



# Joint Replacement Surgery

 **Altru**<sup>®</sup>

**Orthopedics &  
Sports Medicine**

## Welcome to Altru

*It is our goal to make your experience as safe and comfortable as possible. You are the most important member of the healthcare team. Taking an active role in your care is very important for optimal recovery.*

The following video will assist you in planning and preparing for your surgery. To watch the video scan the QR code below.



You are our first priority. Our devoted care team is dedicated to meeting your healthcare needs and ensuring an exceptional experience. We have provided this booklet to keep you and your family informed during your stay. Should you have any questions, concerns or requests during your stay, please do not hesitate to ask anyone on your care team.

Thank you for choosing Altru.

Respectfully,

A handwritten signature in black ink, appearing to read 'J. Deere, MD'.

Joshua Deere, MD | President



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## Scheduled Appointments

### Pre-Operative Physical

Provider \_\_\_\_\_

Date \_\_\_\_\_ Time \_\_\_\_\_

Location \_\_\_\_\_

### Patient Education Class

- Mychart** - You will receive a video in your Mychart account 30 days prior to your scheduled procedure.
- Online** - Visit [altru.org](http://altru.org). You can locate the video in the Patients and Visitors, Patient Education section.
- Call-in/telephone** - you will receive a letter in the mail prior to your scheduled class date with a phone number to call into classroom and listen to the video presentation.

**Remember to have this book with you while viewing/listening to class.**

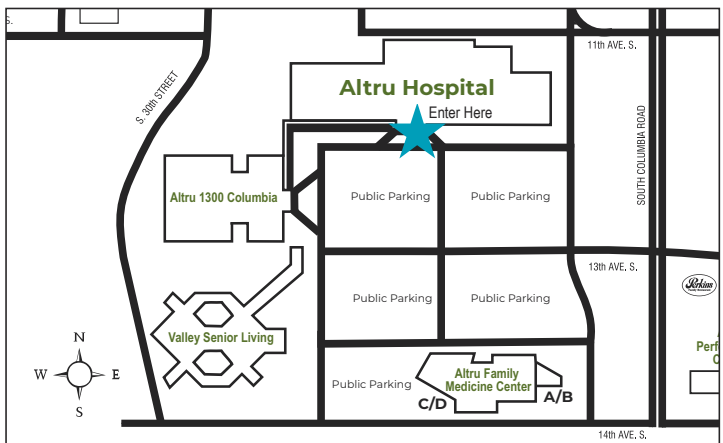
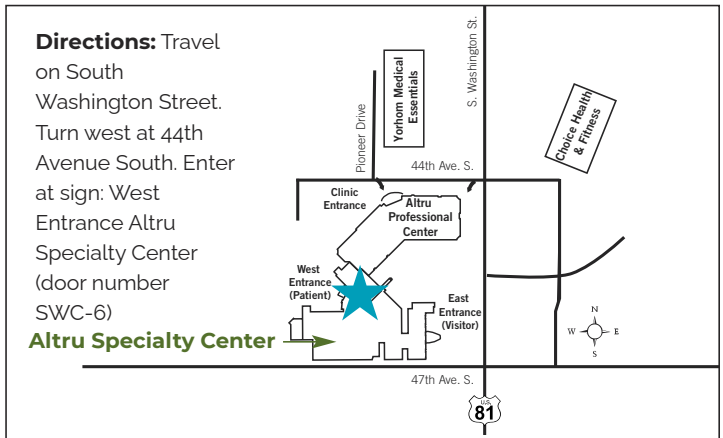
## Surgery

Date \_\_\_\_\_

You will be called the working day prior to your surgery with your arrival time

- Altru Specialty Center  
4500 S. Washington St.  
(West Entrance, door #6)

- Altru Hospital  
1200 S. Columbia Rd.  
Grand Forks, ND 58201



## Arrival Time and Surgery Day Instructions

You will be called sometime between 12 p.m. and 3 p.m. the working day prior to surgery with your instructions. Please be prepared to write these instructions down. If you have not received a call or voicemail by 3 p.m., please call 701.780.4980.

**Arrival time:** \_\_\_\_\_

**Nothing to eat after:** \_\_\_\_\_

**May have 12 oz. of water until** \_\_\_\_\_

**Medications to take on day of surgery**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

*If you were given a pre-op drink by your surgeons' office you will drink that instead of water*

# Post-Operative Appointments

Follow up Provider \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Location \_\_\_\_\_

Physical Therapy Appointment (if needed) \_\_\_\_\_

Date \_\_\_\_\_ Time \_\_\_\_\_ Location \_\_\_\_\_

*As part of Altru's quality improvement for our total joint program you will receive a survey through MyChart prior to surgery and 1 year post-operatively. This survey assesses your function of movement and health and wellbeing prior to and after joint replacement surgery. We ask that when you receive these notifications in your email that you log into MyChart to complete the survey.*

# Important Telephone Numbers

Altru Orthopedics and Sports Medicine.....	701.732.7700
Altru Hospital (Main Switchboard).....	701.780.5000 or 800.732.4277
Pre-Procedure Center .....	701.780.4980
Surgical and Procedural Care Unit Altru Specialty Center.....	701.732.7320
Surgical and Procedural Care Unit Altru Hospital .....	701.780.5690
Joint Replacement Unit Altru Specialty Center .....	701.732.7148
Family Care Unit Altru Hospital .....	701.780.5660
Social Work / Case Management.....	701.780.5345
Business Office .....	701.780.1500
Yorhom Medical Essentials (medical equipment & supplies) .....	701.780.2436 ext. 2436 or 5888

# Lodging Information

Sunshine Hospitality Home ..... 701.732.7900  
933 Duke Drive, Grand Forks, ND

Altru's Sunshine Hospitality Home is open to serve patients or families that must travel to Grand Forks to fulfill their healthcare needs. Cost for an overnight stay is \$40/night. Your length of stay within the home can be as short or as long as needed depending on the situation. (Please ask your provider for a referral to the Sunshine Hospitality Home)



# Before Surgery Checklist

The following checklists are to be used as guides to help you prepare for your surgery.

