

# GUIDEBOOK FOR ANKLES



*A specialty of the  
orthopedics program*

 **RIDGEVIEW**

#10026 01/2023



## WELCOME

Thank you for choosing Ridgeview for your joint replacement surgery. We are pleased to partner with your provider at Twin Cities Orthopedics to help restore you to a higher quality of living with your new prosthetic joint. We look forward to working with you to help you have a great experience and recovery.

Many people just like you have joint replacement surgery at Ridgeview every year. Individuals with chronic joint pain from arthritis that interfere with daily activities, walking, leisure exercise, recreation and work are ideal candidates for joint replacement surgery. This type of surgery aims to relieve pain, restore your independence, and help you return to your daily activities.

Ridgeview's orthopedic services is a team approach designed to offer the best medical and rehabilitative care. We believe that you play a key role in achieving a successful recovery. You are active in the process every step of the way, from preoperative preparation and education to discharge planning and outpatient rehabilitation. Your involvement is crucial to achieving the best functional outcomes following surgery. This guidebook provides the necessary information to promote a successful surgical outcome.

Your team includes physicians, physician assistants, nurse practitioners, nurses, nursing assistants, social workers, and physical and occupational therapists who specialize in joint replacement care. Every detail, from preoperative teaching to postoperative exercising, is considered and reviewed with you. The orthopedics team will help plan your individual treatment program and guide you through it. Please contact us any time if you have questions, comments, or concerns regarding your surgery or rehabilitation. Your feedback will help us to continually improve our program for patients and their families.

Sincerely,

Ridgeview Joint and Spine Services

Phone: 952.777.5383 or 1.800.967.4620 ext.36561

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# Preoperative TOTAL JOINT REPLACEMENT

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Patient name

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Surgery date

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**You will be contacted by Ridgeview's Same Day Surgery Department to review your preoperative education.** Please refer to the preoperative information in this guidebook for specific details.

If you have any questions prior to your surgery, please call Ridgeview's Same Day Surgery Department at 952.777.5132 or 1.800.967.4620.

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A nurse from Ridgeview's Same Day Surgery Department will call you on the last business day prior to your surgery to review preoperative instructions. This includes surgery time, arrival time, and food, drink and medication restrictions. If you will not be available to receive that call at any of your listed phone numbers, please call the Surgery Department at the number listed above to receive your preoperative information and instructions.

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Surgery time

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Time to stop eating

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Time to stop drinking  
liquids

**Same Day Surgery hours:**  
Monday - Friday, 7 a.m. to 3 p.m.  
952.777.5132 or 1.800.967.4620

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**Please have this guidebook available:**

- For your hospital preoperative education
  - While admitted in the hospital
  - For all physical therapy visits after surgery
-



## TELEPHONE DIRECTORY

Ridgeview .....	952.442.2191
(toll-free) .....	800.967.4620
Ridgeview's Joint and Spine Services .....	ext. 36561
Pharmacy (available 24/7) .....	ext. 35200
Surgical Services department .....	ext. 36562
Home Health Services .....	ext. 35078
Social Services department .....	ext. 35190
Ridgeview Rehab .....	ext. 35065
Ridgeview Home Medical Equipment .....	952.442.2283
Ridgeview Patient Financial Services .....	952.442.8054
Twin Cities Orthopedics .....	952.442.2163
Rebound Orthotics & Prosthetics .....	952.442.3233

**To contact any of the Orthopedic Services team members, please contact them at the number listed above.**

# 1. GENERAL INFORMATION

## GENERAL INFORMATION

### THE PURPOSE OF THE GUIDEBOOK

Preparation, education, continuity of care and discharge planning are required for the best results after ankle reconstruction surgery. This guidebook is filled with information so that you will know:

- + What to expect every step of the way
- + What to do before and after surgery

### OVERVIEW OF RIDGEVIEW'S ORTHOPEDIC JOINT REPLACEMENT SERVICES

Ridgeview's Orthopedic Joint Replacement Services is unique. It is a dedicated department within the Waconia campus hospital designed with wellness and rehabilitation in mind.

Features of the Orthopedic Joint Replacement program include:

- + Nurses and therapists who specialize in the care of patients after joint replacement surgery
- + Private rooms
- + Individual care
- + Family and friends are encouraged to participate as "coaches" in the recovery process
- + Coordination of all preoperative care and discharge planning/instruction
- + A comprehensive patient guidebook for referencing throughout your total joint reconstruction surgery journey

### THE ORTHOPEDIC SERVICES TEAM

#### Orthopedic team

The orthopedic team consists of an orthopedic physician/surgeon, physician assistant, and nurse practitioner who specialize in comprehensive care.

#### Anesthesiology care team

The anesthesiology care team consists of an anesthesiologist and certified nurse anesthetists who specialize in patient care during surgery and managing pain relief.

#### Hospitalist team

The hospitalist team consists of internal medicine physicians who specialize in hospital care. They will review your preoperative history and physical information and examine you for baseline information. The team may continue to provide care for you throughout your hospital stay.

#### Nursing team

While you are in the hospital, your care is provided by a nursing team that consists of nurses and nursing assistants. The team can answer any questions you may have about your care and recovery. The nurse manager is responsible for the overall functioning of the nursing unit.

#### Rehabilitation team

The rehabilitation (rehab) team will help get you moving, teach you exercises and instruct you how to walk and function after joint replacement surgery. While in the hospital, you will work with physical therapy staff each day post-surgery to help improve your strength and flexibility.



You will also see an occupational therapist who will teach you techniques for dressing and bathing using appropriate precautions and adaptive equipment. You will receive information about how to gradually increase your functional independence. The therapists can offer suggestions on ways to make your home safe, accessible and more efficient while you are recovering from surgery.

### **Social Services**

Social Services is available to assist you during your hospital stay. Some patients have questions or concerns regarding their family, finances, employment, or how to arrange for the care they need after discharge. A social worker is available to answer questions and will help make arrangements for care following discharge from the hospital, as needed.

### **Home Health liaison**

A home health liaison will help determine a discharge plan and if you require and qualify for home care services, including verification of your insurance benefits and will coordinate the services you will receive.

## FREQUENTLY ASKED QUESTIONS

Listed below are some of the frequently asked questions regarding ankle total joint reconstruction surgery. If you have additional questions, please ask your surgeon or the Ridgeview Orthopedic Services team.

### ***How is total ankle replacement different from traditional treatment for ankle arthritis?***

The traditional treatment for ankle arthritis is ankle fusion. It has been the mainstay of treatment for individuals who suffer from ankle arthritis. In ankle fusion, the two ankle bones are fused together so they would not grind against each other, relieving pain that the arthritic joint creates.

An ankle replacement differs from ankle fusion because the ends of the weight-bearing bones of the ankle are replaced versus fused together, allowing normal mobility of the ankle joint and eliminating pain.

### ***Why is it that not everyone gets an ankle replacement?***

Although ankle replacement has many great advantages, it is a very difficult surgery, and only a small population of patient are good candidates for it. The younger the patient, the more likely he/she will wear out the ankle replacement, and in time will need additional surgeries, which becomes more difficult each time. Typically, an older patient (generally over age 60), is a good candidate for ankle replacement surgery.

### ***What happens during joint replacement surgery?***

In an ankle replacement, the surgeon removes weight-bearing surfaces by shaving off the worn-out areas, then puts a new surface on the end of the tibia and the end of the talus bone. A plastic spacer is placed between the two metal pieces. The critical part of an ankle replacement is the pieces must be perfectly aligned to allow normal motion of the ankle and to decrease the chance of the artificial joint from wearing out.

