Your knee replacement surgery is scheduled for:

If you have questions on topics covered in this workbook, please call any of these numbers from **8 a.m. to 5 p.m. Monday through Friday.**

- Orthopaedics – La Crosse (608) 775-2276 or (800) 362-9567, ext. 52276

- Physical Therapy and Occupational Therapy – La Crosse (608) 775-4765 or (800) 362-9567, ext. 54765

- Outpatient Rehabilitation – Onalaska (608) 775-8140 or (800) 362-9567, ext. 58140

- Social Services (608) 775-3454 or (800) 362-9567, ext. 53454 Ask for the Orthopaedics social workers.

- Cost Estimates – 8 a.m. to 4:30 p.m. weekdays (608) 775-1067 or (800) 362-9567, ext. 51067

- For answers to questions about coverage, call your insurance company or the government program you are enrolled in.

If you have questions or concerns about symptoms **after hours, weekends and holidays**, call:

- Telephone Nurse Advisor: (608) 775-4454 or (800) 858-1050
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Prepare yourself and your home

Patients as partners

At Gundersen Health System, you and your “recovery buddy,” are the most important members of your health care team. A “recovery buddy” is a family member or support who will be available to help you for 1 to 2 weeks after surgery. We encourage both of you to become actively involved in your surgery and recovery. You and your health care team share the responsibility for a safe health care experience.

Speak up if you:
- Have questions or concerns.
- Do not understand something that a doctor or other member of your health care team has told you.
- Are wondering if something is right.

Partner with your health care team:
- Be honest and open about things that put your health at risk, such as diet, alcohol use, exercise and smoking.
- Know what happens before, during and after surgery.
- Prepare your home for a safe recovery.
- Learn to do your exercises and commit to doing them every day.
- Complete physical therapy requirements.
- Come to all your scheduled pre-op and post-op visits.

You expect certain surgical skills and support from your healthcare team. We, in turn, think of you as more than our patient. You are the person who has the final say over whether your journey will be a success. No matter what others do for you, it is what you do for yourself that will matter most. After all, it is your body and your future.
Required preoperative appointments

Preadmission Department – This appointment will take 2 hours.

Bring all of these with you:

- This workbook
- Your medicines and supplements in boxes, bottles or vials they came in. This includes:
  - Medicines prescribed by all your doctors.
  - Medicine you take as part of a study or clinical trial.
  - Over-the-counter products for pain relief, gas, upset stomach, skin conditions and other problems.
  - Herbs and other “natural products.”
  - Vitamins, supplements and products for weight control or other health needs.
- Your advance directive if it is not on file with Gundersen Health System. An advance directive is also called a living will, advance care plan, power of attorney for healthcare, or health care proxy.

During your preadmission appointment, a nurse or pharmacist will review medicines you take and give you instructions. These instructions will include:

- When to stop certain medicines before surgery.
- Medicines you can continue to take up to the morning of surgery.

A nurse will review instructions to prepare you for surgery, such as bathing the night before surgery, teaching you how to prevent respiratory infection and nausea after surgery.

You will also be seen by an Anesthesiology staff member. They will explain anesthesia. There are 3 options:

- Spinal anesthesia is used most commonly. A doctor injects medicine into your lower back. You will be numb from the waist down and breathing on your own. There is less risk of nausea with this method. Most patients wake up easier and feel well enough to walk sooner.
• Local block is usually used in combination with spinal anesthesia. A doctor injects medicine into your knee joint to numb the area.

• General anesthesia is used as the last option. Medicine is given through an IV. You are asleep and a machine breathes for you.

During your preadmission appointment you may be asked about your health history and a healthcare provider may do a physical. Tests such as lab work, EKG or chest X-ray may be ordered. The goal is to make sure you are prepared for surgery.

**Total Joint Academy class**

Be sure your recovery buddy attends this class with you. It is helpful to have two people learn the information needed to improve your recovery after surgery. Your recovery buddy will also learn how to assist you without harming either of you. An Orthopaedics nurse will explain how to prepare for surgery, your hospital stay, and what to expect during your recovery. You will learn exercises that you can do before surgery. These exercises strengthen and train muscles needed to support and move your new joint. Bring your questions in writing. Be prepared to stay after class if some questions are too private to discuss in front of others.

**Preoperative appointment with your surgery team**

This will be about 1 week before your surgery. You will learn more about your surgery, hospital stay and recovery. Pain management and how to take a blood thinner after surgery will be discussed. Come prepared to ask questions. A Patient Revenue Services staff member will be available to go over your surgery cost estimate. You will register for your hospital stay and complete insurance and other forms. Co-pays or other costs not covered by insurance may be due at this appointment.
Day before surgery phone call or text
You will get a short phone call or text today before 6 p.m. A nurse will tell you when and where to arrive for surgery the next day. You will get a call the Friday afternoon before if your surgery is scheduled for Monday. Call (608) 775-3159 or (800) 362-9567, ext. 53159 if you do not receive a call or text by 6 p.m.

Your pre-surgery “to do” list

- **Sign up for MyCare®** – If you have a Smart phone or a computer, MyCare® allows for communication between you and your healthcare team. You will receive important messages throughout your total joint replacement journey.

