



EISENHOWER HEALTH
JOINT REPLACEMENT PROGRAM



JOINT REPLACEMENT

PATIENT

EDUCATION

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EISENHOWER HEALTH

Thank you for choosing Eisenhower Health for your joint replacement surgery. Eisenhower is committed to providing excellence in clinical care and patient satisfaction by adhering to the highest standards in orthopedic surgery. We aim to provide a multidisciplinary approach to joint replacement surgery that fosters a safe and effective experience for our patients. We continuously pursue new evidence-based treatment modalities that improve surgical outcomes and patient satisfaction.

The Eisenhower Orthopedic Wellness Center is a state-of-the-art facility that fosters optimal recovery after your surgery. Our orthopedic nurses and physical therapists are trained to get you up and moving soon after surgery. Early mobilization is an important part of recovery as this helps patients quickly regain their independence after surgery. Prior to being discharged from the hospital, your physician, the nursing staff, physical therapists, and our care coordinators make sure you and your family are educated on your discharge plan, can safely be discharged, and you are comfortable with your plan.

We recognize that pain after surgery is a major concern for many patients and as a result we have developed a multimodal pain management strategy that is safe, evidence based, and effective. The orthopedic surgeons have worked closely with our pain management physicians, orthopedic nurses and physical therapists to develop a personalized yet protocol-based approach to your care. At Eisenhower, we understand that every patient is unique and have tailored our pain management strategies to accommodate each patient's specific needs.

Again, thank you for choosing Eisenhower for your health care needs. We understand making the decision to have a joint replacement can be a stressful choice and we want to make your experience as smooth and as comfortable as possible. We track our patient outcomes through the American Joint Replacement Registry (AJRR) in order to continuously improve our care while minimizing surgical complications. Lastly, we also want our patients to be happy with their care. If you have any issues during your stay, please don't hesitate to contact me.

Thank you,

Erik Schnaser, MD
Director of Adult Reconstruction and Joint Replacement Surgery
Eisenhower Desert Orthopedic Center

Welcome to the Eisenhower Orthopedic Health Center

We are very pleased that you have chosen Eisenhower Health for your joint replacement surgery. We are committed to providing excellence in clinical care and customer service which is supported by our values of integrity, caring, accountability, respect and excellence.

The philosophy of the Eisenhower Orthopedic Health Center is “Wellness in Motion” and our treatment foundation is built on this. We are dedicated to implementing a plan of care after your joint replacement surgery that will allow you to return to an active lifestyle. With this in mind, our physicians, nurse practitioners, nursing staff, physical and occupational therapists and care coordinators all work together to get you back on your feet and prepared to go home the same day, in most cases.

Your satisfaction, recovery and safety are important to us; therefore, we will provide:

■ Excellent Teamwork

You are the most important member of our “Total Joint Team” and your plan of care. We encourage you to play an active role in your recovery! Multiple disciplines will be working with you to prepare you for discharge. Please let us know if you need anything. A team leader is available 24 hours a day to assist you with any concerns or needs you may have.

■ Quality Pain Management

You will be asked to rate your pain, and staff will work with you to manage your pain through non-pharmaceutical cares, such as ambulating, repositioning, ice, etc. Please request pain medication as needed to keep discomfort tolerable. If what you are receiving is not controlling your pain, notify our team so we can discuss a plan and possible changes to your medication regimen to better manage your pain. The goal is to take the least amount of narcotic pain medication you can, while participating in your therapy and keeping your pain manageable.

■ Outstanding Patient Safety

With a joint replacement surgery you are at risk for falls. Please do not get up without assistance at any time during your hospitalization. **Always** call for help with mobility.

We look forward to being a part of your successful joint replacement and wish you a speedy recovery!

Sincerely,

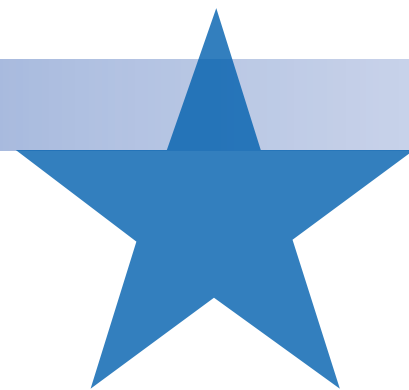
The Orthopedic Team at Eisenhower Health



EISENHOWER HEALTH

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Your Health Care Team

The Orthopedic Health Care Team at Eisenhower Health specializes in Joint Replacement Surgery. While the team consists of many, the main members are listed below:

- **Orthopedic Surgeon**

This physician performs your surgery and directs your care, following you from your first office visit through your rehabilitation.

- **Nurse Practitioner (NP)**

This team member works with the surgeon, providing post-surgical care and education during your hospital stay.

- **Physician Assistant (PA)**

This team member works with the surgeon, providing pre-surgical and post-surgical care, as well as assisting during surgery.

- **Nurse Navigator**

This registered nurse works with all team members, providing support and education for you and your family throughout your orthopedic care.

- **Anesthesiologist (MD/DO)**

This physician monitors and keeps you comfortable during your procedure. As part of the Pain Management Team, they, with the surgeon, work with you to manage your post-surgical pain.

- **Registered Nurse (RN)**

The registered nurses, under the direction of the surgeon, manage your care during your hospital stay and provide education about your health needs to both you and your family.

- **Certified Nursing Assistant (CNA)**

The nursing assistants monitor vitals signs and assist with ambulation and bathroom activities.

- **Clinic Team (RN, LVN, MA, CA)**

The Clinic Team, who work in your surgeon's office, will follow you, both before and after discharge.

- **Physical Therapist (PT)**

The physical therapists work with you throughout your rehabilitation, helping you with range of motion, muscle strengthening, balance and safety.

- **Occupational Therapist (OT)**

This team member works with you to plan safe ways for you to complete your daily activities, such as bathing and dressing.

- **Care Coordinator**

This registered nurse works with you, your family and the other team members to provide you with information about the best and safest discharge plan. The care coordinator is highly knowledgeable about insurance coverage for services and equipment.

In Advance of Surgery

Insurance companies require pre-authorization for elective joint replacement surgery. Your surgeon's office and the hospital admitting department will work with your insurance provider to gain pre-authorization. Upon receipt of pre-authorization approval, you will be contacted by the surgeon's scheduler to discuss available surgery dates.

You need to schedule for the following appointments:

- Medical clearance (if required)
- Cardiac clearance (if required)
- Joint Replacement Education Class
- Eisenhower Health surgical interview
- Pre-surgery office visit with the surgeon/physician assistant
- Surgery date
- First post-surgery office visit

It can be beneficial for you to participate in a strengthening program before surgery. The Eisenhower Desert Orthopedic Center (EDOC) physical therapy department is pleased to develop one for you based upon your individual needs. Your program will allow you to strengthen your muscles prior to surgery in order to assist in your recovery and functional outcomes. Please provide a referral from your orthopedic surgeon so that an appointment can be scheduled for you. Call 760-766-2572 for an appointment.

Understanding Risks of Surgery

Joint replacement surgery is a highly successful and generally safe procedure that allows most patients to return home the same day of surgery. Despite its success, complications can arise. The following are just some of the possible complications associated with joint replacement surgery. It is important that the patient understands these risks. Any questions relating to these risks must be discussed with the surgeon in advance of the surgery.

■ Infection

Patients will be given antibiotics just before and after the operation. The surgery will be performed in sterile conditions with sterile equipment. Despite this, infections can still arise. Infections can arise from the patients themselves, as in the case of a remote infection that spreads to the joint replaced, from the local environment such as the operating room, patient's room, nursing home or patient's home. The wound site may become red, hot and painful. There may also be a discharge of fluid. This is usually treated with antibiotics, but an operation to wash out the joint may be necessary. In some cases, the implants may be removed and replaced at a later date. The infection can sometimes lead to sepsis (blood infection) during which intravenous antibiotics are required. Infection is a very serious and possibly life threatening complication.