### ***How long does it take to recover from the surgical procedure?***

Normal recovery for an ankle replacement is approximately six months until you are expected to have the full benefit from an ankle replacement surgery. Initially, you are given a splint or cast and will be non-weight-bearing for two weeks. At that time, the physician will check the surgical site for healing and then recast or put your surgical foot in a controlled ankle movement (CAM) walking boot for another four weeks. You will remain non-weight-bearing during this time. Six to seven weeks after surgery, you will be allowed to start to put weight on your leg while walking with the CAM boot. The goal is to get you out of the boot approximately 12 weeks after surgery.

### ***How long does the surgery take?***

Ankle reconstruction surgery takes approximately 2 to 2 ½ hours, some this time is preparing you for the surgery.

### ***Will I be awake during surgery?***

You will receive general or spinal anesthesia to make you sleep through your surgery and not feel any pain. Your anesthesiologist will discuss the risks of anesthesia with you prior to surgery.

### ***How long and where will my scar be?***

Your scar will be approximately five inches long and located down the center of your ankle. If you have had ankle surgery previously, then the existing scar will be used.

### ***Will I need a walker, crutches or other assistive devices?***

It is recommended that you use a walker, crutches or a knee scooter for about six weeks after your surgery. Your physical therapist can assist you in what you may need after surgery.

### ***Why might a revision surgery be necessary?***

As your original joint wore out, a joint replacement will also eventually wear out. Another reason for a revision surgery is related to loosening of the artificial surface from the bone. The wearing of the plastic spacer may result in the need for a new spacer. Your surgeon will explain possible complications associated with a total ankle replacement.

### ***What are the risks of a total ankle replacement surgery?***

Most surgeries are without any complications. Every effort is made to avoid complications however, like any surgery, joint replacement surgery has risks. Your surgeon would not recommend this procedure unless the expected benefits outweigh the risks.

#### **Major risks include:**

- + Infection – To avoid infection, antibiotics are used after your surgical procedure. Special precautions are taken in the operating room to reduce the risk of infection. Your orthopedist will discuss ways you can reduce the risk of infection.
- + Blood clots – can occur and travel to your lungs (pulmonary embolism)

### ***Should I exercise before the surgery?***

Yes. Being as active as possible will help you recover better after surgery. Ask your surgeon and physical therapist about the exercises most appropriate for you.

### ***Will I need a blood transfusion?***

Very few patients need a blood transfusion after ankle replacement surgery. If your hemoglobin levels are low, donated blood from the community supply may be used. It is not recommended to donate blood ahead of your surgical procedure.

### ***How long will I be in the hospital?***

Your length of stay in the hospital will depend on your health before surgery, the type of surgery you have, the pace of your recovery and how well you prepare yourself before coming to the hospital. Most ankle patients are hospitalized for one to two days.

There are several goals that you must achieve before you can be discharged, including:

- + Ability to walk with a walker, crutches or knee scooter independently
- + Ability to complete home exercise program
- + Ability to use the bathroom independently
- + Pain managed with oral medications
- + Ability to manage stairs (if there are any at home)

### ***Where will I go after discharge from the hospital?***

Most patients are able to go directly home after discharge. Patients heal faster recovering at home, in a familiar environment. Upon discharge, plan to have someone stay with you for as long as you need assistance. You will need help for the first several days or weeks, depending on your progress. Plan for assistance with laundry, house cleaning, cooking and yard work.

If you need assistance at home, the Home Health liaison will help verify insurance coverage and arrange Home Health services to come to your home as needed. Family or friends will still need to be available to help, as Home Health services do not provide 24-hour care or housekeeping.

Home Health services are typically present for only one to two hours at a time, two or three days per week. Being well prepared prior to surgery can minimize the amount of help needed.

***How long will I need pain medication?***

Each person is different in terms of how much pain he/she experiences and which medications are effective. Please refer to the pain management section of this guidebook, to find suggestions for managing pain and gradually reducing the use of narcotic pain medications.

***Will I need physical therapy when I go home?***

You will start outpatient physical therapy approximately six weeks after your surgery. Your surgeon will give you a referral for physical therapy at one of your postoperative appointments.

***How long until I can drive and get back to normal?***

The ability to drive depends on which leg you had surgery on and the type of vehicle you have. If had surgery on your left leg and you have an automatic transmission, you could be driving two to four weeks after your surgery. If you had surgery on your right leg, driving could be restricted as long as three months. Getting “back to normal” will depend on your progress. It is advised that you do not drive while you are taking narcotic pain medication. Consult with your surgeon or physical therapist for recommendations and restrictions to your activities.

***When will I be able to get back to work?***

It is recommended that most total joint (ankle) replacement patients take at least one month off from work and social obligations. The ability to return to work and social activities are based upon your individual rehabilitation progress and type of work you do. More sedentary jobs (desk related) may be able to return sooner. Talk with your surgeon at your follow-up visit regarding getting back to work and social activities.

***How often will I need to be seen by my health care provider following joint replacement surgery?***

You will be seen two weeks after you are discharged for your postoperative office visit. How often your follow-up visits occur will depend on your progress. Many patients are seen at six weeks, three months, 12 months post-surgery, then yearly after that.

***What restrictions do I need to follow after my joint replacement surgery?***

High-impact activities such as running, tennis and basketball, are not recommended. Injury-prone activities and contact sports are also not recommended for the new joint.

***What physical/recreational activities may I participate in after surgery?***

You are encouraged to participate in low-impact activities – such as walking, dancing, golf, hiking, swimming, bowling and gardening.

***Will I notice anything different about my ankle after surgery?***

You may have a small area of numbness around your scar, which may last a year or more. Some patients notice some clicking when they move their ankle. This is a result of the artificial surfaces.

***Will I have issues with airport security (screening)?***

It is likely that you will need extra screening to get through airport security checkpoints. Please allow enough time at the airport and prepare for the extra screening time. Carrying a card that states you had a joint replacement may not speed up the screening process.

## **INSURANCE PROCESSING INFORMATION & PATIENT FINANCIAL RESPONSIBILITY**

### **INPATIENT AND OUTPATIENT SERVICES**

Contact your insurance provider to understand the specifics of your medical coverage for both your surgery procedure and hospital stay. Upon admission to the hospital, you will receive the insurance processing information and patient financial responsibility booklet for your reference.

### **SURGERY AUTHORIZATION AND SCHEDULING**

Prior to scheduling, your surgery must be authorized by your insurance company. This typically takes three to four weeks. Once your authorization has been received a Twin Cities Orthopedics (TCO) care coordinator will contact you to schedule your surgery.

### **HOURS AND SERVICES**

Account specialists are available in the Patient Financial Services department during regular business hours, Monday through Friday from 8 a.m. to 4:30 p.m. They can answer questions about your account or scheduled services. To reach an account specialist, please call Ridgeview's Patient Financial Services department at 952.442.8054 or toll-free at 800.967.4620. You can also find information at [ridgeviewmedical.org](http://ridgeviewmedical.org)

### **HOTEL AND ACCOMMODATION SERVICES**

For the convenience of Ridgeview's patients, there are discounted rates offered at a hotel located near the hospital. This is a convenient service for those driving long distances or to avoid driving in bad weather.

## **2. PREOPERATIVE INFORMATION**



## PREOPERATIVE INSTRUCTIONS

### PREOPERATIVE (BEFORE SURGERY) CHECKLIST

Check items off this list when completed. Details for each item are on the following pages.