- **Dental checkup** – Be seen by your dentist within 3 months before surgery. Severe gum disease, an abscess or other oral infection would delay surgery.

- **See your primary care provider** if a pre-surgical check-up is requested by your Orthopaedics provider. Make sure you have these vaccines:
  - **Pneumovax®** – Age 65 or older
  - **Shingles** – Age 65 or older
  - **Flu** – Depends on the time of year

- **Advance directive** – We encourage you to have your advance directive on file in your medical record before surgery.

- **Arrange for rides to the clinic** – For 4 to 8 weeks, you will need rides to your physical therapy location 3 times each week. You will also have clinic appointments with your Orthopaedics team at 2 weeks and 6 weeks. You may need rides for blood tests and other clinic visits. You will not be able to drive yourself until you are off of pain medicines and have full function of your surgical leg or the leg that is healing.
• At least 1 week before surgery, be sure your post-op physical therapy appointments have been scheduled.

• Get ready for safe recovery at home.

• **Prepare and freeze a few meals.** Stock up on soups, microwave entrées and other healthy foods that are easy to fix.

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**Sign up for MyCare®**

You will need a MyCare activation code to sign up. To get this 15-digit code:

• Find the code on your after visit summary. This is the printout you get after your doctor visit.
• Go to mycare.gundersenhealth.org and click on “Request Code.”
• Ask for it at your next appointment.

From your computer, tablet or mobile device:

• Go to mycare.gundersenhealth.org
• Click “Sign up now.”
• Follow the step-by-step, on-screen instructions.

After signing up – download the Android or iPhone app by:

• Searching Google Play™ or the App Store™ for Epic MyChart
• Reading and agreeing to the terms of use.
• Scrolling and selecting Gundersen Health System MyCare.
• Logging in with your MyCare username and password.

**Need MyCare help?**

• Phone: Call (608) 775-0303 or (800) 362-9567, ext. 50303 between 6:30 a.m. – 5:30 p.m. weekdays
• E-mail: mycare@gundersenhealth.org
• In person: Stop at any John & Nettie Mooney Library
Antibiotics use for dental appointments after surgery

Antibiotics are required to prevent germs or infection from spreading to your joint. It is important to follow these instructions to protect your new joint:

- No dental appointments for 3 months after surgery.
- First year after surgery – Take antibiotics for any dental work (cleanings or invasive dental work).
- First 2 years after surgery – Take antibiotics for invasive dental work (gum disease treatment or root canal).
- No antibiotics required after 2 years unless they are recommended by your primary care provider, other doctors, or dentist.

Your doctor or dentist must prescribe antibiotics. Take them 1 hour before dental appointments:

- Amoxicillin: 2 grams by mouth

Lifestyle choices

Eat wisely and well before and after surgery

Prepare your body for one of the most stressful periods of your life. Increase your intake of lean protein to help with healing after surgery. Be well nourished so you can heal and regain your strength. Choose from these food groups each day:

- Lean meat, poultry, fish, dry beans, eggs and nuts
- Fruits and vegetables
- Milk, yogurt, cheese and other dairy products
- Bread, cereal, rice and pasta
- Limit fats, oils and sweets

Control your portion sizes. This is not the time to start a crash diet. Focus on getting vitamins, minerals and fuel you need for the challenge you face. Make weight loss a goal when you can move with more ease and less pain.
You may have decreased appetite for a while after surgery. Keep eating smaller portions of healthy, nutritious foods. It is okay to drink diet supplements while you recover.

**Tobacco**
You are at risk for complications if you use tobacco or nicotine replacement products. If you have not already done so, stop smoking or chewing tobacco. You should stop using tobacco, nicotine patches or gum at least 4 weeks before surgery. Bones take about 6 to 8 weeks to heal. Having any form of nicotine in your system can affect your healing process.

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**Get ready for a safe recovery at home**

**Arrange for others to help you**
- It is important to have a recovery buddy available to help you for the first 1 to 2 weeks. After that, when you feel comfortable, you can be by yourself. Have someone to call if needed.
- You need someone to drive you to therapy, clinic appointments or lab work for 4 to 8 weeks after surgery. A full size car or SUV is the easiest to get in and out of.
- Find someone to take care of your lawn, garden and sidewalks.
- Have mail and newspapers delivered to your door or picked up by someone who can bring them inside for you.
- Find a pet sitter or kennel for your pet for a few days.

**Plan ahead for leaving the hospital after surgery**
Home is the preferred destination for most patients after surgery. Your infection risks after surgery are lower if you recover in your own home. You know your way around your home and where things are. Patients have also found they are able to rest more comfortably in their own home. Before you leave the hospital, you will have all the equipment needed for your recovery.
Most patients will stay in the hospital for only 1 night. Before leaving the hospital, physical therapy will make sure you are safe to go home. The surgeon’s instructions will also be reviewed with you and your recovery buddy.

**Make changes to safely recover at home**

- Choose the entrance to your home which will be easiest when you are using a walker. Add one or two rails if there are none.

- Decide which pathways you will follow from room to room. Be sure they are clear of cords, throw rugs and other clutter.

- Be sure lights are working in all rooms and hallways. The path from your bedroom to the bathroom is the most important. Have nightlights in the bedroom and bathroom.

