transfers and chair transfers. He/she works very closely with the physical therapist.

#### JOINT REPLACEMENT COACH

The friend or family member you have selected to be your joint replacement coach plays an important role in both your short- and long-term recovery. This person will be involved with your physical therapy, occupational therapy and pain management, and will continue to support you after you leave the hospital.

### CARE MANAGER

The care manager will meet you the day after your surgery. He/she will review your home situation and your plans for discharge. The length of your stay at the hospital will be determined by how well you do post-operatively. If you are going to a rehabilitation facility, your insurance company is involved in authorizing and determining your length of stay at the facility.

Members of your care team may also include:

- Nurse Manager (NM)—manages nursing care and orthopaedic unit
- Social Worker (SW)—may handle your discharge planning
- **Respiratory therapist**—specialist in airway management, mechanical ventilation and pulmonary hygiene; they evaluate and treat respiratory and cardiovascular problems, if needed
- Unit Secretary (US)
- Environmental services—provides housekeeping services
- Host/hostess-delivers your meals
- Patient Care Technician (PCT)

# Appendix 3: Medication tracker

This form will help you track your medication in one place. This includes prescription and non-prescription medication (aspirin, over-the-counter pain medication, allergy relief medication, antacids, laxatives), vitamins, nutritional/dietary supplements and eye drops.

Patient name		
Date of birth _	Date of surgery	

Surgeon	Telephone
Primary care physician Telephone	
Pharmacy	Telephone

Allergies\_\_\_\_\_

Flu vaccine 🗆 Date \_\_\_\_\_

Pneumonia vaccine 🗆 Date\_\_\_\_\_

MEDICATION	DOSE (in mg or units)	HOW OFTEN DO YOU TAKE IT?	HOW LONG HAVE YOU BEEN TAKING IT?	WHAT IS IT FOR?	STOP DATE PRIOR TO SURGERY (per prescribing physician)

# Appendix 4: Commonly asked questions

### WHAT IF I AM POSITIVE FOR STAPH/MRSA?

If you are positive for staph, the office will call and give you special instructions that include taking a series of preoperative showers with antiseptic soap (Hibiclens/Bactoshield) and applying an antibiotic ointment to your nose. The office will call in a prescription for 2% Mupirocin nasal ointment (Bactroban).

- Dab a small amount of ointment, about the size of a match head, onto a Q-tip.
- Apply ointment to the inside front part of both nostrils.
- Press the nostrils closed to spread the ointment throughout the nostrils.
- Do this twice a day (morning and before bed) for five days.
- Begin preoperative showers protocol five days before your surgical procedure is scheduled.
- Follow instructions as outlined in the patient education preoperative showers section.
  - Bathe or shower every day with Hibiclens/Bactoshield.
  - On the morning of your surgical procedure, shower or bathe again with Hibiclens/Bactoshield.
  - You should have completed six showers or baths with this antiseptic.
- Use the enclosed grid (**Appendix 6**) to keep track of your preoperative skin cleansing schedule and bring it to the hospital on the day of your surgery.

### AM I CONSIDERED AN INPATIENT OR OUTPATIENT?

If you have any questions about inpatient vs. outpatient status, it's important to discuss this in advance with your surgeon or your surgical coordinator.

- A general rule of thumb is, your stay in the hospital may be considered an outpatient stay if you stay only one overnight.
- If you stay more than one overnight due to medical reasons, you may be considered an inpatient.
- Be sure you know what your insurance plan covers for inpatient vs. outpatient and which one your surgeon is recommending.
- The surgeon's office may also need to contact your insurance company for approval for the surgery based on your status as an inpatient or an outpatient. This is called a prior authorization. With certain insurances, you cannot proceed with surgery unless you have this authorization.
- Be sure your surgeon's office has contacted your insurance company for a prior authorization, if needed, as this can mean that your copay is different.