■ Bleeding

During any operation, some bleeding is expected. Your surgeon will make every effort to minimize the amount of bleeding during your operation. In some cases, patients may have injury to a nearby artery or vein causing accelerated bleeding, either during or after the surgery. This is also a rare but very serious complication.

■ Acute or Persistent Pain

The purpose of having a hip or knee replacement is to reduce the level of pain caused by the arthritis. Acute pain after surgery is common as one heals. Persistent pain past the typical recovery period is rare. It can be due to a variety of reasons discussed in this section or other less common reasons. In some cases the surgeon is unable to discover a definitive reason for the pain or discomfort.

Understanding Risks of Surgery (Continued)

■ Bone or Ligament Injury

It is rare, but is possible the pelvis, thigh bone or shin bone may be broken when the knee or hip replacement is being put in. This may require fixation, either at time of surgery or during a later operation. Ligaments and other soft tissues may also be injured during surgery, the most concerning of which is patellar tendon injury after knee replacement surgery. Injuries to this structure affect the patient's ability to straighten the leg.

■ Altered Wound Healing

The wound may become red, thickened and painful (keloid scar). Massaging the scar with cream (vitamin E or Mederma®), when healed, may help the appearance.

■ Nerve Damage

Altered sensation along the incision is fairly common. This is usually temporary and may take several months to resolve, but may also be permanent. Rarely, damage can occur to muscle function, which can be temporary or permanent.

■ Prosthetic Life Span

Modern operating techniques and newer implants allow for a longer life span of the replaced joint. Newer bearing surfaces have improved the longevity of the implants. In most cases, hip and knee replacements last 15 to 25 years. In rare cases, the life span is significantly less. The reason is often unknown; however, implants can wear from overuse, become infected, break or become unstable. Loosening of the implants from the host bone is also a cause for failure. This and other causes of failure may require removal of the implant and revision surgery.

■ Conversion to a Total Knee Replacement

Approximately five to 10 percent of partial knee replacements will require additional surgery, either for the reasons listed above, or for progression of the arthritis in the remaining joint. Repeat operations usually result in conversion to a total knee replacement.

■ Altered Leg Length

For those undergoing hip replacements and more rarely knee replacements, the leg that has been operated on may feel shorter or longer than the other. This rarely requires a further operation to correct the difference. More commonly, a shoe lift is worn to address the discrepancy. In rare circumstances, surgery may be necessary to correct the problem.

■ Joint Dislocation

Hip replacement patients may experience a dislocation. This is a condition in which the ball or femoral head pops out of its socket. It can be traumatic and painful. Typically, a patient is transferred to the emergency department where the doctor, “reduces” the hip back into place. Most often, the joint can be put back into place without the need for further surgery. Sometimes this is not possible, and an operation is required. This can happen at any time during the lifespan of the hip replacement. In cases of recurrent dislocations, surgery may be necessary to correct the problem.

■ Knee Stiffness

This may occur after the operation, especially if the knee is stiff before the surgery. Working on flexion and extension of your new joint may minimize stiffness and reduce pain. Manipulation of the joint (under general anesthetic) may be necessary. Using pain medication so that you can participate properly with physical therapy will minimize stiffness. Poor compliance to the post-operative therapy regimen and pre-surgical stiffness are common reasons for post-surgical stiffness. Persistent stiffness past the general period of recovery is a very common reason for continued knee pain.

■ Blood Clots / Pulmonary Embolism / Stroke

Any patient undergoing lower extremity surgery is at an immediate risk for a blood clot. Clots typically happen in the vein but may also occur in the artery. They can inhibit blood flow to the end organ (in the case of an arterial clot) or flow back to the heart (in the case of a venous clot). Clots can also break away and travel to another organ such as a lung or the brain. In either of these cases, these complications can be devastating and at times fatal. Your surgeon will likely place you on a blood thinner to minimize your risk of clot formation. If you are unclear what your surgeon wishes you to take as your blood thinner, it is imperative that you find out right away.

■ Organ Failure

Undergoing surgery is a major risk. There must be a balance of patient optimization, proper anesthesia, fluid balance, and careful resuscitation. Despite best efforts, bodily organs can be affected. This may include heart attacks, heart failure, stroke, kidney or liver failure. These are very uncommon but potentially devastating complications.

Medications to Stop Prior to Surgery

Please inform your surgeon of all the medications you are presently taking — including vitamins and all nutritional supplements. Talk to your doctor about any medicines you take to thin your blood (aspirin, Plavix®, Pradaxa®, Coumadin®, Lovenox®, Eliquis®, Xarelto®, etc.).

Medications to stop prior to surgery

Seven days before surgery, stop taking:

All NSAIDs (non-steroidal anti-inflammatory drugs)

- naproxen (Aleve®)
- nabumetone (Relafen®)
- ibuprofen (Advil®, Motrin®)
- meloxicam (Mobic®)

All vitamins and supplements

If you are taking blood thinners (anticoagulant medications), your prescribing physician will let you know when to stop taking them before surgery.

These include:

- warfarin (Jantoven®)
- edoxaban (Savaysa®)
- apixaban (Eliquis®)
- enoxaparin (Lovenox®)
- rivaroxaban (Xarelto®)
- fondaparinux (Arixtra®)

If you have a cardiac stent, mechanical heart valves, and/or a history of pulmonary embolism, do not stop taking your medications to prevent clots without first talking to the doctor who put in the stent. Those medications include

- aspirin
- prasugrel (Effient®)
- clopidogrel (Plavix®)
- ticlopidine
- ticagrelor (Brilinta®)

Failure to discontinue the medications listed below may result in rescheduling your surgery.

***You must have clearance from your prescribing physician to stop any anticoagulant medication.**

If you have any questions, please call the office.

Preparing for Surgery

Quit Smoking Before Surgery

The American Academy for Orthopedic Surgeons (AAOS) reports that tobacco and nicotine use is known to impair the body's ability to heal bones and wounds and that smokers are at a higher risk for infection and other complications. Patients who quit smoking before and during orthopedic treatment have less pain than those who smoke and also have better outcomes.

Why should you quit smoking before joint replacement surgery?

Smoking changes blood-flow patterns, delays healing and slows recovery, according to the American Academy of Orthopaedic Surgeons.¹

This is true for any major surgery. The Anemia Institute for Research and Education reports smoking can reduce your red blood cell count. Of course, smoking can also increase lung complications, which is always a concern for patients planning to undergo general anesthesia.

In an article for the *Medical Journal of Australia*, Matthew Peters, MD, wrote that "Wound infection rates are higher in smokers than in non-smokers who have had joint-replacement surgery."² Earlier studies have also shown smoking is linked to longer joint replacement surgeries, lengthened hospital stays, and a higher demand for hospital services.³

According to Dr. Peters, "Continuing smokers must accept that some risks are simply unacceptable given the intent of surgery." And the key is quitting – simply cutting back on smoking is not adequate. To achieve a benefit, patients need to stop several weeks before surgery.

Preparing for Surgery (Continued)

The specific reason for higher infection rates in smokers is not clear. However, there is a glimmer of good news. Dr. Peters indicates nicotine replacement devices such as nicotine gum and patches are not linked to increased infection rates. Your doctor can refer you to smoking cessation programs offered locally.

Just think of how your life may change when you've quit smoking and have had your diseased joint replaced with an implant designed to reduce pain and immobility. You'll have a better chance for a faster recovery, and you could be on your way to a new, much healthier life.

¹ Fact Sheet: Preparing for Joint Replacement Surgery, American Academy of Orthopaedic Surgeons

² *Medical Journal of Australia*. 2004; 180 (7): 317-318

³ *Clinical Orthopedics*. 1999 Oct; 367: 172-180

Alcohol

The AAOS also reports that complications following joint arthroplasty are exponentially related to pre-surgery alcohol use/misuse. Alcohol use increases the risk of infection and poor healing. If possible, minimize your drinking well in advance of your surgery.

If you would like more information on a variety of health-related programs and services, please visit EisenhowerHealth.org/calendar. Eisenhower Health promotes healthy lifestyles through education, information, screenings and wellness programs.

