

JOINT REPLACEMENT **PATIENT GUIDE**



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Table of Contents

WELCOME

Welcome Letter	<u>3</u>
Important Dates	<u>4</u>
About this Guide	<u>4</u>
Introducing Your Memorial Hermann Care Team	<u>5</u>

UNDERSTANDING YOUR JOINT REPLACEMENT SURGERY

Common Causes of Knee and Hip Problems	<u>7</u>
Knee Replacement Surgery	<u>7</u>
Hip Replacement Surgery	<u>8</u>
The Risks of Joint Replacement Surgery	<u>9</u>
What Results Are Typical?	<u>10</u>

PREPARING FOR YOUR JOINT REPLACEMENT SURGERY

Joint Replacement Preoperative Education	<u>11</u>
Preadmission Testing	<u>12</u>
Hospital Registration / Financial Obligations	<u>12</u>
Finding a Coach	<u>12</u>
Tips for Preparing Your Home	<u>13</u>
Preoperative Exercises	<u>14</u>
Medications	<u>15</u>
Preventing Surgical Site Infection	<u>16</u>
Preparing for Your Surgery Day	<u>17</u>
Your Itinerary: Countdown to Surgery	<u>17</u>

DAY OF YOUR JOINT REPLACEMENT SURGERY

Arriving at Memorial Hermann	<u>19</u>
Anesthesia—General Information	<u>20</u>
Recovery	<u>21</u>
Enhanced Recovery After Surgery	<u>21</u>
Managing Your Pain	<u>22</u>
Deep Breathing, iCough® and the Incentive Spirometer	<u>22</u>
Techniques for Coughing and Deep Breathing	<u>23</u>

TRANSITIONING HOME

Preparing to Return Home	<u>24</u>
The Drive Home	<u>24</u>
Medications	<u>24</u>
Diet and Rest	<u>24</u>
Incision Care	<u>24</u>
When to Call Your Surgeon	<u>25</u>

LIFE AFTER JOINT REPLACEMENT

Traveling	<u>26</u>
Dental Care	<u>26</u>
Importance of Lifetime Follow-up Visits	<u>26</u>

EXERCISES AND MOBILITY

What to Expect the First 12 Weeks	<u>28</u>
Joint Replacement Exercise Guide	<u>29</u>
Hip, Knee and Fall Precautions	<u>29</u>
Early Activity and Mobility	<u>32</u>

FACTS ABOUT OPIOIDS	<u>38</u>
--------------------------------------	------------------

FREQUENTLY ASKED QUESTIONS	<u>39</u>
---	------------------

SURVEY AND FEEDBACK	<u>40</u>
--------------------------------------	------------------

iCOUGH CHECKLIST	<u>41</u>
-----------------------------------	------------------

MEDICATION LOG	<u>42</u>
---------------------------------	------------------

HOME EVALUATION FORM	<u>43-44</u>
---------------------------------------	---------------------

Welcome

Congratulations on your decision to have joint replacement surgery! You are probably excited about the prospect of taking this important next step toward a new life.

Specialists affiliated with Memorial Hermann have carefully planned every step of your care to help ensure a speedy and successful journey to recovery. Rest assured—you're in excellent hands every step of the way.

Memorial Hermann uses a team approach to caring for you and your family. Physicians affiliated with the hospital include some of the most experienced and highly trained orthopedic surgeons in the Houston area. Each team member is specially trained to take care of patients having joint replacement surgery. Even though they have cared for countless patients, they also understand your unique needs.

The goal of Memorial Hermann is to provide the highest quality and innovative, individualized care for you and your family. The affiliated surgeons, along with nurses, therapists and support staff, complete a team designed to assist you through your total joint replacement journey.

Thank you for choosing Memorial Hermann.

Joint Replacement Surgery: Important Dates

Preadmission testing/registration appointment _____

Preoperative education class _____

Joint replacement surgery _____

Follow-up appointment with surgeon _____

About This Guide

This Joint Replacement Patient Guide will help prepare you for your surgery and recovery.

It is designed to educate you so that you will know:

- What to expect every step of the way
- What you need to do before and after surgery
- How to care for your new joint for life

Remember that this is just a guide.

Your physician, nurse or therapist may add to or change the recommendations to personalize your treatment process. Always use their recommendations first, and be sure to ask questions if any information or instructions are unclear.

Keep this Joint Replacement Patient Guide as a handy reference for at least the first year after your surgery.

If you have any questions on subjects that are not covered, please ask your physician, therapist or one of your Memorial Hermann nurses for further information.

Introducing Your Memorial Hermann Care Team

Memorial Hermann has an experienced and highly skilled team that will focus specifically on you. Each team member is specially trained to help ensure a safe and successful recovery. They work together with you and your coach to ensure an exceptional experience.

Your care team may include:

Orthopedic Surgeon: Your orthopedic surgeon is the hospital-affiliated physician who will perform your joint replacement operation and will oversee your care throughout your stay at the hospital.

Nurse Navigator: Your navigator is a registered nurse who will serve as your coordinator of care and will follow you throughout your visit at Memorial Hermann. The navigator will also help you prepare for your return home. He or she will work directly with your surgeon and the rest of the team to ensure you and your family have the best possible experience and outcome.

Coach: Your coach is a person who you designate to support you as you prepare for and recover from your joint replacement surgery. This can be a spouse, friend or family member who will provide you with support and encouragement throughout your experience.

Anesthesia Provider: Your anesthesiologist is a hospital-affiliated physician responsible for administering the anesthesia throughout your surgery. He or she may also help manage your postoperative pain.

Primary Care Provider: Your primary care provider is your family physician and the physician who manages your overall health. You can expect your primary care provider to stay in contact with your orthopedic surgeon and be informed regarding your progress after your discharge from the hospital.

Cardiologist: If you have a history of cardiac disease, your cardiologist will be an integral member of the team as it plans your joint replacement surgery. Your cardiologist may provide surgical clearance as well as assist in managing your cardiac medications during the planning of your surgery and recovery.

Registered Nurse: Before, during and after your surgery, you can expect to meet many different nurses who perform many different jobs. Nurses will help prepare you for surgery and will be in the operating room with you throughout your surgery. After surgery, a team of nurses will carry out all orders given by your surgeon, as well as keep you comfortable and safe until you are discharged from the hospital.

Patient Care Assistant: Your patient care assistant, or PCA, will help you with activities like bathing, dressing or getting to the bathroom. PCAs will often help nurses with their jobs and are valuable members of the care team.

Physical Therapist: Your physical therapist is trained to help you gain strength and motion in your new joint and will help ensure that you do your exercises correctly. Your physical therapist will also help teach you how to properly and safely use your walker or crutches after surgery.

Occupational Therapist: Your occupational therapist is trained to help you learn to safely and effectively perform activities of daily living, such as bathing and dressing. He or she will also teach you how to use special equipment, like grabbers or shower seats, which you may need during your recovery.

Other team members you may meet include physician assistants, pharmacists, lab technicians, X-ray technicians, patient transporters, respiratory therapists and chaplains.



Understanding Your Joint Replacement Surgery

COMMON CAUSES OF KNEE AND HIP PROBLEMS

What is osteoarthritis?

Arthritis is a general term meaning joint inflammation. Osteoarthritis is a specific kind of arthritis and is the most common type, affecting nearly 21 million Americans. As we age, the chances of developing osteoarthritis increase, though the severity of the disease is different for everyone. Even people in early stages of life can develop some form of osteoarthritis.

Osteoarthritis breaks down the cartilage in joints and can occur in almost any joint in the body, though it occurs most often in the hips, knees and spine. Cartilage is a rubbery material that covers the ends of bones in normal joints and helps ensure that joint bones don't rub together. It also serves as a shock absorber as wear and tear occurs in the joints after years of use.

Osteoarthritis makes joint cartilage susceptible to damage. Over time, the cartilage may break down and wear away, preventing it from working properly. When this happens, tendons and ligaments in the joint can stretch, causing pain. And, if the condition worsens, joint bones can rub together, causing pain and discomfort.

What are the symptoms of osteoarthritis?

- Joints that are sore and ache, especially after periods of activity
- Pain that develops after overuse or when joints are inactive for long periods of time

What are the causes of osteoarthritis?

Several factors can increase a person's chances of developing osteoarthritis, including family history, obesity, injuries like fractures in the joint, previous surgeries where cartilage was removed from a joint, and overuse.

What is inflammatory arthritis?

Inflammatory arthritis can affect several joints throughout the body. It is caused by an overactive immune system. It may affect other organs of the body. It can affect men, women and children of all ages. Rheumatoid arthritis, psoriatic arthritis and ankylosing spondylitis are types of inflammatory arthritis.

What are the symptoms of inflammatory arthritis?

- Stiffness and joint swelling
- Redness and warmth
- Pain

KNEE REPLACEMENT SURGERY

Your knee is made of three basic parts that move and work together to ensure smooth motion and function. When arthritis affects the joint and the cartilage that cushions the knee wears away or is destroyed, the knee joint requires replacement.

Total Knee Replacement Surgery

This involves resurfacing the knee joint with an artificial joint made of a body-friendly metal alloy and plastic. The materials used in your artificial joint are very strong and are designed to last a very long time inside your body. Your orthopedic surgeon will consider many factors, such as age, bone density and the shape of your joints, when determining the exact kind of knee replacement you'll receive and how it will be inserted into your knee.

