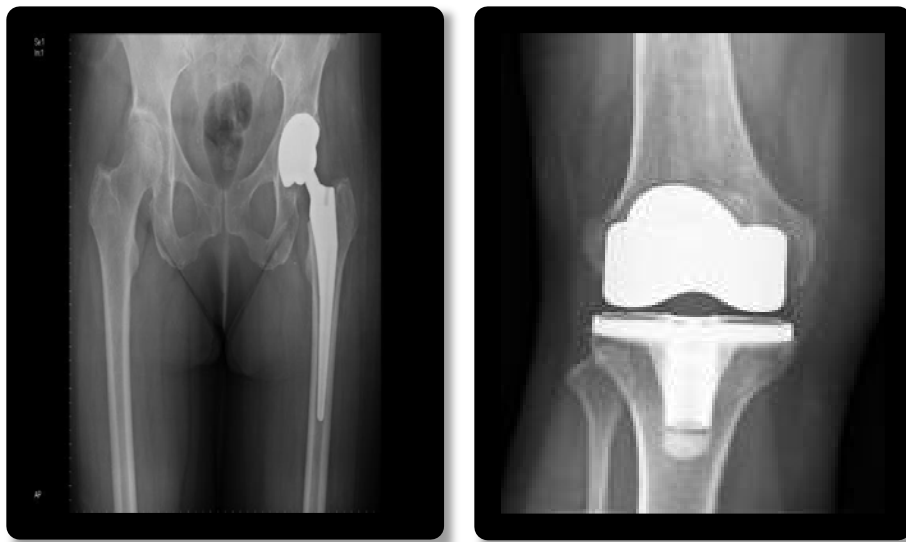


UC San Diego Health

Total Joint Replacement Patient Education Book



Department of Orthopaedic
Surgery Joint Reconstruction

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Total Joint Replacement Pre-Operative Education At UC San Diego Health

In this educational booklet you will find valuable information to prepare you for your upcoming surgery. It will outline things you need to do to prepare for surgery and things you will need to do after surgery. Please take the time to read through the material carefully.

If after reading this booklet you have further questions regarding your surgery please contact your Surgeon's office or the Department of Orthopaedic Surgery at 858-657-8200.

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Important Contact Information

My Joint Replacement Surgeon _____

My Surgery Scheduler Name/Number _____

UC San Diego Health Department of Orthopaedics
(Clinic Locations)

**UC San Diego Health – La Jolla
Perlman Medical Offices**

9350 Campus Point Drive, Ste 1A/B
La Jolla, CA 92037
Phone: 858-657-8200
Fax: 858-657-8235

**UC San Diego Health – Hillcrest
Medical Offices North, 1st floor**

200 West Arbor Drive
San Diego, CA 92103
Phone: 619-543-6312
Fax: 619-543-7480

UC San Diego Health (Hospital Locations)

**UC San Diego Health – La Jolla
Jacobs Medical Center**

9300 Campus Point Drive
La Jolla, CA 92037
Phone: 858-657-7000

**UC San Diego Health – Hillcrest
UC San Diego Medical Center**

200 West Arbor Drive
San Diego, CA 92103
Phone: 619-543-6222

Preoperative Education Class and Video

Attending the Pre-Operative Joint Replacement class is the first step in learning about how to prepare for and learn what to expect before, during and after your surgery. Learning this information will help you to heal and prevent complications associated with surgery.

There is an online educational video available that provides information related to your joint replacement surgery. It can be watched from home. We encourage you to watch it to reinforce what you learned from the class. Please ask your surgery scheduler for an access code and log-in instructions. When you have your access code the video is available at www.startemmi.com



Types of Joint Replacement Surgery

Both hip and knee replacement surgeries have become common orthopaedic procedures in the United States to help alleviate conditions caused by osteoarthritis, rheumatoid arthritis, fracture, dislocations, congenital deformities and other joint problems.

Total Hip Replacement

The hip is a ball-and-socket joint. The femoral head is considered the “ball” and the Acetabulum is considered the “socket”. A total hip replacement involves replacing the damaged surfaces of the hip with artificial surfaces. The femoral head and the neck of the femur are removed and replaced with a metal head and neck. The damaged socket is lined with a metal cup and plastic liner (see Fig. 1 & 2). In addition to the traditional metal ball-plastic socket combinations, ceramic articulations can also be used.

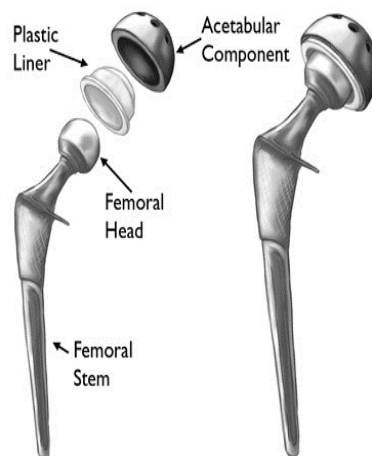


Fig. 1

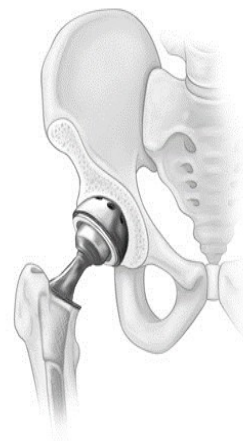


Fig. 2

There are several approaches to hip replacement surgery; anterior, anterolateral and posterior. Each approach uses an incision placed on a slightly different spot around your hip. Post operatively there are specific precautions with each approach which will be reviewed by your Surgeon and your Physical Therapist.

Hip replacements can also be “cemented” or “cementless.” The type of approach or if it is cemented or not depends on the Surgeon’s preference, the individuals’ age, activity level, and characteristics of their bone. If you have questions regarding your options, please ask your doctor.

Total Knee Replacement

The knee joint is made up of three bones that come together, the femur, the tibia, and the patella (see Fig. 3). A total knee replacement involves resurfacing the ends of the bones with artificial implant materials made of metal and plastic. These components are fixed to the bone by acrylic bone cement or with a surface that allows for direct bone growth (see Fig. 4).

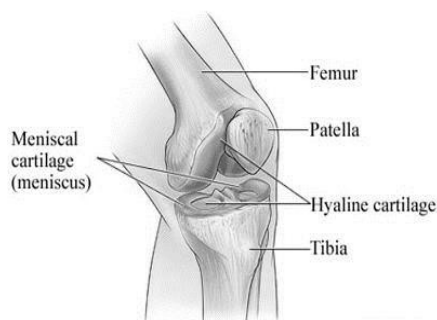


Fig. 3



Fig. 4

Partial Knee Replacement

A partial knee replacement is another type of knee replacement. An individual may be a candidate for a partial knee replacement if only one side, or compartment, of the joint is damaged and there is limited deformity (see Fig 5).