Pre-surgical Tests

- Blood tests
- EKG
- Chest X-ray

These screening tools may be needed to confirm that you are in optimal health for your surgery.

Surgical Interview

This appointment is a comprehensive screening tool used to obtain your medical and surgical history.

Please have the following available for this appointment:

- an up-to-date list of all your current medications — the dose and frequency of each (include all vitamins, minerals and nutritional and herbal supplements)
- an advance directive — a copy will be placed on your chart
- insurance card(s)

Medical and Cardiac Clearances

It may be necessary for you to receive medical and/or cardiac clearance to ensure you are in optimal health prior to your surgery. Your surgeon will order these, as needed, based upon your medical history.

Dental Work

At your next appointment, please discuss any dental work with your provider.

Joint Replacement Education

This class is provided to all patients and their families either in person or you can view the content online by visiting EisenhowerHealth.org/preopedu. You will be given information on how to prepare your home and what to expect when you go home. Education about physical therapy and discharge planning are also part of this class.

Equipment

You **MUST** have a front-wheeled walker **PRIOR** to surgery.

Some patients prefer additional equipment even though it is not required. This equipment must be purchased by the patient.

Examples may include:

- **Bedside commode** — which can be used as a toilet riser and/or shower chair.
- **Cold therapy unit**
- **Reacher/grabber**
- **Long-handled sponge for showering**



Front-wheeled walker



Reacher/grabber

Home Safety Checklist

- Designate an area in your home where you will spend most of your day. The chair/sofa seat should be firm and at the proper height, and easy to get in and out of. An ottoman will be needed to help elevate your leg.
- Everything should be within easy reach, including the phone, lamps, TV remote and medications.
- Place a small, covered container at your bedside. This will hold one dose of pain medication that may be needed at night.
- Remove all loose rugs.
- Secure a bath mat outside your tub or shower.
- Place a non-skid surface in the bathtub and/or shower.
- Secure all loose wires, especially around your desk area.
- Place nightlights in the halls and bathroom.
- Use non-skid shoes; no flip flops, slip-ons or heels.
- Stock your kitchen with healthy foods, some high in fiber.

Two Weeks Prior to Surgery

You may have muscle weakness that has developed over time due to favoring your painful leg. It is beneficial to begin a strengthening program for your whole body before surgery to ease recovery and increase your strength and stamina. Arm strength will be needed after surgery for walking and getting in and out of bed. Walking, if able, for 10 to 15 minutes each day will increase your readiness for surgery.

The exercises shown on pages 31-34 are safe for both hip and knee replacement patients and may be done prior to surgery. The exercises should be done twice a day as you are able and tolerate. Start slowly and work your way up to the full regimen as tolerated. If the exercises cause an increase in your pain, modify or stop the activity and seek guidance from your surgeon or physical therapist.

Practice using your walker before surgery. Understanding how to use your walker and other equipment at home prior to surgery is useful. When practicing, keep your body within the frame of the walker and avoid putting your full weight on the leg on which surgery will be performed. The therapists at the hospital will offer you additional support regarding activity with your equipment.

Before Surgery Patient Checklist

Time of Decision to Have Surgery

- Find your “coach” – a support person who will assist you with your home care needs for the first five to seven days and attend or watch the joint class.
- Prepare your home (see page 12).
- Stock your kitchen with prepared meals.
- Arrange a place for your pets to stay.

Three to Four Weeks Prior to Surgery

- Complete any required pre-admission testing (labs, EKG, X-ray) no sooner than 30 days prior to surgery.
- Attend the Joint Class or watch the class online at EisenhowerHealth.org/preopedu, along with your coach.
- Watch Anesthesia Patient Education Video: Anesthesia with Peripheral Nerve Blocks at EisenhowerHealth.org/Anesthesia.
- Obtain a front-wheeled walker if you do not already have one. Most insurance companies do not cover this and patients must buy one. If you think your insurance company may cover it, contact the surgeon’s office as needed for an order. You MUST have a walker prior to arriving to the hospital for your surgery.
- Start your pre-surgery strengthening exercises (see pages 31-34).

Two to Three Weeks Prior to Surgery

- Complete your pre-admission appointment (either an in-office visit or a phone call).
- Continue your pre-surgery strengthening exercises (see pages 31-34).

Before Surgery Patient Checklist (Continued)

One to Two Weeks Prior to Surgery

- Attend your pre-surgery office visit with your surgeon or the surgeon's PA.
- Pack any personal items you wish to bring to the hospital (see page 16).
- Continue your pre-surgery strengthening exercises (see pages 31-34).
- Call your surgeon with any changes in your health (e.g., illness, colds, flu, or infections).
- STOP any medications as instructed.**
- Sign up for MyChart® at [EisenhowerHealth.org/MyChart](https://www.eisenhowerhealth.org/MyChart).

Day Prior to Surgery

- In the rare case that it is planned that you will remain overnight in the hospital, pack any medical equipment (CPAP/BIPAP, etc.)
- Finish packing. Make sure to bring this book.
- Complete your shower as instructed by the pre-admission nurse using the chlorhexidine soap.** Avoid using this soap on your face and genitals.
- You will receive a phone call from surgery today regarding the time for your procedure.
- Remove all jewelry and plan to leave all valuables at home.

Day of Surgery

- Eating and drinking instructions are as follows:
Do not consume any food eight hours before your surgery. Do not consume any liquids four hours before your surgery. If you eat or drink outside of these guidelines, your surgery may be canceled due to risks with anesthesia.
You may drink clear liquids up to four hours before your surgery requiring anesthesia or sedation. Clear liquids includes electrolyte drinks, such as Gatorade or PowerAde, which are beneficial. It also includes water, juices without pulp, such as apple or cranberry, and coffee or tea without milk or cream. It does not include alcohol or carbonated beverages. You may eat a light meal, such as toast, up to eight hours prior to your surgery. Avoid any greasy foods, foods high in fat, or foods containing dairy (milk products). If you have diabetes, monitor your blood sugars frequently. For any questions, contact your surgeon's office.
- Take another shower this morning, prior to coming to the hospital, using the chlorhexidine soap.** Avoid using this soap on your face and genitals.
- Arrive at the hospital on time.**

Hospital Information

Items to Bring to the Hospital

- Comfortable, loose fitting clothes, such as short-sleeved shirts, clothes with hems above the knee and an elastic waistband, T-shirt, shorts, sundress, house coat, etc.
- Comfortable shoes with a back; no flip flops, slip-ons or heels
- Paper and pen to write things down
- Dentures, hearing aids and/or eyeglasses (these items should be kept in protective cases when not in use)
- Cell phone
- Personal electronic equipment, such as computer, e-reader
- Walker (leave in the trunk of your car for use on day of discharge)

Items to Leave at Home

- Jewelry
- Money, credit cards

If you bring any personal belongings such as a watch, jewelry or money, please arrange for a family member or friend to take them home for safekeeping. If no one can take them home for you, ask your nurse to place them in the hospital vault. **The hospital will not be responsible for patients' personal belongings or valuables.**

Night Before Surgery

- Review the instructions given to you by the surgical interview nurse.
- Follow the guideline outlined on page 15 for eating and drinking.
- No alcohol or smoking prior to surgery as it interferes with anesthesia, pain medication and the healing process.
- Take a shower using chlorhexidine wash.

Chlorhexidine Wash Instructions:

No one wants an infection. By washing your skin carefully before surgery, you can lower your chances of infection.

For chlorhexidine liquid soap:

- Wash your body and hair with your regular soap and shampoo and rinse off. Do not shave the area where you will be having surgery.
- Turn off the water or step out of the shower and put the chlorhexidine soap all over your body **from the neck down**. Wash gently for five minutes, adding more soap as you wash parts of your body. (Avoid washing your genitals with the chlorhexidine soap.) This soap will not lather like your regular soap. Pay extra attention to the place where you will be having surgery.
- Turn the shower back on and rinse all of the chlorhexidine soap off of your body. Do not use any additional soaps.
- Dry yourself with a clean towel.