Partial Knee Replacement Surgery

Sometimes the cartilage damage in your knee is limited to just one side or the other. When this happens, a partial knee replacement procedure may be appropriate. Partial knee replacement is similar to total knee replacement except only one side of the knee joint is resurfaced. This involves a quicker recovery and a smaller scar.

HIP REPLACEMENT SURGERY

Your hip is made up of two basic parts that move and work together to ensure smooth motion and function. When arthritis affects the joint and the cartilage that cushions the hip wears away or is destroyed, the hip joint requires replacement.

The materials used in your artificial joint are very strong and are designed to last a very long time inside your body.

Your orthopedic surgeon will consider many factors, such as age, bone density and the shape of your joints, to determine the exact kind of hip replacement you'll receive and how it will be inserted.

Total joint replacement surgery requires your surgeon to remove the damaged parts of two bones and insert new, artificial joint surfaces. In hip replacement, your orthopedic surgeon will replace the upper part of your femur (the long bone in the thigh of your leg) with an artificial ball. The hip socket in your pelvis will be lined with metal and plastic. The new ball will glide normally in the newly lined hip socket. Your surgeon may decide to attach your new joint with or without bone cement. If your doctor decides not to use cement, a special implant will be used that allows your bone to grow into it.

Memorial Hermann uses two different techniques for hip replacement surgery. You may have your hip replaced through the back of the hip (posterior approach) or through the front of the hip (direct anterior approach).

Posterior total hip replacement is the most commonly used method and allows the surgeon excellent visibility of the joint for placement of the implants.

Direct anterior total hip replacement is an approach to the front of the hip joint as opposed to the back. This technique is muscle sparing. The muscle can be separated to allow for placement of the implants.

There is currently no clinical study showing the superiority of one approach over the other. Please be sure to discuss your surgery technique with your orthopedic surgeon.

THE RISKS OF JOINT REPLACEMENT SURGERY

Joint replacement is major surgery. Although advances in technology and medical care have made the procedure very safe and effective, there are risks that should be considered carefully before you decide to have surgery. You are encouraged to discuss the potential risks with your orthopedic surgeon, primary care provider and your family.

Every measure will be taken by your care team to avoid complications, which are rare but sometimes do occur. The team will also make every effort to minimize risks and to avoid the most common ones, which include:

Blood clots: Blood clots can form in a leg vein or in your lungs after joint replacement surgery and can be dangerous. Blood clots are more common in older patients, patients who are obese, patients with a history of blood clots, patients who smoke and patients with cancer.

Infection: Infection is very rare in healthy patients having a joint replacement. Patients with chronic health conditions, such as diabetes or liver disease, or patients who take some forms of corticosteroids, are at higher risk of infection after any surgery. Superficial wound infections are usually treated with antibiotics. Deeper infections inside the joint may require additional surgery.

Nerve, blood vessel and ligament injuries: Damage to the surrounding structures in the knee, including nerves, blood vessels and ligaments, are possible but extremely rare. More commonly, there is numbness in the area of the incision, which usually, but not always, resolves in 6 to 12 months.

Wound healing: Sometimes the surgical incision heals slowly, particularly if you take corticosteroids or have a disease that affects the immune system, such as rheumatoid arthritis or diabetes, or if you are a smoker.

Limited range of motion: On the day of surgery, you will begin exercises to help improve the flexibility of your knee or hip. Your ability to bend your knee or flex your hip after surgery often depends on how far you could bend or flex it before surgery. Even after physical therapy and an extended recovery period, some people are not able to bend the knee or flex the hip far enough to do normal activities such as reaching their feet to put on socks or tie their shoes.

Loosening of the joint: Over the long term, loosening of the artificial knee or hip joint is the most common risk associated with total knee or hip replacement. Loosening may occur when tissue grows between the artificial joint and your bone.

SPECIFIC TO KNEE REPLACEMENT SURGERY

Hematoma: Bleeding into the knee can occur either immediately after surgery or at a later time. This is accompanied by acute pain and swelling and is sometimes confused with infection.

Instability: After surgery, the knee may feel a bit unstable. This will normally improve as muscles regain their strength.

SPECIFIC TO HIP REPLACEMENT SURGERY

Dislocation of the hip: A patient's hip may move out of place after surgery (only 2 percent to 3 percent of patients). If this occurs, your surgeon will put the hip joint back in place. Some patients may be required to wear a brace for a short time after the dislocated hip is reset. In very rare cases, surgery may be required to put the hip back in the socket.

Changes in the length of your leg: After hip replacement, slight changes in the length of your leg may occur. The change is typically very small (less than 3/8") and is usually not noticeable to patients.

WHAT RESULTS ARE TYPICAL?

You can expect a successful outcome from your joint replacement surgery. Generally, patients experience less pain and more mobility and can resume most of the activities they enjoyed before the onset of arthritis. Long-term studies show that 85 percent to 90 percent of artificial joints are intact and functional after 20 years. Your artificial joint will last longer if you maintain your ideal weight and avoid high-impact activities.

You can also help reduce your risk of many of these complications by:

- Reducing or eliminating the use of tobacco and alcohol
- Being compliant with managing your diabetes, if applicable
- Maintaining a healthy diet
- Using good hand-washing techniques
- Performing your exercises as directed by physical therapy
- Limiting high-impact activities as directed by your surgeon

Preparing for Your Joint Replacement Surgery

The Memorial Hermann joint replacement experience begins long before your actual surgery. These guidelines will prepare you for a rapid and safe recovery in your quest for improved mobility and health.

To make sure you and your coach are fully prepared for your joint replacement surgery, it is important that you carefully and thoroughly review this patient guide and practice your exercises before surgery. The information will help you better understand your diagnosis, the joint replacement process and what to expect every step of the way as you prepare for your surgery. You will be introduced to the exercises, tips and activities that will speed recovery and promote success.

Be active: Exercise will help your body to be as fit as possible and keep your weight under control. If you are already exercising, keep up the good work. If you are not, start slowly adding exercise into your day. A 30-minute walk every day is far better than not exercising at all.

Stop smoking: *Do not use tobacco before surgery.* If you smoke, quit the use of tobacco products for good. This is a step that will have the greatest impact on improving your overall health. We recommend stopping six weeks beforehand and not smoking afterward for at least 2 weeks.

Quitting is possible, even if you are a long-time heavy smoker and have tried to quit many times before. It is never too late to stop smoking! Your doctor can help you stop smoking and talk with you about a variety of options.

Blood sugar control: If you have diabetes, management of your blood sugar is key to the healing process. Please discuss your diabetes with your physician prior to surgery.

YOUR DIET

2 to 6 weeks before surgery: Eat a well-balanced diet. Fruits, vegetables and protein will help your body heal faster, regain strength and energy more quickly and even improve your ability to fight infection. If you have lost weight without trying, please contact your surgeon to discuss adding additional protein to your diet. You will be given further instructions on what to eat and drink the day before and day of surgery when you are contacted by a Memorial Hermann nurse.

JOINT REPLACEMENT PREOPERATIVE EDUCATION CLASS

To make sure you are fully prepared for your joint replacement surgery, a class has been designed especially for patients like you. This education will help you better understand your diagnosis, the joint replacement process and what to expect every step along your journey to health. You'll also be introduced to the exercises, tips and activities you will use to speed recovery and ensure lasting success. This will also be a great time for you to ask any questions about your procedure or recovery. You will be given information about class options and setup by the pre-admission testing department or the campus Nurse Navigator.

This education is very important because it will provide you with the information you need to have an exceptional experience in the hospital and to be ready to do your part after returning home to ensure a full recovery.

You will be contacted to set up education prior to surgery. The Preadmission Testing Department coordinator will register you for an in-person class or help you set up online education. Please ask which options the hospital provides.

PREADMISSION TESTING

Once your surgeon's office schedules your procedure with us, you will be contacted by our Preadmission Testing Department coordinator to set a preadmission testing appointment. Preadmission testing ensures that the care team will be completely prepared for your specific needs on the day of surgery. Fasting is not required prior to preadmission lab testing.

What to bring to your preadmission testing appointment:

- A list of all your current medications
- Valid picture identification
- Health insurance information
- Copy of any advance directives that you have (durable power of attorney, living will)

The preadmission testing appointment takes approximately an hour. The nurse and clinical team will review and obtain the following:

- Height, weight and vital signs
- Blood and urine testing
- EKG and X-ray
- Medical history
- Anything you may be taking, including supplements, over-the-counter medication, or any medication prescribed by your physician. Please bring your medications in their original prescription bottles or a detailed list of that includes the medication name, dosage and frequency.
- Any known allergies and your reactions
- Previous surgeries with dates
- Name and location of your pharmacy
- Name and phone numbers of your primary care physician and any specialists you have seen.
- Name and phone number of the person who will be driving you home.

HOSPITAL REGISTRATION / FINANCIAL OBLIGATIONS

During your preadmission testing appointment, you will also meet with a business office registrar to complete the preregistration process. The registrar or a financial counselor will review your financial obligations for the procedure.

Payment is required at the time of service to cover any applicable copay, deductible or coinsurance as identified by your insurance carrier(s). **Hospital charges are separate from the physician charges (surgeons, radiologist, pathologist, surgical assistant and anesthesiologist).** If you have any questions regarding your financial responsibility or insurance coverage, please call your insurance provider or Memorial Hermann business office.