- Arrange your kitchen for easy reaching. Put the tools, dishes and containers you are most likely to use between waist and shoulder height.

- Make sure to have a cell phone or cordless phone. Take and make calls while sitting.

- Choose a sturdy chair that allows you to elevate your leg. The chair should also allow you to position your leg in a straight line. Put non-skid tips on the legs if needed. Choose a chair with sturdy armrests to help you easily get out of the chair.

- Have grab bars installed in your shower. Use a non-skid mat.

- Rent, borrow or buy a raised toilet seat with safety rails or a commode.

- Each stairway needs at least one good handrail. Keep stairs well lit. Wear sturdy shoes while using stairs.

- Have someone help you change the position of your bed. Create a path around it wide enough for your walker.
• You need to sit for a minute to keep from getting dizzy when you move to a sitting position.

• Add a grab bar or a bench that goes over the edge of the tub. It will help you safely enter and exit if you shower in a tub.

Changes you should make at home before surgery

Stairways should have rails on one or both sides.

Consider adding a temporary ramp if you have multiple steps to enter your home.

You will need support on one or both sides of the toilet. Options shown here include grab bars, safety rails, or seat risers with rails. Towel racks, toilet paper holders, suction cup grabs and door frames are not safe to use.
If you have a tub with a shower in it, you are likely to need grab bars or a tub transfer bench. Tub transfer benches adjust to fit most tubs.

Take a sponge bath if safety aids cannot be installed.

**Countdown to surgery**

**5 days before surgery**

- Do not shave skin on or near your surgery site. Surgery could be canceled if you have a fresh cut, scrape or burn.
- For pain relief, take acetaminophen (Tylenol®). **Do not take** non-steroidal anti-inflammatory drugs such as:
  - ibuprofen (Advil®, Motrin®)
  - naproxen (Naprosyn®, Aleve®)
  - nabumetone (Relafen®).
  These increase risk of bleeding. If you are allergic to acetaminophen or need something stronger for these 5 days, contact your primary care doctor or an Orthopaedics nurse.
- Remove all toenail polish.
- Try to drink 8 glasses of water each day. Being well hydrated before surgery is important.
2 days before surgery

- Continue to drink plenty of water. It helps prevent bladder infection after surgery.

Day before surgery

- Pack your bag with everything that you need for your hospital stay.
- You will get a short phone call or text today before 6 p.m. A nurse will tell you when and where to arrive for surgery the next day. You will get a call the Friday afternoon before if your surgery is scheduled for Monday. Call (608) 775-3159 or (800) 362-9567, ext. 53159 if you do not receive a call or text by 6 p.m.
- Do not drink alcohol or use tobacco for at least 24 hours before surgery

Night before surgery

- Have freshly laundered sheets on your bed.
- Shower and wash your hair. Rinse well. Use freshly laundered wash cloth and towels. Apply nothing to skin. Dress in clean nightwear.
- **Wait 2 hours** after your shower. Use CHG cloths as instructed by the nurse during your Preadmission appointment.
  - There are two cloths in the package. Use the first cloth to gently wipe back and forth for 15 seconds. Do not scrub hard. Let skin air dry for a few minutes.
  - Repeat using the second cloth for 15 seconds.
  - It is normal for your skin to feel sticky.
  - If your skin itches or burns after using the CHG cloth, rinse off. Let staff know about reaction the morning of surgery.
- **Do not** have your pet(s) sleep with you tonight. Pets may increase your chance of infection.
• Drink the 2 cans of Ensure you received during your Preadmission appointment. It is best to drink when cold or over ice.

• After 10 p.m., you may only have a light, low-fat snack such as dry cereal, crackers or toast. **Do not eat anything after midnight.** This includes chewing gum, mints or other hard candy. **Do not** eat or drink dairy products, broth or Jell-O®. Drink only these 5 clear liquids until 2 hours before you are scheduled to be at the hospital.
  - Water
  - Black coffee or clear tea
  - **No milk or creamer of any kind**
  - Apple juice (plain)
  - Soda or soft drinks (diet or regular)

**Bring these to the hospital:**

• Your workbook and your patient education folder
• Your medical and pharmacy insurance cards
• A copy of your “med list” from the clinic or Preadmission appointment.

• Bring only these medicines:
  - Eye drops
  - Ear drops
  - Nasal sprays
  - Inhalers
  - Medicine the pharmacist or nurse told you to bring during your Preadmission appointment

• The Incentive Spirometer (spur-AH-mi-tur) breathing device you were given during your Preadmission appointment

• Medically necessary items such as:
  - Glasses with case or contacts with case and solution
  - Hearing aids
  - Dentures
- CPAP or Bi-PAP machine
- Ostomy supplies
- Walker, crutches or cane. Leave your 4 wheeled walker at home.
- Prostheses
- Special wheelchair
- Scooter
  • Tennis shoes or other sturdy non-skid shoes with backs.
  • 2 sets of loose fitting clothes. T-shirts and shorts or sweatpants with stretch or string-tie waist.
- Personal care items
  • Knee-length robe if you want to wear one over your gown.