#### MAINTAINING HEALTHY WEIGHT AFTER SURGERY

Healthy eating and maintaining a healthy body weight can improve your overall health, especially after joint replacement. Main Line Health can help you with nutrition counseling and weight loss options.

Visit mainlinehealth.org/nutrition for more information.

#### MAY I TAKE MY OWN MEDICATIONS?

**NEVER** take your own medications while you are in the hospital, unless you are requested to do so by your nurse. You should have NO medications by the bedside. Please bring a current list of your medications (**Appendix 3**) so that we can have them ordered for you by your doctors.

#### HOW LONG WILL I BE IN THE HOSPITAL?

Your length of stay is dependent upon your medical status and how well you are progressing with your physical therapy. On average, patients spend one or two nights on the orthopaedic unit after hip or knee replacement surgery. Partial joint replacement patients typically go home the same day as surgery.

#### WHERE WILL I BE GOING AFTER SURGERY?

You should expect to go home after discharge from the hospital. Further therapy services are arranged for by an assigned social worker or case manager if there is a medical need after a physical therapy evaluation and as per physician protocol.

#### HOW SOON AFTER SURGERY MAY I EAT?

Hip or knee replacement patients usually start with clear liquids. If you do not become nauseated, you will be advanced to your preadmission diet.

#### WHEN MAY I SHOWER?

This varies depending on your surgeon's instructions, but typically you may shower within 48 to 72 hours after surgery or as instructed by nurse on discharge.

#### WHAT ARE ANTICOAGULANTS?

Anticoagulants (blood thinners) are a type of drug your doctor prescribes to prevent blood clots. Commonly used medications are Coumadin, Lovenox, Arixtra, Eliquis,<sup>®</sup> Xarelto and aspirin. You will be directed to stay on one of them for a period of time after surgery. Depending on the medication,

you will need to have your blood tested to monitor the effect of the drug and to regulate the dosage. Once discharged home, arrangements will be made to continue monitoring your blood.

# HOW OFTEN WILL I RECEIVE PHYSICAL AND OCCUPATIONAL THERAPY IN THE HOSPITAL?

After your initial evaluation, you will receive therapy once or twice a day. Your therapist will be instructed by the surgeon as to what therapy you need. The goal is to keep you out of bed and active.

#### WHERE DO I GET THE EQUIPMENT I NEED?

We encourage you to borrow or purchase equipment before your surgery, so you can make sure it is appropriate for you in your home environment. A list of recommended items is on page 9. There are many local pharmacies and medical supply companies that carry equipment for you to physically choose from. Many patients purchase them online. If you do purchase equipment, you may be able to submit receipts to your insurance company for some reimbursement, depending on your insurance coverage. Insurance companies often cover only one device, the walker being the most common. You may bring in your own or borrowed walker (if you have one) to ensure a proper fit.

#### WILL I BE ABLE TO USE STAIRS AT HOME?

Your physical therapist will make sure you can successfully navigate stairs prior to your discharge home. You will find that your endurance will improve once you are home, but it would be beneficial to have someone available to assist you in the first days after discharge.

### WHAT IF I HAVE AN ISSUE WHILE I AM IN THE HOSPITAL?

Please do not wait until after you are discharged to voice any concerns that you may have. Members of the nursing administration, as well as our volunteers, make daily rounds. Your suggestions are very important to us. We want your stay to be a superior patient experience.

## WHO WILL I SEE IN THE HOSPITAL AFTER MY SURGERY?

You will be cared for by an entire team of professionals under the direction of your orthopaedic surgeon. After surgery you may be seen by the surgeon, orthopaedic resident, nurse practitioner and/or physician assistant to monitor your progress and assure the best possible recovery from your surgery.

# Appendix 5: Preoperative skin cleansing schedule

Use this guide **ONLY** if you have a staph infection and have been instructed to by your surgeon's office.