## What to Complete Before Surgery

- Complete pre-op physical
- Complete pre-admission testing
- Complete any dental work
- Attend pre-operative education class
- Arrange for a coach to be present for all education sessions
- Begin or continue pre-op exercises
- Prepare your home for your return after surgery
- Stop shaving at least 2 days prior to procedure
- Stop taking any medications as instructed
- Complete pre-op skin prep
- MyChart Survey regarding your function, health and well-being prior to surgery

## What to Bring

- This booklet
- Your insurance cards and identification
- A list of your current medications with dosages
- Health Care Directives (Living Will or Advanced Directives) if Altru does not have a copy.
- A walker or crutches, if you have one, for your therapist to evaluate
- Comfortable clothing (enough for an overnight stay)
- Non-skid, flat, supportive athletic or walking shoes
- Personal toiletries you may need
- Eyeglasses, contact lens cases with solution, and denture storage
- If you use a CPAP or BiPAP machine at night, please bring it with you to the hospital
- Credit or Debit card for any assistive devices you may need or prescriptions on discharge

## Please Do Not Bring

- Medication (unless instructed by your doctor or Altru staff)
- Rings, watches, or other jewelry MUST be removed. If they don't come off, please visit a jeweler as they will be cut off prior to entering the operating room.
- Money or valuables of any kind.

# Optimizing Your Health

Now that you are scheduled for your procedure there are a number of steps that the surgical team, you and your family will take to ensure you are ready for surgery. Following each of these guidelines will help you with a smoother quicker recovery.

## Pre-Op Physical

You will be scheduled to see your personal provider within 30 days of your upcoming surgery. Your provider will discuss your medical, surgical and family health history. They will perform any necessary testing to medically clear you for surgery. You may need to see a specialist such as a cardiologist prior to your procedure.

## Tobacco Use

Smoking or use of nicotine products has been shown to increase the risk of complications following surgery. Tobacco products inhibit bone and wound healing, increase the risk of blood clots and interfere with your lung's ability to clear itself of secretions which can possibly lead to pneumonia. Talk to your provider about tobacco cessation before your procedure.

## Alcohol Use

Decrease the use of alcohol before your surgery as it can slow down the recovery process and increase the risks associated with surgery. No alcohol at least 12 hours prior to procedure. Remember to avoid alcohol while you are taking opioid/narcotic pain

medication.

## Nutrition/Diet

Good nutrition is a very important part of your recovery. Eat a healthy diet before your surgery. This is not the time to try to lose weight or reduce your calorie intake.

## Sleep Apnea

Sleep apnea is a sleep disorder where breathing is interrupted. You will be asked questions related to sleep apnea by a nurse or your provider. If necessary, you will be referred for assessment and possible testing in our sleep lab. If you have sleep apnea, we ask that you bring your CPAP/BiPAP to the hospital for use after surgery.

## Exercising

It is very important that you maintain an active lifestyle up until your surgery as this will promote faster healing. Try for at least 30 minutes of activity every day. If you don't currently have an exercise regimen you can follow the pre-operative exercises provided in this manual. Following your procedure, you will be provided a home exercise program to follow.

# Reducing Your Surgical Risk

Throughout your surgical experience there are certain things that you can do to help lower your own risk of surgical complications after surgery. The following explains steps that you should take to reduce your surgical risk.

## Skin Health

- » Be observant of any open cuts, sores or bruising. Check skin folds for any hidden rashes or open areas. Observe for any bug bites, such as tick or spider bites. You will be asked the day prior to surgery to check your skin condition so that we know you are safe to proceed with surgery.
  - » During your pre-surgery phone call, you will be instructed to stop shaving or using a razor on any part of your body (including electric razors) at least two days prior to your scheduled surgery.
  - » You will be given instructions regarding completing a pre-operative skin prep by either the clinic nurse or the pre-procedure center nurse.
- » Your surgeon will determine if your surgery needs to be postponed; so any active infections may be treated and resolved.
  - » You will complete the pre-operative skin prep wash as instructed which will prevent the transmission of any germs traveling from your skin into your incision.
  - » Mupirocin/Bactroban ointment may be given to you by your provider depending on your health history.
  - » To help prevent infection during your surgery, antibiotics may be given through your IV.

## Dental Work

- » It is important to consider having any tooth or gum problems treated prior to surgery.
  - Finish any dental work that is underway.
  - Please do not schedule any dental work to occur less than three weeks before your scheduled surgery date.
  - It is recommended to put off any dental work for at least 8-12 weeks after your procedure.

## Prevention of Infection

- » It is very important to contact your surgeon if have experienced any of the following within four weeks of your scheduled surgery:
  - A fever
  - Cold symptoms
  - Urinary tract infection
  - Flu symptoms
  - An active infection that required antibiotics

## Prevention of Pneumonia

- » When you are in pain or drowsy from anesthesia or pain medication, your breathing may be shallow.
- » Breathing exercises will help after surgery to rid your airway and lung passages of mucus which may cause infection leading to pneumonia.
- » Begin to practice and perform deep breathing and coughing exercises as noted below.
  - Aim for 10 deep breaths every hour while awake. Breathe in through your nose and slowly out through your mouth.
  - Normally, you take deep breaths almost every hour without being aware of it, whenever you sigh or yawn.



# Preprocedure Full Body Skin Prep with Chlorhexidine Gluconate (CHG) Cloth

Before your procedure, you can play an important role in your own health. Washing your skin with CHG antiseptic solution will help reduce the number of germs on your skin and decrease the chance of infection. Disposable cloths moistened with a no-rinse CHG antiseptic solution are provided for you to use the evening prior to surgery. \*\*\***WARNING: To avoid permanent injury, do not use cloths on or in your eyes or ears.** If you are **allergic to CHG**, please let your physician's office know.

If you might have trouble reaching the areas of your body where the procedure will be done or if you have physical limitations, you may need to arrange to have someone help you use the cloths. If you have skin folds that are difficult to dry, you may need to arrange to have someone help you use the cloths.