- Call your insurance provider to review coverage for your surgery procedure, hospital stay, and postoperative rehabilitation needs.
- Complete and mail in the pre-registration form in the prepaid envelope provided.
- Schedule preoperative history and physical with your primary care physician. Discuss smoking cessation, if applicable.
- Schedule physical therapy and pre-rehabilitation evaluation.
- Start your preoperative exercises.
- Schedule post-surgical outpatient physical therapy, as directed.
- Prepare your home for after your surgery.
- Look into any adaptive equipment needs you may need after your surgery.
- Stop any medications that increase bleeding (10 days before surgery), as directed by your physician.
- Start using the Mupirocin ointment (five days before surgery).
- Confirm your arrival time (on the last business day before your scheduled surgery date).
- Shower with special soap (one week prior to surgery and again either the night before or morning of surgery).
- Stop eating food and drinking liquids, as directed.
- Arrange to have a responsible adult, such as a family member or friend, drive and pick you up from the hospital.
- Bring all prescription and non-prescription medication in their original containers with you on the day of surgery.

### PRE-REGISTER

As soon as you receive this guidebook, please complete and mail in the pre-registration form, located in the front pocket of this guidebook (using the prepaid envelope provided).

### SCHEDULE A PREOPERATIVE HISTORY AND PHYSICAL

You will need to schedule a preoperative appointment with your primary care physician within three weeks of your scheduled surgery date.

In the front of this guidebook, you will find the preoperative anesthesia requirements form, explaining what tests need to be completed at your preoperative appointment. Bring this form to your preoperative appointment for your primary care physician to complete.

### SCHEDULE PHYSICAL THERAPY PRE-HABILITATION EVALUATION

In the front pocket of this guidebook, you will find a prehab physical therapy evaluation form. Your surgeon may recommend that you schedule an evaluation with an outpatient physical therapist before you have your surgery. Ridgeview offers total ankle prehab evaluations at specific rehab outpatient locations.

## START PREOPERATIVE EXERCISES

You will find exercises to help prepare for surgery in the preoperative exercises section of this guidebook. Your physical therapist can help if you have any questions. If you have not been exercising regularly you will need to begin gradually. You should not continue with any exercise that aggravates your surgical area or that causes you additional pain, particularly in your ankle. Follow the guidelines for starting your preoperative exercises.

It is recommended to start practicing going up and down stairs without putting any weight on the surgical ankle before you have surgery. Your physical therapist can teach you techniques, and practice is very important. Consider alternative strategies if you are unable to do stairs without putting weight on your leg. Examples include – installing a ramp to enter your home and placing a bed on the main level.

## EXERCISE YOUR RIGHTS

Advance directives are a way of communicating the patient's wishes regarding health care. If a patient has a living will or has an appointed health care agent, and the patient is not able to express their wishes to the physician or hospital staff, Ridgeview is committed to honoring the legally documented wishes of the patient.

Upon hospital admission, you will be asked if you have an advanced directive. If you do, please bring copies hospital with you the day of your surgery. Advance directives are not a requirement for hospital admission.

## PREPARE YOUR HOME FOR RETURN FROM THE HOSPITAL

It is very important to have your house ready for your arrival back home. A little preparation will make your transition to home much easier. These preparations include general cleaning, laundry and having clean linens on the bed. Prepare meals and freeze them in single-serving containers. Cut the grass, tend to the garden and finish any other yard work needed. Remove throw rugs which can be a fall hazard and tack down any loose carpeting. Remove electrical cords and other obstructions from all walkways. Install nightlights in bathrooms, bedrooms and hallways.

Install handrails for stairs that do not have any. Arrange for someone to collect your mail and take care of pets or loved ones, if necessary. Arrange for help with snow removal or lawn care.

Falls in the home typically occur in bathrooms, bedrooms and on stairs. Refer to the fall prevention safety tips handout at the end of this section, to help minimize the risk of falling in your home.

## LOOK AT ADAPTIVE EQUIPMENT NEEDS

Most of the equipment that you will need can be purchased from the hospital. Another option is to borrow or rent equipment that you do not expect to need long-term. Your inpatient rehabilitation team will offer suggestions during your hospital stay, based on your needs at the time of your discharge from the hospital.

Because most insurance plans will only cover the cost of one assistive device, you may want to borrow equipment if more items are necessary. To increase the likelihood of insurance paying for an assistive device, do not purchase this equipment (i.e. crutches, cane, walker) before your surgery, or check with your insurance guidelines and coverage options.

Items Ridgeview Home Medical Equipment has for sale, but are not covered by insurance include:

- + reacher
- + long handled shoehorn
- + sock aid
- + raised toilet seat

## SURGERY PREPARATION & HOSPITALIZATION

### TEN DAYS BEFORE SURGERY

**Stop all medications and supplements that contain blood thinners as discussed in your preoperative physical.**

Stop medications and supplements that contain blood thinners as directed by your physician. Before surgery, all anti-inflammatory medications will need to be stopped to reduce the risk of bleeding. If you are taking other prescription anti-inflammatory or pain medication, please speak with your primary care physician to see if the medication(s) act as a blood thinner. Also inform your physician about any supplements you take, as some supplements/vitamins increase the risk of bleeding. (See the list below for supplements that may contribute to thinning your blood.)

If you have been prescribed a blood thinner medication – such as Coumadin® (warfarin), aspirin or Plavix, please call the physician who prescribed the medication for advice on when to stop taking this medication.

#### Supplements that may thin your blood:

- |                   |             |  |
|-------------------|-------------|--|
| + Alfalfa         | + Feverfew  | + Ginseng  |
| + Bromelain       | + Garlic    | + Omega-3 fatty acids<br>(limit to less than 3,000 mg/day) |
| + Chewing tobacco | + Green tea | + Saw palmetto   |
| + Danshen         | + Ginger    |  |
| + Dong quai       | + Gingko    |  |

### ONE WEEK BEFORE SURGERY

#### Bathe with special soap

You will need to take 2 different showers with the antibacterial soap that your surgeon provided to you. Use half of the bottle of soap one week before your surgery. Use the second half (of the bottle of soap) the night before or the morning of surgery.

#### Directions:

- + Pour the antibacterial soap on a washcloth.
- + Wash all areas of your body, except your face and genital area, with the antibacterial soap provided. (You may use your own shampoo.)
- + Wash the area well where you are going to have surgery.
- + Rinse.
- + Dress in clean clothes.

### FIVE DAYS BEFORE SURGERY

#### Start using the Mupirocin ointment

Most surgical infections are the result of bacteria that live normally on the skin and in the nose. It is possible to significantly reduce the number of bacteria by treating the nostrils with an antibiotic ointment for five days leading up to the surgical procedure.

With the antibiotic ointment your surgeon provided you, place a pea-sized amount of ointment on a cotton swab and gently swab the inside of each nostril. You will do two treatments a day (once in the morning, once in the evening). A common side effect of the ointment is a runny nose.

## **DAY BEFORE SURGERY**

**You will receive a phone call regarding your arrival time at the hospital.**

The hospital will call you the last business day before your surgery to let you know when your procedure is scheduled. For example, if your surgery is on Monday, you will be called on Friday. You will be asked to come to the hospital approximately 2 ½ hours before your scheduled surgery time for the nursing staff to prepare you for surgery and answer any questions you may have. It is important that you arrive on time. You will also be instructed on when to stop eating and drinking before surgery. The nurse will review your current medications with you at this time.

### **When to Shower**

The night before (or the morning of) surgery, wash with the antibacterial soap you were given by your surgeon.

#### Directions:

- + Pour the antibacterial soap on a washcloth.
- + Wash all areas of your body, except your face and genital area, with the antibacterial soap provided. (You may use your own shampoo.)
- + Wash the area well where you are going to have surgery.
- + Rinse.
- + DO NOT use lotions, creams or ointments.
- + Dress in clean clothes.

### **When to stop eating and drinking.**

Follow the instructions from the surgery nurse about when to stop eating food and drinking beverages. This includes chewing gum or using tobacco products.