FINDING A COACH

Recovering from joint replacement is a team effort. It is strongly recommended that you have a coach, family member or friend who is willing to support you every step of the way and who can participate fully in activities before surgery and during your recovery.

It is important to bring your coach with you to your preoperative education class. Your coach's support, encouragement and companionship can make all the difference, not just on the day of surgery but also throughout the weeks before and after your surgery.

TIPS FOR PREPARING YOUR HOME

You and your family/coach may want to consider these tips to help make your home safe and comfortable when you return from your surgery:

- Purchase a non-slip bath mat for inside your tub/shower.
- Check every room for tripping hazards. Remove throw rugs, and secure electrical cords out of your way.
- Determine what items from dressers, cabinets and shelves you'll need immediately after returning home. Any items you use often should be moved to counter height to avoid excessive bending or reaching.
- Plan on using a cordless phone or a cell phone. They can be tucked away inside a pocket, carried easily or set within reach.
- Make sure stairs have handrails that are securely fastened to the wall. If you must negotiate stairs inside or outside your home, please discuss this at your preoperative visit.
- If you have pets, you may want to consider boarding them for a few days after your return home.
- A chair with a firm back and arm rests is recommended during your recovery. A chair that sits higher will help you stand more easily. Chairs with wheels should not be used under any circumstances.
- In order to minimize cooking, prepare meals in advance and freeze them. Alternatively, you can purchase prepared meals for convenience.
- Install night lights in bathrooms, bedrooms and hallways.
- Avoid yard work for 10 days prior to surgery. Make arrangements for outdoor work such as gardening or cutting the grass for at least 2 weeks after surgery.
- Do laundry ahead of time and put clean linens on your bed.
- Arrange for someone to collect your newspaper and mail.
- Since your safety is a primary concern, it is a requirement that your coach, spouse, a family member or friend stay with you after your surgery until you are able to perform activities of daily living independently and safely. Typically, this occurs within a few days after you return home.

PREOPERATIVE EXERCISES

Start these preoperative exercises as soon as possible. Your recovery will go much faster if you are as fit as possible before undergoing a total joint replacement. Below are exercises specially designed by Memorial Hermann therapists that you should do before your surgery.

Do the following four exercises three times a day, repeating each exercise 30 times. Exercises should be performed on both legs.

Buttock squeezes: Squeeze your buttock muscles together. Hold for 5 seconds.

Quad sets: Slowly tighten the muscles on the front of your thigh. Straighten your leg as if you are pushing the back of your knee into the bed. Hold for five seconds. **(2)**

Hamstring sets: Slowly tighten the muscles on the back of your thigh by bending your knee with your heel planted. Dig your heel into the bed attempting to bend your knee without moving your leg **(3)**. You should feel the muscle on the back of your leg tighten. Hold for 5 seconds.

FOR KNEE REPLACEMENT ONLY

Straight-leg raises: To promote quadriceps strength, lie on your back and bend your uninvolved knee to a comfortable position. Tighten your thigh muscle and straighten your knee. Slowly raise your leg about 6 to 8 inches, and hold for 5 seconds **(4)**. Slowly lower your leg and relax your thigh muscle.



FOR HIP REPLACEMENT ONLY

Supine hip abduction: Lie on your back on a firm surface. Tighten your thigh muscle so that your knee is straight. Move your leg out to the side, keeping your knee straight, with your foot and knee pointing to the ceiling **(5)**. Return to the starting position.

POSTOPERATIVE EXERCISES

After surgery you will learn the postoperative exercises. (**See page 31.**) Performing these exercises regularly and properly is perhaps the most important factor in speeding recovery and determining the long-term success of your new joint. Keep in mind that the exercises are designed to strengthen muscles around the knee or hip and improve mobility. The exercises are not always easy, but they are an important part of your treatment and recovery process. Some soreness in your joint is normal and will improve over time. Your surgeon will let you know if you should omit any exercise.

If you experience severe pain with any exercise, you should stop immediately.

MEDICATIONS

You may take your prescription medications as directed by your orthopedic surgeon. During your preadmission testing appointment, a nurse will review which medications you should take the morning of surgery. Take the designated medications with a 12-ounce bottle of pre-surgery drink (you will be instructed where to obtain this) at least 1 hour before you arrive at the hospital for your surgery.

Medications You May Need to STOP Taking Prior to Surgery

Some medications that you currently take may prove harmful during surgery because they thin your blood and increase the risk of bleeding after surgery. If you take the following medications*, you must stop taking them prior to your surgery:

2 weeks prior: Prescription diet medications. The American Society of Anesthesiology has recommended you stop the following supplements: ginkgo biloba, garlic or garlique, ginseng, glucosamine, green tea (capsule form), kava, Echinacea, St. John's wort, valerian, fish oil and vitamins A and E.

7 days prior: Anti-inflammatory medications (ibuprofen, Motrin®, Advil®, Aleve®, meloxicam, naproxen, Relafen® or diclofenac).

***Note:** If you are on blood thinners, anticoagulants or antiplatelet agents (such as Coumadin®, Plavix®, Effient®, Xarelto®, Eliquis®, etc.), aspirin, compounds containing aspirin, or Trental®, you will need special instructions from your surgeon. You may need to stop taking other medications not listed above. Talk to your surgeon if you are taking medications that could suppress your immune system, such as drugs for rheumatoid arthritis or hormone replacement.

PREVENTING A SURGICAL SITE INFECTION

There are several steps that you can take to help prevent surgical site infections.

Dental care: All invasive dental work, including cleanings, must be completed at least **2-4** weeks prior to your surgery. You must call your surgeon's office if any dental problems arise prior to your scheduled surgery date. Talk to your surgeon about dental procedures after surgery, as you may need to take an antibiotic.

Shaving: It is very important that you do not shave your legs or use any hair removal products anywhere near the surgical area for **5** days prior to surgery. Studies show an increased risk of surgical site infection associated with shaving, due to the microscopic cuts in the skin that allow bacteria to enter. *If hair needs to be removed around the site of your incision, it will be done in the hospital prior to surgery.*

Clean hands: Hand hygiene is very important. You will notice your caregivers using alcohol-based hand sanitizer when entering your room. Your family and friends are strongly encouraged to use this cleanser frequently to wash their hands (for at least 20 seconds each time) to prevent the spread of infection. Please remind your medical team, friends and family to wash their hands if you do not see them do so.



Illness: If you become ill with a fever, cold, sore throat, flu or any other illness, please contact your orthopedic surgeon's office.

Skin rash or broken skin: Report either instance to your orthopedic surgeon's office.

Pre-surgery bathing: One week prior to surgery, use an antibacterial soap such as Dial, Lever 2000 or Safeguard. Please follow all pre-surgery bathing instructions detailed later in this guide.

PREPARING FOR YOUR SURGERY DAY

The following checklist should help you prepare for your joint replacement surgery.

Bring With You

- We encourage you to bring your own walker, if you have one, labeled with your full name.
- Clean, comfortable, loose-fitting clothing like elastic-waist pants, shorts, skirts or jogging outfits for your trip home from the hospital.
- Tennis shoes or shoes with a flat, rubber bottom. Do not bring tight-fitting footwear, as your feet may swell a bit following surgery. Do not bring slides or backless slippers.
- Eyeglasses (including case), contact lens cases with solution, denture storage, and hearing aids case.
- A pack of your favorite chewing gum. This will help your digestive system recover after your surgery. Do not chew gum prior to surgery.
- If you use a breathing machine such as a CPAP, bring your machine, mask and hose.
- Your insurance card.
- Credit card number or check to make any necessary co-payments.
- Your advance directive, either a living will or a durable power of attorney for health care. If you don't already have an advance directive, forms will be available at the hospital.
- Reading material for your enjoyment.
- This Joint Replacement Patient Guide.

For your convenience, Wi-Fi is available throughout the hospital.

Items to Leave at Home

Jewelry, cash or valuables of any kind should be left at home or in the care of a trusted loved one.

YOUR ITINERARY: COUNTDOWN TO SURGERY

3 to 4 Weeks Before Surgery

- Make a surgical clearance appointment with your primary care provider, cardiologist or anesthesiologist, if required.
- Perform any ordered tests, such as chest X-ray, EKG or MRI within 30 days of surgery, if ordered.
- Joint Replacement Preoperative Class (Depending on the campus, this class may be offered online or in person).
- Begin your exercise program.
- Begin making arrangements for someone to accompany you to your preoperative appointments if desired, transport you to the hospital the day of surgery, drive you home after surgery and stay with you upon your return home after surgery.
- Stop smoking.

2 Weeks Before Surgery

- Start making home preparations.
- Stop taking prescription diet medications and herbal supplements.

7 to 10 Days Before Surgery

- Stop taking medications as directed by your physician.
- Begin bathing with antibacterial soap, which can be purchased at a grocery or drug store.
- Reduce alcohol consumption, and continue to refrain from smoking.
- Diabetic patients, ask your doctor how your insulin should be adjusted the day of surgery.

Day Before Surgery – Bathing and General Preparations

Before surgery, your body needs to be thoroughly cleaned with a special soap called chlorhexidine gluconate (CHG). This soap removes the germs on your skin, which reduces the risk of infection. You will receive your CHG bathing kit at your preadmission visit.