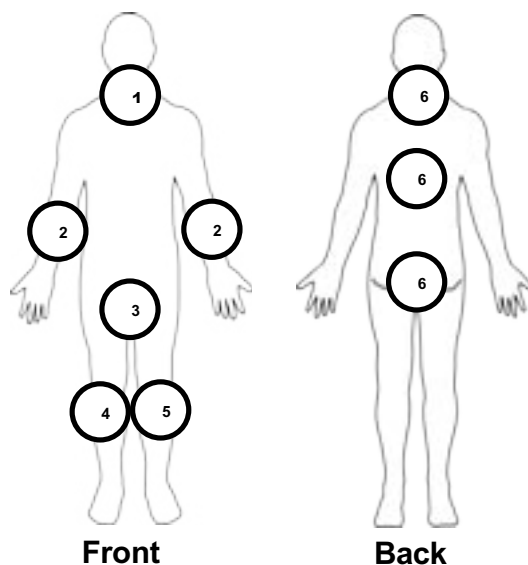
## Directions:

- » **Do not shave** any part of your body for at least 2 days prior to your procedure.
- » The night before your procedure, take a shower or bath with **warm, NOT hot** water. Wash your hair as usual with your normal shampoo.
- » **Wait for an hour after your shower or bath to allow your skin to cool off before using the wipes.**
- » Open the package of CHG cloths by holding the flap on top and pulling down to tear the flap away to expose a blue foam wrapper. Inside the blue foam you will find 6 wet white cloths. (The blue foam is packaging; not used to clean the skin).
- » You will use all 6 wet, white cloths to clean 6 areas of your body as per the instructions from your doctor or nurse. See guide below.
- » **Gently** cleanse each area using 1 wipe for about **30 seconds** (**DO NOT** rub the skin for 3 minutes as printed on the package). Use a new cloth for each body area; Completely wet the entire skin of each area with a cloth.
- **Do not wipe over any open wound, area of skin breakdown, or mucous membrane. Do use the wipes to clean up to the wound.**
- » Discard the cloths, the blue foam and packaging.
- » **Allow area to completely air dry**, including skin-fold areas, armpit, groin, etc. This may take several minutes. It is normal for the skin to have a temporary "tacky" feel for several minutes. NOTE: If your skin stays red or itchy or if you get a rash, notify your physician's office.
- » **Do not rinse the CHG off your skin; leave the CHG on overnight. Do not apply lotions, moisturizers, or makeup.**
- » Apply clean bedding and wear clean garments before going to bed. You do not need to shower or bathe again in the morning; however, if you choose to shower in the morning, do not apply moisturizer, lotion or makeup.
- » Wear clean clothes to Altru in the morning.
- » You will be asked about using these washcloths when you come to Altru.

### **You will use a total of 6 wipes for cleansing the entire body:**

- 1) Neck, Shoulders & Chest
- 2) Armpits, Arms, & Hands
- 3) Abdomen, Groin, & Perineum  
(do not use on female genitalia, tip of penis, or anus)
- 4) Right Leg & Foot
- 5) Left Leg & Foot
- 6) Back and Buttocks

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## Preparing Your Home

Typically, you will be ready to go home either the same day or the following day after surgery. It is recommended to have a family member stay with you when you first come home from the hospital. They may need to assist you with meals, bathing, applying your compression stockings, and using stairs to get in and out of your home.

It is important to prepare your home so you will have a safe environment. You should consider the following modifications that will aid in a smooth transition to home.



### Living Room and Kitchen

- » Turn on lights when you enter a room.
- » Have a good firm chair that does not move, preferably with arms you can use to push to standing.
- » Remove throw rugs to prevent tripping.
- » Keep pathways clear of obstructions.
- » Remove electrical cords across the floor that could cause tripping.
- » Small pets may also cause you to trip. You may want a family member to care for your pet while you are recovering.
- » Cupboards in the kitchen may need to be rearranged to have the dishes and more commonly used items easier to reach.
- » Meal preparation: you may choose to have microwave dinners or meals brought in to you as needed.

- » Add firm pillows to low chairs.
- » Keep items such as your cellphone within reach.

### Bedroom

- » A firm mattress, bed not too low or too high, so you can lift your legs in and out of bed.
- » You may need to set up a bedroom on your main level until you are more comfortable walking and climbing stairs.
- » Have comfortable clothes to slip on. Store clothes so that they are easy to reach.

### Bathroom

- » Grab bars in the shower
- » A non-skid mat inside and outside of shower or tub
- » Bath bench or shower chair (no backrest) to sit on
- » Long handled sponge for showering or bathing
- » Raised toilet seat or toilet seat adaptor
- » Grab bar by your toilet or a toilet seat frame.
- » Night light, so you can see as you walk into the bathroom during the night.



Grab Bar

Shower Stool

Raised Toilet Seat

### Clothing/Dressing

- » Wear low, broad heeled or flat shoes that are properly fitted
- » Elastic shoe laces will help decrease the need to bend down and tie shoes
- » Wear elastic waist or draw string bottoms
- » Avoid wearing pants/gowns/night clothes which are too long to avoid tripping
- » Wear clothes with pockets or have a bag on your walker that can hold things such as your

cellphone, tissues, medications, or TV remote.

- » Place frequently worn or used items on or in dressers that don't require excessive bending.
- » A reacher/grabber tool can assist with picking up dropped items as well as with getting dressed.
- » Assistive devices can be helpful to have during the recovery process.

### NOTE – Assistive devices can be purchased through Yorhom Medical Essentials



Reacher



Sock Aide



Long Handled Shoe Horn

### Car

- » You may use a plastic bag on the seat to make sliding in and out of the car easier.
- » Have a pillow in the car for elevation/comfort

## Pre-Operative Physical Therapy Exercises

The success of your recovery depends on your motivation and participation in working to keep your muscles strong. You may be asked by your provider to participate in a formal physical therapy program prior to surgery.

The following exercises are vital in helping you return to your normal activities and are designed to help increase leg strength. As a general rule, exercises should be performed with 10 repetitions and should be performed 2 - 3 times a day.

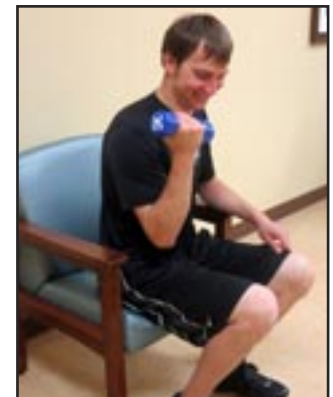
If you experience excessive pain with any of the exercises, please talk to your physician or therapist.

### Exercise Descriptions

- » **Triceps Curls:** Sit, leaning forward from the waist. Bend your elbow so that your forearm is parallel to the floor. Then straighten your elbow as you extend your arm behind you. You may use small weight or elastic band as instructed. Begin with elbow bent. Straighten elbow. Return to starting position. Repeat 10 times. Repeat with opposite arm.