### **What to bring to the hospital**

- + Personal hygiene items (toothbrush/toothpaste, comb/brush, deodorant, etc.)
- + Clothes for discharge and a pair of sturdy walking shoes (at least 2 pair).
- + A sweater/sweatshirt
- + This guidebook
- + A copy of your advanced directive
- + Your insurance card(s)
- + A photo ID
- + **All medications** that you are currently taking, including supplements, eye drops and inhalers (**all in their original containers**) for medication verification.
- + Eyeglasses, dentures, hearing aids (and their containers for when they are not in use).
- + Patients with sleep apnea, bring your CPAP machine (distilled water will be provided).
- + Have someone bring your crutches and/or walker after you have been admitted to your hospital room, if you have them.
- + Checkbook or cash to purchase supplies (bring no more than \$50 in cash).
- + Your cellphone and charger (Wi-Fi is available at the hospital).

## FALLS PREVENTION SAFETY TIPS

The National Council on Aging reports that 1 in 4 Americans aged 65 and older fall each year. Falls are the number one cause of injury and death among older adults. Every 11 seconds, an older adult is treated in the emergency room for a fall; every 19 minutes, an older adult dies from a fall.

Falls in the home typically occur in: bathrooms, bedrooms and on stairs. Most falls are preventable and are not a normal part of the aging process. Regular strength exercises can significantly reduce your risk of falling and reduce your risk of being injured if you do fall.

The following checklist is designed to help people minimize the risk of falling in their homes.

### OUTSIDE SAFETY

- + Paint the edges of outdoor steps and any steps that are especially narrow or are higher or lower than the rest.
- + Paint outside stairs with a mixture of sand and paint for better traction. Keep outdoor walkways clear and well-lit.
- + Clear snow and ice from entrances and sidewalks.

### MAKE YOUR HOME SAFE

- + Remove all unnecessary clutter in your house.
- + Keep phone and electrical cords out of pathways.
- + Tack rugs, and glue vinyl flooring so they lie flat. Remove or replace rugs or runners that tend to slip, or attach non-slip backing to the rug(s).
- + Ensure that carpets are firmly attached to the stairs.
- + DO NOT stand on a chair or table to reach something high. Use a “reach stick” (grabbing tool) or ask for help instead.
- + Store frequently used objects where you can reach them easily.



### KEEP A WELL-LIT HOME

- + Have a lamp or light switch that you can easily reach without getting out of bed.
- + Use night lights in the bedroom, bathroom and hallways.
- + Keep a working flashlight handy.
- + Have light switches at both ends of stairs and halls. Install handrails on both sides of stairs.
- + Turn on the lights when you go into the house at night.

### TIPS FOR A SAFER BATH

- + Add grab bars in shower, tub and toilet areas.
- + Use nonslip adhesive strips or a mat in the shower or tub.
- + Consider sitting on a bench or stool in the shower.
- + Consider using an elevated toilet seat.



*(continued on reverse)*

# FALLS PREVENTION SAFETY TIPS

(continued)

## USE CARE WHEN WALKING

- + Use a helping device, such as a cane, as directed by your healthcare provider.
- + Wear nonslip, low-heeled shoes or slippers that fit snugly. Avoid walking around in stocking feet.
- + **Wear a personal alarm.** This is a device that allows you to call 911 if you need help. Ask your healthcare provider for more information.
- + **Manage your medical conditions.** Keep all appointments with your healthcare providers. Visit your eye doctor as directed.

## HOW CAN I MAKE MY HOME SAFER?

- + **Add items to prevent falls in the bathroom.** Put non-slip strips on your bath or shower floor to prevent you from slipping. Use a bath mat if you do not have carpet in the bathroom. Use a shower seat and a hand-held shower head so you do not need to stand while you shower. Sit on the toilet or a chair in your bathroom to dry yourself and put on clothing.
- + **Keep paths clear.** Remove books, shoes, and other objects from walkways and stairs. Place cords for telephones and lamps out of the way so that you do not need to walk over them. Tape them down if you cannot move them. Remove small rugs. If you cannot remove a rug, secure it with double-sided tape.
- + **Install bright lights in your home.** Ask others to help change light bulbs. Consider using LED bulbs to reduce how often they need to be changed. LED bulbs last longer and can save you money over time. Use night lights to help light paths to the bathroom or kitchen. Always turn on the light before you start walking.
- + **Keep items you use often on shelves within reach.** Do not use a step stool to help you reach an item.
- + **Paint or place reflective tape on the edges of your stairs.** This will help you see the stairs better.

## OTHER SAFETY TIPS

- + Keep emergency phone numbers in large print near each phone.
- + Put a phone near the floor in case you fall and cannot get up.
- + Consider wearing an alarm device that will alert someone if you fall.
- + Review medications with your doctor or pharmacist. Some medications, including over-the-counter medications, can make you drowsy, dizzy, and unsteady.
- + Discuss safe amounts of alcohol intake with your physician.
- + Have your hearing and eyesight tested. Inner ear problems can affect balance. Vision problems make it difficult to see potential hazards.
- + Exercise regularly to improve muscle flexibility, strength and balance.
- + If you feel dizzy or lightheaded, sit down or stay seated until your head clears. Stand up slowly to avoid unsteadiness.

## CALL 911 OR HAVE SOMEONE ELSE CALL IF:

- + You have fallen and are unconscious.
- + You have fallen and cannot move part of your body.

## WHEN SHOULD I CONTACT MY HEALTH CARE PROVIDER?

- + You have fallen and have pain or a headache.
- + You have questions or concerns about your condition or care.



## PREOPERATIVE EXERCISES

### PREOPERATIVE ACTIVITY GUIDELINES AND GOALS

It is important to be as fit as possible before having a total ankle replacement. This will make the recovery process quicker. This section shows ten exercises that are helpful in preparing you for surgery. Your physical therapist will instruct you in how to perform these or other exercises before your surgery.

Remember that strengthening your entire body, not just your leg (ankle) is important. It is also important to strengthen your arms by doing chair push-ups (exercise #8), because you will rely on your arms to help you get in and out of a chair, walk with crutches or a walker, and to perform postoperative exercises after surgery.

If you have not been exercising regularly you will need to begin gradually. Do exercises #1 through #5, completing 10 repetitions each day. Do these exercises for a few days, then see how you are feeling. If this routine is not causing any discomfort, gradually add the other exercises to your daily exercise program. Do not continue with any exercise that aggravates your surgical area or that causes you additional pain, particularly in your ankle.

### RANGE OF MOTION AND STRENGTHENING EXERCISES

#### 1. Quad Sets



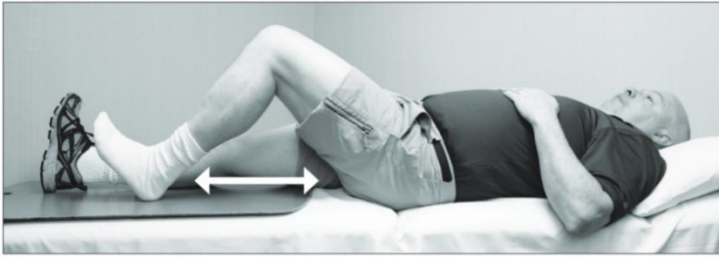
- + While laying down, push the back of the knee into the bed/floor by tightening the muscles on the front of the thigh.
- + Hold for 5 seconds.
- + Relax.
- + Repeat 20 times.

#### 2. Gluteal Sets (Bottom Squeezes)



- + Squeeze the muscles in your buttocks together.
- + Hold for 5 seconds.
- + Repeat 20 times.

### 3. Heel Slides



- + Laying down with the exercise board under your leg, slide the heel of one leg toward your buttocks, as far as possible, bending your knee.
- + Then straighten the knee completely.
- + Repeat 20 times with each leg.