**Do not wear or bring rings, watches or other jewelry.**

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**Surgery and hospital stay**

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**Surgical day**

**Morning of surgery at home**
  • Do not bathe or shower.
  • Wear freshly laundered clothes.
  • Take the medicines the pharmacist or nurse instructed you to take.
  • 2 hours before you are scheduled to be at the hospital:
    - Drink the can of Pre-Surgery Ensure given to you at your Preadmission appointment.

**Arriving at the hospital**

Valet is available at the main hospital entrance or you may park your car in the Green or Blue parking ramp. Check in at the hospital information desk and let them know you are here for surgery. You will be taken to the pre-op area on the 2nd floor. 1 or 2 family members may be with you.
Pre-op expectations

- Nurse will ask about medicine you have taken in recent days or today.
- Nurse will check your vital signs:
  - Blood pressure
  - Pulse
  - Breathing
  - Temperature
- Staff will help you get into a gown and clean your surgical area with the CHG cloths.
- You will have an IV. A small needle will be used to gain access to a blood vessel. It will be attached to a tube for fluids and medicine.
- Staff will help you swab the inside of your nose to decrease your risk of a surgical infection.
- Your surgeon will visit briefly, answer any questions and sign the correct knee.
- Your anesthesiologist will discuss anesthesia options with you.
- You will sign the surgery consent form.
- 1 hour before surgery
  - You will be given medicine through your IV to help you relax. It may make you feel sleepy. After this, you must stay in bed because you are more likely to fall. Staff will see that you are comfortable and answer your questions.
  - Special leg wraps, called Thromboguards, will be placed on your legs. Rhythmic squeezing of the legs keeps blood moving and prevents blood clots.

Surgery and recovery

Surgery will take 1 to 3 hours. This includes time needed to get you prepared and positioned for surgery. Your surgeon will call or meet with family after the surgery to provide an update. After surgery you will be taken to the recovery room. You will stay there for 1 to 3 hours until you are awake and stable. You might remain in the recovery room longer until your hospital room is ready. Your family will be kept informed.
In the recovery room, your vital signs will be checked often. You will have oxygen tubing in your nose and will receive fluids through your IV. Your pain will be controlled with the use of IV and oral medicines. Your knee will be wrapped in a thick, bulky surgical dressing. Your foot will be raised on 2 pillows with an ice pack on the knee. You most likely will not have a catheter in your bladder. The rhythmic squeezing leg wraps will be on your lower legs.

**Recovery in the hospital after surgery**

You will be in a private room. 1 or 2 family members or friends can visit and stay overnight with you. After you are in your room, a nurse will be checking your vital signs, pain, circulation, and your dressing. You will be able to start drinking water. Your IV will remain in place to give you medicine and fluids.

**Now your work begins**

- **Exercise your lungs** – Breathe deeply and cough every hour while you are awake. This will help prevent pneumonia and other breathing problems. To strengthen and open up your lungs, your nurse will encourage you to use your Incentive Spirometer ten times every hour while you are awake. This simple device will challenge you to take deeper breaths. Oxygen may be needed for 12 to 24 hours after surgery.

- **Physical Therapy (PT) and Moving** – You may start doing ankle pumps and circles and wiggling your toes as you regain feeling. You will be able to use the overhead trapeze bar on your hospital bed to move around. Expect to have PT a few hours after arriving in your hospital room. A therapist will come to your room and teach you how to move safely into and out of bed. You will get your first lesson on how to use a walker. If you do not have PT, you will get out of bed, take a few steps and sit in a chair. Staff will help you use a bedside commode or walk to the bathroom.
• **Pain management** – You and your nurse will determine how much pain you can typically tolerate by asking questions and using the pain scale. Based on how you score your pain and your pain tolerance, you and your nurse will determine the right pain medicine for you. After surgery, you will be asked often to rate your current pain. Your pain management plan may include oral medicines, IV medicines, cold packs, rest and elevation and essential oils. Your nurse will do their best to keep your pain at a level that you can tolerate. All of your pain will not be eliminated. You will not be pain free.

![Numeric Rating Scale](image)

Wong-Baker FACES® Pain Rating Scale

0 2 4 6 8 10
No Hurt Hurts Little Bit Hurts Little More Hurts Even More Hurts Whole Lot Hurts Worst

• **Call. Don’t Fall** – Nurses need you to use your call light. Call before getting out of bed or chair or to change positions, go to the bathroom or take a walk. At no time during your stay should you get up by yourself. Family members must not help you. Call the nurse. This is for your safety and to prevent falls or harm to your new joint.

• **Diet** – You will start with sips of water. As you wake up, you will be given other liquids. You and your nurse will decide when you can start eating solid food. Our room service allows you to order healthy choices for your healing body. Ask a dietitian to assist you if you have questions about nutrition.
**Day 1 after surgery**

There is a good chance you will be able to go home today. You will need to complete physical therapy. You and your recovery buddy will need to learn about recovery at home. Your discharge depends on how you are progressing towards your goals and where you will go after discharge.

Expect to wear your own clothes today. After your IV is removed, you will be free of tubes. You will be able to walk freely in your room, to the bathroom and in the hallway with nursing staff. **Use your call button. A staff member will come to help you.**

Your nurse or occupational therapist will change your incision dressing. Your nurse will also teach you how to do the daily dressing change. You will need to do this at home.