After You Use Chlorhexidine Liquid Soap:

- Be sure to put on clean clothes after you use the liquid soap.
- Do not put on lotion, deodorants, creams, powders, or perfumes.

What will the results be?

- You will have fewer germs on your skin, lowering your risk of infection at your surgery site.

What problems could happen?

- Rash, itching, burning

Helpful tips

- Do not shave the area where you will be having surgery.

Day of Surgery

- Take a shower as instructed using a chlorhexidine wash.
- Do not mark the surgical area.
- Do not shave the surgical area.
- If you were instructed to take medications by the Surgical Interview nurse, do so with a very small sip of water.
- Arrive on time at the location where your surgery will be performed. You will be escorted to the pre-surgery area.
- A name band will be placed on your wrist after verifying your name and date of birth. Throughout your hospital stay, you will be asked frequently to say your first and last name as well as your date of birth. This helps to ensure your safety.

In Pre-surgery Area

- You will be cared for by a registered nurse.
- You will change into a surgical gown and be given a pair of socks, a soft blue hat and a warm blanket.
- An intravenous (IV) line with fluids will be started by your nurse.
- All consents, paperwork and lab results will be reviewed with you by your nurse.
- You will be asked several routine screening questions — these are safety checks.
- Your nurse will administer any medications ordered by your surgeon.
- You will meet a member(s) of the anesthesia team:

Your **anesthesiologist** will review your medical and surgical history, your medications and allergies to determine the best type of anesthesia for you.

TYPES OF ANESTHESIA

Depending on the type of surgery, you will have one or more of the following anesthesia types:

- General anesthesia
- Monitored anesthesia care (MAC)
- Regional anesthesia

In order to manage surgical pain effectively, you may be given a nerve block at the request of your surgeon. The anesthesiologist blocks sensation in a specific area of your body by injecting anesthetic medication near the major nerves surrounding the area of surgery to keep you comfortable and control your pain. The decreased sensation effect may last for several hours after a surgical procedure, depending on the type and amount of anesthesia used.

Your anesthesiologist may use one or a combination of the following methods of regional anesthesia:

- **Nerve block** – Local anesthesia is injected near the major nerves surrounding the area of surgery
- **Spinal** – Local anesthesia is injected directly into the fluid surrounding the spinal cord in the back

Risks of spinal anesthesia include:

- Difficulty urinating
- Headache
- Drop in heart rate and blood pressure.
- Short or long term weakness from nerve damage (rare)

Risks and Possible Complications of a Peripheral Nerve Block:

- Infection
- Nerve injury
- Irregular heartbeat
- Decreased blood pressure
- Seizures (very rare)
- Allergic reaction (very rare)
- Cardiac arrest (very rare)

Benefits of a Peripheral Nerve Block:

- Reduced need for narcotic (opioid) pain medication after surgery
- Improved pain control after surgery

For information on peripheral nerve blocks, watch the educational video *Anesthesia with Peripheral Nerve Blocks* available at EisenhowerHealth.org/anesthesia

- Your family will be able to visit with you in this area.
- Your stay in the pre-surgery area may be 90 minutes to two hours.

In the Operating Room

- A registered nurse will take you into the operating room **or** on a gurney and remain with you during the entire surgery.
- The room is bright, cold and noisy.
- You will see the anesthesiologist, a surgical technician — who assists the surgeon, an operating room technician — who assists the anesthesiologist. Some surgeons work with a physician assistant as well.
- You will be placed on a monitor that continuously records your vital signs.
- A registered nurse will monitor your care in the operating room, will ask you several routine screening questions, and will monitor safety checks.
- You will be kept comfortable during the procedure.

When the procedure is completed, the surgeon will speak with your designated contact person, if they are available. If your contact leaves the area, please ask them to leave a phone number where they can be reached.

After Your Surgery

- You will be cared for by a registered nurse.
- Your vital signs, including your pain level, will be monitored by the staff.
- The incision will be covered with a dressing.
- You will have a warm blanket, oxygen, IV fluids, and sequential compression devices.
- You will begin to take clear liquids. When tolerated, your diet will be advanced.
- A physical therapist will see you for an initial evaluation.
- Cold therapy will be used to help reduce pain and swelling.

Your Surgery (Continued)

- An X-ray will be taken of the new joint.
- You will receive any medications ordered by the surgeon and/or anesthesiologist.
- If you wish, one person will be allowed to visit briefly.
- Your nurse will review with you all of your discharge instructions.

Visitors

Patients may designate and receive visitors of their choosing. Eisenhower Health does not have established visiting hours; however, the hospital may limit the number of visitors for any one patient during a specific period of time. The patient will be informed regarding the reason for any restriction or limitation of visitors.

To protect our patients' health, friends and relatives who are ill should not come to the hospital to visit.

Blood Thinner

You will take a blood thinner after surgery, both while being in the hospital and when you go home. It is very important to take this medication as prescribed.

On a Bowel Regimen

Pain medications can cause constipation. You will need to ensure you are staying regular, both in the hospital and when you go home. You may need to take over the counter bowel medications to maintain regularity.

Need for Pain Control

You will need to establish your pain goal after surgery. Identify what you have done/taken in the past that has worked well for your pain management and let staff know. We will use pain medications, ice, ambulation and repositioning to keep you comfortable. If you are hurting, please let the nursing staff know so they can take measures to make you more comfortable.

Exit Plan

Identify your plan for help when you go home. Who will stay with you after surgery? Ensure you have a walker prior to arriving at the hospital for your surgery.

Stay Active

After your surgery, please continue to be active at home. Walking several times daily is important to your recovery. Movement helps prevent blood clots, reduces pain and promotes healing and motion of your new joint.

Pain Management

Pain Management in the Hospital

Pain management is a joint effort. You, the surgeon, the Pain Management Team and your nurses will all work together for optimal pain relief.

During your hospital stay you will be asked the following questions:

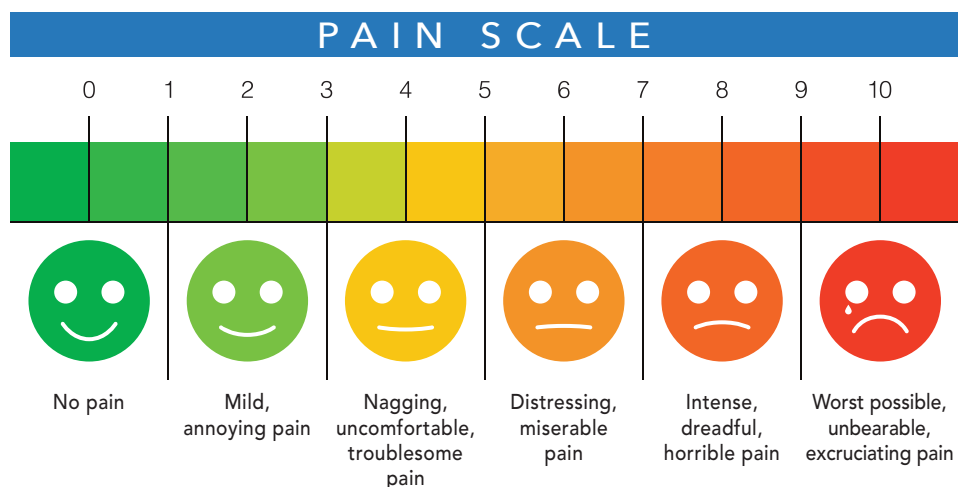
- Where is the pain?
- What does it feel like? Aching, burning, pressure, throbbing, etc.
- Is it there all the time or does it come and go?
- At what number would you rate your pain?

1 - 3 = mild pain

4 - 6 = moderate pain

7 - 10 = severe pain

Managing your pain is an important part of your recovery and rehabilitation. You will have pain after your procedure. Only take narcotic pain medications when it becomes intolerable, otherwise utilize non-pharmaceutical treatments, such as ambulation, reposition, ice, etc. While managing your pain is a collaborative effort, pain is subjective; only you know how you really feel. If you have a need for pain medication, please notify your nurse and reposition your leg. Our goal is to keep your pain manageable. This will help you to successfully reach your goals.