Fig. 5

Preparing for Your Surgery

Scheduling Surgery

Once you have discussed surgical options with your orthopaedic Surgeon and have decided to proceed, with scheduling your surgery and verifying insurance approvals is done by calling UC San Diego Health Department of Orthopaedic Surgery at **858-657-8200**.

Medical Clearance

Your Surgeon and surgery scheduler will discuss any requirements you must complete before being cleared for surgery. For example, you may need to visit your primary medical provider and have medical records or medical clearance documentation faxed to your surgery scheduler. It may also be advised to have a check-up with your dentist and complete any necessary dental work prior to surgery. After medical and/or dental clearance is received by your surgery scheduler, a date for surgery can be scheduled.

No dental work should be done within four weeks of surgery. If there are dental emergencies or if you have any new symptoms, such as rashes, bruises or bumps close to your upcoming scheduled surgery, immediately contact the Orthopaedic Surgery clinic to discuss them with a Registered Nurse at **858-657-8200**.

Preparing Physically

Physically prepare yourself as much as possible before surgery. Doing exercises that improve your upper body strength will be useful to help support yourself after your joint replacement. You can do this by sitting in a chair and using your arms to lift your body up and down. More exercises can be found on page 33.

Things to do to prepare yourself and your home before surgery:

- Identifying a person to care for you at home after surgery
- Make transportation arrangements for day of discharge at 11am, follow up appointments & outpatient Physical Therapy
- Create a clear pathway that would fit a walker, cane or crutches
- Remove clutter, throw rugs and/or trip hazards

- Purchase night lights for hallways and bathrooms
- Walk through your home as if you had your joint replaced, what needs to be moved or more accessible
- Have safety bars installed in bathroom and shower
- Get a hand held shower head, thermometer and weekly med box
- Get a notebook for notes, and to write down times of medications
- Arrange for pet boarding while you are recovering
- Make a note of the layout of your home and number of stairs
- Stop smoking before surgery
- Place commonly used items within reach (ex: remote, water bottle)
- Stock up on food and home supplies (driving after surgery is restricted)

Personal Belongings

You are welcome to bring your own clothes, robe and non-skid shoes to the hospital for your comfort. We do provide a hospital gown and socks. Please pack lightly, and bring loose fitting clothing. Make sure to bring hearing aids, glasses and dentures. Please bring non-essential valuables at your own risk. The hospital is not responsible for lost, missing or broken items with the exception of hearing aids, glasses or dentures.

Prepare your home before surgery by ensuring essential items are available to you. Ice packs are needed to ice your post-operative site. Preparing well balanced meals ahead of time are helpful, as you will need to rest and focus on rehabilitation after surgery.

Preoperative Appointments

Your surgery scheduler will help you coordinate a pre-operative appointment with our Pre-Operative Care Center (Pre-Operative Anesthesia Clinic) within 1-2 weeks before surgery. Contact your surgery scheduler for any questions regarding scheduling this appointment.

What to Expect at the Pre-Operative Appointment

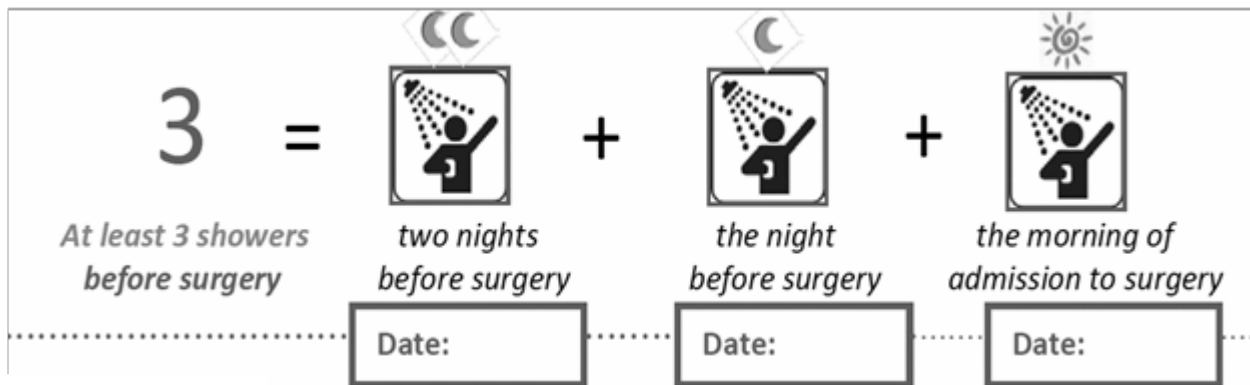
Your past medical history will be reviewed. Any laboratory testing, x-rays and/or an electrocardiogram (EKG) will be completed if needed. If you have a pacemaker or cardiac stent please make sure you have information regarding these past procedures with you at your appointment.

Eating and Drinking Restrictions

Instructions will be provided to not eat or drink after midnight the night before surgery.

Antimicrobial Soap

You will be given a bottle of soap that contains Chlorhexidine Gluconate (CHG). This is a special soap that helps prevent infections after your surgery. You will be provided with written instructions on how to shower using the CHG soap. You will bathe with the CHG soap a minimum of three times before surgery to block bacterial growth.



How to Bathe with CHG Soap

1. Rinse your body with warm water
2. Wash your hair with regular shampoo
3. Use a clean sponge and apply CHG soap
4. Firmly massage neck, arms, chest, back, abdomen, hips, groin & external genitalia & buttock
5. Clean legs, feet, between fingers and toes
6. Do not shave your legs one week prior to surgery
7. Pay special attention to surgical site (knee or hip)
8. Lather then rinse off your body
9. Pat dry with a clean towel
10. Do not use any other soaps or body wash when using CHG
11. Do not use lotions or powders
12. **Use clean clothes and freshly laundered bed linens**

Your skin may feel sticky for a few minutes after you wash with CHG. Do NOT wipe off, allow to air dry. While you are in the hospital, staff will provide you CHG wipes to use for bathing. This will help lower bacteria on your skin after surgery and further prevent surgical site infections.

Screening for Methicillin-Resistant Staphylococcus Aureus (MRSA)

You will be screened for a bacteria called MRSA. A small cotton tip applicator will be placed briefly into your nostril.

Staphylococcus aureus

(pronounced staff-ill-oh-kok-us-aw-ree-us) or “Staph” is a

common bacteria. One in every

three people normally have this bacteria on their skin or in their nose.

Most people do not have symptoms and do not have any significant problems. Finding out if you have MRSA in your nostril before surgery can help the healthcare staff take actions to treat the infection in order



to reduce the risk of a MRSA infection at your surgical site where it can cause serious problems with healing and serious problems in your new joint after surgery.

What should I do if I am MRSA positive?

If the test is positive, it means that MRSA is “colonized” in your nose. The Surgeon’s office will contact you with instructions to begin using an antibacterial ointment in your nose immediately. It is important that you complete the entire treatment before surgery. Additional ways to prevent MRSA from causing problems include a clean living environment, good hand washing and personal hygiene.