Take a shower and wash your entire body, including your hair and scalp, in the following manner:

- Wash your hair using normal shampoo. Make sure you rinse the shampoo from your hair and body.
- Wash your face with your regular soap or cleanser.
- Using a fresh, clean washcloth/sponge, use CHG and wash from your neck down, leaving on for 1 full minute prior to rinsing. Do not use CHG on genitals or the anus.
- Rinse your body thoroughly.
- Using a fresh, clean towel, dry your body.
- Dress in freshly washed clothes.
- Use fresh, clean sheets and pillowcases after this shower.
- Do not use lotions, powders or creams after this shower.
- Prepare a small bag with the items you will need to bring with you for the day of surgery.
- Relax and get a good night's sleep.
- You will be contacted in the late afternoon to confirm your surgery and receive an arrival time.

Day Before Surgery – Eating and Drinking

24 Hours Before Surgery

- Do not drink alcohol or use tobacco products.
- Eat your normal meals and drink plenty of fluids the day before surgery until midnight, unless told otherwise by your doctor.

12 Hours Before Surgery

(if ordered by your physician):

- Drink two bottles of clear pre-op carbohydrate drink as directed by your physician. Drink both bottles within 30 minutes.

8 Hours Before Surgery

- Do not consume solid foods, protein shakes, creamer or milk. Example: If your surgery is scheduled for 9 a.m., stop consuming solids, dairy products, juice with pulp, candy and gum after 1 a.m.

For your safety, your surgery may be canceled or delayed if you have consumed any food or unapproved fluids within 8 hours of surgery.

Day of Your Joint Replacement Surgery

Day of Surgery – Bathing and General Preparations

Take a shower in the following manner:

- Wash your hair using normal shampoo. Make sure you rinse the shampoo from your hair and body.
- Wash your face with your regular soap or cleanser.
- Using a fresh, clean washcloth/sponge, use CHG and wash from your neck down, leaving on for 1 full minute prior to rinsing. Do not use CHG on genitals or the anus.
- Perform routine oral care.
- Wear clean, comfortable clothes. Avoid wearing cologne, perfume or fragrances of any kind. Deodorants, creams, lotions and shaving creams should be avoided. Do not wear jewelry, makeup or nail polish.
- Do not take blood thinners or aspirin unless specifically directed by your surgeon. You should take heart, blood pressure and/or seizure medications as instructed.
- Dentures and hearing aids must be removed prior to surgery but will be returned to you after surgery.
- Remove contact lenses prior to surgery.
- Report to the check-in area as instructed.

Day of Surgery – Pre-surgical Drink

If ordered by your physician:

Drink one bottle of a clear pre-op carbohydrate drink **3 hours before your surgery** (usually 1 hour before your scheduled arrival time). Drink the entire bottle within 30 minutes. Do not drink anything after this. Example: If you are asked to arrive at 7 a.m., consume the bottle by 6 a.m.

ARRIVING AT MEMORIAL HERMANN

The day of your surgery will be a busy one. Several hours may pass between the time you check in to the hospital and the time that your surgery is completed. Your family and coach should be prepared for a few hours' wait. Please park and arrive at the entrance as you were instructed.

Surgery Preparation

Please check in at the assigned area of the hospital. Patient identification will be applied at this time. It is important for you to verify that all information on your identification wristband is correct. We will be asking you to confirm this information many times throughout your hospital stay as one way of ensuring your safety.

You will be escorted to a preoperative area, where a nurse will review your medical records, take your vital signs, perform a brief physical exam, clean the surgical site and make sure everything is in order. A nurse will start an IV to allow medication and fluids to flow directly into your bloodstream. Sometimes additional tests may need to be performed.

Your orthopedic surgeon or physician assistant and the anesthesia provider will visit you in the pre-op area prior to surgery. Among other things, your surgeon will ask you to identify which knee or hip is being operated on and will mark the surgical site with a special marker. Your anesthesia provider will ask you a number of questions to help determine the best anesthesia for you.

Family Waiting

Your family or friends will be escorted to the surgery waiting room while you are completing the preoperative process. During your procedure, your family or friends are welcome to wait in the surgery waiting room or leave the area.

Once your joint replacement is complete, a member of the surgical team will contact your coach, spouse, family member or friend. At this point, they will be able to speak with the surgeon to discuss your procedure.

Patient Privacy

Your family will be given a patient identification card with a personal identification number (PIN). When asking about your current medical status, your family must use your full name along with the provided PIN.

ANESTHESIA—GENERAL INFORMATION

Board-certified physician anesthesiologists affiliated with the hospital and certified registered nurse anesthetists (CRNAs) staff the operating room (OR) and the post-anesthesia care unit (PACU).

Your anesthesia provider will meet you before surgery. At that time, they will examine you, discuss your medical history and determine the best plan for your anesthetic care. It is important that you tell the anesthesia provider of any prior problems or difficulties you have had with anesthesia.

They will discuss the risks and benefits associated with the various anesthetic options, as well as the potential side effects that can occur with each. Any time you have surgery and anesthesia, there is a chance that you may experience some nausea and vomiting; however, medications are available to treat both and are routinely given ahead of time to try to prevent these symptoms.

Types of Anesthesia

Decisions regarding your anesthesia are tailored to your personal needs. The types available are:

- General anesthesia—provides loss of consciousness.
- Regional anesthesia—involves the injection of a local anesthetic to provide numbness, loss of pain or loss of sensation to a large region of the body. You may not be able to feel or move your legs until the anesthetic wears off, which can last for several hours. It is important that you do not try to walk until your physical therapist or nurse determines you are ready.
- Neuraxial anesthesia—involves a local anesthetic placed around the nerves of the central nervous system, such as spinal or epidural blocks.
- Local anesthesia—a combination of medications injected into your knee or hip during surgery to help with postoperative pain.

Operating Room

Inside the operating room, you will be cared for by a team of affiliated physicians, physician assistants, nurses and skilled technicians. The total time required for surgery differs from patient to patient, depending on the complexity of the procedure.

RECOVERY

After surgery, you will be transported to PACU or the recovery room, where you will recover from the effects of anesthesia.

A specially trained nurse may check your vital signs—including blood pressure, respiratory rate and heart rate—and monitor your progress. Pain medications will be provided through your IV as needed. The nurse will check your bandages, check drainage from your surgical site and encourage you to take deep breaths.

The nurse may also apply foot or leg compression devices to help with circulation. These pumps will squeeze your feet or legs at regular intervals to circulate blood and help prevent clotting. If you do not feel the compression, be sure to let your nurse know.

Nurses will assess you and continue to monitor you frequently until you are stable. Once your vital signs are stable and you have regained movement and sensation in your lower extremities, you will be visited by a physical therapist and/or occupational therapist. The physical therapy / occupational therapist will assist you and provide additional education on how to use your walker, how to get in and out of a bed and chairs and how to properly exercise during your recovery process.

You will also be offered a meal while you are recovering. Since you will still be recovering from the effects of anesthesia, we encourage light meals such as a small sandwich and soup.

ENHANCED RECOVERY AFTER SURGERY

Enhanced Recovery After Surgery is a program that utilizes new techniques to speed healing with fewer complications to help patients spend less time in the hospital.

Enhanced Recovery includes, but is not limited to, the following:

- Keeping you hydrated by giving a carbohydrate-loading drink up to 3 hours before the operation (if ordered by your surgeon)
- Controlling pain better using non-narcotic pain relievers before surgery begins
- Walking and eating solid food soon after surgery

Since everyone's health and situation are different, your Enhanced Recovery program will be personalized to meet your specific needs.

Early Ambulation

Early ambulation is key in recovering more quickly and with fewer complications.

The exercises in this booklet are designed to help increase strength and flexibility in the joint. The goal is for you to bend your joint and perform activities of daily living, such as walking, climbing stairs and getting in and out of a bed and up and down from a chair or toilet. To ensure maximum success, it is important that you take part in physical and occupational therapy as ordered while you are in the recovery room and continue your exercises after you are home.

Once you are able to ambulate safely, you will be ready to discharge home.

Fall-Prevention Program

After joint replacement surgery, you are at risk for a fall. Always ask for assistance whenever you need to get up. If you have stairs or steps at home, you must have someone assist you when going up or down them.