Managing Pain without Medicine

Below is a list of suggestions to help manage your post-surgical pain. They are to be used in conjunction with the pain medication recommended by your surgeon.

- Move every one hour to 90 minutes.
- Change your position frequently.
- Use cold therapy to help reduce pain and swelling.
- Elevate your leg above your heart to reduce swelling.
- Practice meditation.
- Allow distractions.
- Practice relaxation.

Pain Management at Home

In most cases, your surgeon will send your prescriptions to your chosen pharmacy in advance of your surgery date.

It is important to continue with the following:

- Keep your pain manageable.
- Take your medication as stated on the label.
- Use cold therapy.
- Change your position every one hour to 90 minutes.
- Elevate your leg above your heart.
- Use your walker until your physical therapist advances you.

If your pain is preventing you from normal daily activities after doing all of the above, call the surgeon's office.

Discharge Planning

Prior to your surgery, your health care team will begin working with you on your discharge plan.

The goal is for you to go directly home after your surgery. Your safety is top priority; therefore, you must have someone to help you during your first few days at home.

Home Health Services

There are several home health agencies in the area from which to choose. The agencies generally provide a nurse and physical therapist.

The visiting nurse will monitor your incision, medications and any other health needs. The physical therapist will work with you on a home exercise program. The duration for home health services is generally two to three weeks.

Rehabilitation Center/Skilled Nursing Facility

In rare instances home health services may not be available where you live. If you and your physician anticipate needing home health services and you live in a remote area please discuss alternative discharge destination options with family or friends prior to surgery.

Outpatient Physical Therapy

Outpatient physical therapy begins either at discharge from the hospital or upon discharge from home health services and generally lasts six to eight weeks, depending upon your needs. The surgeon's office will provide the facility of your choice with a prescription for this service.

Notes

At Home, If You Are Having...

Nausea

- Take your medications with food, unless otherwise instructed.
- Eat small, frequent meals.
- Call the surgeon's office if it is not relieved.

Constipation

Constipation is a side effect of narcotic pain medications, anesthesia, surgery, and decrease in activity.

- Take a stool softener as ordered.
- Increase the fiber in your diet (e.g., fiber cereal, fiber bars, plenty of fruits and vegetables).
- Drink plenty of water unless restricted by your primary physician or cardiologist.
- If you have not had a bowel movement for two days, please take an over the counter laxative (MiraLax[®], magnesium citrate, suppository, etc.). If you still don't have a bowel movement after taking these medications, please contact your surgeon's office.

Swelling

- Swelling after surgery is normal. Because it can be painful and slow the healing process, it is important to frequently elevate your leg above your heart. Applying cold therapy is also helpful.

Bruising

- Bruising after surgery is normal. It will resolve over the first few weeks.

Nutrition

Nutrition is important during the recovery process. Nutrients important for healing are:

- Vitamin A
- Vitamin C
- Zinc
- Protein

Vitamin C helps your body to form collagen which is an important protein needed for strength and flexibility. It repairs ligaments and strengthens bones. Vitamin C is decreased when the body is under stress. Food sources of vitamin C include citrus, kiwi, strawberries, broccoli and bell peppers.

Vitamin A is needed for cell growth and development and to help the immune system. Vitamin A is found in liver, paprika, sweet potatoes, carrots, dark green leafy vegetables, lettuce and cantaloupe.

Zinc is involved in wound healing. Zinc-rich food sources include oysters, shellfish, wheat germ and low-fat roast beef.

Surgery and surgical wounds are stressful on the body. When stressed the human body requires more calories and protein for recovery after surgery. This will increase your nutritional needs. Infection after surgery can also increase calorie and protein needs. Protein rich sources of food include milk, soy milk, eggs, cheeses, yogurt, peanut butter, tofu, beans, lentils and nuts.

Adequate hydration and fiber are keys to optimal nutrition after having a total joint replacement. Fluid and fiber intake is important for avoiding constipation after surgery while taking pain medications.

Physical Therapy

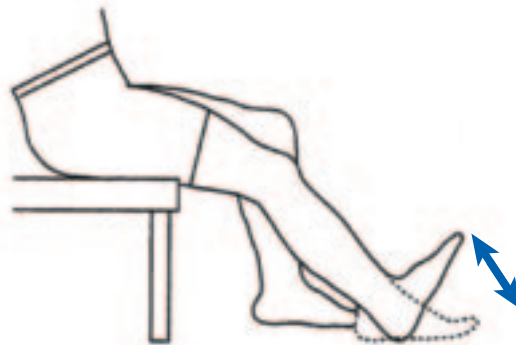
- Physical therapy (PT) is a very important part of your rehabilitation. The therapist will develop a specific exercise program to meet your needs. **You are expected to do your home exercise program on your own between treatments.** These exercises will strengthen your leg, as well as improve your flexion (bending) and extension (straightening).
- You will begin to work with a physical therapist on the day of your surgery and then each day during your hospital stay. If you have any concerns about mobility in your home — narrow hallways, stairs, etc. — please let your therapist know.
- When you return home, you will participate in a therapy regimen to continue your rehabilitation. This may occur via a home health agency or outpatient therapy clinic, and will include a home exercise program.
- Included in this book are exercises that are designed to maximize your outcomes. Follow the instructions given by your therapist. It is strongly suggested that you take some time to become familiar with and even practice these exercises before surgery so you will know what to expect after surgery. It is important NOT to overdo as this may increase your pain and swelling and prolong your recovery.
- After total knee replacement, it is very important to keep your leg moving. Doing so frequently will help control pain, prevent tissues from tightening, prevent blood clots and increase your joint motion. This will improve your ability to get out of bed, out of a chair, and to walk safely.
- Outpatient PT generally lasts several weeks. It is designed to progress as your tissues heal. Participation in your home exercise program on your own, between treatments, will improve your muscle control, increase joint motion, and correct your gait pattern in order to return to your normal activities.

Exercise Program

Ankle Pumps

- Move foot up and down as shown.
- May be done in bed or sitting.

Perform 1 set of 10 repetitions, three times a day.



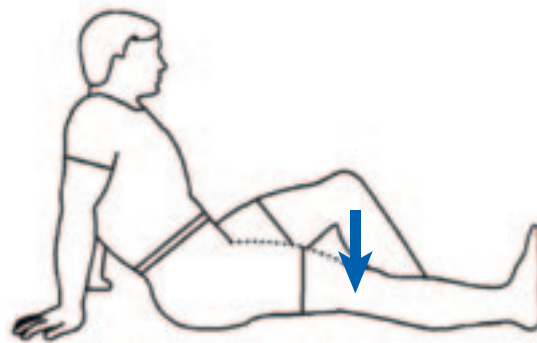
Quad Sets

- Sit with leg extended.
- Tighten quad muscles on front of leg, trying to push back of knee downward.

Special Instructions:

Do not hold breath.

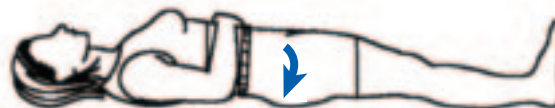
Perform 1 set of 10 repetitions, three times a day.



Gluteal Sets

- Lie on back with legs straight.
- Squeeze buttocks together.
- Hold and repeat.

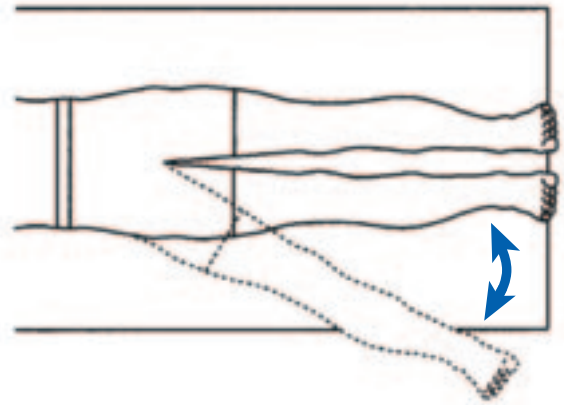
Perform 1 set of 10 repetitions, three times a day.