Medication List

Bring a list of the medications you are currently taking, including vitamins and herbal supplements. We suggest you fill out the medication list provided at the back of book and bring to your appointment. If you take anticoagulants (blood thinners) inform your Surgeon to discuss when to stop taking these medications before surgery.

Types of Anesthesia

An Anesthesiologist will give you a sedative and anesthesia to relieve you of pain and sensation during surgery. You will be able to talk to the anesthesiologist on the day of surgery. Your anesthesiologist will discuss the type of anesthesia that is best for you based on the type of surgery, your Surgeon's preference, your medical history, general health status, age and preferences. The following are various forms of anesthesia.

General Anesthesia

General anesthesia is an anesthetic used to induce unconsciousness during surgery. The medication is either inhaled through a breathing mask or tube, or administered through an intravenous line. A breathing tube may be inserted into the windpipe to maintain proper breathing during surgery.

Spinal Anesthesia

Spinal anesthesia is an anesthetic used to cause numbness in lower body. This type of anesthetic involves injecting a single dose of the anesthetic medication into the lower back, below the end of the spinal cord. This type of anesthesia is most often used in orthopedic procedures of the lower extremities.

Epidural

Epidural anesthesia is similar to a spinal anesthesia and is commonly used for surgery of the lower limbs. This type of anesthesia involves a continuous infusion of an anesthetic medication through a thin catheter (hollow tube). The catheter is placed into the space that surrounds the spinal cord in the lower back, causing numbness in the lower body.

Regional Anesthesia (Nerve Block/Peripheral Nerve Block)

Regional anesthesia is used to block the sensation in a specific part of your body during and after surgery. A numbing medication is injected around the nerves that blocks pain signals from the area involved in surgery. The procedure “blocks” the nerves, lowering the amount of pain you will feel during or immediately after surgery. Depending on the specific numbing medicine (local anesthetic) used, the effects of the block can last from hours to days. For some types of surgery, you may receive a continuous infusion pump, which can deliver medication for 1-2 days while in the hospital.

Local anesthesia

Local anesthesia stops the sensation of pain in a specific area such as your hip. Local anesthetic can be administered via injection to the tissues surrounding the surgical site. This is used for surgical site pain and is combined with other types of anesthesia.

The Day of Your Surgery

Arriving at the Hospital

Arrive 2-3 hours before your scheduled surgery time; confirm this time with your surgery scheduler. The pre-operative Nurse will review paperwork, ask you questions and prepare you for surgery by:

- Taking you to the pre-procedure room
- Put on a hospital gown
- Verifying the type of surgery you are having
- Verifying when you last had something to eat or drink
- Taking your vital signs (blood pressure, heart rate, respiratory rate)
- Start a peripheral I.V.
- Applying compression stockings and Sequential Compression Devices (SCD) to help prevent blood clots
- Apply a warming unit (the Bear Hugger) to keep you warm

The Anesthesiologist will come talk to you to discuss your anesthesia options. A member of the orthopedic joint team will come and verify the operative site and answer any questions you may have.

The Operating Room (OR)

The operating room Nurse will speak with you in the pre-operative area. You will be asked many questions pertaining to your surgery to verify all information is correct. Once completed and questions have been answered, the Anesthesiologist will bring you on a gurney to the OR.

The surgery suite is usually cool in temperature; the environment may be noisy and the lights are bright. There will be several people in the room verifying information with you. The doctors and Nurses will be wearing masks and special protective clothing that may look different than what you may be expecting. In the OR you will be given anesthesia which may make things seem different than they are. If you feel anxious or frightened, please let the Nurse or Anesthesiologist know. Once the anesthetic is working, a urinary catheter will be inserted into your bladder and your skin will be washed with special soap.

The Surgeon will then begin surgery. Surgery time varies by individual patient and type of surgery performed. While you are in the OR your family members can wait in the surgical waiting area. They will be notified when the procedure is completed.

The Recovery Room

After the operation is complete you will be transferred to the recovery area called the Post-Anesthesia Care Unit (PACU). The Surgeon will go to the waiting room to speak with your family.

The PACU Nurses will monitor you very closely as you recover from the anesthesia. You will be attached to equipment:

- Blood pressure cuff,
- Oxygen tubing in your nose
- SCD pump on your legs

The Nurses will be monitoring your vital signs, level of consciousness and pain level. Once you are stable, a family members can visit you in the PACU and you will be transferred to the orthopedic unit as soon as possible. If you are having surgery as an outpatient procedure you may go home the same day.

Your Hospital Room

Your hospital stay is typically 1 to 3 days. The staff will make sure your call button is within reach and will show you how to use it. Your room will have the equipment needed to help you recover, including a trapeze grab bar to help you change positions in bed. You may be in a hospital room alone or you may be in a room that is shared with another patient. Every effort is made to maintain your privacy in either case. Family and friends are welcome to visit at any time and you may have one guest spend the night. Please let the staff know so they can have a recliner placed in the room for your guest. Nurse hand-off report (shift change) takes place each day at 7 to 7:30 am and again at 7 to 7:30 pm. The Nurses will check on you prior to shift change to make sure that your needs are being met and continuous quality care is maintained.

What to Expect After Your Joint Replacement

The following provides you with a general idea of what to expect each day while in the hospital

Topic: Breathing

- Use incentive spirometer (IS) 10 times per hour while awake to help prevent pneumonia
- Continue using the IS as noted and bring it home with you at discharge. Complete the exercises until your follow up appointment



Topic: Eating/Drinking

- Dry mouth is a common side-effect of anesthesia & pain medications
- Drink plenty of fluids
- Increase fiber intake (fruits, vegetables, whole grain)



Day Of Surgery

- Ice chips when fully awake
- If you are not nauseated, begin drinking clear liquids
- Your gastrointestinal (GI) tract is sluggish, it is best not to overeat

Post-Operative Day 1

- Sit up in a chair for all meals
- May eat solid food if not nauseated

Post-Operative Day 2

- Progress to your normal, well balanced diet
- Same as above

Topic: Bowel/ Bladder

- Your gastrointestinal (GI) tract is moving slower than usual, this is a normal side effect of anesthesia, the Nurse will ask you if you are passing gas (farting) this is a good sign that your GI tract is working
- Constipation is a major side-effect of pain medication, the Nurse will give you stool softeners



Day Of Surgery

- You may have a urinary catheter (Foley) in place to collect your urine
- If you do not have a Foley catheter, nursing staff will help you use a bedpan, bedside commode or walk with you to the bathroom

Post-Operative Day 1

- Foley catheter will be removed at 0600, this decreases the risk of developing a urinary tract infection (UTI).
- You will get out of bed to use the bathroom or bedside commode
- Always ask for assistance when getting out of bed