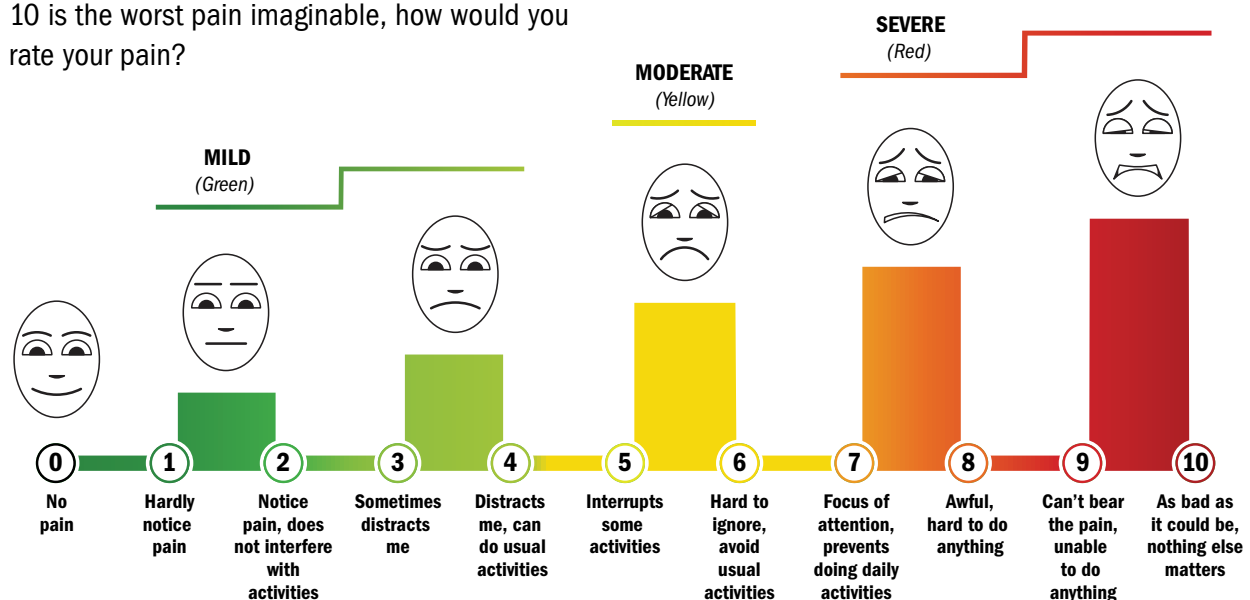
MANAGING YOUR PAIN

For most patients, the regional anesthetic wears off after a few hours. When this occurs, you will start taking pain medications by mouth. Take your pain medication approximately 30 minutes before you begin doing your exercises to help control the soreness that often accompanies activity in the first few days after surgery.

The amount of pain and discomfort you experience depends on multiple factors. You will receive pain medication through your IV immediately after surgery and then by mouth once you are able to tolerate liquids.

Your physicians and nurses will do everything possible to control your pain and discomfort using medications and other techniques.

Communication is an important part of helping to manage your pain. You are encouraged to share information with your nurses about any pain you experience. Be as specific as possible. For example, where is the pain? How often do you feel pain? What does the pain feel like: Is it sharp, dull, aching or spreading out? On a scale of 0 to 10, where 10 is the worst pain imaginable, how would you rate your pain?



DEEP BREATHING, iCOUGH® AND THE INCENTIVE SPIROMETER

You will receive a device called an incentive spirometer, which helps you fully expand your lungs and keeps them active. Doing so helps prevent chest congestion, pneumonia or other breathing complications after surgery. You may practice coughing after using the spirometer to ensure your lungs are clear.

(I) Incentive Spirometer Exercises

1. Put your lips around the mouthpiece, breathe in deeply and try to hold the piston up for 2 to 4 seconds.
2. Remove the mouthpiece, breathe out and rest a few seconds.
3. Repeat this exercise 10 times every hour while you are awake.
4. Take a deep breath and cough. If you have secretions, cough them up.

(C) Cough and Breathe Deeply

After surgery, taking deep breaths and coughing will help to clear your lungs. This helps the lungs do the vital job of delivering oxygen to the tissues in your body.



(O) Oral Care Before and After Surgery

In addition to brushing your teeth, use mouthwash twice daily to keep your mouth clean from germs. You should brush your teeth and use mouthwash several days before your surgery and then continue after you are discharged from the hospital.

(U) Understand iCOUGH® Practices

It is important for you and your family to take an active part in your recovery from surgery. We want your pain to be controlled to help you take deep breaths and cough, do breathing exercises and make sure that you get out of bed, sit in a chair and walk.

(G) Get Out of Bed and Walk the Hallway

Getting out of bed and walking at least three times per day will help your recovery after surgery and help prevent complications. Walking will help clear secretions from your lungs and improve your circulation so that you may regain your strength.

(H) Head-of-Bed Elevation

It is important to keep the head of your bed elevated 30 to 45 degrees. Being in an upright position after surgery will help your breathing.

TECHNIQUES FOR COUGHING AND DEEP BREATHING

STEP 1

- Sit on the edge of a bed or a chair, or lie on your back with your knees slightly bent.
- Lean forward slightly.
- Breathe out normally.

STEP 2

- Breathe in slowly and deeply through your nose.
- Then breathe out fully through your mouth. Repeat.
- Take a third deep breath. Fill your lungs as much as you can.

STEP 3

- Cough two or three times in a row.
- Try to push all of the air out of your lungs as you cough.
- Then relax and breathe normally.
- Repeat as directed.

Nutrition After Your Surgery

- Drink liquids and eat foods as desired.
- You may be asked to chew gum for 10 minutes, three times a day in order to help the digestive system recover.
- Eat at least 60 grams of protein (or at least 6 ounces of meat) per day in addition to other foods. If needed, drink protein shakes to help meet the goal of 60 grams throughout the day.
- Your surgeon may ask that you drink an immuno-nutrition drink such as Impact Advanced Recovery® or Ensure® Surgery three times a day for 5 days after surgery.

See our helpful iCOUGH® Checklist on page 41.

Transitioning Home

PREPARING TO RETURN HOME

Before you go home, members of your care team will make sure that all your dismissal needs are met. Your surgeon may order the following based on your individual needs:

- Medication for pain
- Celebrex® or other medication to decrease inflammation
- Anticoagulant to thin the blood

You can also expect:

- Written instructions from your surgeon
- Appointments for physical therapy (if ordered) and follow-up with your surgeon

Do not drive until cleared by your surgeon. Do not drive, operate machinery or drink alcohol 24 hours after your surgery or while taking pain medication. Also, do not sign any legal documents or make any important decisions.

THE DRIVE HOME

You will need to arrange for your coach, family member or friend to drive you home. To make your ride more comfortable, your driver should bring pillows for you to sit on, slide your seat back and recline the seat slightly.

MEDICATIONS

Resume your home medications as instructed by your physician.

Be sure to take your pain medications by mouth with a meal or snack. Take your medication as directed on the prescription label. Avoid drinking alcohol or driving while taking prescribed pain medication. Consider taking pain medication 30 minutes prior to performing the prescribed physical therapy exercises.

If you need a refill of your pain medication, contact your pharmacist. The pharmacy will contact your surgeon. You may begin to substitute acetaminophen (Tylenol®) for the prescription medication at any time.

It is normal to experience a deep ache through the bone after surgery.

Some people experience constipation while taking pain medication. This is a common side effect of this medication. You may consider drinking prune juice daily, drinking more water, adding fiber to your diet or taking an over-the-counter stool softener to prevent this. Exercise also helps prevent constipation.

DIET AND REST

Eat a healthy diet to promote healing. You may experience decreased appetite after surgery. This is normal and should gradually resolve.

Take rest breaks as needed during the day, and get a good night's sleep to support the healing process. It is common to have difficulty sleeping after surgery, but this will gradually improve.

You may sleep on your back or on your side with a pillow between your legs for comfort.

INCISION CARE

Though most patients who have surgery immediately begin the recovery process, some surgeries may result in a surgical site infection (SSI) at the area of the body impacted by the operation. Most SSIs can be treated with antibiotics. The antibiotic given depends on the bacteria (germs) causing the infection. Sometimes patients with SSIs also need another surgery to treat the infection. Most patients who have surgery do not develop an infection.

Your healthcare team takes a number of steps to reduce your risk of acquiring an infection, and there are steps that you can take to ensure a healthy recovery.

How Your Healthcare Team Prevents SSIs

Our doctors, nurses and other healthcare providers:

- Clean their hands and arms up to the elbow with an antiseptic agent just before the surgery.
- Clean their hands with soap and water or an alcohol-based hand rub before and after caring for each patient.
- Wear special hair covers, masks, gowns and gloves during surgery to keep the area clean.
- Administer antibiotics before surgery starts.
- May remove hair in the impacted area immediately before surgery using electric clippers. Razors should not be used to remove hair prior to surgery.
- Clean the skin at the site of surgery with a special soap that kills germs.

Managing Swelling for Knee Replacements

It is normal to have bruising around your knee and down to your foot as well as up the inner thigh to the groin area. You may also experience swelling of the upper and lower leg down to the foot and ankle. Swelling usually peaks around 7 days after surgery.

Be sure to use ice three to four times a day for no longer than 20 minutes at a time with your leg elevated. This will help reduce pain and swelling. Be sure to place a towel on your knee under the ice.

Ice should NOT be placed directly on the skin.

Elevate your foot 10 inches above the level of your heart, and apply the ice if you have excessive swelling. You may place a pillow under your heel, but do not place one under your knee.

Follow-up Physician Visit

You will see your surgeon or physician assistant for a follow-up appointment 1-2 weeks after surgery and routinely thereafter for the first year.

WHEN TO CALL YOUR SURGEON

A moderate amount of bruising, swelling and redness can be expected after joint replacement surgery.

If you experience any of the following, you should contact your surgeon or the hospital:

- A fall
- Persistent numbness, tingling or burning
- Pain not relieved by medication or pain that is getting worse
- Drainage from the incision site that is thick or tinted yellow, milky white or green
- Inability to do your exercises
- Excessive swelling that persists even after elevating your leg and applying ice
- Toes that are very cold and do not get warm when you cover them
- Increased redness around your incision
- A temperature over 101 degrees Fahrenheit (38.3 degrees Celsius)
- Any unexpected problems, concerns or questions

It is unlikely, but if you experience chest pain, palpitations or difficulty breathing, please call 911.

Life After Joint Replacement

TRAVELING

When traveling long distances, you should attempt to change position or stand about once an hour. Some of the exercises, such as ankle pumps, can also be performed, should you need to sit for long periods of time.