You will work with physical therapy 1 to 2 times during the day. You will work on walking with a walker, postoperative exercises, using stairs and getting in and out of a car. Therapy is hard work. It is the best way to get back on your feet and use your new knee.

You will have occupational therapy 1 time during the day. You will learn how to do your leg wrap and safely do basic activities that you do every day such as bathing and sitting on the toilet. Having your recovery buddy present during these sessions is very valuable. They will be the one helping you with your daily dressing change and leg wrap.

A social worker, if needed, will meet with you and your family or caregiver to discuss and prepare for your discharge. They will make sure you have all the equipment that you need to be safe at home. They will make arrangements for you to go to a rehabilitation facility if it is not safe for you to go home.
Leaving the hospital

You will be ready to leave the hospital when:

- You complete physical therapy
- You are medically stable
- Your recovery buddy has received the education necessary for you to recover at home.

Your recovery buddy should be with you in the hospital the morning before you leave. Your recovery buddy needs to hear all of your care instructions and ask questions.

You need to know how and when to take your prescribed pain medicine and blood thinner medicine. Pick up your prescriptions from your pharmacy and follow the instructions on your discharge instructions.

Your recovery buddy should be available to you for the first **1 to 2 weeks** after discharge. They are important to help you have a smooth recovery. They will help you with your daily dressing change and applying your leg wraps. Once home you need your rest. Allow your buddy to complete tasks around the house that need to be done. You are at a higher risk for falls so **safety** is your primary job.

During your discharge a lot of information was reviewed with you. After you have rested, pull out your instructions and review them. If you have any questions, call an Orthopaedics nurse.
Recovering at home

Managing your pain

**Expect to have pain after surgery.** Unlike arthritic pain, surgical pain will get better and go away. You will not be completely without pain even with good pain control. Trying to reach zero on your pain scale would not be safe. The risk of decreased breathing rate from too much pain medicine is not worth the extra comfort. The best method to manage your pain:

- Determine your tolerable pain level by using the pain scale.
- Use the most conservative dose of pain medicine that brings your pain to your tolerable level.

There are several ways to keep pain at a level you can handle.

- Oral pain medicine – Before you are discharged from the hospital, your nurse will work with you to create a pain management plan. The goal is to keep your pain at a tolerable level. Oral pain medicine controls pain the longest amount of time. It can take up to 1 hour to start working.
  - Take it before your pain becomes severe.
  - Take pain medicine 1 hour before exercising.
Your nurse will teach you about your pain medicines and tricks to manage your pain at home.

- Special leg wraps and cold packs – The leg wraps help control swelling which causes pain. Cold or ice packs can also reduce swelling and pain.

- Rest and elevation – It is important to rest and elevate your legs after exercising.

**Make your own ice pack**

Pour 4 cups of water into a 1 gallon zip-lock bag. Add 16 ounces of rubbing alcohol. Seal the strip tightly. Put a second zip-lock bag around the first and seal the strip. Place the double bagged mixture in the freezer. Freeze until cold and firm.
Taking a blood thinner after surgery

You will be placed on an anticoagulant (an-tye-ko-AG-u-lent). This is also called a blood thinner. This medicine keeps your blood from clotting. Blood clots can cause complications. There are different kinds of blood thinners. Your health history will determine the type of blood thinner that you will take for 4 weeks after surgery.

- You may be asked to take a full strength aspirin (325mg tablet) 2 times each day. Aspirin is taken once in the morning and once in the evening.

- Warfarin or Coumadin® is another option. You will take it once each day at bed time. Warfarin requires a blood test each day in the hospital and 1 to 2 times each week after discharge. This test shows if you have the right level of warfarin in your body. You will have special teaching about warfarin before you go home.

- There are other blood thinners that your provider may have you take besides aspirin or warfarin.

Incision care

Your surgeon used special skin glue called Dermabond® Prineo® to close your knee incision. The skin glue looks like mesh tape and is used instead of stitches or staples. It decreases risk of infection and drainage. You can shower 24 hours after there is no drainage on your dressing. Allow the water to run over the incision and use mild soap to gently wash. Do not apply ointments, creams or lotions to the incision.

You will leave the skin glue in place for 3 weeks after surgery. Your surgical team will tell you how to remove the skin glue during your postoperative visits. Do not use bathtubs, hot tubs, pools or lakes for 6 weeks after surgery.
To complete your daily dressing change, you and your buddy:

1. Need to wash your hands with soap and water
2. Cover your incision with a 4 x 4 gauze. You can purchase gauze at any drug store.
3. Use the tube dressing to hold the gauze in place over the incision. Continue to cover incision until drainage stops or if it is more comfortable for you.

Swelling, bruising and redness are normal around the incision and around the knee joint. Call an Orthopaedics nurse if you develop any of these signs and symptoms of infection:

- Severe or lasting pain that is not relieved by rest, icing or pain medicine.
- Increased swelling in knee or leg.
- Less function in leg than when in the hospital.
- Increased redness around incision.
- Increased drainage from incision.
- Fever of 101 degrees F or higher.