Post-Operative Day 2

- If you have not had a bowel movement let the Nurse know; additional medications are available
- Continue to be proactive with treating constipation after discharge home

Topic : Activity

- You are a HIGH FALL RISK! DO NOT get out of bed without help!
- Always use your call button if you need to get out of bed
- You will have a yellow triangle charm on your ID bracelet
- You will wear yellow nonskid socks
- Turn and reposition in bed every 2 hours with help from nursing staff to help prevent skin breakdown
- Elevate your operative leg while at rest to decrease swelling



Day Of Surgery

- Depending on your surgery time, Physical Therapy (PT) or Nursing will get you out of bed to walk with you using a front wheel walker
- Goal is to walk 50 feet

Post-Operative Day 1

- You will work with PT twice
- You will work with Occupational Therapy (OT) once
- Continue bed exercise on your own
- Ride pedicyle for 30 minutes 3x/day
- Goal is to walk 50-100 feet

Post-Operative Day 2

- Continue above
- Goal is to walk 100+ feet



Topic: Pain Management

- You will have discomfort and/or pain
- The goal is to keep your pain at a tolerable level
- The Nurse will ask you to rate your pain on a scale of 0-10 or mild, moderate and severe
- Remember pain is easier to treat when mild. DO NOT wait until it is severe
- Oral pain medication is scheduled every 12 hours and also available as needed (PRN), usually every 4 hours
- Use ice throughout the day to reduce swelling at the surgical site



Day Of Surgery

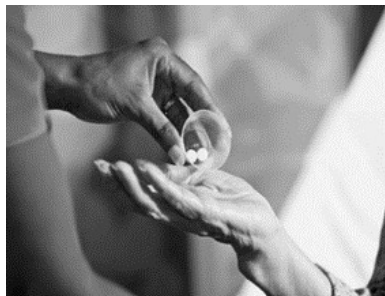
- Intravenous (IV) medication may be used for severe pain

Post-Operative Day 1

- Goal is to reduce the amount of IV medication needed in preparation for going home

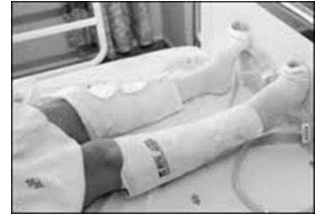
Post-Operative

- Have good pain control using oral pain medications before going home



Topic: Blood Clot (DVT) Prevention

- Circulate the blood in your legs by doing foot pumps
- Wear compression stockings
- Wear sequential compression devices (SCDs)
- Remove stockings and SCDs for 1 hour/day



Day Of Surgery ➤ Same as above

Post-Operative Day 1 ➤ Start anticoagulation medication as ordered by physician

Post-Operative Day 2 ➤ Continue anticoagulation medications as ordered, wear compression stockings and do foot pumps when discharged home



Topic: Care Coordination

Day Of Surgery ➤ The Care Manager will meet with you

Post-Operative Day 1

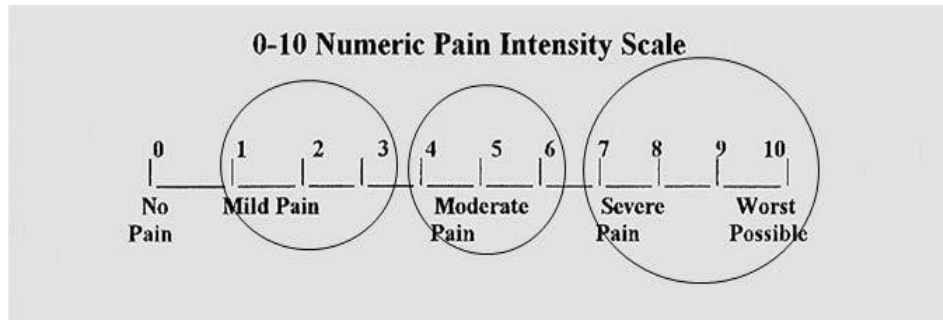
- The Care Manager will discuss your progress and needs with the doctor, Nurses and Physical Therapist
- The Care Manager will arrange for equipment or home Physical Therapy if needed.



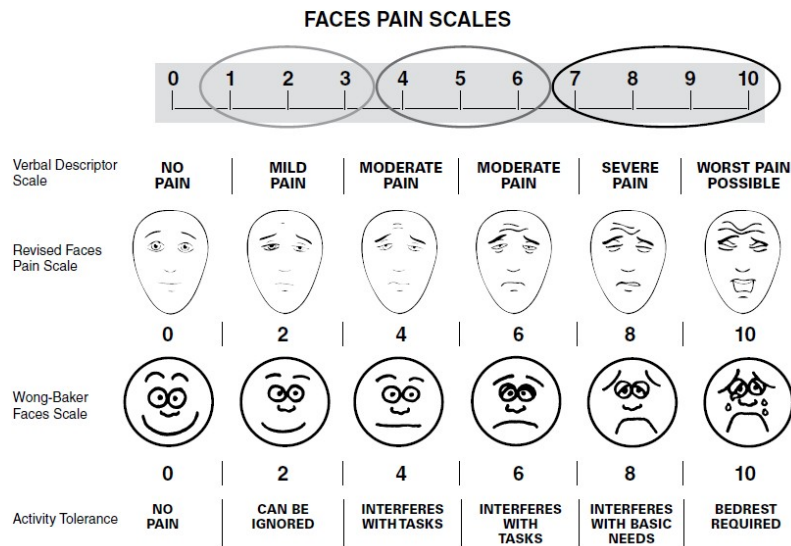
Post-Operative Day 2 ➤ If you are unable to go home safely the Care Manager will assist with placement and transportation to a Skilled Nursing Facility (SNF).

Your Pain Management Plan

To help us manage your pain after surgery you will be asked to rate the intensity of your pain using a pain scale of 0 to 10 (0 is no pain, 10 is worst possible pain).



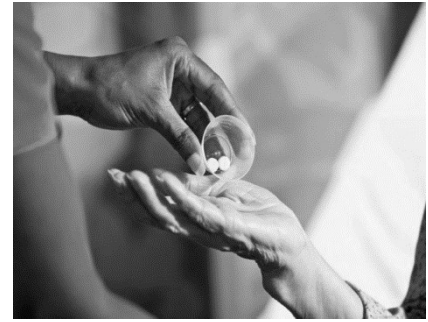
If you are unable to verbally rate your pain on a scale of 0 to 10, the faces pain scale below will be used.



After Joint Replacement Surgery you will have pain and or discomfort. A score of 0 is not realistic or an attainable goal. For most patients a score between 2 to 3 out of 10 is usually achievable. The Surgeon and Anesthesiologist will order a wide variety of pain management options.