- » **Bicep Curls:** Begin with elbow straight. Bend elbow up as far as possible. Return to starting position. Repeat 10 times. Repeat with opposite arm. You may use a small weight or elastic band as instructed.



- » **Seated Press-Up:** While sitting in a chair with armrests, put hands on arms of chair, straighten your arms and lift your bottom off the seat. Repeat 10 times.



- » **Ankle Pumps:** Point feet up and down. You should feel a gentle stretch in your calf when your toes are pointed up. Repeat 10 times.



- » **Quad Set:** Tighten muscles on front of your thigh by pushing the back of the knee down. Hold for five seconds. Repeat 10 times.



- » **Heel Slides:** Slide your heel on the surface up toward your buttocks. This will cause your knee and hip to bend. Repeat 10 times.



- » **Gluteal Sets:** Squeeze buttocks muscles together and hold for five seconds. Repeat 10 times.



- » **Hip Abduction:** Keep knees straight and pointed toward ceiling. Slide your leg out to the side then back to midline. Repeat 10 times.



- » **Short Arc Quads:** Lie on back with towel roll or pillow under thigh. Lift foot, straightening knee. Do not raise thigh off of the roll or pillow. Hold for 3 count. Repeat 10 times.



## Pre-Operative Education Video

To fully prepare you for your surgery you will view the Altru Pre-Procedure preoperative education video. The video will help you better understand the surgery and what to expect every step of the way. You will be introduced to exercises, tips and activities that will help you on the road to recovery and ensure lasting success. It is recommended that you encourage a "coach" to view the class with you.

A coach can be a spouse, family member, or friend. We encourage the coach to be present on the day of surgery and throughout your hospital stay. We encourage them to be present for therapy sessions as well as education and discharge instructions during your stay. Once you return home they should be able to stay in your home with you for a recommended 3-5 days. The coach is one of the most important people to have by your side as you go through your surgical experience.

## Pre-Operative Phone Call

In the two weeks prior to your surgery you will be contacted via phone by a pre-procedure center nurse. During this call the nurse will:

- » Review your allergies
- » Review your medications
- » Review your health history
- » Give instructions regarding preoperative skin preparation
  - when to stop shaving
  - when and how to perform skin prep wash
- » Go over your surgical plan in preparation for your surgery.

**One working day prior to surgery a nurse will contact you again with your time of arrival for your surgery. They will also review your eating and drinking instructions and go over any last-minute questions or concerns you may have.**

## Pre-Surgery Clear Nutrition Drink

You may be given a Pre-Surgery drink by your surgeons office. This drink contains complex carbohydrates that will aid in your recovery from surgery.

- » Studies have shown that patients receiving a pre-surgery clear nutrition drink prior to procedure have:
  - Reduced postoperative nausea and vomiting
  - Reduced preoperative hunger and anxiousness
  - Reduced length of stay
  - Improved healing
- » During your phone call with the nurse the working day prior to your surgery you will be given instructions on when to drink the Pre-surgery drink.
- » If you are diabetic you will not receive the preop drink as it may interfere with your blood sugars.

# Medications

To avoid problems during and after surgery, you may need to stop certain medications. Some medications don't mix well with anesthesia and others can increase bleeding.

Please remember to bring a list of your current medications, including over-the counter drugs, to all appointments with you. Also have the list readily available for review during your pre-op phone call with your pre-procedure center nurse.

**Please note that unless you are told otherwise, you need to continue to take all medications as prescribed by your physician.**

## Prescribed Medications

- » Continue to take medications unless instructed otherwise.
- » On the day of surgery only take the medications you were instructed to.
  - You will be instructed on these during your pre-op phone call with the nurse or at your pre-op physical with your physician.
  - You may take them with clear liquids up until the time you are instructed.

**Medication you MAY take the morning of surgery include the following:**

- » Inhalers
- » Nebulizers
- » Eye/ear drops
- » Nitroglycerin
- » Nasal spray
- » Topicals-avoid surgical area

## Blood-thinning Medications

- » Blood-thinning medications affect clotting and bleeding. Both your primary provider and your surgeon will need to decide if your medications need to be stopped or changed prior to surgery.
- » Check with your provider during your pre-op physical for special instructions regarding all blood thinning medications. These include, but are not limited to: Aspirin, Plavix, Coumadin, Aggrenox, Xeralto, Pradaxa, Eliquis for example.

## Anti-inflammatory Medications (NSAIDS)

- » Motrin, Ibuprofen, Advil, Aleve and Naproxen should be stopped seven days prior to surgery.
- » Acetaminophen is okay to take up until midnight the night before surgery.

## Herbal Medications and/or Supplements both Over-the-counter and Prescribed

- » Vitamin E, Glucosamine Chondroitin, CoQ 10, fish oils should be stopped seven days prior to surgery.

## If You have Diabetes

- » If you are taking long-acting insulins such as: Lantus, Levemir or Victoza, continue to take as usual unless instructed otherwise.
- » Oral diabetic medications may be taken the morning of surgery EXCEPT for Metformin
  - Do NOT take Metformin the day of surgery.
- » Check your blood sugar the day of your surgery if it is too high or too low you may use your discretion and treat yourself

**NOTE - Failure to follow these requirements may result in delay or cancellation of your surgery.**

## Surgery Day

### Your Coach/Family Member

We strongly recommend that you ask your coach or family member to accompany you. They will be involved in the pre-op and postop education. The doctor may also want to visit with them in the family waiting room following your procedure.

### Admission Process

Upon your arrival at the hospital, you will need to stop at the registration desk in the front lobby to be registered. The registration staff will check you in and give you a hospital ID bracelet. For your safety you will be asked to verify your name and date of birth throughout your surgical experience. A staff member from Day Surgery/SPCU will greet you and bring you back to the surgery department.

### Nursing Staff

- » Completes your admission process and assists you with changing into your hospital gown.
  - Remove all clothing (including undergarments) dentures, hair pins, wigs, glasses, contacts, jewelry (including ALL piercings), hearing aids.
  - Belongings will be gathered, labeled, secured and will be delivered to your hospital room.
- » Performs a head to toe skin assessment.
- » Completes a skin preparation wash
- » Reviews your latest medical information
- » Administers any pre-operative medications as ordered by your surgeon/anesthesiologist
- » Performs additional safety checks and tasks

- » A member of the surgical team will start an IV (intravenous) line.
  - The IV provides a route for fluids and medications.