### 4. Short Arc Quads



- + While laying down, place the exercise roll under your knee on your leg.
- + Leaving your thigh on the roll, lift your foot up to straighten your knee.
- + Hold for 5 seconds.
- + Repeat 20 times with each leg. (You may use weights with this exercise.)

### 5. Hip Abduction



- + While laying down, slide your leg out to the side and back.
- + Keep your toes pointed up and knee straight.
- + Repeat 20 times with each leg.

### 6. Straight Leg Raise



- + Bend one leg. Straighten your other leg and lock your knee.
- + Lift the straightened leg up approximately 10 inches off the chair or bed.
- + Lower the leg and relax.
- + Start with 5 repetitions, gradually increase to 20 as able with both legs. (Have someone help you until you can do it by yourself.)

## 7. Seated Hip Flexion



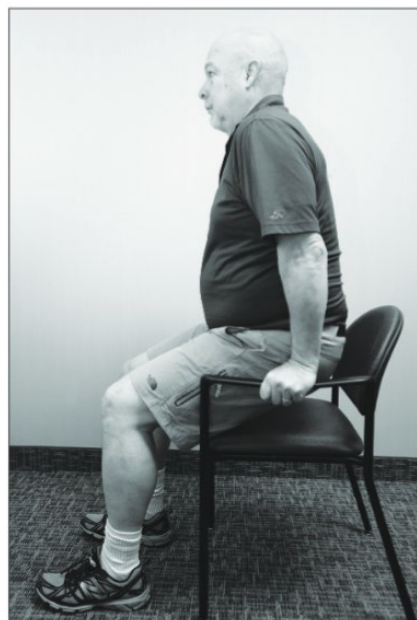
- + Sit in a chair with your feet touching the floor.
- + Keeping your back straight and abdominal (belly) muscles tight, lift your knee up and lower it.
- + Repeat 20 times with each leg.

## 8. Seated Active Knee Extension



- + Bend and straighten your knee as far as possible.
- + Repeat 20 times with each leg.

## 9. Armchair Push-Up



- + Sit in an armchair.
- + Place hands on the armrests.
- + Straighten your arms, raising your bottom up off the chair seat, if possible. (Your feet should be flat on the floor.)
- + Repeat 20 times.

## 10. Mini Squat



- + Standing at a counter or stable object, bend your hips and knees into a small squat, as if you are going to sit.
- + Repeat 20 times.

### **3. HOSPITAL CARE**

## HOSPITAL CARE

### ANESTHESIA FOR JOINT REPLACEMENT SURGERY

The Ridgeview anesthesia department tailors anesthesia for each patient and their planned operation. An anesthesiologist and certified nurse anesthetist compose the team that delivers anesthesia at Ridgeview. The anesthesiologist will explain your anesthesia options and develop a plan. The nurse anesthetist will be with you throughout the surgery, to help manage your anesthesia and respond to any issues that may arise.

### TYPE OF ANESTHESIA USED

Total joint replacement surgery patients receive regional anesthesia using a peripheral nerve or a spinal block. Some patients choose to receive general anesthesia.

- + **Peripheral nerve block** – the leg can be selectively numbed using a local anesthetic injection into a nerve bundle.
- + **Spinal block** – a small amount of local anesthetic is injected into the spinal sac (fluid surrounding the spinal cord) using a very thin needle. The needle is passed through an intervertebral space along the backbone (safely below the level of the spinal cord), thus giving a loss of sensation and motion below the chest area.
- + **General anesthesia** – medicine given in an intravenous (IV) line. After you are anesthetized, a tube is placed in the back of your throat or trachea (windpipe) to help you breathe. Additional medicine is given to control pain and keep you anesthetized until the surgery is over. At that time, you will be awakened, and the breathing tube removed.

### SIDE EFFECTS

Your anesthesiologist will discuss the risks and benefits associated with general anesthesia as well as any complications or side effects that can occur. Nausea or vomiting may be related to anesthesia. Medications to treat nausea and vomiting will be given during and after surgery if needed. The amount of discomfort you experience will depend on several factors. Your pain will be managed with medications and other measures. Your discomfort should be tolerable, but do not expect to be totally pain-free. Ridgeview's Orthopedic Services team will teach you the pain scale (0-10) to assess your pain level.

### DAY OF SURGERY – WHAT TO EXPECT

You will be admitted and prepared for surgery. This includes starting an IV and cleaning the area on your body where the surgery will occur. Your surgeon will meet with you and mark your surgical area(s). You may also meet with one of Ridgeview's hospitalists (an internal medicine physician specializing in hospital care). He/she will review your preoperative history and physical information. He/she may continue to care for you throughout your hospital stay.

Your anesthesiologist will review all information needed to evaluate your general health. This includes your medical history, laboratory test results, allergies and current medications. With this information, the anesthesiologist determines the type of anesthesia best suited for you. He/she will also answer any additional questions you may have.

After being admitted and prepared for surgery, you will be brought into the operating room where your surgery will be performed.



Following surgery, you will be taken to a recovery area where you will remain for about an hour. During this time, your pain will be controlled, and your vital signs monitored. An x-ray may be taken of your new joint. You will then be taken to Ridgeview's Orthopedic Services department for continued care.

When you experience any discomfort (pain), notify the nursing staff and you will be given pain medicine either through your IV and/or by mouth. You will begin performing ankle pump exercises on your non-surgical ankle to improve blood flow, and you will start to use your incentive spirometer to keep your lungs clear.

Immediately after surgery, your provider will order the appropriate diet for you. It will most likely be clear liquids (broth, Jell-O, tea and clear juice), then you will progress to a regular food diet, as you are able to tolerate it. If you have any problems with the menus, food service or the meals, please ask to talk with the dietician. Your appetite may be poor, but your desire for solid food will return. Drink plenty of fluids to stay hydrated.

A physical therapist may evaluate you, begin exercises, get you up and help you walk in your room or the hallway.

You should expect to be awakened several times the first night, as your nurse will come in often to assess you.

### **DAY ONE - AFTER SURGERY**

On the first day after surgery, you will be assisted with personal hygiene and helped into the recliner for meals. An occupational therapist will work you in how to get dressed and perform daily self-care activities (brushing teeth, hair, washing up, etc.) with and without adaptive equipment.

A member of the orthopedic team will visit with you to assess your progress.

Intravenous (IV) pain medications will be stopped and you will continue with oral pain medications.

A physical therapist will teach you exercises and help you continue your walking program. You may practice going up and down stairs and/or a ramp with weight-bearing restrictions.

Most patients will be ready for discharge on this day. Upon discharge, if you are going home, your ride will need to be available to pick you up. Ridgeview's Orthopedic Services team will escort you to the main entrance and assist you into your vehicle.

### **DAY TWO - AFTER SURGERY**

On the second day after surgery, you will continue to progress your activity level. You will again be seen by an occupational therapist who will assess your level of completing daily self-care activities, and a physical therapist to work on mastering stairs effectively.

Have your ride available throughout the day for when you are discharged. Ridgeview's Orthopedic Services team will escort you to the main entrance and assist you into your vehicle.

### **EVERYDAY**

Ridgeview's Orthopedic Services will focus on helping you return to normal daily activities during your hospital stay. We will emphasize being independent and encourage you to practice tasks as you would at home with caregiver assistance or adaptive equipment. You will use the bathroom for personal hygiene, bathing and brushing your teeth as you would at home. You will be in a chair for meals and periodically throughout the day.

Ridgeview uses colored stars to identify your level of independence with getting up and walking. If you have a red or yellow star on your door frame, please call for assistance whenever you need to get up, use the bathroom, move around your room or take a walk.