	COMPLETED		
5 DAYS BEFORE SURGERY			
Nasal ointment applied 2 times—morning and bedtime	🗆 АМ	🗆 РМ	
Hibiclens/Bactoshield shower or bath			
4 DAYS BEFORE SURGERY			
Nasal ointment applied 2 times—morning and bedtime	🗆 АМ	🗆 РМ	
Hibiclens/Bactoshield shower or bath			
3 DAYS BEFORE SURGERY			
Nasal ointment applied 2 times—morning and bedtime	🗆 АМ	🗆 РМ	
Hibiclens/Bactoshield shower or bath			
2 DAYS BEFORE SURGERY			
Nasal ointment applied 2 times—morning and bedtime	🗆 АМ	🗆 РМ	
Hibiclens/Bactoshield shower or bath			
DAY BEFORE SURGERY			
Nasal ointment applied 2 times—morning and bedtime	□ AM	🗆 РМ	
Hibiclens/Bactoshield shower or bath evening before procedure		🗆 РМ	
REMEMBER: Please refer to anesthesia directions for fasting guidelines prior to surgery.			
MORNING OF SURGERY			
Apply final application of nasal ointment	🗆 АМ		
Hibiclens/Bactoshield shower or bath	🗆 АМ		
# Appendix 6: Medication information

Your orthopaedic surgeon will prescribe the medicine you take at home (with a few exceptions). You **MAY** also be given some of the following: multivitamin, antibiotic, stool softeners and a mild laxative.

MEDICATION	PURPOSE	SIDE EFFECTS	OTHER CONSIDERATIONS
Tylenol (non-opioid)	Mild to moderate pain	Side effects are rare	Liver damage may occur with high doses
Lyrica (non-opioid) or Neurontin	Nerve pain	Nausea, vomiting, dizziness, lightheadedness, blurred vision	
Roxicodone (Oxycodone)	Moderate to severe pain	Nausea, vomiting, constipation, lightheadedness, dizziness, drowsiness	Take this medication with food to prevent an upset stomach
Oxycontin (Oxycodone HCI) Sustained release	Moderate to severe pain	Nausea, vomiting, constipation, dry mouth, lightheadedness, sweating, dizziness, drowsiness	Do not drive while taking this medication and take with food to prevent upset stomach
Percocet (Oxycodone (opioid) + Tylenol)	Moderate to severe pain	Nausea, vomiting, constipation, lightheadedness, dizziness, drowsiness	You may receive Percocet instead of receiving Roxicodone and Tylenol separately
Toradol (NSAID/non-opioid)	Decreases pain and inflammation	Dizziness, drowsiness, stomach/intestinal bleeding	This medication is given only during a hospital stay and is given intravenously
Ultram/Tramadol (opioid- like)	Moderate pain relief	Nausea, vomiting, constipation, dry mouth, lightheadedness, dizziness, drowsiness	Take this medication with food to prevent an upset stomach
Celebrex Mobic (NSAID/non-opioid)	Decreases pain and inflammation	Headache or belly pain	
Multivitamin	To treat or prevent vitamin deficiency	Constipation, diarrhea, upset stomach	
Iron supplement	Used to treat or prevent low blood levels of iron	Constipation, diarrhea, upset stomach (may cause stools to turn black, which is not harmful)	
Colace <sup>®</sup>	Stool softener often the first method used for preventing and treating constipation	Diarrhea, stomach pain	
Senna MiraLAX	Stimulant laxative used to treat constipation caused by narcotics	Diarrhea, nausea, vomiting, abdominal cramps, bloating (Senna may cause red or yellow-brown urine)	
Blood thinners (aspirin, Eliquis,® Coumadin, Lovenox, Xarelto, Arixtra)	Your surgeon will choose one for you to minimize your risk of blood clotting after surgery	Your nursing staff will explain side effects of the one chosen for you and explain how it is used	

Your doctor has prescribed these medications because he or she has judged that the benefit of these medications is greater than the risk of side effects. The information on this page is selective and does not cover all the possible side effects. Others may occur. Please report any problems to your doctor.