Oral Pain Medication

Oral medications are taken by mouth. Once you are able to tolerate liquids and solid food you will be given these types of pain medication. It is best to request oral pain medication when your pain level begins to increase but prior to it becoming a severe. Oral pain medications take about 30-60 minutes to start lowering your pain. The Surgeon may order two different types of oral pain medication. These two types are Immediate Release (IR) medication or Extended Release (ER) medication.



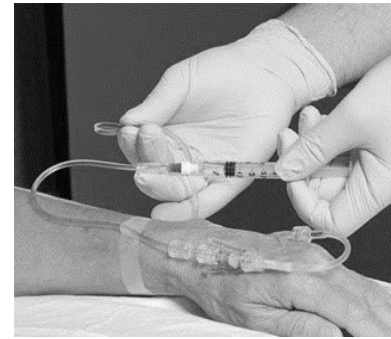
Oxycodone is an immediate release medication and starts to take effect within 30 to 60 minutes. These types of medications are usually ordered PRN (as needed) every 4 hours. The Nurse does not automatically bring PRN medication to you every 4 hours; this type of medication needs to be requested and is given based on your reported level of pain.

OxyContin is an Extended Release (ER) medication. This medications work by slowly releasing a steady dose of medication in your system over a 12-hour period. Your Surgeon may order OxyContin twice a day, the Nurse will bring it to you when scheduled.

You play an important role in managing your pain. Please talk with your Nurse and Surgeon to discuss your pain management options. It may be necessary for the Nurse to wake you up throughout the night to bring you pain medication, so that you don't wake up in severe pain. Pain medications can cause respiratory depression and over sedation, the Nurse will checks on you throughout the night, and may wake you to make sure that you are breathing at an acceptable rate.

Intravenous Pain Medication

Some pain medications can be given intravenously (IV) through your veins. Medications given IV work faster, usually within 5-15 minutes, and will be used if needed for severe pain.



Peripheral Nerve Blocks (PNB)

A peripheral nerve block is used for patients that have knee replacement surgery. A small catheter is placed near the nerve, and numbing medication is released blocking the nerve receptors. Having a nerve block can help with pain, however they increase your risk of falling after surgery. If you have a PNB, always ask for assistance when getting out of bed.



Patient Controlled Analgesia (PCA)

Occasionally, a Patient Controlled Analgesia (PCA) is ordered for patients with severe or chronic pain. A PCA allows you to give yourself a small dose of pain medicine through an intravenous (IV) line. When you press the button an appropriate prescribed dose of medication is delivered. No one can press the button for you. If you are unable to press the button on your own then it is not appropriate to use a PCA for pain management.



Epidural Catheters

An epidural catheter provides a continuous flow of pain medication into the epidural space in your spine. Epidurals are occasionally used for total hip surgery. Epidurals provide pain relief but can also cause some numbness to both legs. If you have an epidural you are considered a high risk for falls. Please ask for help getting out of bed.

Narcotic Pain Medication Side Effects

Unfortunately, narcotic pain medications often cause side effects. Side effects include:

- Dry mouth
- Drowsiness
- Nausea or upset stomach
- Itching
- Constipation
- Respiratory depression
- Over sedation

Please discuss any unusual symptoms you may be experiencing with your Nurse and/or doctor. There are other medications that may help relieve some of these symptoms. Taking narcotics or other pain medication with crackers or a light snack may help prevent nausea or upset stomach. If nausea continues, the Surgeon can prescribe an antiemetic medication to help with nausea after being discharged from the hospital. If you are constipated or having difficulty having a bowel movement, stool softeners can be purchased over the counter at your local pharmacy.

Non Pharmacologic Pain Management

There are ways to help manage your pain after surgery without taking medications. The use of ice on your post-operative site can help reduce inflammation. Make sure the bag of ice is wrapped in a cloth or pillow case to protect your skin. Only ice for 20 minutes at a time to help prevent damage to surrounding skin and the incision. When laying or sitting down, elevating your leg can help decrease swelling. Ask the Physical Therapist and/or Nurse about positioning to make sure your new joint is in the proper position and getting enough support. Both icing and elevating your leg are ways to help ease pain and reduce swelling without taking medication. Make sure to continue using ice once you have been discharged home from the hospital. Flat ice packs as pictured below can be helpful for home use. These types of ice packs are gel-like, stay cool longer, and can be easily formed to your body.



Your Nursing Care

Infection

It is very important that your healthcare team, you and anyone helping to take care of you at home take measures to help prevent a surgical site infection (SSI). A surgical site infection occurs in the skin, muscle, bone, or implants where you had surgery.

Risk factors that can increase your risk for infection:

- Older age
- Overweight
- Diabetes (make sure your sugars are controlled)
- Smoking (stop smoking)
- Weak immune system
- Length of surgery



Infection can make it harder to heal after surgery, can cause more pain, stress and more medications may be need, along with longer hospital stays and additional surgeries.

Before your joint replacement surgery bathe with Chlorohexidine Gluconate (CHG) three times before coming to the hospital, use CHG wipes to clean your body while in the hospital. Take antibiotics as prescribed before, during and after your surgery.

Hand washing is the MOST important way to prevent infections. It is okay to ask any healthcare provider (Physician, Nurse, PT, OT) or visitor to wash their hands with alcohol get or soap and water EVERY time someone enters and leaves your room.



Signs and symptoms of a possible infection include the following and should be reported to your Nurse or Surgeon's office immediately.

- Increasing pain at rest and with activity
- Increasing swelling, redness or tenderness in the area of the incision
- Persistent fever with chills
- Drainage from the incision

Blood Clots

Developing a blood clot in one or both of your leg is a serious risk after joint replacement surgery. To prevent blood clots from forming wear knee-high compression stockings and sequential compression device (SCDs) sleeves on your legs during and after surgery; these help circulate blood in your legs. Also, moving your ankles and pumping your feet help keeps the blood flowing while you are lying in bed. It is very important to start moving as soon as possible after surgery.

Standing, walking and performing the exercises given to you by the Physical Therapist will help decrease your risk for developing a blood clot. Your Surgeon will also prescribe medication to help prevent blood clots (based on your medical history and risk factors), you may also hear this referred to as an anticoagulant.

The most common anticoagulants used for Joint Replacement are:

- Aspirin
- Xeralto
- Lovenox
- Coumadin

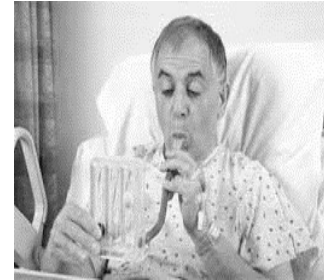
Signs and Symptoms of blood clot include the following:

- Redness
- Swelling
- Increased calf pain
- Warmth and tenderness

If you experience these symptoms while in the hospital let your Nurse or physician know immediately. If you are home and experiencing these symptoms contact the Surgeon's office immediately.