**Leg elevation and positioning**

When resting, your surgeon wants you to elevate your lower leg on 2 pillows to position your leg in a straight line. Do not place pillows directly under your knee. This position will prevent a possible permanent bend in your knee. You may apply ice to your knee. You may lie on your side with pillows between your legs to ensure your leg is positioned in a straight line while at rest.
Leg wraps to reduce swelling
Edema (eh-DEE-mah) is swelling caused by excess fluid in body tissues. Careful wrapping and light exercise can control this swelling. Wrapping helps reduce pain and improve knee movement. Wear leg wraps all the time (even at night) except when:

- You take a shower.
- Wrap is still damp after being washed.

How to wrap your leg
You will be wearing your 2 layer compression wraps for 4 to 6 weeks. Your surgery team will decide when you can stop wrapping your leg.

- Layer 1 – You will be given 2 pieces of tubing. One is wider than the other.
  1. Put the narrow piece on first. As you pull it on, let the lower end cover your toes. Pull the tubing up to the middle of your calf.
  2. Pull the wider tubing over the first piece until the top edge is 4 to 6 inches above your knee. Cover the entire incision. The bottom edge should slightly overlap the narrow tubing. No skin should show between the tubing pieces.
  3. Fold back a 2 to 4 inch band of tubing at the base of your toes.

- Layer 2 – You will be given 2 lengths of bandage called Comprilan®. One is wider than the other.
  1. Start with the narrow bandage. Wrap from the base of your toes to the middle of your calf. Keep gentle tension. Do not pull it tight. Secure the end with plastic tape.
2. When you begin wrapping the second bandage, overlap the first by about half of its width.

3. Wrap to about 4 inches above your knee. Secure the end with plastic tape.

- Remove and re-wrap 1 or both layers if:
  - Skin is numb under or next to the wrap.
  - You feel pain under or near the wrap.
  - Skin turns red or blue under or at the edge of the wrap.

**How to care for wraps** - Wash tubing by hand each day. Hang it up or lay it on a rack to air day. Do not use while it is damp. Wash the Comprilan® bandage by hand if it gets soiled. If you have a mesh bag, you can wash both kinds of wraps in your washing machine and dry in your dryer. Use the gentle cycle and low heat.

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**Urinating after surgery**

Everyone is different. Some people may urinate more often after surgery. Others may have trouble urinating. It is normal to notice an increase in the number of times you need to urinate. It is also normal to have an increase in the amount of urine. If you are having trouble urinating, call the Orthopaedics nurse right away.

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**How to prevent opioid constipation**

Opioids (OH-pee-oyds) are narcotics. Opioids are some of the strongest drugs for pain. Common names are Lortab™, Oxycodone™, Dilaudid™, and Tramadol™.

Narcotic pain medicines can make you constipated. Your bowels are less active than normal when you take these drugs. You could have belly pain or a harmful blockage if stools become hard and slow to move. A severe blockage could injure your bowels.
**Stay ahead of this problem.** Take a stool softener, a gentle laxative or both. Soft stools move easily through your bowels. A laxative makes your bowels move more often. You need more of this medicine than what is required to manage constipation caused by what you eat. Contact the doctor who prescribes your opioids if you become constipated. A typical bowel program includes:

- 1 to 2 tablets of senna 2 times each day
- or -
- 1 to 3 tablets of docusate sodium (100 to 300 milligrams) each day and Miralax®

It is good to have senna or docusate sodium and Miralax in your home before surgery.

In general, we advise you not to use products like Metamucil™ and Fiberall™. High fiber or bulk forming laxatives require you to drink a lot of water. They absorb water and expand. If you do not drink enough water, stools may harden and not move as well through your bowel. Taking these products with too little water can make constipation worse.

**Ongoing constipation**

Try a suppository. Put it in your rectum (bottom) to help your bowels move. Use one or both types:

- A bisacodyl suppository if your stool is soft
- A glycerin suppository if your stool is hard

You can buy them over the counter at any drug store. **Contact your doctor’s office that day if your bowels do not move after using a suppository.** Do not give yourself an enema unless you are told to by your doctor or nurse.
Daily activities: Keep yourself moving

In all of the exercises below, surgical leg is the one with the new knee joint. Non-surgical is the leg that was not operated on.

Your recovery will occupy most of your time for the first couple of weeks. How your body is feeling will be the best indicator of how active you should be. Each day after surgery your activity level should increase. Instead of taking one long walk each day, take short, frequent walks of 100 to 400 feet. Each walk might take 5 to 10 minutes. Each day walk a little farther or for a few more minutes. The more active you are, within safe limits, the faster you will recover. If pain or swelling increases, you are too active. Get up and stretch or take a short walk every 60 minutes while you are awake. This will help ease stiffness and swelling.

You will be using a walker when you leave the hospital. Keep your head up and your buttocks tucked in when using the walker. Use the walker until you walk without a limp. This could be a few weeks or months. You may switch to a cane when your doctor or therapist says you are ready.

Getting in and out of bed

Support your surgical leg with a leg lifter when moving to a sitting position. Silk or satin nightwear and sheets make this movement easier.

Sitting and standing

Where and how you sit will affect your recovery. At home and away, choose a chair with:

- A straight back
- A firm, high seat
- Arm rests
Avoid low chairs or chairs that have:

- Soft cushions
- Wheels or rockers
- Swivels

Getting into or up out of a chair could strain your healing knee. Rockers or wheeled chairs can scoot out from under you.