Because your new artificial joint contains metal components, you will likely set off the security systems at airports or shopping malls. This is normal and should not cause concern.

Please be sure and check with your surgeon on when it will be safe to travel by air.

DENTAL CARE

Antibiotics may be indicated prior to dental work for a certain period of time after your surgery. Please feel free to discuss this with your orthopedic surgeon.

Leading an Active Life

Exercising and maintaining an active lifestyle are important parts of health. Most patients with artificial joints are able to enjoy many activities, though some should be avoided. In general, high-impact exercises, such as running, jumping, heavy weight lifting or contact sports, are not recommended. Participating in these or similar activities may damage your joint or cause it to wear down much more quickly. Low-impact activities, such as swimming, walking, gardening and golf, are encouraged. Be sure to check with your orthopedic surgeon before starting any new activity.



THE IMPORTANCE OF LIFETIME FOLLOW-UP VISITS

After your joint replacement surgery, it is important to follow up with your orthopedic surgeon on a regular basis.

Some general rules:

- In the first year, keep all your scheduled appointments.
- After that, plan yearly visits unless otherwise instructed by your surgeon.
- Contact your surgeon anytime you have mild pain for more than a week.
- Contact your surgeon anytime you have moderate or severe pain that requires medication.

Three good reasons to follow up with your orthopedic surgeon:

First, if you have a cemented hip or knee, the integrity of the cement must be evaluated. With time and stress, cement may crack. You probably would be unaware of this happening, because it usually happens slowly over time. This does not often occur in the first 10 years, but it can. After 10 years, the incidence is greater. Seeing a crack in cement doesn't necessarily mean you need another surgery, but it does mean you will need to be followed more closely. Your hip or knee could become loose, and this can lead to pain. Or, the cracked cement could cause a reaction in the bone called osteolysis, which causes the bone to thin out. The sooner potential problems are discovered, the better your chance of avoiding more serious problems.

Second, the plastic liner in your hip or knee may wear. Small particles may get into the bone and cause osteolysis, similar to what may happen with cement. Replacing a worn liner early can keep this from happening.

The **third** reason is that it is important to keep a record of the performance and outcome of your surgery so that developing technology can be accurately evaluated. You may benefit from this process by giving your surgeon information that will allow him or her to better counsel you regarding surgical options.

X-rays taken at your follow-up visits can detect these problems. Your new X-rays can be compared to previous X-rays to make these determinations. This evaluation will be performed in your orthopedic surgeon's office.

If you are not sure how long it has been or when your next visit should be scheduled, call your doctor's office.

The following pages contain a list of basic exercises and activities that you will be performing after your knee or hip surgery. These activities are vital in helping you return to your normal activities and are designed to help increase leg strength, flexibility and function.

WHAT TO EXPECT THE FIRST 12 WEEKS

Weeks 1 to 3

During weeks 1 through 3, you will become more independent. If you are receiving home therapy, you will need to be very faithful to your exercise program to achieve the best outcome. Please have your physical therapist complete your record of treatment and progress.

Your goals for this time period are to:

- Achieve the goals set with your physical therapist in the hospital.
- Walk with the proper assistive device (walker, crutches or cane).
- Walk at least a quarter mile (or as much as is comfortable).
- Climb and descend a flight of stairs (12 to 14 steps).
- Straighten your leg and tighten your quadriceps (muscle on front of thigh).
- Independently shower and dress.
- Resume homemaking tasks.

Weeks 4 to 6

During weeks 4 through 6, you will see increasing mobility to full independence. Your home exercise program will be even more important as you receive less supervised therapy.

Your goals for this time period are to:

- Achieve your 1- to 3-week goals.
- Walk with a cane or single crutch if instructed to do so by your surgeon or therapist.
- Walk a quarter to a half mile.
- Begin progressing on stairs from one foot at a time to regular stair climbing (a few steps at a time).
- Drive a car with your surgeon's permission.

Weeks 7 to 12

During weeks 7 through 12, you should be able to begin resuming all of your normal activities. Your goals for this time period are to:

- Achieve your 1- to 6-week goals.
- Walk with no cane or crutch if instructed to do so by your surgeon or therapist.
- Walk without a limp.
- Walk up to one mile.
- Climb and descend stairs in normal fashion (foot over foot).
- Improve strength to 80 percent.
- After week 12, with your doctor's approval, and still following all joint replacement precautions, you may resume all activities, including dancing, bowling and golf.

Exercises and Mobility



JOINT REPLACEMENT EXERCISE GUIDE

Regular exercise to restore your knee or hip mobility and strength and a gradual return to everyday activities are important for your full recovery.

Your orthopedic surgeon and physical therapist may suggest some of the following exercises. The following guide can help you better understand your exercise/activity program, supervised by your therapist and orthopedic surgeon. You may feel uncomfortable at first, but these exercises will speed your recovery and actually diminish your postoperative pain.

HIP DISLOCATION PRECAUTIONS (POSTERIOR)

- Avoid bending the surgical hip or trunk past 90 degrees.
- Avoid internal rotation of the surgical hip (turning hip inward).
- Avoid crossing the surgical hip past the midline of the body (crossing your ankles or legs).

HIP DISLOCATION PRECAUTIONS (DIRECT ANTERIOR)

Avoid taking your surgical leg backward while simultaneously turning it outward.

KNEE PRECAUTIONS

Although there are no specific precautions regarding your knee, care should be taken to avoid falling on your knee. Although your incision may look healed on the outside, it takes longer for the tissues to heal on the inside. For this reason, use caution when kneeling and exercising during the first couple of months. Please consult with your physician if you have questions.

FALL PRECAUTIONS

Fall precautions apply to all patients. Here are some tips to help you avoid falling:

- Use the appropriate assistive device until cleared by your surgeon or physical therapist.
- Use a reacher/grabber to pick things up off the floor.
- When standing, turn your entire body (keeping your nose, belly button and toes in line) rather than turning at the waist.
- Keep items you will need after surgery within reach.
- Prepare your bathroom to avoid slips, trips and falls.
- Avoid alcohol (especially while taking pain medications).

EXERCISES ON THIS PAGE APPLY TO TOTAL HIP AND KNEE REPLACEMENTS

Ankle pumps: To promote circulation and to decrease swelling postoperatively, in bed or sitting in a chair, point your toes up **(1A)** and down **(1B)**. Perform 10 repetitions every hour.

Quad sets: To achieve a fully straight knee and to improve quadriceps strength, lie with your leg straight and toes pointed toward the ceiling. Tighten the muscle on the top of your thigh by pushing the back of the knee into the bed **(2)**. Hold your muscles tight for 5 seconds.

Supine hip abduction: Lie on your back on a firm surface. Tighten your thigh muscle so that your knee is straight. Move your leg out to side, keeping your knee straight with your foot and knee pointing to the ceiling **(3)**. Return to starting position.

Short arc quads: To further promote quadriceps strength, put a towel or pillow under the back of your knee. Lift the lower leg up **(4)** and straighten the knee. Hold for 5 seconds.

Long arc quads: To promote quadriceps strength, sit with your knees bent at 90 degrees. Straighten your leg at the knee while keeping your back upright **(5)**. Slowly lower your leg to the starting position. Hold for 5 seconds.

See next page for additional exercises that are specific to hips or knees.



ADDITIONAL EXERCISES FOR TOTAL KNEE ONLY

Straight-leg raises: To promote quadriceps strength, lie on your back and bend your uninvolved knee to a comfortable position. Tighten your thigh muscle and straighten your operated knee, and slowly raise your leg about 6 to 8 inches. Hold for 5 seconds **(6)**. Slowly lower your leg and relax the thigh muscle.

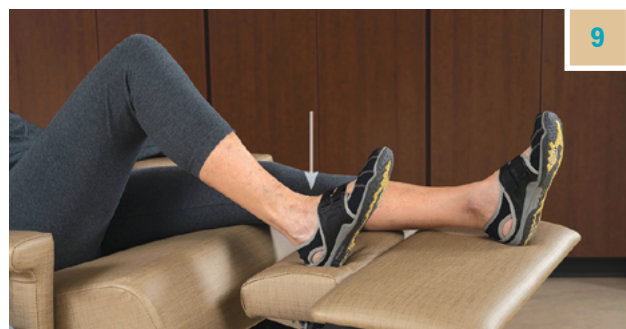
Heel slides: To promote active bending, lie on your back with your legs straight and your toes pointed toward the ceiling. Slowly bend your knee by sliding your heel toward your buttocks as far as you can **(7)**, attempting to achieve greater motion with each repetition.

Seated knee flexion: To promote knee bending, sit in a chair with your knee bent and your foot fixed to the floor. Gently slide your foot back toward you **(8)**. You can lift your heel up, but not the ball of your foot. Relax in the new position for 5 seconds.

ADDITIONAL EXERCISES FOR TOTAL HIP ONLY

Buttocks squeezes: Squeeze your buttocks muscles together. Hold for 5 seconds.

Hamstring set: Bend your knee and dig your heel into bed **(9)**. Hold for 5 seconds.



EARLY ACTIVITY AND MOBILITY

Soon after your surgery, you will begin to perform everyday activities. This early activity aids your recovery and helps your knee or hip regain its strength and movement.

Getting Dressed

Slacks and Underwear

Use the adaptive equipment as recommended by your therapist. Keep all clothing within reach.