## Appendix 7: Glossary of commonly used terms

## Unmasking the jargon

With all of the medical terminology and alphabet soup of acronyms you hear at a typical hospital, you might feel like you're on another planet! Here is a list of terms and definitions you might come across while in the hospital.

**Abductor** muscle group on the outside of the hip joint that moves the legs apart

**Adductor** muscle group of the inner thigh that moves the legs together

**ADL** Activities of daily living—for example, hygiene (bathing, grooming, shaving and oral care), dressing, feeding yourself and toileting

Ambulation how a patient walks

**Anticoagulant** blood thinner medication, for example, Coumadin and Lovenox

Arthritis inflammation of a joint(s)

**Arthroplasty** the surgical reconstruction of a joint (joint replacement)

Autologous blood donation patient donates blood for him/herself

Bed mobility how a patient moves in bed

Bilateral pertaining to both sides of the body

**Cartilage** a firm, thick, slippery tissue that coats the ends of bones where they meet other bones to form a joint; it allows bones to slide and glide over each other and acts as a protective cushion between them to absorb the stress applied to joints during movement

**CPM** Continuous passive motion, a machine that gently bends (flexes) and straightens (extends) your knee after surgery; also helps you to regain full range of motion (ROM) of your knee joint and reduce the swelling associated with surgery

DJD Degenerative joint disease (same as osteoarthritis)

DME Durable medical equipment, equipment (walker, raised

toilet seat, etc.) that helps you walk and perform your ADLs safely

**DVT** Deep vein thrombosis, a blood clot that forms in a vein (for example, in your calf)

Extension straightening

Flexion bending

**Functional status** evaluation of a patient's mobility (for example, bed mobility, transfers and ambulation)

FWB Full Weight Bearing

Gastrocnemius muscle calf muscle

Hamstrings muscles in the back of the thigh

Home care rehab physical rehab services received in your home

**Inpatient rehab** physical rehab services at a facility where you stay overnight for a period of time (for example, acute rehab, sub-acute rehab or a skilled nursing facility)

**Isometric exercise** contraction of a muscle without any visible movement of the joint

JRP Joint replacement program

**NPO** Non Per Os—nothing may be taken orally (no eating or drinking)

**NWB** Non-weight bearing

**OA** Osteoarthritis—arthritis caused by the breakdown and eventual loss of cartilage

**OR** Operating room—the room where your surgery will take place

**OTC** Over-the-counter-medicine sold directly to the consumer, without a prescription

**Outpatient rehab** physical rehab at a facility that does not require an overnight stay

**PACU** Post Anesthesia Care Unit—the recovery room where you will be taken immediately after surgery; when you are medically stable, you will be transferred to the orthopaedic unit

**Partial hip replacement** hemiarthroplasty, surgery done for patients with arthritis that is limited to one side of the hip joint, certain types of hip fractures or avascular necrosis of the hip

**Partial knee replacement** unicondylar/unicompartmental knee arthroplasty surgery done for patients whose arthritis is limited to one side of the knee joint

**PASS** Pre-anesthesia surgical screening—may also be referred to as PAT (Pre-Admission Testing)

PAT Pre-admission testing

**PCA** Patient controlled analgesic—enables the patient to deliver pain medication (as needed) through an IV line by pushing a button