**How to sit on a chair or commode or a toilet with safety rails**

1. Walk backward until you feel the chair touch the back of your leg.
2. Grasp the arm rests. Lower yourself into the chair. Keep your surgical leg straight in front of you.
3. Once you are firmly seated, slide back until the chair supports your back.
4. Reverse these steps to stand.

**Using the toilet**

Add one of these simple aids for your safety and comfort. It will be easier to get on and off the toilet without help.

<table>
<thead>
<tr>
<th>Toilet safety rails</th>
<th>Toilet and commode frame</th>
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<tbody>
<tr>
<td><img src="image1.png" alt="Toilet safety rails" /></td>
<td><img src="image2.png" alt="Toilet and commode frame" /></td>
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<table>
<thead>
<tr>
<th>Toilet safety rails with raised seat</th>
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<tbody>
<tr>
<td><img src="image3.png" alt="Toilet safety rails with raised seat" /></td>
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Using a walker

Your first instinct may be to protect your surgical leg. This will not help you achieve your recovery goal. You must use both legs, not just your “good” one, to return to a walking pattern that is as normal as possible.

A walker will help you maintain your balance and take some weight off your surgical leg. Use the leg with the new joint more each day.

Normal walking involves this sequence of movements:

1. Push off your toes.
2. Bend your knee as you bring your leg forward.
3. Put your heel down first before you shift weight onto your leg.

Use good posture while you walk. Your therapists will encourage and guide you as your gait and strength improve.

Walking with a walker

1. Stand in the middle of the walker. Shift your weight toward your non-surgical leg. Gently glide the walker forward.
2. Push down slightly on the walker to support yourself as you pick up the surgical leg. Place it in front as shown in this photo.
3. Place more weight on the walker using your arms as you step onto your surgical leg. Bring your non-surgical leg forward so your feet are side by side.

4. You will take larger steps with your non-surgical leg as you improve. Always keep your body inside the walker.

Going up a curb or deep step

1. Approach the curb and get close to the edge.

2. Place your walker up on the curb.
3. Step up with non-surgical leg or “Up with the Good”

4. Step up with surgical leg.

Stepping off a curb or deep step

1. Stand near the edge of the curb. Put your walker down onto the lower level.

2. Step down with the surgical leg or “Down with the Bad”. As you step down, use your arms to put weight on the walker.

3. Step down with the non-surgical leg.
**Using a cane**

Hold the cane in the hand opposite your surgical leg. Slightly bend your elbow.

**As you walk,** the cane and your surgical leg should swing and strike the ground at the same time.

1. To start: Place your cane tip about one small step ahead.
3. Finish the step with your normal leg.
4. Repeat: Cane and surgical leg forward first. Followed by the non-surgical leg.

**Going up stairs with a cane**

You will move one step at a time. Ask your helper to stand below you if someone is helping. There is no hard and fast rule about where your cane should be when you go upstairs. You and your therapist will decide which technique works best for you.

1. Hold the handrail. Step up with your non-surgical leg first. “Up with the Good.”
2. Bring your surgical leg and cane up at the same time. Repeat this pattern. One step at a time.

Going down stairs with a cane

1. Hold the handrail. Take one step down with your surgical leg and cane at the same time. “Down with the Bad.”

2. Step down with your non-surgical leg. Repeat this pattern. One step at a time.
Using equipment to manage your day

While you recover, you must change the way you do some normal activities. Your therapist will show you correct body positions, transfers, and how to use special tools for dressing and bathing.

**Bathing** – For safer, more secure transfers, use these aids:

- Tub transfer bench
- Grab bar and shower chair
- Shower chair
- Long-handled sponge

Wash your legs and feet with a long-handled brush or sponge. Use correct transfer technique to move in or out of tub or shower. Your therapist will show you.

**Dressing**

You can dress yourself with the right tools. Your therapist will show you. A reacher, a long shoe horn, elastic shoe laces and other tools can make dressing easier while you heal.

- Sock aid
- Reacher
Massage exercises

A clear fluid called lymph (limf) flows throughout your body. After surgery, lymph builds up in your tissues and causes swelling. You can help move this excess fluid from your leg to your kidneys so it can be filtered and passed in your urine. Follow these 6 steps in the same order at least 3 times each day. Do each step at least 10 times before you start the next one. You can do these exercises lying down or sitting.

1. **Breathe deeply and gently massage over your navel or belly button.** Breathe in through your nose and out through your mouth. Massage by gently pulling the skin. Do not just rub over it.

2. **Squeeze your buttocks together.**

3. **Massage your groin.** Place your hands in the crease at the top of your legs. Massage up toward your heart.
4. **Heel slides** – Start with your surgical leg out straight. As you slowly bend your hip and knee, slide your heel toward your bottom as far as you can. Slide your heel back down the bed to straighten your leg. Do 1 to 2 sets of 10 each. Do 2 times each day. Use a metal cookie sheet to help your foot slide on the bed.

5. **Massage the back of your knee** with your hands or a towel. Massage up toward your heart.

6. **Pump your ankles** – To improve the blood flow in both legs, move your feet up and down in a pumping motion. Do 10 to 20 times. Repeat often throughout the day.
Strengthening exercises

Start these before surgery. Perform these exercises while you lie on your back in bed.