### Anesthesia Team

- » Reviews and explains the anesthesia plan of care.
- » Reviews and signs anesthesia consent form
- » Sedation
  - The level of sedation and anesthesia is tailored to your specific needs and will allow for you to awaken very soon after the surgical procedure is completed
  - Type of anesthesia that will be used.
    - General anesthesia
    - Spinal anesthesia
- » Administers pre-op nerve block for patients having a total knee replacement.

### Surgeon

- » Answers any last-minute questions
- » Reviews with you and confirms that your surgical consent has been signed
- » Confirms your identity, review the procedure and then signs your surgical site with a marker.

Members of the surgical team will bring you on a cart to the surgical area. At this point, your family will be escorted to the family waiting room.

# The Surgical Procedure

Total joint replacement surgery takes approximately one to two hours, but the actual elapsed time from operating room to recovery room is usually about one and a half to two and a half hours. Your surgeon will call or meet with your family following surgery. Please remind your family to provide the nurse with specific contact information as to where and how they can be reached.

## Total Hip Replacement

An incision is made, giving your surgeon access to the hip joint. Your surgeon cleans away the damaged bone and shapes the surface of the joint to hold the prosthesis. The new joint prosthesis is then put into place and checked for correct alignment. The incision is closed with surgical staples or stitches.



## Total Knee Replacement

An incision is made on the front or side of your knee. Your surgeon cleans away the damaged bone and shapes the surface of the joint to hold the prosthesis. The new joint prosthesis is then put into place and checked for correct alignment. The incision is closed with surgical staples or stitches.



## After Surgery

### Post anesthesia care unit (PACU)

Once surgery is complete, you will go to a recovery area. You will be closely monitored as you recover from your anesthesia. The staff will take many readings of your vital signs, such as pulse and blood pressure. Family is not permitted in the recovery area but will be kept updated on your progress. When the anesthesiologist determines that you are sufficiently recovered, you will be taken to your room on the nursing unit where you will continue to be monitored frequently. Family will be able to see you on the nursing unit once the nurse has settled you. You will be in the recovery area for approximately half an hour to one hour.

### Nursing unit

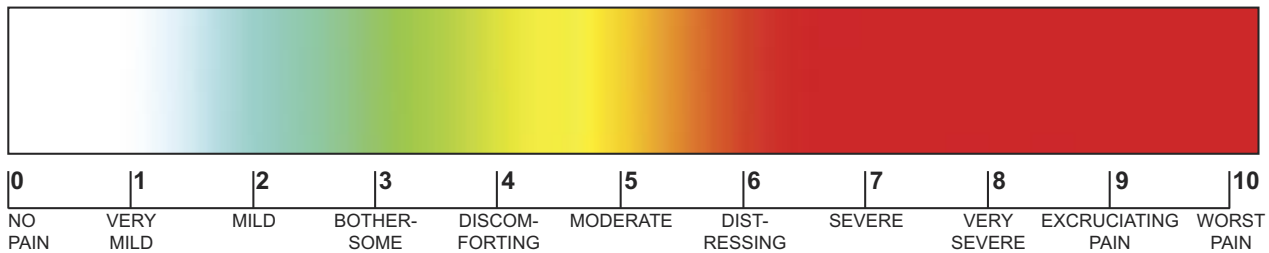
- » Members of the nursing staff will position you in bed and help you turn until you are able to move on your own
- » Use your non-operative leg when repositioning yourself in bed
- » You will have a surgical bandage in place.
- » You can expect to receive medications for pain, nausea, antibiotics and blood thinners.
- » Begin deep breathing and coughing exercises
- » You will be given clear liquids and advanced to a regular diet as you tolerate it.



# Pain Management

Pain is a normal part of the healing process. Our goal is to manage your pain throughout your surgery and recovery. Your surgeon, anesthesia and nurses will work together with you to make sure you are as comfortable as possible.

Staff will frequently ask you about your level of discomfort using the pain scale as a guide to help you. The following information will give you a better understanding of pain management throughout your entire surgical experience.



## Pain Management Methods

- » Pre-operative nerve block (*Patients having a total knee replacement only*)
  - Administered by anesthesiologist before you go into surgery.
  - An injection of medication near the saphenous nerve which will help with pain control for several hours after surgery.
- » Pain meds through the IV line
- » Pain pills by mouth
  - Oral pain medication can be prescribed (usually an opioid or narcotic) both before and after your surgery. It will control your discomfort without restricting your activity or mobility.
  - Over the counter (non-opioid or non-narcotic) may be used in conjunction with your prescribed pain pill.
    - Taking these will help decrease the need for the opioid/narcotic medications.
    - Discuss with your provider before starting any over the counter medications.
- » Cold Therapy
  - The application of cold has been shown to reduce swelling and pain associated with the surgical site. Ice packs may be used throughout your recovery.
- » Other Non-Medication options:
  - Medications are only part of the puzzle. The following are non-medication options that can greatly help with keeping pain at a manageable level:
    - limit visitors to allow adequate time to rest
    - create a healing environment
    - positioning (elevating affected limb)
    - relaxation (guided imagery, meditation,

breathing techniques)

- music therapy
- therapeutic touch
- pet therapy
- acupressure

## Tips for Managing Pain

- » Take your pain medication as prescribed.
  - Keep in mind that your pain is easier to control if you do not allow it to become severe before taking your medication.
- » Take your pain medication 30 minutes prior to starting your exercises.
  - This will allow enough time for the medication to take effect.
- » Taking pain medications with food will help in reducing feelings of nausea.
- » Wean off the opioid or narcotic medications as soon as possible
  - Transition to the over the counter non-opioid or non-narcotic medications as prescribed by your physician.

### Remember if you are taking prescription narcotics:

- » Avoid alcoholic beverages
  - » You cannot drive until physician clears you to do so
- Please contact your surgeon's office if you are not obtaining adequate pain control or are experiencing unpleasant side effects. It is also important to notify your surgeon's office if you require additional pain medication. Being able to participate in your recovery activities is a goal of the recovery process.