- Put underwear and slacks on your operated leg first **(1A)**.
- Using a dressing stick or reacher, catch the waist of the underwear or slacks. Lower the item to the floor, and slip the clothing over your operated leg first **(1B and 1C)**.
- Pull the underwear up over your knees. Pull the slacks up over your knees **(1D)**. Pull up the underwear and slacks simultaneously to the waist, standing just once **(1E)**.



Socks and Stockings

Use a sock aid as outlined below:

- Slide your sock or stocking onto the sock aid **(2)**. Make sure the heel is at the back of the aid and the toe is straight and tight on the end. The top of the sock should not come over the top of the sock aid.
- Holding onto the cords, drop the sock aid out in front of the operated leg and slip your toes into the opened sock **(3)**. Point your toes, and pull on the cords to pull the sock up.



Shoes

Slip-on shoes are easier to put on. Elastic shoelaces allow tie shoes to slip on easily.

- Use the reacher to grab the shoe by the tongue, and place your toes in the shoe **(4)**. A long-handled shoehorn is helpful when pushing your heel into the shoe.



Getting into Bed

- Back up to the bed until you feel it on the back of your legs.
- Reaching back with both hands, sit down on the edge of the bed **(5)** and then scoot back toward the center of the mattress. (Silk pajama bottoms, satin sheets or sitting on a plastic bag may make this easier.)
- Move your walker out of the way, but keep it within reach.
- Scoot your hips around so that you are facing the foot of the bed.
- Lift your leg into the bed while scooting around **(6)**. If this is your operated leg, you may use a cane, a rolled bed sheet or a belt to assist with lifting that leg into bed.
- Keep scooting, and lift your other leg onto the bed **(7)**.
- Scoot your hips toward the center of the bed.

Getting Out of Bed

- Scoot your hips to the edge of the bed.
- Sit up while lowering your leg to the floor.
- Bring your opposite leg down to the floor.
- Scoot to the edge of the bed.
- Use both hands to push off the bed. If the bed is too low, place one hand in the center of the walker while pushing up off the bed with the other hand.
- Balance yourself before grabbing the walker.



Sitting

It is important to use the correct technique when sitting down. Using a chair with armrests is recommended. In order to sit safely, use the following procedure:

- Using the walker, back up to the chair until you feel it behind your legs **(8)**.
- Slide your affected leg out in front of you **(9)**.
- Reach back for the armrests, and slowly lower yourself into the chair **(10)**.
- You may then slide back into the chair if you are seated too far forward.
- Reverse this process to stand up from a chair.

Walking

Proper walking is the best way to help your knee or hip recover. At first, you will walk with a walker or crutches. Your physical therapist will tell you exactly how much weight you are allowed to put on your affected/operated leg as ordered by your surgeon. Your allowed weight may range from “touchdown” (barely touching your foot to the floor) to “partial” (less than half of your weight) or “as tolerated” (as much as is comfortable).

Stand comfortably and erect with your weight evenly balanced on your walker or crutches. Advance your walker or crutches a short distance, and then reach forward with your operated leg with your knee straightened so the heel of your foot touches the floor first. As you move forward, your knee and ankle will bend and your entire foot will rest evenly on the floor. As you complete the step, your toe will lift off the floor and your knee and hip will bend so that you can reach forward for your next step. Remember, touch your heel first, then flatten your foot, then lift your toes off the floor.

Note: If you are using crutches, make sure all of your weight is supported on your hands, not under your arms.



Walk as rhythmically and smoothly as you can. Don't hurry. Adjust the length of your step and speed as necessary to walk with an even rhythm. As your muscle strength and endurance improve, you may spend more time walking. You will gradually put more weight on your leg. You may use a cane in the hand opposite your surgery and eventually walk without an aid. Hold the aid in the hand opposite the side of your surgical leg. You should not limp or lean away from your operated knee or hip.

The correct way to use your walker is as follows:

- Always keep your walker in front of you.
- Push your walker and place it approximately an arm's length in front of you. Be sure to place all four legs down flat before walking.
- Place your affected leg approximately half the distance between you and the walker.
- Place your unaffected leg next to or past the affected leg near the front of the walker.

Stairs

The ability to go up and down stairs requires strength and flexibility. At first, you will need a handrail for support and will be able to go only one step at a time. Always lead up the stairs with your good leg and down the stairs with your operated leg. Remember, "up with the good" and "down with the bad." You may want to have someone help you until you have regained most of your strength and mobility.

Do not try to climb steps higher than the standard height (7 inches), and always use a handrail for balance. As you become stronger and more mobile, you can begin to climb stairs foot over foot.

There are several ways to go up and down stairs. Your therapist will instruct you on which technique is best for you. Remember to maintain your weight-bearing status even while you are on the stairs.



Going Up Stairs with Crutches

- Walk up to and face the steps, keeping your crutches on the floor.
- Step up with your unaffected leg first and then your surgical leg.
- Bring the crutches up to the step you are on.
- Repeat until you reach the top of the stairs.

Going Down Stairs with Crutches

- Place the crutches on the step below you.
- Step down with your surgical leg first and then your unaffected leg.
- Repeat until you reach the bottom.

Going Up Curbs with a Walker

- Move your feet and the walker as close to the curb as possible.
- Put your weight on both your legs; then lift the walker onto the sidewalk.
- Step onto the sidewalk with the unaffected leg first. Then, using the walker to support your weight, bring up the surgical leg.

Going Down Curbs with a Walker

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

Advanced Exercises and Activities

Once you have regained independence for short distances and a few steps, you may increase your activity. The pain of your joint problems before surgery and the pain and swelling after surgery have weakened your knee or hip. A full recovery will take many months. The following exercises and activities will help you recover fully. Your orthopedic surgeon may refer you to outpatient physical therapy for advanced knee or hip strength and flexibility rehabilitation.



Advanced Exercycling Exercise

Exercycling is an excellent activity to help you regain muscle strength and knee mobility. At first, adjust the seat height so that the bottom of your foot just touches the pedal, with your knee almost straight. Pedal backward at first. Ride forward only after a comfortable backward cycling motion is possible.

As you become stronger (at about 4 to 6 weeks), slowly increase the tension on the exercycle. Exercycle for 10 to 15 minutes twice a day, gradually building up to 20 to 30 minutes, three or four times a week.

Pain or Swelling after Exercise

You may experience knee pain or swelling after exercise or activity. You can relieve this by elevating your leg and applying ice wrapped in a towel. Exercise and activity should consistently improve your strength and mobility. If you have any questions or problems, contact your orthopedic surgeon or physical therapist.

Facts About Opioids

An opioid is a **strong** prescription medication used for pain relief when other non-opioid medications and techniques have not reached your goals of sleeping, walking, eating and breathing deeply.

Side Effects

The side effects of opioids have the potential to delay your healing process after surgery by not allowing you to eat or have bowel movements.

Some common side effects of opioids are:

- Nausea and vomiting
- Constipation
- Itching
- Dizziness and sleepiness
- Decreased ability to think clearly

Serious side effects include decreased breathing and death.

It is not recommended to drive, operate heavy machinery or participate in other high-risk activities while taking opioids due to dizziness and sleepiness. Do not mix opioids with alcohol or other medications that can cause drowsiness. Please let your doctor know if you are currently taking any anti-anxiety medications such as Xanax® or Valium®.

Using Opioids Safely

- Take all non-opioid medications as prescribed to prevent severe pain.
- Only use opioids if you have severe pain that is not relieved with other non-opioid medications prescribed.
- As your pain gets better, use opioids less frequently.
- Only use your opioids for your surgical pain. Do not use pills for other reasons.
- Your opioids are only for you. Do not share your pills with others.

Opioid Addiction

You are at a higher risk of developing dependence or an addiction to opioids if you:

- Have a history of depression or anxiety.
- Have a history of using or abusing alcohol, tobacco or drugs (including prescription or street drugs).
- Have a history of long-term (chronic) pain.
- Take opioids for longer than one week.
- Take more pills, more often, than your doctor prescribed.

If you have a history of chronic pain or substance abuse, please let your physicians know so that they can better take care of you during this process. You are an important part of your healthcare team, so make sure you ask questions such as:

- How long should I expect to have pain?
- Can I use over-the-counter medications, such as acetaminophen (Tylenol®) or ibuprofen (Motrin®, Aleve®)?
- What other things can I do to help control my pain? (Ice, rest, elevate, exercise, lifting or activity restrictions.)
- If I am discharged with opioid pills, can I have fewer of them because I have small children or teenagers in the house?

Store and Dispose of Opioids Safely

- Store opioids safely out of reach of infants, children, teens and pets. Do not store your opioids in places that allow easy access to your pills (example: bathroom).
- Lock your pills, if possible.
- Keep a count of how many pills you have left.

Dispose of unused opioids:

- Medication take-back drives.
- Participating pharmacy public disposal boxes (to search for a box in your area, visit: deadiversion.usdoj.gov/pubdispsearch)
- Mix drugs (do not crush) with used coffee grounds or cat litter in a plastic bag, and then throw away.

Frequently Asked Questions

How often will I see my physician after surgery?

It is likely that you'll see your surgeon or his or her physician assistant after surgery in the recovery room. Your surgeon will also want to see you for follow-up appointments in his or her clinic after you are discharged.

How do I know if my incision is infected?

After surgery, you will notice discolored skin, some swelling and drainage around your incision. This is normal. If you experience painful redness, abnormal swelling or thick, bad-smelling drainage from your incision, you may have an infection. A temperature over 101 degrees also may indicate an infection.