Pneumonia

A combination of anesthesia, less moving around and more time laying down can cause fluid to collect in your lungs, causing pneumonia. To help prevent pneumonia during your hospital stay and once you are discharged home, you will be encouraged to cough and deep breathe frequently using a device called an incentive spirometer (IS). The Nurse will instruct you on how to use the IS properly. The goal is to inhale slowly taking a deep breath and expanding your lungs. This may cause you to cough, which will help loosen phlegm and help you clear your lungs and breathe better. The IS should be used 10 times per hour while awake during your hospital stay and while you are recovering at home until your follow up appointment.



Constipation

The pain medication prescribed and taken by most post-operative patients have side effects including constipation. To help prevent constipation your Surgeon will prescribe a stool softener and/or laxative. Other ways to help prevent constipation include:

- Drinking plenty of water
- Increasing your fiber intake
- Increase your activity (walking as tolerated)

Be proactive in your attempts to relieve constipation. Be mindful of your normal bowel routine and if you experience severe gastrointestinal cramping, pain, nausea or vomiting while in the hospital, inform the Nurse immediately. If you are home and experience these symptoms call the Surgeon's office to speak with a Nurse.

Your Physical Therapy

Your rehabilitation begins the day of surgery. We aim to have Physical Therapy (PT) or a Nurse walk with you within 4 hours after arriving to the Orthopedic Unit. Your Physical Therapist will work with you to progress your mobility twice each day (morning and afternoon) for the first 2 days after surgery. Most insurances will cover the cost of a walker and will be arranged by your Care Manager for you while you are in the hospital. Physical Therapy will help adjust the walker to fit your height and teach you how to use it correctly. They will also teach you how to use other assistive devices if needed, walk with you, give you tips and suggestions on how to get out of bed safely, and practice stairs if needed. Although you will be moving around with PT, for your safety, please do not attempt to get out of bed to the chair or bathroom without help. The staff is available to assist you to the bathroom and can help you sit in a chair for meals. Depending on your discharge plan and how well you are progressing, you may continue PT in your home, outpatient facility or at a rehabilitation facility.

Starting on post op day one, PT will provide you with a Pedicycle. While sitting in a secure chair, ride the Pedicycle three times a day. The goal is to ride the Pedicycle for 30 minutes each time. Staff will help you transfer to a secure chair (preferably with armrests). Secure the leg you had surgery on to the Pedicycle first, and then secure the non-surgical leg. Position the Pedicycle so that when one of your limbs is in the straightest position of the pedal revolution you still have a slight bend in your knee (avoid hyperextension). Pedal gently and with control. It is not about speed and/or resistance! Forward and/or backward revolutions are acceptable. If you are unable to achieve a full revolution, practice moving the pedals back and forth and work towards completing full revolutions. You will be provided with a Pedicycle while you are in the hospital.



Unfortunately, we do not sell Pedicycles in the hospital, and they are not covered by insurance plans. However, if you are interested in using the Pedicycle at home, before or after your surgery, they can be purchased online for approximately \$35. The more active you are before surgery the easier it will be for you after surgery.

You should practicing the exercises below before surgery, as well as after surgery. While in the hospital the Physical Therapist recommends doing these 4 exercises 10 times every hour while awake and in bed.

1. Ankle Pumps



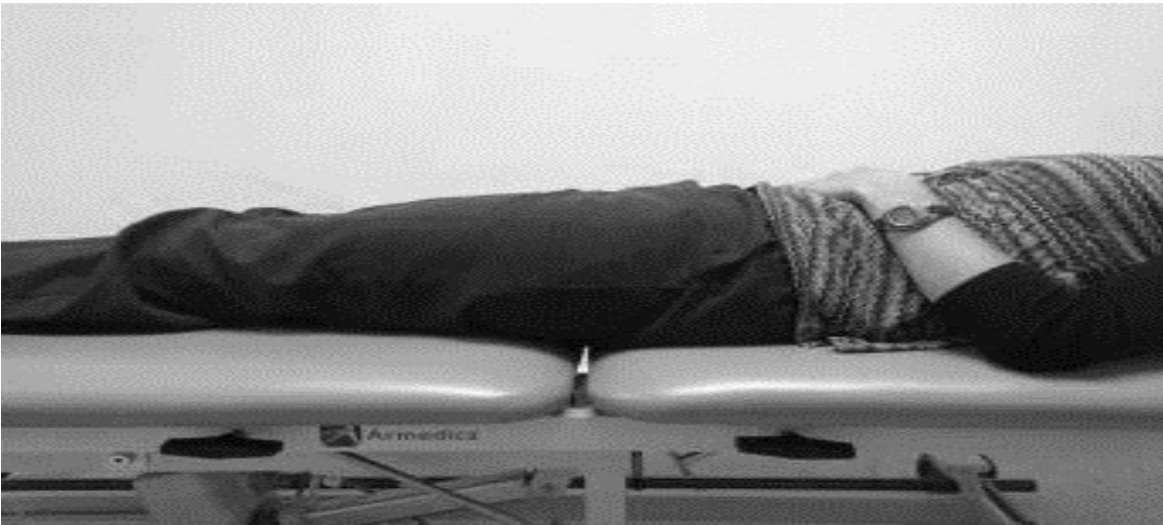
Point and flex your ankles

2. Quad Sets



Press back of knee into bed and hold x 5 seconds

3. Gluteal Squeezes



Squeeze buttock muscles and hold x 5seconds

4a. Heel Slides



4b. Heel Slides with Active Assistance

**Bend and straighten hip and knee
OR use a blanket, towel or belt to assist in bending knee and hip**



Your Occupational Therapy

Occupational Therapy (OT) will also assist you during your hospital stay. The Occupational Therapist will assess your ability to perform Activities of Daily Living (ADLs). These self-care activities include things such as bathing, dressing, grooming. Occupational Therapy will show you how to properly perform these activities safely after joint replacement surgery. They will also evaluate if any extra equipment is needed to help you perform these activities safely in your home. Before surgery think about some of the difficulties you may have after surgery such as bending to pick something up off the ground, putting socks and shoes on etc. If you have specific questions about how to perform certain activities, make sure to ask your occupational or Physical Therapist for guidance.



Your Care Management and Discharge Planning

Discharge is an exciting finale to your hospital stay. You will have received your new joint, and on your way to feeling better and enjoying your future activities. By the time you are ready to leave the hospital, you will be able to:

- Get in and out of bed
- Walk with a walker or crutches
- Climb stairs by yourself or with help
- Know your prescribed exercises
- Understand your new medications
- Know preventive measures you can take to decrease complications

Your Care Manager will develop a discharge plan with you based on:

- Your medical needs
- Doctor's orders
- Insurance options
- Recommendations from Physical and Occupational Therapy
- Your preferences

The goal is to provide you with continuing care for your rehabilitation at home or in a short term skilled nursing facility. Be sure to let your Care Manager verify your correct discharge address and phone number.