# Your Recovery Schedule

## Day of Surgery

- » Ankle pump exercises as instructed
- » Encourage your coach/family member to be present throughout your stay including therapy sessions and discharge education.
- » Physical therapy
  - Get out of bed
  - Walking
  - Exercises
  - Begin range of motion
- » Occupational therapy
  - Get dressed
  - Assists in getting to and from the bathroom for the first time.
  - Assess for assistive devices that may be needed
- » Up to chair as you tolerate
- » Deep breathing and coughing exercises
  - 10 times every hour while awake
- » Pain medication available as needed
  - Keep on top of pain and take medications prior to working with therapy
- » Surgical dressings in place
- » Begin to advance diet
  - IV fluids may be discontinued but IV will remain in place until discharge.
- » TED hose/Tubigrip/SCD's in place for prevention of blood clots
- » Ice to affected area as needed

## Day of Surgery Goals

- » Get in and out of bed with minimal assistance
- » Begin walking in your room from the bed to the door
- » Advance to discharge goals as able

**Note - It is possible you will discharge home if all your discharge goals are met.**



## Day One After Surgery

- » Ankle pump exercises as instructed
- » Surgical dressing is changed
- » Regular diet
- » Bowel function begins to return
  - If constipation becomes a problem, tell your nurse as a laxative or stool softener may help.
- » IV fluids stopped
  - IV will remain in place until discharge.
- » Physical and Occupational therapy
  - Dressing session
  - Walking
  - Exercises
  - Transfers
- » Participate in Therapy sessions and activities
  - Encourage your coach or family member to attend sessions with you.
- » Up to chair during the day
- » Deep breathing and coughing exercises
  - 10 times every hour while awake
- » Pain medication available as needed
  - Keep on top of pain and take medications prior to working with therapy
- » TED hose/Tubigrip/SCD's in place for prevention of blood clots
- » Ice to affected area as needed

## Day One After Surgery Goals

- » Get in and out of bed with stand by assistance
- » Get dressed
- » Get up and down from the chair and toilet with stand by assistance
- » Get in and out of a tub or walk-in shower with stand by assistance
- » Walking goal of 50-100 feet
- » Be able to go up and down 2-3 stairs with help
- » Perform your Home Exercise Program with assistance
- » Get in and out of a car

**Note - Plan discharge home once goals are met.**

# Discharge Process

The majority of patients who undergo a total joint replacement are usually discharged from the hospital the next day. Many of them are able to return to their home. If additional assistance is needed after surgery the patient care navigator/social work team will assist you and your coach in understanding and arranging any resources necessary for your post-hospitalization care.

## Discharge Goals

You will be able to transition home when you are medically stable and have safely achieved the following:

- » Able to move without help (in and out of bed; on and off chairs; on and off the toilet)
- » Able to care for yourself, or have a caregiver to help you at home
- » Able to walk on level surfaces when using your walker or crutches
- » Able to walk stairs (with help) using your walker or crutches
- » Able to do your exercise program on your own or with assist of your caregiver

**Note - We strongly encourage you to ask a family member or friend to stay with you at home after your surgery. Everyone is different but on average it is recommended to have someone at home to help you for approximately 3-5 days.**

## Going Home

Before you go home, we will make sure that you have everything you need. You can expect:

- » The nurse will review all discharge instructions.
  - Please have your coach/family member present for discharge education.
- » A prescription for pain medicine.
  - Can be picked up at a pharmacy of your choice.
  - A driver's license is needed to pick up pain medication prescriptions.
- » A prescription for a blood thinner
- » Possibly a prescription for a stool softener
- » A prescription for a walker (if you do not currently have one available)
- » Any adaptive equipment and other supplies are available for purchase through Yorhom Medical Essentials.
- » Follow up appointment with your surgeon will be made.
  - Typically scheduled for 2-3 weeks after your surgery.

- » Altru Health System staff must escort you to the lobby front door.

**NOTE – It may take approximately two hours to coordinate your discharge appointments and supplies.**

## The Drive Home

You will need to arrange for your family member or friend to drive you home.

Your driver may bring pillows for you to sit on and recline your seat just slightly if possible. If your ride is long, we recommend you stop and stretch every couple of hours or so.



## Your Surgical dressing

A dry sterile dressing will be applied over your incision until your staples or sutures are removed at your surgeon's office. After the staples are removed, leave the incision uncovered unless instructed otherwise.

**NOTE – Inform your surgeon if you notice increasing redness or drainage from your incision and /or fever.**

## Post Discharge Check In

Remember to have your phone with you when you return home. You can expect a check in via MyChart from a nurse the day after discharge. If you do not have a MyChart account you will be receiving a phone call directly from a nurse. following your discharge and again at 1 week post operatively. During this check in, the nurse will ensure you understand your discharge medications, review your discharge education, and answer any questions you may have.

## Continuing your Recovery and Preventing Complications

Recovery from surgery takes time. You will likely feel tired and fatigued for several weeks, this is a normal response. It is important to plan periods of rest throughout the day. You may experience skin numbness around your incision and leg stiffness, particularly with excessive bending activities (getting in and out of a chair or a car) this is normal. The benefits of total joint replacement usually become fully evident six to eight months after surgery.

Preventing complications is an important focus during your hospital stay and continues as you return to your home environment. This is a team effort between you and your caregivers.

### Preventing Blood Clots

#### Early Ambulation

- » Walk daily for increasing distances, allowing for rests between activities
- » Use your walker or crutches when walking.
  - You will progress to the use of a cane when directed by your physical therapist or surgeon.
- » Continue to do your Home Exercise Program as prescribed
- » Ankle pumps when sitting or lying down
- » Attempt short distances every hour during the day

#### Compression Stockings

- » Wear your compression stockings as directed by your surgeon.
  - You may take the stockings off to bathe or for short periods of time during the day.
  - Your stockings may be removed at night.
  - Your compression stockings can be washed by hand and hung to dry before bedtime, so they will be ready to be put back on in the morning.

#### Blood Thinning Medication

- » Take your anticoagulant (blood thinning) medication as your surgeon prescribed.
- » Call your surgeon if you have any questions.
- » Report any abnormal bleeding to your surgeon immediately! Examples of abnormal bleeding:
  - Blood in urine (red or smoky color)
  - Excessive bruising
  - Nosebleeds
  - Blood in stools (tarry or bright red color)

### Preventing Infection

#### Maintain a Healthy Diet

- » Eat balanced nutritious meals with adequate calories and protein to enable your body to replenish proteins depleted by surgery.