Leg Sweeps

- Lie on back on firm surface, legs together.
- Move leg out to side, keeping knee straight.
- Return to starting position.
- Repeat with the other leg.

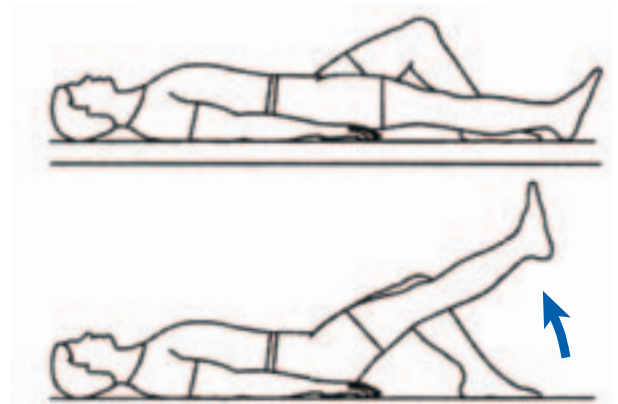
Perform 1 set of 10 repetitions, three times a day.



Straight Leg Raise

- Lie on back with uninvolved knee bent as shown.
- Raise straight leg to thigh level of bent leg.
- Return to starting position.
- Repeat with other leg.

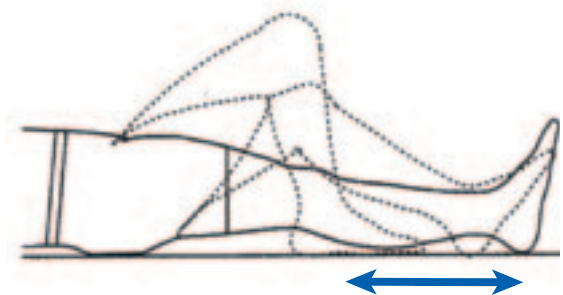
Perform 1 set of 10 repetitions, three times a day.



Heel Slides

- Lie on back with legs straight.
- Slide heel up to buttocks.
- Return to starting position.
- Repeat with other leg.

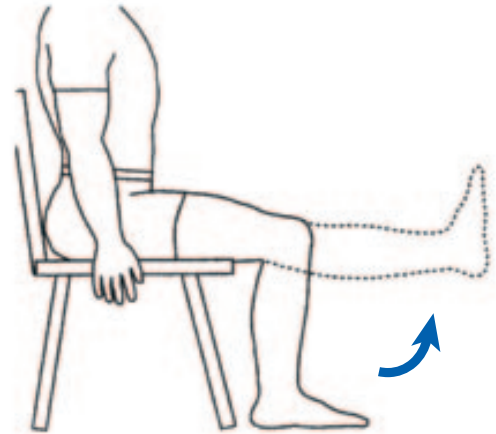
Perform 1 set of 10 repetitions, three times a day.



Long Arcs

- Sit in chair or side of bed.
- Kick foot up until knee is straight.
- Return to starting position. Perform 10 reps.
- Repeat with the other leg.

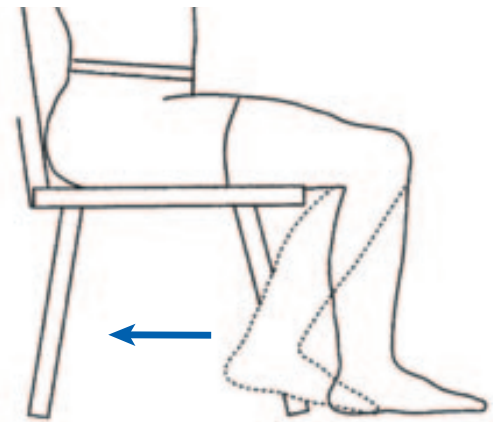
Perform 1 set of 10 repetitions, three times a day.



Knee Flexion

- Sit in chair, moving heel of involved leg under chair, through full range, as shown.
- Return to starting position.
- Once 10 repetitions have been completed, bend knee again and relax in that position for 20 minutes.

Perform 1 set of 10 repetitions, three times a day.



Knee Extension

- Sit in chair.
- Place ankle on a chair or stool as shown.
- Relax leg and let gravity straighten knee.

Special Instructions:

Push down on knee if possible.

Work up to maintain position for 20 to 30 minutes.

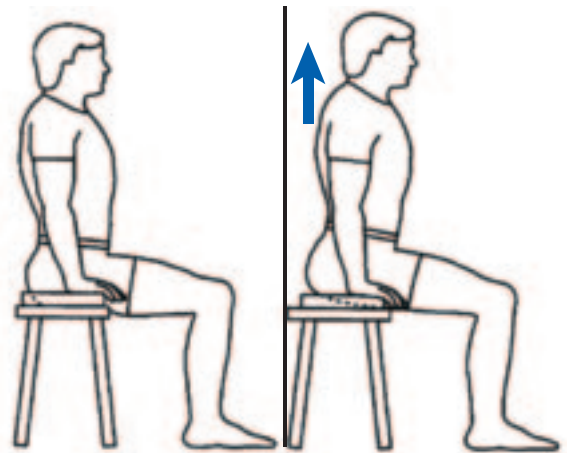
Perform three times a day.



Seated Pushups

- Seated pushups
- Sit on a firm surface, with arms at side.
- Push downward with both hands on the arms of the chair, lifting your buttocks off of the chair.
- Slowly, return to start position.

Perform 1 set of 10 repetitions, twice a day.



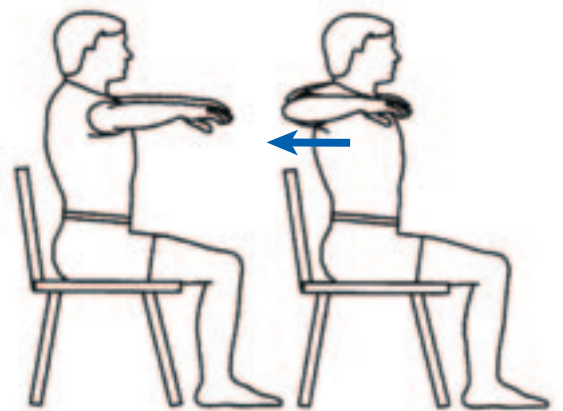
Shoulder Blade Squeezes

- Sit in chair or upright in bed.
- Raise arms to shoulder height, out to sides, elbows bent.
- Squeeze shoulder blades together, and relax.

Special Instructions:

Keep elbows bent.

Perform 1 set of 10 repetitions, twice a day.



Bicep Curls

- Sit in chair or upright in bed.
- Begin with arm at side, elbow straight, palm up.
- Bend elbow upward.
- Return to starting position.

Special Instructions:

May use weights with these bicep curls.

Perform 1 set of 10 repetitions, twice a day.

Hold exercise for 5 seconds.



Activities of Daily Living – Reaching Below Your Knees

Long Handled Reacher

Reaching down can be done with a long handled reacher. A long handled reacher is used for dressing the lower part of your body, allowing you to slip clothing over your feet without bending over. It's also quite useful for retrieving items from the floor. You can also utilize barbecue tongs, or long kitchen tongs, a "golfer's lift" or ask for help.



In your bathroom, kitchen, and bedroom you may want to move items that are stored in low cabinets or drawers to higher places to avoid bending over.

Activities of Daily Living - Bathing

Use caution when you are entering or exiting the shower as the floor of the tub/shower will be slippery.

Entering the Shower

- Back up to the shower.
- Step in with your good leg first.
- Reach back for chair or grab bars.
- Sit down, if applicable.



Exiting the Shower

- Step out with the surgical leg first.