Discharge Options

Home Health

A licensed therapist from a certified, home health agency will provide home visits as needed. The first appointment will be scheduled by the home health agency that is approved by your insurance, and will depend on their availability in scheduling.

Home Care

A Nurse visit may also be ordered. These visits last about an hour and will be scheduled by the therapist. If you desire private nursing care, your Care Manager can assist you with this private pay option.

Home Equipment

Depending on your surgery, certain medical equipment may be needed once you go home. This may include a walker, toilet seat riser or shower chair. Not all insurance companies cover the equipment. Equipment recommended by your therapist will be arranged by the Care Manager before you leave the hospital. If you need a walker it is usually delivered to your hospital room prior to discharge and is adjusted to fit your height/weight. Other equipment (if indicated and if covered by your insurance) are sent home with you from the hospital or delivered to your home.

Skilled Nursing Facility (SNF) Placement

The best place to recover after surgery is home. Plan ahead! Make sure that someone (friend, family member, and/or spouse) is available to care for you for the first few days after surgery. If for some reason, you anticipate not being able to go home; placement at a skilled nursing facility may be necessary. Please let your physician know and discuss this at your pre-operative appointment. Skilled nursing placement is dependent on your insurance coverage and level of care needed.

- Call your insurance to verify which facilities are covered
- Plan to visit 2-3 facilities before having surgery

These websites may be helpful:

- General Information on Medicare Skilled Nursing Care:
<https://www.medicare.gov/Pubs/pdf/10153.pdf>
- Skilled Nursing Home Comparison:
<https://www.medicare.gov/nursinghomecompare/search.html>
- Home Health Agency Comparisons:
<https://www.medicare.gov/homehealthcompare/search.html>

The Care Manager in the hospital can also help provide you with some options. The Care Manager will help you arrange for transportation (if going to a facility), home health physical therapy services, and any assistance devices covered by your insurance.

At time of discharge, you will be given your discharge instructions, at UC San Diego Health is called "After Visit Summary" (AVS), which include the name and telephone number of your home health agency and equipment company. Your Nurse will review these instructions with you, including your discharge medications. It is highly recommended that you have your prescriptions filled onsite at the UCSD Health pharmacy prior to being discharged to avoid any delays with getting the medications you need.

Don't forget to have some comfortable loose clothing for the ride home, and arrange for your ride to be at the hospital in the morning; discharge time is 11:00 AM.

Freedom of Choice Home Healthcare Provider/Skilled Nursing Facility (SNF)

Federal law states that you have freedom of choice to select your own Home Health provider and Skilled Nursing Facility. The law states that all hospitals must give patients a list of qualified Home Health agencies and/or Skilled Nursing Facilities for you to select from. The hospital may not specify or limit any qualified provider that can provide you with post-hospital healthcare services. The hospital is also required to tell you if it has a disclosable financial interest in any entity, or similar entity.

Every effort will be made to honor your request for a specific provider. Please be aware that an alternate provider may need to be selected, if your choice of provider does not accept all methods of payment or provide the level of care you require.

What to Expect After Your Hospital Stay

Post-Operative Appointments

The surgery scheduler will arrange 2 post-operative appointments. The first appointment is typically 1 month after surgery, the second follow-up appointment is at 4 months after surgery. These appointments may be scheduled with the Surgeon's Nurse Practitioner or Physician Assistant.

Post-Operative Tips

For any questions or concerns after surgery you may contact the Orthopaedic Clinic at 858-657-8200 or 619-543-6312.

General Instructions

- Elevate your post-operative leg when you are resting to minimize swelling.
- Wear your compression stockings at least 12 hours a day.
- Use ice to help control the swelling and pain. Place ice over your post-operative area for 20 minutes every hour, protecting skin from direct contact. DO NOT USE HEAT – this will increase the swelling.
- Call the office or hospital operator after business hours if you develop a fever (over 100.5) or chills, develop drainage from the incision, redness surrounding the wound, increased pain, increased leg swelling, bleeding, lightheadedness, or headache.
- Go to the emergency room if you develop chest pain, shortness of breath, or have a change in mental status.

Post-Operative Incision Care

- Follow your Surgeon's detailed instructions on how to care for your incision.
- If there are tape-like strips placed over your incision, they should be kept in place until they come off on their own in 1-2 weeks.
- Do not use ointments or creams on the incision.
- Keep the incision clean and dry. Any drainage from the incision should be reported to the doctor immediately.

- You can shower 3-4 days after your surgery. Do not soak the incision.
- NO baths, swimming (pools or ocean), or hot tubs until after your first post-operative appointment and your Surgeon clears you.
- Let warm, soapy water run over incision, do not rub or scrub your incision site. Pat dry with a clean, dry hand towel.
- Bruising, swelling and warmth around the incision and into the thigh or leg is normal, and will begin to go away within the first 2 weeks after surgery. If you are concerned please call your Surgeon.

Activity

- Your Surgeon will instruct you about how much of your weight you can put on your operative leg.
- You may walk as much as tolerated with your walker or crutches.
- You will have Home Health Physical Therapy for your initial recovery period at your home. Your Surgeon and Physical Therapist will guide you on exercises, range of motion and stretching.
- We recommend you refrain from driving until four weeks after surgery. Once you are no longer taking narcotic pain medication and feel you have your normal reflexes back it is safe to drive. We suggest you practice with another driver until you feel comfortable.

Medications

- Take all medications as prescribed. For questions regarding medication, call your Surgeon's office.
- If taking extended release pain medication begin to wean off of the medication 7-10 days after surgery. Immediate release pain medication can be continued as needed.
- Medication to help prevent blood clots will be taken for 2-4 weeks after surgery. Make sure you understand what medication you are prescribed and how often to take them.
- Please provide 2-3 days' notice to your Surgeon's office for refill requests.

Frequently Asked Questions

How long will my knee be swollen and warm?

Swelling and warmth of the knee can last for four to six weeks after surgery. Swelling will go away slowly over time, it may take several months to return to normal.

Is it normal for the skin around my incision to feel numb?

Yes, cutting through the skin irritates the nerves in the skin causing this area to be less sensitive or numb. Normal sensation will return over time.

What exercises can help prepare me for surgery?

Before Joint Replacement surgery it is helpful to have good strength. General strengthening exercises to all limbs and core can be beneficial.

Are private rooms available in the hospital?

We will make an effort to place you in a private room, however we cannot guarantee you will be in a private room. This depends on what beds are available.

Can my loved one stay with me in the hospital?

Yes. You may have a family member stay with you in the hospital; however, not all rooms have a recliner or area for your family member to sleep. If you have a roommate, we will need to ask your roommate's permission to have your loved one stay with you.

Where do I go after surgery?

The BEST place to recover after surgery is home. Majority of patients go home after surgery. If for some reason it is unsafe for you to return home the Care Manager will help coordinate discharge to a Skilled Nursing Facility (SNF). If you live alone, make arrangements before surgery for family or friends to help you. During the hospital stay, Nurses, doctors, Care Manager, Physical and Occupational Therapists will determine the best discharge plan for you.