**PE** Pulmonary embolus—a life-threatening condition where a blood clot travels to the lungs

Post-op Postoperative—after surgery

Pre-op Preoperative—before surgery

PRN Pro re nata—as needed

**Prosthesis** in hip or knee replacement, the new surface of the joint

PWB Partial weight bearing

**Quads** Quadriceps—muscles in the front of the thigh

**ROM** Range of motion—the amount (measured in degrees) that a joint can move

**SNF** Skilled nursing facility

Subcutaneous just under the skin

Syringe needle

**THA** Total hip arthroplasty—another name for a total hip replacement

THR Total hip replacement

TJR Total joint replacement

**TKA** Total knee arthroplasty—another name for a total knee replacement

**TKR** Total knee replacement

**Total Hip Precautions** positions to avoid following a total hip replacement

**Transfers** how a patient moves from a bed, chair, etc. from a sitting to a standing position

**TTWB** Toe touch weight bearing—ability to place toe on floor but not bear any weight

Unilateral pertaining to one side of the body

**WBAT** Weight bearing as tolerated—ability to put as much weight on the operated leg(s) as a patient can tolerate

**Weight Bearing Status** how much weight you can put on your operated leg(s) when you are standing and/or walking

## Appendix 8: At-home checklist for postoperative hip or knee replacement

Use this page to track important information when you get home.

Patient name	Surgeon

Date of birth \_\_\_\_\_ Date of surgery \_\_\_\_\_ Telephone \_\_\_\_\_

	DATE /TIME				
MEDICATION FOR SEVERE PAIN					
MEDICATION FOR MILD PAIN					
BLOOD THINNER					
MEDICATION FOR CONSTIPATION					
MEDICATION SIDE EFFECTS?					

PHYSICAL THERAPY			
APPOINTMENTS			
PHYSICAL THERAPY/ EXERCISE ON OWN			

DR. APPOINTMENT/ SURGEON			
DR. APPOINTMENT/ PRIMARY CARE			

QUESTIONS I HAVE			
Example: When can I drive?			

Remember to take this to your doctor appointments.

Primary care physician	Emergency contact

Telephone \_\_\_\_\_

Telephone \_\_\_\_\_

	_	DATE /TIME	_	
MEDICATION FOR SEVERE PAIN				
MEDICATION FOR MILD PAIN				
BLOOD THINNER				
MEDICATION FOR CONSTIPATION				
MEDICATION SIDE EFFECTS?				

PHYSICAL THERAPY			
APPOINTMENTS			
PHYSICAL THERAPY/ EXERCISE ON OWN			

DR. APPOINTMENT/ SURGEON			
DR. APPOINTMENT/ PRIMARY CARE			

QUESTIONS I HAVE			
Example: When can I drive?			

Remember to take this to your doctor appointments.

## Appendix 9: Walking program

Walking is one of the best exercises after joint replacement. But it needs to be a gradual process. Doing too much too fast can make you have more swelling and pain. You started the process of walking distances in the hospital- here are some goals for home:

## WEEK 1 HOME - WALK A MINIMUM 100 FEET, 3X A DAY

- The distance around a standard dining room table or across a living area is about 10 feet, so you would need to make about 10 trips around for one session.
- On your pedometer 100 feet equals about 40-50 steps.
- Use a walker, crutches, or cane \*\*\*

## WEEK 2 HOME - WALK A MINIMUM 250 FEET, 3X A DAY

- The width of an average two car driveway or average hallway in apartment/condo building is 25 feet to 50 feet in length. Consider a few trips down the hall or to the mailbox and back if the driveway is not at too much of an angle.
- On your pedometer 250 feet equals about 100-125 steps.
- Use a walker, one crutch, or cane \*\*\*

#### WEEK 3 HOME - WALK A MINIMUM 500 FEET (ABOUT 1 BLOCK) 3X A DAY

- The length of an average city block is about 500 feet around which equals about 200-250 steps.
- Use a cane or nothing \*\*\*

#### WEEKS 4-8 HOME - WALK A MINIMUM OF 1,000 FEET (COMMUNITY DISTANCE) 3X A DAY

- 1000 feet equals about 400-450 steps. Feel more comfortable adding slight inclines and declines to your walk route.
- Progress to no cane \*\*\*

\*\*\*Progression of device dependent on individual. Surgeon and/or PT can assist you in transition.