When can I take a shower?

Most patients shower the day after surgery. When you are at home, you may need special equipment, such as a bath mat, hand-held showerhead or shower seat to help you bathe comfortably and safely. Your surgeon may also instruct you to cover your incision when you shower.

Why must I take antibiotics for dental work or other surgical procedures?

Taking antibiotics is a precaution to help ensure that your new artificial joint does not become infected. Additional surgeries or dental work increases the chance of infection. No matter where the infection starts, if it spreads to your new joint, the results could be very serious. When artificial joints become infected, they must be removed surgically and then replaced.

Please let your dentist or physician know that you've had joint replacement surgery. This is important no matter how small or straightforward the procedure.

How should I sleep at night to keep my knee or hip comfortable and safe?

Placing a pillow between your legs should help keep your knee or hip comfortable and stable. You may sleep on your back or on either side, depending on what makes you most comfortable.

When will I be able to drive again?

You should not drive a car or other motor vehicle until your physician says it's OK to do so. You must be off pain medications before you will be cleared to drive again. In most cases, patients are able to resume driving about 4 weeks after surgery.

When can I return to work?

Most often, at least 4 to 6 weeks are needed off from work. It depends on the type of work you do.

When can I play sports again?

You are encouraged to participate in low-impact activities after your full rehabilitation. These activities include walking, dancing, golfing, hiking, swimming, bowling and gardening. High-impact activities such as running, tennis and basketball are not recommended.

Information from American Academy of Orthopedic Surgeons:
orthoinfo.aaos.org

Survey and Feedback



Thank you for choosing Memorial Hermann and for allowing us to provide you with a great surgical experience!

You will receive a survey in the mail to provide feedback on our services. These surveys are beneficial in recognizing our employees, providing feedback on our services and improving processes. We hope that if your experience did not meet your expectations, you have brought it to our attention while you were with us and received resolution.

If at any time you feel that your experience is not going as you expected, please know that you can ask to speak to the charge nurse, who will inform the manager or director of surgical services. We would like to take care of any of your concerns in real time.

Please make sure you have provided us with a correct phone number that we can call a few days after your procedure for an update on your progress.

iCough® Checklist

INCENTIVE SPIROMETER EXERCISES

Repeat 10 times per hour.

AM																			
PM																			

COUGH AND BREATHE DEEPLY

Take deep breaths often.

ORAL CARE

Brush your teeth and use mouthwash twice daily.

AM																			
PM																			

UNDERSTAND ICOUGH PRACTICES

Do you understand why you are using iCOUGH?

YES

NO

NOT SURE

Rate your pain on the scale:



0

No pain



1

Hardly notice pain

2

Notice pain, does not interfere with activities



3

Sometimes distracts me

4

Distracts me, can do usual activities



5

Interrupts some activities

6

Hard to ignore, avoid usual activities



7

Focus of attention, prevents doing daily activities

8

Awful, hard to do anything



9

Can't bear the pain, unable to do anything

10

As bad as it could be, nothing else matters

GET OUT OF BED AND WALK THE HALLWAY

Walk at least three times per day.

MORNING																			
AFTERNOON																			
NIGHT																			

HEAD-OF-BED ELEVATION

Is the head of your bed elevated greater than 30 degrees?

YES

NO

Medication Log

[illegible]

Memorial Hermann Joint Replacement Home Evaluation Form

(Please complete before preoperative education class.)

First name: _____ Last name: _____

How you would like to be addressed: _____ Surgeon's name: _____

Date of surgery: _____ Type of surgery: ☐ Total hip ☐ Total knee ☐ Partial knee

Patient goal: _____

Living Situation TODAY

- I live: ☐ Alone ☐ With family ☐ With a spouse ☐ Other
Is assistance available, and are they willing to assist with care? ☐ Yes ☐ No
- I live in a: ☐ House ☐ Senior high-rise ☐ Apartment ☐ Assisted living ☐ Other
- My home is: ☐ One level ☐ Two-story ☐ Split-level ☐ Apartment/elevator ☐ Apartment/stairs

Steps You Will Use at Home After Surgery

- Steps in home (please mark all that apply to your home situation):

Number of steps:

Front steps: _____ Railing: Single/Bilateral

Split-level steps _____ Railing: Single/Bilateral

Garage steps: _____ Railing: Single/Bilateral

Basement _____ Railing: Single/Bilateral

Back steps: _____ Railing: Single/Bilateral

Upstairs _____ Railing: Single/Bilateral

Open back steps: ☐ Yes ☐ No (can see through them in back)

Bathroom Access

Please mark all that apply to your home situation:

- Bathroom has: ☐ Walk-in shower ☐ Tub only (height of tub _____) ☐ Combination tub/shower
☐ Fixed shower head ☐ Hand-held showerhead ☐ Curtain
☐ Shower door ☐ Bar or support near shower

How wide is entrance of the shower doors? _____

Toilet height: _____ Elevated seat? ☐ Yes ☐ No Bar or support near toilet? ☐ Yes ☐ No

- Access to the following equipment:

☐ Bath bench/seat ☐ Commode ☐ Non-skid bath mat or decals ☐ Wall-mounted grab bar
☐ Tub grab bar ☐ Hand-held showerhead ☐ Elevated toilet seat ☐ Walker ☐ None

- Equipment currently have and/or using:

☐ Bath bench/seat ☐ Commode ☐ Non-skid bath mat or decals ☐ Wall-mounted grab bar
☐ Tub grab bar ☐ Hand-held showerhead ☐ Elevated toilet seat ☐ Leg lifter
☐ Reacher ☐ Long shoe horn ☐ Sock aid ☐ Crutches
☐ Walker basket ☐ Wheelchair ☐ Elastic shoelaces ☐ Wheeled walker
☐ Walker ☐ Cane ☐ Long-handled sponge ☐ None

Getting Around

- Walks before surgery: ☐ Without cane/walker ☐ With a walker ☐ With a cane ☐ With crutches

- Walks: ☐ Outdoors ☐ Indoors only ☐ Zero to six blocks ☐ More than six blocks

- My bed is _____ inches from the floor to top of mattress.

When lying down in bed, which side do you exit from? ☐ Right side ☐ Left side

Could you use the other side? ☐ Yes ☐ No Mattress: ☐ Soft ☐ Firm

- Will walker fit in home before surgery? ☐ Yes ☐ No

Are there things blocking your pathway? ☐ Yes ☐ No (over)

12. Have rugs been picked up? ☐ Yes ☐ No
13. Have the most used dishes been placed at or above sink level, and have things you will use in the bathroom and bedroom been put at a height that is easy to get to? ☐ Yes ☐ No
14. Is there a chair in the home to use after surgery? (e.g., a high/firm chair or recliner) ☐ Yes ☐ No
Will you need to get a chair to use after surgery? ☐ Yes ☐ No
15. At this time, my plans at discharge are:
☐ Return home alone ☐ Home with outpatient therapy ☐ Home with family ☐ To relative's home
☐ Home with home care ☐ Rehab facility ☐ I do not know
16. Equipment needed after surgery: _____

Activities of Daily Living

In home, the following are done by:

17. Cooking meals/cleanup
 Laundry ☐ Self ☐ Spouse ☐ Agency ☐ Other
 Shopping ☐ Self ☐ Spouse ☐ Agency ☐ Other
 Cleaning (dusting, vacuuming, etc.) ☐ Self ☐ Spouse ☐ Agency ☐ Other
 Driving/transportation ☐ Self ☐ Spouse ☐ Agency ☐ Other
 Household maintenance ☐ Self ☐ Spouse ☐ Agency ☐ Other
 Yard work ☐ Self ☐ Spouse ☐ Agency ☐ Other
18. Name of agency assisting with above tasks: _____
19. Dressing (putting on / taking off)
 Shirt/blouse/dress ☐ Self ☐ Spouse ☐ Agency ☐ Other
 Bra/fasteners ☐ Self ☐ Spouse ☐ Agency ☐ Other
 Slacks undergarments ☐ Self ☐ Spouse ☐ Agency ☐ Other
 Shoes ☐ Self ☐ Spouse ☐ Agency ☐ Other
 Socks/nylons ☐ Self ☐ Spouse ☐ Agency ☐ Other
20. Bathing
 Sponge bath ☐ Self ☐ Spouse ☐ Agency ☐ Other
 Shower stall ☐ Self ☐ Spouse ☐ Agency ☐ Other
 Shower/tub ☐ Self ☐ Spouse ☐ Agency ☐ Other
21. Transfers
 In/out of chair ☐ Self ☐ Spouse ☐ Agency ☐ Other
 In/out of bed ☐ Self ☐ Spouse ☐ Agency ☐ Other
 In/out of toilet ☐ Self ☐ Spouse ☐ Agency ☐ Other
 In/out of tub/shower ☐ Self ☐ Spouse ☐ Agency ☐ Other
 In/out of car ☐ Self ☐ Spouse ☐ Agency ☐ Other
22. Name of agency assisting with the above: _____
23. Previous injuries/problems:
☐ Shoulder arthritis
☐ Shoulder replacement ☐ Right ☐ Left ☐ Both
☐ Rotator cuff injury ☐ Right ☐ Left ☐ Both
☐ Other joint problems
☐ Previous hip replacement
☐ Previous knee replacement
24. Comments: _____
- _____
- _____
- _____
- _____



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