1. **Quad sets or thigh squeezes** – With your surgical leg out straight, place a small towel roll under your **heel**. Tighten your thigh muscles by pushing your knee down toward the bed. Work up to a 5 second hold. Do 1 to 2 sets of 10 each. Do 2 times each day.

2. **Straight leg raise** – Bend the non-surgical leg so that your foot is flat on the bed. Keep the surgical leg straight. Tighten the thigh muscles of your surgical leg by pushing your knee down toward the bed. Keep your knee straight as you raise your surgical leg off the bed about 12 inches. Do not raise higher than the bent knee of the non-surgical leg. Work up to a 5 second hold. Do 1 to 2 sets of 10 each. Do 2 times each day.
3. **Heel slides** – Start with your surgical leg out straight. Slowly bend your hip and knee and slide your heel toward your bottom as far as you can. Slide your heel back down the bed to straighten your knee. Do 1 to 2 sets of 10 each. Do 2 times each day. Use a cookie sheet to help your foot slide on the bed.

![Heel slides images]

4. **Short arc quad** – Place a coffee can or large towel roll under your surgical thigh just above your knee. Lift your heel off the bed while you try to straighten your knee. Keep your thigh resting on the can or towel. Hold for 5 seconds. Do 1 to 2 sets of 10 each. Do 2 times each day.

![Short arc quad images]
Do the following exercises while you sit in a sturdy chair with arms.

5. **Ankle pumps** – To improve the blood flow in both legs, move your feet up and down in a pumping motion. You can also do this exercise while you are lying down. Do 10 to 20 times. Repeat often throughout the day.

6. **Floor scrubs** – Slide your foot back and forth in a sweeping motion as you bend and straighten your knee. Bend your surgical knee as much as you can. Do 10 to 20 times. Repeat throughout the day.
7. **Straight stretch or knee extension stretch** – Place surgical leg on a stool. Stretch your leg out as straight as you can. Place your hands on top of your thigh just above the knee. Gently press down to straighten your knee. Hold for 10 seconds. Do 5 to 10 times. Do 3 or 4 times each day.

![Straight stretch or knee extension stretch](image1.png)

8. **Bend stretch or knee flexion stretch** – Warm up by doing a few floor scrubs. Slide your foot back on the floor as far as you can. Keep your foot planted on the floor. Then slide your bottom forward on the chair. You will feel a stretch in the front of your knee. Do not raise your hip off the chair. Hold for 10 seconds. Do 5 to 10 times. Do 3 or 4 times each day.

![Bend stretch or knee flexion stretch](image2.png)
Daily exercise plan

How quickly you heal after joint surgery depends on you. Your job during recovery is to do the exercise plan multiple times every day. The massage exercises help decrease swelling. Swelling will hinder healing and cause pain. The strengthening exercises will help improve the function of your new knee joint. There are 3 main things to remember with your exercise plan:

• Take pain medicine 1 hour before doing your exercises. This will help manage your pain.
• Do your strengthening exercises right after doing the massage exercises. Massage followed by strengthening gives the best results.
• After each exercise session, put your leg up and apply ice to your knee. Keep your leg as straight as you can while resting. Rest and apply ice throughout the day.

Cooking, chores and self-care

Use good posture and balance. Stay within reach of solid objects such as sturdy chairs, tables and counters. Use a reacher to get things off high or low shelves. When you have to reach a low drawer or shelf, set aside your walker or cane. You may stand without your walker when you wash dishes, put on makeup or shave. Put equal weight on both feet.

Accept help offered by friends and family for activities such as cleaning or lifting heavy objects.
Moving forward with a new knee

1. You must accept some limits in order to be safe and to make steady progress.
2. Your knee should slowly improve.
3. You will gain strength, balance and flexibility overtime.

You should not drive a car for 6 to 8 weeks after surgery. You can get behind the wheel when all of these are true:

- Your doctor says you can start driving again.
- You have stopped taking prescribed pain medicine.
- You have full control of your foot pressure on the gas pedal, clutch and brakes.

Your doctor will tell you when you can work without putting your new knee at risk. You can return to work depending on:

- The type of work you do.
- How soon you regain your strength, balance and freedom of movement.

You may start to ride a bicycle in 4 to 6 months.

Do not do activities that involve running or could give your knee a sudden jolt. This is a time to watch – not play – contact sports.
Total Joint Surgery Checklist

- Dental Checkup
- Vaccinations are up to date
- Advance Directive is complete
- Rides to the clinic are arranged
- Prepare and freeze a few meals

Home Help
- Someone will help you in the home for the first 2 weeks
- Someone will take care of your lawn or snow removal
- Someone will bring in your mail and paper
- Arrange rides to the store, church, other events

Home Safety
- Choose which entrance to use (Do you need handrails?)
- Remove throw rugs and clutter from your path
- All lights are working
- Dishes and kitchen tools within reach (shoulder and waist height)
- Cell phone
- Grab bars in shower or tub
- Stairway has handrail
- Bed is easy to get into and out of with walker

Hips only
- Sturdy straight back chair with arm rests
- Raised Toilet seat
- Firm pillows to raise seat bottoms of chairs

Knees only
- Arrange your 1st outpatient physical therapy appointment