Can I shower after surgery?

Follow your Surgeon's discharge instructions. Most patients can shower 3 to 4 days after surgery. NO baths, hot tubs, pools or ocean swimming for 4 to 6 weeks after surgery, or until the incision is fully healed.

When can I return to playing sports and exercising?

Continue exercises as instructed by your Physical Therapist until you see the Surgeon at the first post-operative visit. Take short frequent walks throughout the day, walking as much as tolerated. Returning to sports or more vigorous exercise is dependent upon individual patient's recovery, and can generally be resumed after 2 to 4 months.

When can I resume sexual activity?

Generally, you can resume sexual activities six to twelve weeks after surgery, however this is dependent on which joint is being replaced and possible positioning precautions. Ask your Surgeon and Physical Therapist for recommendations based on your recovery.

When can I drive again after surgery?

Do NOT drive while taking narcotic pain medication. If surgery is on your right knee or hip, for your safety do not drive for 4 weeks. Reaction times can be slower after surgery, putting you at risk for an accident. After 4 weeks, return to driving when you feel comfortable. If surgery is on the left knee or hip, you may drive when comfortable if you have an automatic transmission. If driving a manual transmission and your surgery is on the left knee or hip, do not drive for about 4 weeks. Everyone's recovery is different, when ready to drive, test your driving ability in an empty parking lot before driving in traffic.

How long before I am able to return to work?

Returning to work depends on the physical demands of the job. Those with jobs that require little physical exertion may return to after 4 weeks. Those with physically demanding jobs may take 8 to 12 weeks or longer, depending on recovery. Discussing specific work requirements with your Physical Therapist and Surgeon after surgery will help develop a plan for returning to work.

When can I travel after surgery?

Any traveling with sitting greater than 1 hour can increase risk of blood clots due to inactivity and should be avoided until after your first post-operative appointment. While recovering you should make sure to stand/walk every hour to help decrease risk of developing blood clots. If you are planning to travel notify your Surgeon.

What should I bring to the hospital?

Pack lightly, bring identification and insurance cards, comfortable clothing and safe shoes for walking when you are discharged. The hospital is not responsible for lost or damaged valuables such as phones, laptops and tablets.

How long will I be in the hospital?

Patients with hip replacement stay in the hospital for 1 to 2 days. Patients with knee replacements stay in the hospital for 1 to 3 days. Each patient is evaluated by the Surgeon, Nurses, Physical Therapists and Care Managers to determine when it is safe to go home.

What equipment should I buy before surgery?**(Toilet riser, walker, shower chair)**

The Physical Therapist and Care Manager will evaluate what equipment (if any) is needed. The Care Manager will review individual insurance coverage and will order the equipment needed. Most insurances will cover the cost of a walker which will be arranged after surgery in the hospital. Equipment not covered by insurance can be purchased privately.

How long will I be on a blood thinner medication?

The Surgeon, will decide which blood thinner medication to take after surgery and for how long to take the medication.

Medications prescribed and length of treatment depends on your health history and risk factors. Typically, patients take blood thinners 2 to 4 weeks after surgery.

How do I prevent constipation after surgery?

Patients may experience constipation after surgery due to a variety of reasons such as anesthesia, pain medication, and not moving as much. The hospital will provide stool softeners while you are in the hospital and you should continue to take your prescribed stool softeners after going home. Also, be sure to drink plenty of fluids, eat foods high in fiber and stay as active as possible.

How long will I need pain medication after surgery?

Patients require different amounts of pain medications for different lengths of time. You will likely leave the hospital with a prescription for pain medication and after a few weeks you can switch to Tylenol or Ibuprofen. However, this will be determined by your physician, so please discuss concerns about pain with your physician.

Will the implant set off metal detectors?

Usually not, but if you desire, the clinic can provide you with a card that documents your knee or hip replacement.

What are the artificial joints made of?

Our Surgeons use several different artificial joints. Depending on the implant, they are often made of a combination of metal and plastic. If you have questions regarding your implant speak with your Surgeon.

Why does my knee click?

The implants are made out of metal and plastic. The components will separate slightly with gravity and when you swing your knee to walk a clicking sound may be heard as the pieces come into contact. It does not mean the components are loose or broken; it should not cause any pain.

How long will my joint replacement last?

The durability of knee and hip replacements is quite good. The majority will last a lifetime; occasionally implants can wear out or become loose over time depending on your age and activity level.

Medical Words Explained

As you learn about your upcoming surgery, you may hear some medical terms that are new to you. We want to make sure the information we give you about your surgery is clear and in a way you understand so you can feel prepared.

ADLs: Activities of Daily Living. These are daily care activities, such as bathing, grooming, feeding, toileting etc.

Ambulation: Walking

Anticoagulant: Blood thinner. This medication helps prevent blood clots.

Care Manager: A Nurse who helps you plan for your discharge. If needed, your Care Manager will arrange for home medical equipment, home health physical therapy or nursing services, and coordinate your discharge to a skilled nursing facility.

DME: Durable medical equipment. This is medical equipment, such as wheelchairs, walkers or shower chairs etc.

DVT: Deep vein thrombosis, or blood clot.

Foley catheter: A flexible tube that is inserted through the urethra into the bladder to drain urine.

Homebound: This is an insurance term meaning you require assistance to leave your home. You must be considered 'homebound' to receive home health care benefits, such as physical therapy.

Home Health: Health services provided in a home setting. For joint replacement surgery, this often refers to home health physical therapy.

Injectable: A medication given as an injection shot, or through an IV catheter into your vein.

Incentive Spirometer (IS): A device to encourage slow, deep breathing after surgery to help prevent pneumonia.

Occupational Therapist (OT): A health care professional who helps you improve and regain your ability to do self-care activities, such as increasing function for bathing, feeding, and toileting.

Oral: By mouth. An oral medication is one you take by mouth.

Physical Therapist (PT): A health care professional who helps you improve and regain your mobility using special exercises and equipment to improve range of motion.

Pre-Op: Pre-operative, which means before surgery

Post-Op: Post-operative, which means after surgery

Post-Op Day 0: The day of surgery

Post-Op Day 1: The day after surgery

SCDs: Sequential Compression Devices. These are special leg pumps to prevent blood clots.

SNF: Skilled Nursing Facility. A nursing facility that provides continued nursing care and rehab after discharge from the hospital.

TED stockings: Thromboembolic disease stockings, or compression stockings. These are tight stockings to prevent thromboembolism, or blood clots.

Medication List

Complete your medication list here and bring to your pre-operative appointment.

Name of Medication	Dosage-How much do you take (mg)?	Frequency-How often do you take it?	Reason for the Medication?

Are you allergic to any medication? (Circle) Yes No
If yes, what? _____

What was the reaction you had to each of the above? _____