## FALL PREVENTION WHILE IN THE HOSPITAL

Ridgeview is committed to preventing falls and injuries. We would like you to be safe. You will be considered a “falls-risk” because of your surgery and receive a wristband noting this risk.

To decrease chances of experiencing an accidental fall while you are in the hospital, please review the following:

- + Please call the nurse for assistance when you need to get out of bed. (Medications may have side effects that make you feel dizzy or weak.)
- + Sit at the side of the bed before getting up.
- + If you use (or will be using) a walker, cane or wheelchair at home, notify your nurse. Please bring your labeled walker, cane or wheelchair to use while admitted. Keep these items within reach and remember to use them.
- + Wear properly fitting shoes or slippers when you are up.
- + Do not forget to wear eyeglasses and/or hearing aids.
- + Play close attention to any tubing – such as oxygen or catheters, that may interfere with you walking.
- + Do not climb over or through the side rails of the bed.
- + Use stationary objects to help steady yourself. Do not use IV poles, tray tables, wheelchairs, or other objects that can move easily.
- + Use handrails in bathrooms and hallways.
- + Notify healthcare staff immediately of any spills or wet areas on the floor so they can be cleaned up quickly.
- + A bed alarm may be used to remind you to call for help when getting out of bed.

## DISCHARGE PLANNING

### Discharge Checklist:

Before you are discharged from the hospital, Ridgeview’s Orthopedic Services team wants to make sure you know the following information. Please review and check off the items as you complete them. Ask for assistance with anything that you are not completely comfortable with.

- Know what blood thinning medication you are taking if one is prescribed for you.
  - + Time of day to take it
  - + Dosage to take
  - + How it is monitored
  - + Side effects
- Signs and symptoms of infection
- Signs and symptoms of a blood clot
- How to get in and out of bed safely
- How to progress your home exercises
- How to go up and down stairs
- Pain medication:
  - + Side effects
  - + When and how often to take each
  - + How much to take
  - + How to avoid constipation

Ridgeview's Orthopedic Services recommend every effort be made so you can return home after surgery and recover in your own environment. The decision to go home, with or without home care, or to a skilled rehab facility will be made together by you, Ridgeview's Orthopedic Services team, including your surgeon, nurses, physical and occupational therapists, social services and your insurance company.

You will need to arrange to have a responsible adult, such as an adult family member or a trusted adult friend, drive you home and stay with you for 24 to 48 hours after you are home. You will receive verbal and written discharge instructions concerning medications, physical therapy, activity, pain management and more. Ridgeview's staff will also help arrange for any equipment you may need at home. Social Services and the nursing staff will make every effort to ensure you have the resources you need when you discharge home. If you should require Home Health Services to assist you in your recovery process at home, the Home Health Liaison and nursing staff will assist you in arranging this resource.

### **Discharging to a skilled rehab facility**

If you are going to a skilled rehab facility, Ridgeview staff will assist you in arranging placement. Every attempt will be made to have placement at a skilled rehab facility finalized as quickly as possible, but it may be on the day of discharge when placement is finalized.

You will need to arrange transportation to the skilled rehab facility. If you will be using a medical transportation company for your transportation needs, note this is an out-of-pocket expense with payment due up front. If you need assistance in arranging transportation, please notify a member of your care team.

Transfer papers will be completed by the nursing staff. The length of stay will be based on your progress. Upon discharge home, you will receive instructions by the rehab staff.

Skilled rehab facility stays must be approved by your health insurance. A patient's stay in a skilled rehab facility must be done in accordance with the guidelines established by your health insurance or Medicare. Although you may want to go to a skilled rehab facility when you are discharged from the hospital, your progress will be monitored to determine if you meet the criteria to benefit from skilled rehab care or your health insurance provider may recommend you return home with other care arrangements.

Most joint replacement surgery patients recover well and do not meet guidelines to qualify for skilled rehab facility stays. Therefore, it is important to make alternative plans for care at home. In the event a skilled rehab facility is not approved by your health insurance but you wish to go to a skilled rehab facility you will need to pay-out-of-pocket.

Address care after discharge (example: lack of a caregiver, caring for pets, etc.) before your surgery, as your health insurance does not address these issues.

Take this guidebook with you to use as a resource during your recovery.

## **4. PAIN MANAGEMENT**

## PAIN MANAGEMENT

### MANAGING PAIN AFTER JOINT REPLACEMENT SURGERY

Pain or discomfort decreases gradually over the six weeks following surgery. Your surgeon will write a prescription for pain medication to use at home. Be sure to time your pain medications so you can take them about 60 minutes before you start your exercises and walking. Keeping your pain under control will allow you to complete your exercises and increase your mobility sooner. You should also remember to rest and use ice to reduce swelling, which is a common cause of pain after surgery. Do not push yourself beyond your limits.

#### REST

Pain, swelling and over-activity are all related. The key to managing all three is rest. During the first few weeks of recovery, be active for short periods of time and rest for longer periods in between. Practice relaxation techniques such as deep breathing, imagery and listening to music. Do not expect to be able to do strenuous household activities during this recovery period. As you continue to get back to normal activities, take time to rest, ice and elevate your leg during the day.

#### ICE

After surgery, it is normal to have swelling in your foot and ankle. Ice can be useful for managing pain and inflammation. Right after surgery, ice and pain medications will be used together for pain relief. You may apply a covered ice pack for 20 minutes, several times during the day for the first few weeks. Use ice packs after activities, such as physical therapy exercises, walking, outings and before sleep. Continue to use ice as you become more active. It will likely be needed for the next few months.

#### ELEVATE

It is recommended that you elevate your leg as often as you can after your surgery. For several weeks after surgery, you will have swelling in the surgical leg. “Elevate” means to have your leg higher than your heart. Elevating the surgical leg allows gravity to help with circulation. It is recommended that you lie down on a bed or couch and elevate your leg above your heart for at least 20 minutes twice a day.

#### MEDICATION

To control your pain, most patients will be given a written prescription for oral narcotic pain medication to be filled at a pharmacy. It will be the same medication that you have been taking in the hospital. During your hospital stay, Ridgeview’s orthopedic staff will determine which medication works best for you with the fewest side effects. If you experience intolerable side effects or have problems with your pain medication at home, please call to speak with your surgeon. There are many different types of pain medication and you may just need a different type.

Narcotic pain medications have side effects, including:

- + **Nausea and vomiting** – to avoid nausea and vomiting, take your pain medication(s) with food and four to six ounces of water.
- + **Lightheaded or dizziness** – you should sit down or stay seated until your head clears. Stand up slowly to avoid unsteadiness.

- + **Itching**
- + **Drowsiness**
- + **Altered mental status** – including poor memory.
- + **Constipation** – take an over-the-counter stool softener such as Colace or Senokot. Follow the recommended dosage on the bottle. Increase your fiber (dietary and/or with a supplement, such as Metamucil) and fluid intake. DO NOT exceed three days without having a bowel movement. If on the third day you have not had a bowel movement, use a laxative, such as Milk of Magnesia, Miralax, a suppository or an enema.

## REFILLING PRESCRIPTIONS

All patients who are given a narcotic prescription are looked up in the Minnesota Prescription Drug Monitoring Database. Patients may only receive narcotics from one provider. Your surgeon will NOT refill narcotic prescriptions after normal business hours or on weekends (Friday - Sunday). Narcotic prescriptions cannot be called into a pharmacy. A written prescription must be picked up at the surgeon's office or mailed to your home. Keep this in mind and do not wait for the evening or weekend to call if you need more medication.

## UNDERSTANDING YOUR PRESCRIPTIONS

The most prescribed narcotics after joint replacement surgery are:

- + **Norco** (hydrocodone and acetaminophen) – short-acting pain medication.
- + **Percocet** (oxycodone and acetaminophen) – short-acting pain medication.
- + **Oxy IR** (oxycodone) – short-acting pain medication.