- » Drink plenty of fluids including juice, and eat fruits, vegetables and bran to avoid problems with constipation.

#### Deep Breathing

- » Continue to encourage yourself to perform your deep breathing and coughing exercises
  - 10 times/hour while awake

#### Frequent Hand Washing

- » Wash your hands prior to touching anywhere around incision site or while performing cares.
- » Encourage any family, friends or visitors to wash their hands prior to coming in contact with you.

#### Antibiotics

- » Please tell all your health care providers that you have an artificial joint, as they may need to prescribe antibiotics before treatment. This is especially important before dental procedures, bowel or colon procedures, and/or bladder or invasive urinary procedures.

### Preventing Swelling

#### Elevation

- » Lie down for an hour each day once in the morning and once in the afternoon
- » Swelling may show up about 3-5 days post op and may not peak for 5-7 days.
- » It is possible to have bruising from your hip all the way down to your toes.
- » Periods of walking should be alternated with periods of elevating your leg.
- » Keep your leg elevated when you sit or lie down
  - **Total Knee Replacement's should NOT place a pillow under your surgical knee**
- » Keep your compression socks on during the day.
- » Use ice/cold pack a few times a day
- » Perform ankle pumps

## Nausea

- » Common side effect of narcotic/opioid medication
- » Take medications with food
- » Lie down and place a cool wash cloth on your forehead
- » Stick with bland foods
  - Bananas, rice, apples, toast, crackers for example
- » Clear liquids
  - Water, Gatorade, Soda, Ginger ale for example

## Constipation

- » Following surgery activity is limited and you are taking pain medication, this combination can lead to problems with constipation
- » Drink plenty of fluids
  - Water, prune juice
- » Increase your intake of fruits, vegetables and bran
- » Take over the counter stool softeners or laxatives as instructed by your physician.

## Preventing Falls

### Hospital

- » Hourly rounding by staff to assess your needs
- » Do not get out of bed without assistance unless you have been cleared to do so by nursing or therapy.
- » Wear nonskid socks or slippers
- » Do not pull yourself to stand using the walker/assistive device/bedside table as support.
  - Push yourself up using bed rails/grab bars/arm rests
  - Once balance is steady then reach for walker

### At Home

- » Encourage coach/family member to stay with you at least 3-5 days
- » Always sit in a chair with arm rests that you can get into and out of easily and safely
- » Clear pathways of any debris or clutter that may be a tripping hazard for example: throw rugs
- » Have your family available to assist with bathing
- » Use assistive devices as needed
  - Grab bars
  - Shower chairs
  - Reacher/grabber

## Frequently Asked Questions

### 1. How often will I see my surgeon after surgery?

Your surgeon will follow your care throughout your hospital stay. You can expect to see a surgeon or their physician assistant/nurse practitioner every day while you are in the hospital recovering. Your surgeon will also want to see you for follow-up appointments in their clinic after you are discharged. Follow-up appointments are scheduled for two-three weeks after surgery.

### 2. How often should I ice my joint?

If you are using a gel pack, you may ice 15-20 minutes (no longer than 20 minutes). If you are using a cyro-cuff you may keep it in place as long as you would like while you are awake. Do NOT use either ice or cyro-cuff while you are sleeping. Remember- do NOT place gel pack or cyro-cuff directly on your skin.

### 3. Can I use heat?

No, do not use heat at this time until physician clears you to do so. You may only use ice only in order to reduce pain and swelling.

### 4. How do I know if my incision is infected?

After surgery, you will notice some redness, swelling and warmth around your incision. This is normal. If you experience painful redness, increased swelling or thick bad smelling drainage, you may have an infection. A temperature over 101 degrees Fahrenheit may also indicate an infection. Please notify your surgeons office if you think you possibly have an infection.

## 5. What do I do if I experience drainage?

It is normal to experience some drainage to your incision site. Most drainage is minimal. If you do notice drainage on the bandage you may outline the drainage with a black marker as this will assist in measuring the drainage. Be sure you are wearing your compression stockings. Elevate and rest your leg and the drainage should slowly decrease over time. If there is a large amount of drainage to the bandage or if the bandage is leaking call your surgeon.

## 6. When can I take a shower or bath at home?

Your surgeon will inform you when you are able to safely shower. When you return home, you may need special equipment, like a bath mat, hand-held showerhead or shower seat to help you bathe comfortably and safely. Do NOT soak your incision or take a bath until your surgeon clears you to do so.

## 7. When will I be able to drive again?

You should not drive a car or other motor vehicle until your surgeons' office says it is okay to do so. You must be off pain medications before you will be cleared to drive again. In most cases, patients can resume driving about four to six weeks after surgery.

## 8. Will I need to take antibiotics for dental work or any other surgical procedures?

Yes, taking antibiotics is a precaution to help ensure that your new artificial joint does not become infected. Additional surgery or dental work increases the chance of infection. No matter where the infection starts, if it spreads to your new joint, the results could be very serious. When artificial joints become infected, they must be removed surgically and then replaced several weeks later. Please let your other medical providers, including your dentist, know that you have had a joint replacement surgery. This is important no matter how small or straightforward the procedure.

## 9. How should I sleep at night to keep my joint comfortable and safe?

» **Total Hip Replacement** - You may sleep on your back or side depending on what makes you most comfortable. If you lie on your back you may place pillows under your knees for comfort.

If you lie on your side, lie on your non-operative side and place pillows between your legs for comfort and to prevent crossing your legs.

» **Total Knee Replacement** - You may sleep on your back or side depending on what makes you most comfortable. If you lie on your back do NOT place pillows under your surgical knee. If you lie on your side, you may lie on either side. You should place pillows between your knees to keep your leg comfortable and stable.

## 10. Can I kneel after a total knee replacement?

It is possible to kneel eventually following a total knee replacement. It might not be as comfortable as it was prior to surgery. You should not kneel until your surgeon clears you to do so. As you do not want to kneel on your incision during the healing process.

## 11. Will my new joint affect my travel plans?

Because your new joint contains metal components, you will likely set off the metal detectors at airports or other security systems used in shopping malls and department stores. You must now remember to plan ahead for any travel and arrive earlier than normal due to the extra time that you will spend in pre-boarding screening.