#### WALKING SAFETY TIPS

- 1. Use non-slip closed toe, comfortable shoes. Sneakers are a great choice.
- 2. Consider what you are wearing and choose clothes that drivers can easily see. Light or bright colors, reflective material and flashing lights are best.
- If you have a choice about where you walk, choose a flat route with sidewalks or a shoulder to give yourself space away from traffic. Consider a walking/running path nearby.
- 4. If there are no sidewalks, walk facing traffic on a flat road.
- 5. Important things to carry with you are water, a driver's license or ID, and a cell phone.
- 6. Consider walking in a nearby mall or superstore for a flat surface that is climate controlled when the temperature is too hot or too cold.
- 7. Always look for cars before crossing a street or stepping off a curb. Use crosswalks and follow traffic signals when crossing at streetlights.
- **8.** Be predictable. Let someone know if you are walking alone before you go and after you return home.
- **9.** Before stepping in front of a car make eye contact with the driver. Make sure they see you, plan on stopping and have time to stop.
- **10.** You might have the right-of-way, but walk like drivers do not know the rules.

## Appendix 10: Home exercise program

1. QUAD SET (ISOLATION)	2 SETS / 10 REPS / 5 SECOND HOLD
1 2	**Focus of this exercise is to be able to squeeze your quad muscle, without squeezing your backside muscles**
	<ul> <li>2 Sets</li> <li>10 Repetitions</li> <li>5 Second Holds</li> <li>Lie on your back with your head propped up for comfort</li> <li>Place a rolled towel under the knee of your surgical leg.</li> <li>Squeeze your thigh muscles (quads), while pushing the back of your knee into the towel, (flatten your knee into the mat/bed)</li> <li>You should feel your thigh muscles tighten. You should NOT feel the muscles in your backside tighten.</li> </ul>
	Hold this position, relax and then repeat.
2. GLUTE SET (ISOLATION)	2 SETS / 10 REPS / 3 SECOND HOLD
	**Focus of this exercise is to squeeze the muscles in your backside, without squeezing your quad muscles**
	<ul> <li>2 Sets</li> <li>10 Repetitions</li> <li>3 Second Holds</li> <li>Lie on your back with your legs straight, prop up your head for comfort</li> <li>Squeeze the muscles in your buttocks, only one side at a time, without squeezing your quad muscle</li> </ul>
	<ul> <li>Squeeze left, followed by right, followed by left; should feel a rhythm like you are almost walking using your buttocks muscles</li> </ul>

3. HEEL SLIDES WITH OVERPRESSURE	2 SETS / 10 REPS / 5 SECOND HOLD
1 2	For total knee replacement patients only **Focus of this exercise is to create knee bend, with the long term goal of matching the amount of bend that your non surgical leg has. This will be uncomfortable, but should not be intolerable**
	2 Sets 10 Repetitions 5 Second Holds
	Start in a seated position with your legs straight out in front of you
	• Place a belt, dog leash, or towel, around the end of your affected foot of your surgical leg
	• Slide your heel in towards your buttocks as far as you can, keeping your knee pointing directly upwards
	<ul> <li>**It is paramount that you then pull the belt, dog leash, or towel further towards you creating even more knee bend**</li> </ul>
	• This will be uncomfortable, it is supposed to be uncomfortable. If you are not uncomfortable, the intensity is not high enough for this exercise
	<ul> <li>Control your breathing, do not hold your breath, hold each rep for about 5 seconds; take as much time as needed to recover</li> </ul>
4. PROPPED UP KNEE EXTENSION	1 SET / 1 REP / 1 SECOND HOLD
4. PROPPED UP KNEE EXTENSION     1     2	<b>I SET / 1 REP / 1 SECOND HOLD</b> For total knee replacement patients only **Focus of this exercise is to allow your knee to be as straight as possible, you will need additional supplies such as a jacket, blanket, or weighted blank to create more pressure than just gravity**
	For total knee replacement patients only **Focus of this exercise is to allow your knee to be as straight as possible, you will need additional supplies such as a jacket, blanket, or weighted blank to create more pressure than
	For total knee replacement patients only **Focus of this exercise is to allow your knee to be as straight as possible, you will need additional supplies such as a jacket, blanket, or weighted blank to create more pressure than just gravity** 2 Sets 2 Minute Holds
	For total knee replacement patients only **Focus of this exercise is to allow your knee to be as straight as possible, you will need additional supplies such as a jacket, blanket, or weighted blank to create more pressure than just gravity** 2 Sets 2 Minute Holds Progress from 2-minute holds, up towards 5 minutes; 30 second increments • Sit upright in a chair, and place the heel of your surgical leg on a chair,
	For total knee replacement patients only **Focus of this exercise is to allow your knee to be as straight as possible, you will need additional supplies such as a jacket, blanket, or weighted blank to create more pressure than just gravity** 2 Sets 2 Minute Holds Progress from 2-minute holds, up towards 5 minutes; 30 second increments • Sit upright in a chair, and place the heel of your surgical leg on a chair, ottoman, or table • Make sure there is a gap between your foot and your hip, this will leave
	<ul> <li>For total knee replacement patients only **Focus of this exercise is to allow your knee to be as straight as possible, you will need additional supplies such as a jacket, blanket, or weighted blank to create more pressure than just gravity**</li> <li>2 Sets</li> <li>2 Minute Holds</li> <li>Progress from 2-minute holds, up towards 5 minutes; 30 second increments</li> <li>Sit upright in a chair, and place the heel of your surgical leg on a chair, ottoman, or table</li> <li>Make sure there is a gap between your foot and your hip, this will leave space for your knee to straighten out</li> <li>You will need to progress the amount of time from 2 minutes to at least</li> </ul>