Patients are prescribed a short-acting pain medication. These medications are taken on an “as needed” basis. You should not take them more often than the prescribed interval of every four to six hours. If your pain is well managed, you should not have to take them as often. Most pain medications are ordered to take one to two tablets at a time. You can decide how many you need to take based on how well your pain is controlled. If one tablet works well, then you do not need to take two. If your pain is not controlled with one tablet, then you may need to take two tablets to control the pain.

In addition to your narcotic prescription, you may also receive a prescription for a muscle relaxer. This type of medication can help with pain control and muscle spasms, but it may make you drowsy. If you are finding that you are too tired, you can try taking the narcotic without the muscle relaxer.

The narcotic prescription you will receive may contain acetaminophen – which is also known as Tylenol®. Acetaminophen (Tylenol®) is sometimes abbreviated as APAP on prescription bottles. You may start using acetaminophen (Tylenol®) instead of the narcotic when your pain improves, and you do not need as much of the narcotic medication. Please keep track of how many milligrams (mg) of acetaminophen (Tylenol®) you are taking in a day. Please check any over-the-counter medications that contain acetaminophen (Tylenol®). You should not take more than 4,000 mg of Tylenol® within a 24-hour period. There are different strengths of acetaminophen (Tylenol®) available without a prescription.

## DOSING SCHEDULE

Use the chart at the end of this section to keep track of your narcotic pain medications, and your dosing schedule. Also, write down the amount of acetaminophen (Tylenol®) you are taking – to keep a running total for each day to prevent taking more than 4,000 mg in a 24-hour period.

## FREQUENTLY ASKED QUESTIONS

### *How long will I need to take the prescribed narcotics?*

The length of time that someone might need to take narcotic pain medication varies because everyone experiences pain differently. The key to managing pain well after surgery is to expect a tolerable level of discomfort, with or without taking pain medication. Take an amount that helps you to stay active and to rest comfortably.

You can gradually reduce your use of pain medication when you feel ready. There are many ways to do this. Most people are eventually able to take fewer medications during the day but may still need to take them at night.

### *How can I wean myself off the prescribed pain medication?*

Reduce or stop using any prescribed muscle relaxer as a next step to wean off pain medications.

Begin to take your prescribed pain medications less frequently and use acetaminophen (Tylenol®) in between the prescribed narcotic doses. For example, if you are taking a narcotic every four hours, you may find that you can wait five or six hours before taking more. Gradually, you will be able to go seven or eight hours (and longer) between doses.

You can also try alternating between the narcotic and acetaminophen (Tylenol®). Make sure to time your narcotic pain medications so you can take them about 60 minutes before exercises and at bedtime.

You may eventually find that the use of acetaminophen is enough to control your pain.



## DOSING SCHEDULE TRACKING WORKSHEET

<u>Date</u>	<u>Time</u>	<u>Name of Medication Taken</u>	<u># Pills</u>	<u>Product Contains How Many mg of Acetaminophen</u>	<u>Running Daily Total of Acetaminophen</u>

# **5. BLOOD CLOT PREVENTION**

## BLOOD CLOT PREVENTION

### AFTER SURGERY

After surgery, you are at an increased risk for a blood clot. There are two types of blood clots:

- + *Deep Vein Thrombosis*
- + *Pulmonary Embolism*

#### Deep Vein Thrombosis (DVT)

Deep Vein Thrombosis is a blood clot in the leg. Also known as a DVT.

Decreased activity may cause the blood to slow and coagulate (clot) in the veins of your legs, creating a blood clot. If a clot occurs, you may need to be admitted to the hospital. Prompt treatment usually prevents more serious complications.

If you have any of the signs or symptoms listed below, contact your surgeon or medical physician immediately.

- + Increased swelling in a leg that does not go away with rest, ice, or elevation.
- + Pain, heat, redness, or tenderness in calf, back of the knee or groin area, or the entire leg.

Note: Blood clots can form in either leg.

#### Pulmonary Embolism (PE)

A Pulmonary Embolism is a blood clot in the lung. Also known as a PE.

A blood clot in the lung is a complication of a DVT that occurs when part of the clot breaks up and travels through the bloodstream to the lung. This is an emergency, and you should call 911 immediately if you suspect and have any of the signs/symptoms of a pulmonary embolism listed below:

- + Chest pain
- + Difficult and/or rapid breathing
- + Shortness of breath
- + Sweating
- + Confusion

### PREVENTION OF BLOOD CLOTS

To help prevent painful or dangerous vein clotting, take the following steps:

- + Perform foot and ankle pumps.
- + Walk and engage in frequent activity.
- + Wear compression stockings, if ordered for you.
- + Medications – such as aspirin, Coumadin® (warfarin), Xarelto®

### COMPRESSION STOCKINGS

You may be asked to wear a white compression stocking (on your non-surgical leg) after surgery. The stocking is used to help ensure optimal blood flow and reduce the risk of blood clots. Wear the stocking continuously, removing it for one hour twice a day.

If you were told to wear a compression stocking, ask your surgeon when you can stop wearing the stocking. Usually, this is approximately two to four weeks after surgery.

You will be given one pair of compression stockings. The stocking(s) can be washed. Wash them by hand and allow them to air dry during the time you can have them off.

## **6. INFECTION PREVENTION**

## INFECTION PREVENTION

### CARING FOR YOUR SPLINT

- + Keep your splint dry.
- + DO NOT remove your splint
- + You may shower but keep the splint dry. Cover the splint with a plastic bag.
- + Notify your surgeon if there is increased drainage, redness, pain, odor or heat around the incision.
- + Take your temperature if you feel warm or sick. Call your surgeon's office if it is greater than 101 degrees Fahrenheit (101°F).

### SIGNS OF INFECTION

A surgical site infection is an infection that occurs after surgery in the part of the body where the surgery took place. Most patients who have surgery do NOT develop an infection. Some of the common signs that your incision may be infected may include:

- + Increased swelling and redness in the ankle area.
- + A change in color, odor, or amount of drainage.
- + Increased pain in the surgical area.
- + Skin around the incision area is hot to the touch.
- + Fever greater than 101 degrees Fahrenheit (101°F).

### INFECTION PREVENTION

To prevent an infection of your incision:

- + Take proper care of your splint.
- + Use good hand washing habits. Wash your hands often.
- + After your incision is healed, there may be a chance your joint could become infected if you develop an infection somewhere else in your body.
- + Wash and care for any cuts or injuries using antibiotic soap or ointment, keeping the surgical area clean and dry.
- + Inform your health care provider and dentist of your joint replacement.
- + Follow your surgeon's recommendations on the use of antibiotics prior to any dental work/cleaning or other surgeries.

### INFECTION PREVENTION

Risks are very low for postoperative infections. It is important to realize that there are risks with all surgeries. A prosthetic joint could attract bacteria from an infection located in another part of your body or from bacteria released into the blood during dental work or other procedures. If you sustain an injury, such as a deep cut or puncture wound, you should clean it as best as you can. Put a sterile dressing on it and notify your health care provider. The closer the injury is to your joint replacement (prosthesis), the greater the concern. Occasionally, antibiotics may be needed. Superficial scratches may be treated with topical antibiotic ointment. Notify your surgeon if the area is painful, reddened or if you have any other concerns.

# **7. AFTER DISCHARGE GUIDELINES**

## AFTER DISCHARGE

### SKIN CARE

Many joint replacement patients in the hospital are at risk for developing pressure ulcers. A pressure ulcer, also known as a bed sore, is an area of skin that breaks down when you stay in one position for a long period of time without shifting your weight. The constant pressure against the skin reduces the blood supply to that area and the affected tissue dies. Additionally, the skin breakdown can occur when skin slides against a bony area. This is called “shearing”.