When traveling long distances, you should attempt to change positions or stand about every hour or so. Some of the exercises from your home exercise program, like ankle pumps, can also be used if you need to sit for long periods of time.

## 12. When can I return to work?

The amount of time you are out of work depends on many things. You can discuss returning to work with your surgeon at your post-operative visits.

# Home Exercise Program

## Total Hip Replacement

Postoperatively, it will be important to perform the following exercises. Your goal is to continue to improve the overall muscle strength, minimize swelling and obtain full range of motion in your operative leg. Therefore, it is critical that you work on bending and straightening your leg throughout the day. Please perform the following exercises as directed by your surgeon or therapist, exercises may vary slightly from person to person. It is normal to experience some discomfort while doing your exercises. Take your pain medication prior to doing your exercises in order to make it easier on you.

Do all exercises slowly and three times a day. Do exercises until your recheck with your surgeon (four to six weeks).

### Ankle Pumps

Move both ankles up and down. Repeat 20 times.



### Quad Set

Place a rolled-up towel under your knee. Lift your heel off the bed. Your heel should come up slightly from the bed. Do this exercise slowly and hold five seconds. Repeat 15-20 times.



### Heel Sliding

Slide your heel toward buttocks. Do not allow your knee to roll in or out. Repeat 15-20 times.



### Hip Abduction

Keep surgical leg straight with toes pointing to the ceiling. Slowly slide your leg out to the side. Repeat 15-20 times.



### Ham Set

Lie with legs straight, bend knee slightly, dig heel back toward hip. Do this exercise slowly and hold this position for five seconds. Repeat 15-20 times.



# Home Exercise Program

## Total Knee Replacement

Postoperatively, it will be important to perform the following exercises. Your goal is to continue to improve the overall muscle strength, minimize swelling and obtain full range of motion in your operative leg. Therefore, it is critical that you work on bending and straightening your leg throughout the day. Please perform the following exercises as directed by your surgeon or therapist, exercises may vary slightly from person to person. It is normal to experience some discomfort while doing your exercises. Take your pain medication prior to doing your exercises in order to make it easier on you. In addition to attending outpatient physical therapy you will be instructed to perform the following home exercises program.

Do all exercises slowly and three times a day. Do exercises until your recheck with your surgeon (four to six weeks).

### Quad Set

Place a rolled up towel under your knee. Lift your heel off the bed. Your heel should come up slightly from the bed. Do this exercise slowly and hold five seconds. Repeat 15-20 times.



### Straight Leg Raise

Bend your non-surgical knee while keeping your surgical knee straight, slowly raise and lower your surgical leg. Repeat 15-20 times.



### Ham Set

Lie with legs straight, bend knee slightly, dig heel back toward hip. Do this exercise slowly and hold this position for five seconds. Repeat 15-20 times.



### Heel Sliding

Slide your heel toward buttocks. Do not allow your knee to roll in or out. Repeat 15-20 times.





## Hip Abduction

Keep surgical leg straight with toes pointing to the ceiling. Slowly slide your leg out to the side. Repeat 15-20 times.



## Ankle Pumps

Move both ankles up and down. Repeat 20 times.



## Knee Range of Motion

Sit in chair. Slowly bend your surgical leg backwards as far as you can and hold for 5 seconds. Then straighten your leg, as much as you can and hold for 5 seconds. Repeat 15-20 times.



Bend the knee as far back as possible. Plant the foot firmly on the floor. Slide forward in chair to stretch knee. Hold for \_\_\_\_ seconds. Repeat \_\_\_\_ times.



Sit on a chair, place your foot on a second chair the same height, so knee is straight. Point toe to ceiling. Hold for \_\_\_\_ minutes



# Do's and Don'ts After Your Total Joint Replacement

## DO'S

- » Do continue your exercise program as prescribed.
- » Do get up and walk, gradually increasing the distance of your walking.
- » Do use your walker or crutches until your physician or physical therapist advises.
- » Do eat a balanced diet and drink plenty of fluids.
- » Do return to clinics and physical therapy as scheduled.
- » Do keep your operative leg in line with your body when you walk.

## DON'TS

- » Don't jump or run on your new joint
- » Don't bend excessively forward if it is painful. Use a reacher/grabber or other assistive devices to pick up items off the floor.
- » Don't sit in chairs that are low to the ground, chairs with wheels or chairs without armrests.
- » Don't pivot, twist or rotate on your operative leg.
- » Don't cross your legs
- » Total knee patients: Do not kneel until your surgeon clears you to do so.
- » Don't apply heat to your surgical site.
- » Don't drive a car until cleared to do so by your surgeon.
- » Don't soak your surgical site or take a tub bath until cleared by your surgeon.
- » Don't have sex or play sports until cleared by your surgeon.

# When and Where to Seek Care

## Following Your Joint Replacement



**CALL 911 AND  
GO TO THE  
EMERGENCY  
ROOM  
IMMEDIATELY**

- 
- » Chest pain
  - » Difficulty breathing
  - » Fall and unable to walk
  - » Complete wound separation
  - » Uncontrolled bleeding
  - » Change in mental alertness



**CALL  
YOUR  
SURGEON'S  
OFFICE**

- 
- » Sudden increase in pain, drainage, or swelling
  - » Change in color or any odor of drainage
  - » Pain not relieved with pain medication
  - » Fever over 101.5
  - » Increase in redness around the incision
  - » Severe nausea
  - » Fall with increased pain



**NORMAL  
FINDINGS**

- 
- » Warmth around the incision area
  - » Bruising of the leg
  - » Low grade fever (less than 101.5)
  - » Feeling tired
  - » Pain that can be managed with pain medication

### LOCATIONS

#### **Altru Orthopedics and Sports Medicine**

701.732.7700

Monday - Friday

8 a.m. - 5 p.m.

**After hours call 701.780.5000**

#### **Express Injury Clinic**

Monday - Friday | 8 a.m. - 7 p.m.

Saturday | 8 a.m. - Noon

4440 South Washington St.

*Enter through door 13, take elevator  
to the 2nd floor and proceed to  
Orthopedics department.*

6445-0093 APR 23



**Orthopedics &  
Sports Medicine**

P.O. Box 6002  
Grand Forks, ND  
58206-6002

[altru.org/ortho](http://altru.org/ortho)