Activities of Daily Living - Bathing

Entering the Bathtub to Shower (you must have a chair):

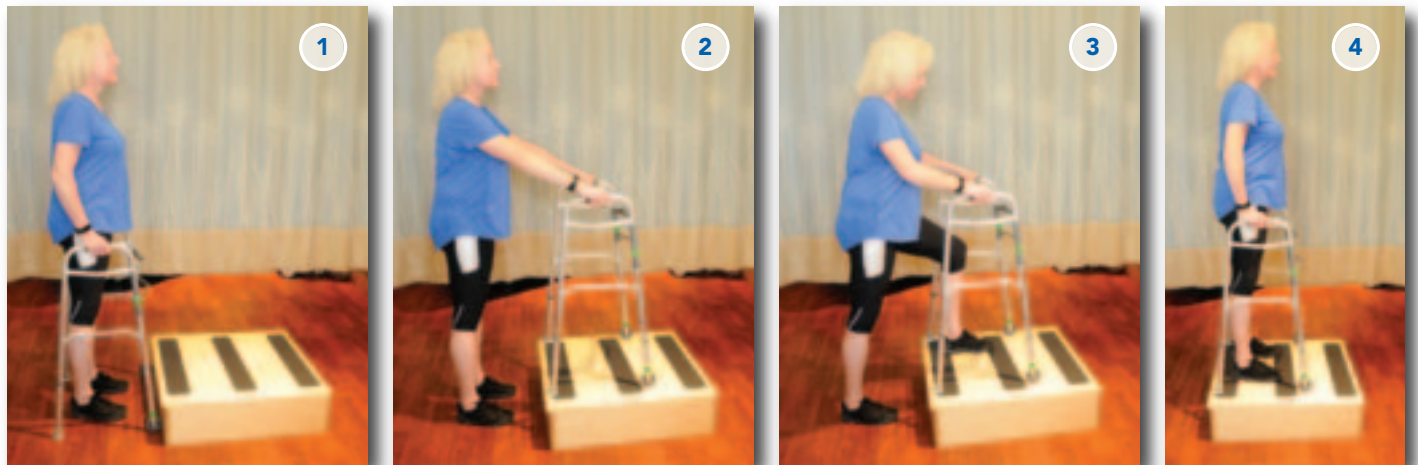
- Back up to the tub.
- Reach back and sit on the bench.
- Lift first leg over edge of tub.
- Lift your second leg over the edge of the tub.



Activities of Daily Living - Stairs

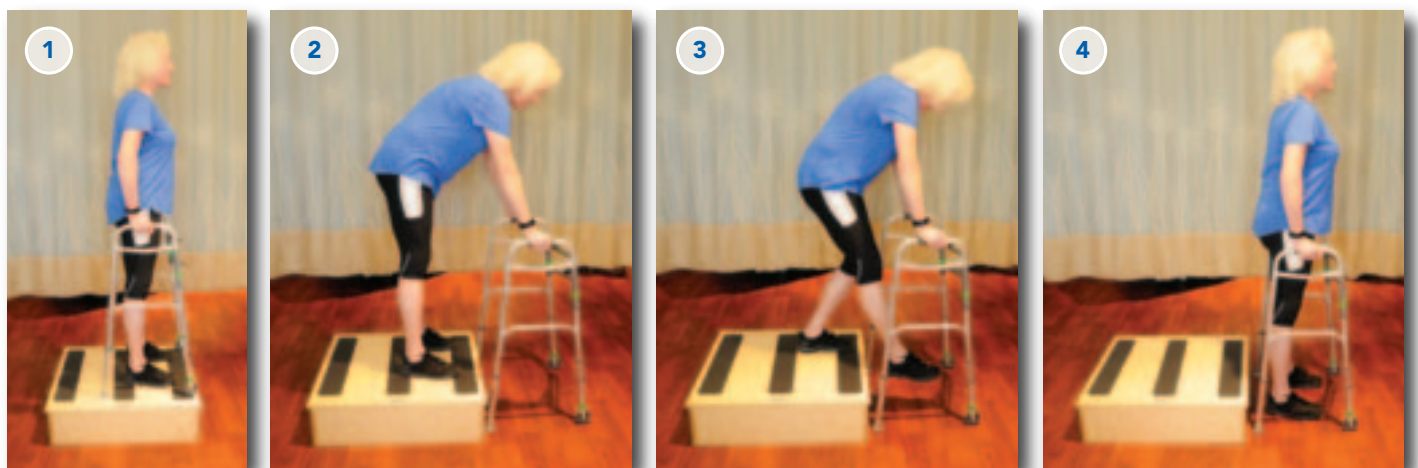
Going Up Steps

- Step forward to the curb/step.
- Place all four legs of walker onto curb/step.
- Step up with good leg followed by surgical leg.



Going Down Steps

- Bring feet close to edge of step.
- Place walker down first.
- Step down with weaker leg followed by stronger leg.



Activities of Daily Living - Car Transfers

Before Entering the Car

- Move passenger seat back to provide adequate leg room.
- Recline the seatback slightly to avoid it being at 90 degrees.

Entering the Car

- Approach passenger side using your walker or crutches.
- Turn and back up to the car seat as if it were a chair.
- Transfer hands from walker or crutches to stable parts of the car (car frame, dashboard, back of seat). Be careful that your car may be hot.
- Extend surgical leg forward as you lower yourself to the seat.
- Sit down on edge of car seat.



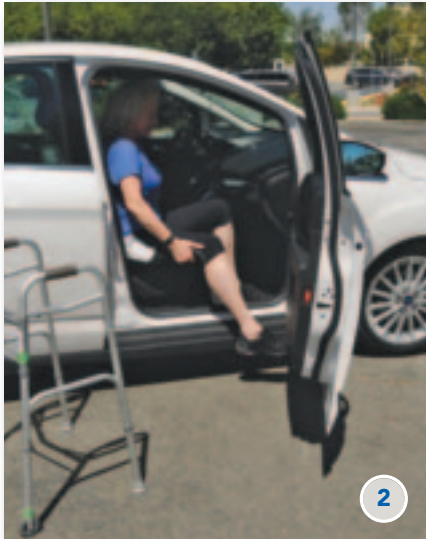
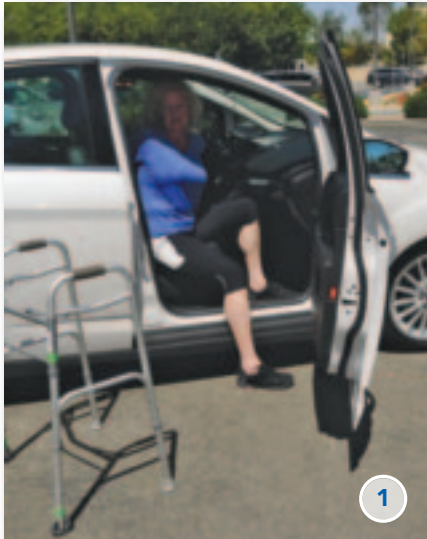
Activities of Daily Living - Car Transfers

Positioning Self into the Car

- After sitting, slide your hips back as far as possible towards driver's seat. You may even find that sitting in a reclined seatback gives you more room to swing your legs into the car.
- Pivot into seated position, gently assist first leg into the car. Then, assist the second leg.

If you have hip precautions be careful to avoid rolling your leg in or out.

- A family member may need to help lift the surgical leg into the car.