5. STANDING MARCHES WITH SUPPORT	2 SETS / 10 REPS / 10 SECOND DURATION
	**The focus of this exercise is to create movement in the knee/hip, within appropriate range of motion**
	2 Sets 10 Repetitions 3 Second Holds
► 8 ► 8 ► 8	<ul> <li>Stand up straight with your hands on your walker or another source of support such as the back of a chair or counter top</li> </ul>
	<ul> <li>March on the spot, lifting your knees up towards your chest, but no higher than your waist</li> </ul>
	*Marching higher than your waist could violate surgical precautions and lead to increased pain*
	Keep your posture upright and avoid looking down throughout the exercise.
6. STANDING HEEL RAISES WITH SUPPOR	
6. STANDING HEEL RAISES WITH SUPPOR	
-	<ul> <li>**Focus of this exercise is to increase mobility, as well as reduce swelling within your legs**</li> <li>2 Sets</li> </ul>
-	**Focus of this exercise is to increase mobility, as well as reduce swelling within your legs**
	<ul> <li>**Focus of this exercise is to increase mobility, as well as reduce swelling within your legs**</li> <li>2 Sets</li> <li>10 Repetitions</li> </ul>
	<ul> <li>**Focus of this exercise is to increase mobility, as well as reduce swelling within your legs**</li> <li>2 Sets</li> <li>10 Repetitions</li> <li>5 Second Holds</li> <li>Standing up straight, with your hands on support such as walker,</li> </ul>
	<ul> <li>**Focus of this exercise is to increase mobility, as well as reduce swelling within your legs**</li> <li>2 Sets</li> <li>10 Repetitions</li> <li>5 Second Holds</li> <li>Standing up straight, with your hands on support such as walker, counter top, or the back of a chair</li> </ul>

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# Hip and knee replacement pre-op class options

Our pre-op classes for hip and knee replacement surgery patients are available in two ways:

- Virtual live class
- Online pre-recorded presentation

We strongly suggest you attend a pre-op class. These classes are helpful in preparing you for this elective procedure. During the class we will briefly discuss joint replacement basics and what you need to do before surgery as well as expectations for the day of and after surgery.

You'll be able to ask questions throughout the class.

**TO REGISTER OR ATTEND ANY CLASS OPTION,** visit **mainlinehealth.org/jointeducation**, call **1.866.CALL.MLH (1.866.225.5654)** or scan the QR code below with your electronic device.







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