Activities of Daily Living - Car Transfers

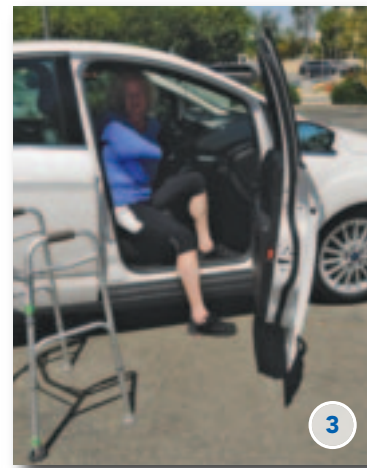
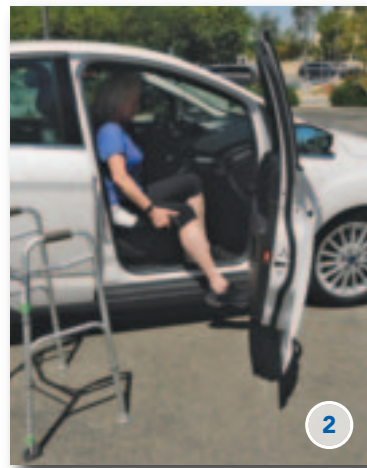
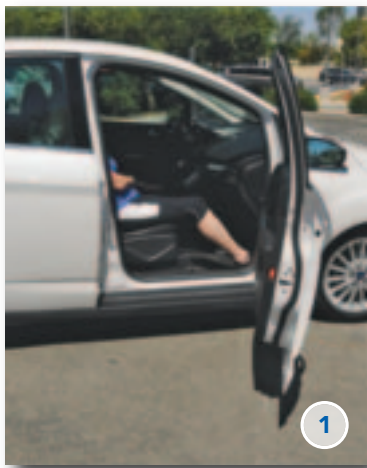
Exiting the Car

Exit the car in the reverse order that you got into it:

- Recline seatback.
- Scoot your hips back onto reclined seatback or towards driver's seat.
- Use your strong leg to help scoot your hips on the seat.
- While remaining reclined, you may need someone to support your surgical leg to exit the car.
- Pivot and scoot hips to the edge of car seat.
- Assist the first leg out of the car, then assist the second. Place both feet on the ground.

If you have hip precautions be careful to avoid rolling your leg in or out.

- Have your walker or crutches available and ready to use once standing.
- Extend surgical leg forward as you lift yourself from the seat.
- Push off from stable parts of the car (car frame, dashboard, back of seat) to stand up. Be careful that your car may be hot.



When to Call the Surgeon

- You have a temperature greater than 101 degrees.
- You have excessive bloody or odd colored drainage from the incision.
- You have increasing redness around the incision.
- You have increasing thigh, calf and/or ankle swelling not relieved with frequent elevation.
- Your pain is not relieved with the appropriate pain medication.
- You have any side effects from medications prescribed by the surgeon.

For any life-threatening emergencies or symptoms, call 911 to be transported to the nearest emergency room.

Life with Your New Joint

You may have X-rays taken at your follow-up office visits with the surgeon.

Your surgeon may prescribe antibiotics for you before certain procedures in an effort to prevent the joint implant from becoming infected. Some procedures may introduce bacteria into your system. Such procedures may include a dental procedure or cleaning, endoscopy, bronchoscopy, colonoscopy, sigmoidoscopy, colon or intestinal surgery, endoscopic retrograde cholecysto-pancraetography (ERCP), cholangiography, cystoscopy, proctoscopy, D&C, hysterectomy, etc.

For any questions regarding a need for antibiotics before a procedure, please contact your surgeon's office.

Hand washing is the most effective way to prevent the spread of infection.

Frequently Asked Questions

Why is my knee warm?

- This is a normal response to the surgery and implant.
- We recommend cold therapy.

Why is there swelling?

- Swelling is a normal response to the surgery.
- Excessive swelling can be painful and slow the healing process. We recommend frequent elevation above your heart and cold therapy.

Can I get the incision wet?

- You will be instructed at the time of your discharge if/when you can get the incision wet.

Can I kneel on my new knee?

- Yes. However, it may not feel very comfortable.

Do I have to protect the position of my new hip?

- Your physical therapist and nurse will instruct you after surgery on any restrictions placed upon you.

When can I drive?

- You are not using any narcotics during the day.
- Your use of a cane or walker is minimal.
- Generally at three weeks or as instructed by your surgeon.

When can I golf?

- Your surgeon will determine at your follow-up visit.
- Generally at 12 weeks or as directed by your surgeon.

When can I play tennis?

- Your surgeon will determine at your follow-up visit.
- Generally at four to six weeks you may start to hit the ball.
- At about 12 weeks you should feel comfortable moving around the court.

When can I resume sexual activity?

- Your surgeon will determine at your follow-up visit.

Important Contact Numbers

Your Surgeon's Office Number _____ (write in)

Eisenhower Health 760-340-3911

Orthopedic Wellness Nursing Unit 760-773-1301

Orthopedic Nurse Practitioners 760-835-1025
760-285-4738
(Monday through Friday 7 a.m. – 3 p.m.
Outside of these hours, call your surgeon's
office for any issues or concerns.)

Nurse Navigator 760-340-3911 ext. 2512

For any needs after hours, please call your surgeon's office first. They have an after-hours triage which will get you in contact with a member of their team right away.

Intimacy After a Total Joint Replacement










At Eisenhower Health, our goal is to ensure you are safe after having a total joint replacement surgery as you resume your normal daily activities, including intimacy.

The following pages contain detailed information and graphics regarding safe positions during intimacy for both hip and knee replacement. There is no need to view and you may disregard if you are not sexually active. For any questions or concerns regarding intimacy after joint replacement, please talk with your occupational therapist.

Intimacy After a Total Joint Replacement - HIP

Intimacy may be resumed once you feel you are ready. Listen to your body and use only these safe positions shown below for the first three months after your **hip replacement** surgery. Any position that causes pain to your hip should be stopped immediately. For questions regarding a position, talk with your physical therapist.










✔ = Safe ✘ = Unsafe

POSITION		HIP
	Missionary – TOP	✔
	Missionary – BOTTOM	✘
	Sitting in Chair – TOP	✘
	Sitting in Chair – BOTTOM	✔
	Standing – FRONT	✔
	Standing – BEHIND	✔
	Face-to-Face – ON SIDE	✘
	Edge of Bed – TOP	✘
	Edge of Bed – BOTTOM	✘
	Four Point – BEHIND	✔
	Four Point – FRONT	✘
	L-Shaped – ON SIDE	✘
	Torso Bent – TOP	✘
	Torso Bent – BOTTOM	✔
	Torso Straight – TOP	✘
	Torso Straight – BOTTOM	✔

Intimacy After a Total Joint Replacement - KNEE

Intimacy may be resumed once you feel you are ready. Listen to your body and use only these safe positions shown below for the first three months after your **knee replacement** surgery. Any position that causes pain to your knee should be stopped immediately. For questions regarding a position, talk with your physical therapist.

✔ = Safe ✘ = Unsafe

POSITION		KNEE
	Missionary – TOP	✘
	Missionary – BOTTOM	✔
	Sitting in Chair – TOP	✔
	Sitting in Chair – BOTTOM	✔
	Standing – FRONT	✔
	Standing – BEHIND	✔
	Face-to-Face – ON SIDE	✔
	Edge of Bed – TOP	✔
	Edge of Bed – BOTTOM	✔
	Four Point – BEHIND	✘
	Four Point – FRONT	✘
	L-Shaped – ON SIDE	✔
	Torso Bent – TOP	✘
	Torso Bent – BOTTOM	✔
	Torso Straight – TOP	✘
	Torso Straight – BOTTOM	✔

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Important Contact Numbers

Your Surgeon's Office Number

Eisenhower Health

760-340-3911

Orthopedic Wellness Nursing Unit

760-773-1301

Orthopedic Nurse Practitioners

(Monday through Friday 7 a.m. – 3 p.m.
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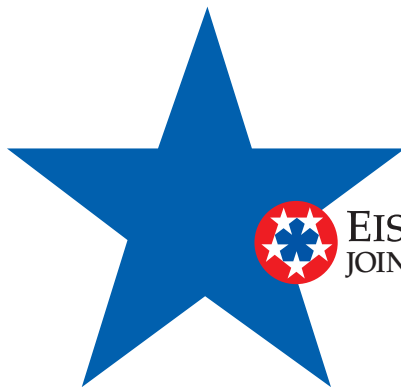
760-835-1025

760-285-4738

Nurse Navigator

760-340-3911 ext. 2512

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EISENHOWER HEALTH
JOINT REPLACEMENT PROGRAM

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