You may be at risk for pressure ulcers if you:

- + Are elderly
- + Are unable to move certain parts of your body
- + Have poor circulation (as in diabetes or a vascular disease)
- + Are sensitive to pain or discomfort
- + Have moist skin or a weeping wound
- + Have fragile skin
- + Are malnourished or underweight
- + Are bedridden or in a wheelchair

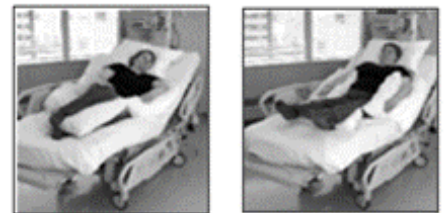
### Protecting your skin when sitting or lying down:

#### Sitting:

- + Shift your weight every 15 minutes.
- + When sitting in a wheelchair (if applicable), sit on a pillow or special cushion (as there tends to be less padding on the seat of a wheelchair).
- + Utilize the footrest on the bed or wheelchair to help prevent yourself from sliding down, place extra pillows under your legs (if needed) when lying in bed.

#### Lying in bed:

- + If you are on bed rest, your position should be changed every two hours, or as instructed.
- + Use pillows under your arms and legs. A pillow between your legs can keep pressure off your knees and ankles when angled to the side (see photo).
- + Keep the bed sheets free of creases as much as possible.
- + DO NOT let your heels touch the bed. Instead use pillows under your calves to lift your heels up when lying flat (see photo).
- + Keep the head of the bed down, except for meals. This will decrease the pressure and shearing of your tailbone. If you must have your head elevated, your knees should be raised, and your position changed frequently.





## PREVENTION

### Check your skin every day.

Your family members or other caregivers can also help with this. Pressure ulcers form most commonly over bony areas (bones close to the skin) like the tailbone, elbow, heels, hips, ankles, shoulders, back, and the back of the head.

- + Look for reddened areas (when pressed do not turn white), and for blistered or painful areas. Report any of these symptoms to your health care provider
- + Make frequent position changes
- + Keep your skin clean and dry
- + Prevent shearing
- + Eat a balanced diet
- + Increase your activity, when able

### Prevent falls.

Falls in the home can occur in bathrooms, bedrooms and on stairs. Refer to the fall prevention safety tips handout “Preoperative Information” section of this guidebook to help minimize the risk of falling in your home.

### Live more securely in your own home.

Phillips Lifeline is a leading medical alert service that provides prompt, caring help and is available at the press of a button, 24-hour a day, 365 days a year. Ridgeview has been a partnering provider of Lifeline Services for many years. To learn more about Lifeline or to receive a brochure, call Ridgeview Home Health Care at 952.442.2283.

## POSTOPERATIVE ACTIVITY GUIDELINES

Use the following guidelines to advance your activity over the next several weeks. Each individual heals at a different rate. It is important to stay active as well as spending adequate time icing, resting, and elevating your leg. Use your medication to allow you to exercise without excessive pain and to help you enjoy restful sleep at night.

DO NOT return to driving while you are still taking narcotic pain medication. You should also wait until you are able to get in and out of the driver’s seat without difficulty.

Plan to use an assistive device (such as a walker, crutches, knee scooter, etc.) until you can walk without a limp and bear full weight on the new ankle. You will advance from using a walker, knee scooter or crutches to a single crutch or a cane over the coming months. A single crutch or cane is typically held on the opposite side from the surgical leg. Please continue to use an assistive device outside, especially when it is slippery from ice, snow or rain.

### Day 2 to Week 6

After one to two days in the hospital, you should be ready for discharge. During your recovery period:

- + Continue with a walker, crutches or knee scooter, unless otherwise instructed.
- + Non-weight bearing (or minimal weight bearing) on surgical leg.
- + Move your toes often.
- + Shower (or sponge bathe) and dress independently, while keeping the splint clean and dry.
- + Gradually resume housekeeping tasks.
- + Do 20 minutes of your required home exercises twice a day, with or without a physical therapist.

## Weeks 6 to 12

During this time frame, you should be able to begin increasing your weight bearing on the surgical leg. Your goals are to:

- + Achieve all goals from week one to week six.
- + Walk with crutches while in a surgical boot.
- + Progress to weight-bearing while walking in a surgical boot.
- + Work with a physical therapist to increase range of motion in your ankle and begin strengthening exercises.
- + *Short-term goal:* neutral ankle dorsiflexion, 15-20 degrees plantar flexion.



This is an example of a surgical boot you may use during this time frame.

## Weeks 12 to 5 months

During this time frame, you will continue to see your recovery efforts to full independence. Your home exercise program will be even more important as you receive less supervised therapy. During this time, you can expect:

- + Full weight-bearing.
- + Wean gradually back into wearing a shoe (on the surgical foot).
- + Exercise for balance and proprioception (the body's ability to sense movement, action, location).
- + Gradually progress your activity level to a normal level. Comfort should guide your progression.
- + *Goals for active range of motion:* dorsiflexion 5 degrees, plantar flexion 20 to 30 degrees.

It is normal to continue to have swelling and mild pain for several months after joint replacement surgery. Continue to ice during the day and elevate your leg as needed.

The milestones noted above are to help encourage you to make progress, but there is variability in a "normal" recovery after joint replacement surgery. DO NOT be discouraged if it seems to take longer to achieve the goals above. Keep working at it and talk with your physical therapist or surgeon if you have concerns about your progress.

## ACTIVITIES OF DAILY LIVING: PRECAUTIONS AND SAFETY TIPS

You will be non-weight bearing for several weeks after surgery. You may choose to use a knee scooter to get around in the community. You will also need crutches to climb stairs, and a walker to access areas where the scooter cannot take you. When climbing stairs, use a railing if one is available.



### Crutch walking and stairs

#### To climb stairs:

- + Put both crutches in your other hand (or have someone carry one crutch for you). Hold your affected leg out behind you.
- + Push down on the rail and crutch, using your arms to help you, and hop onto the step.
- + Bring the crutch up onto the step and repeat to go up the stairs.

#### Going down stairs:

- + Hold onto the handrail with one hand.
- + Put both crutches in your other hand (or have someone carry one crutch for you). Hold your affected leg out in front of you.
- + Place the crutch in the middle of the step below you.

- + Take your weight onto the crutch and rail and gently lower yourself down onto the step.
- + Repeat as needed for each stair.

It is advisable to have somebody with you on the stairs until you feel safe. If you do not feel safe with the instructions given above, you may be able to go up and down stairs in a seated position. Place a sturdy stool or chair away from the top of the stairs for you to lift yourself onto before standing. If you do not have a handrail, then use both crutches instead.

## Tub Transfer

### Getting into the tub using a bath seat:

- + Place the bath seat in the tub facing the faucets.
- + Back up to the tub until you can feel it at the back of your knees. Be sure you are in front of the bath seat.
- + Reach back with one hand for the bath seat. Keep the other hand in the center of the walker.
- + Slowly lower yourself onto the bath seat, keeping the operated leg out straight.
- + Move the walker out of the way but keep it within reach.
- + Lift your legs over the edge of the tub.



### Note:

- o Although bath seats, grab bars, long-handled bath brushes and hand-held showers make bathing easier and safer, they are typically not covered by insurance.
- o Always use a rubber mat or non-skid adhesive on the bottom of the tub or shower.
- o To keep soap within easy reach, make a “soap on a rope” by placing a bar of soap in the toe portion of an old pair of pantyhose and attach it to the bath seat.

### Getting out of the tub using a bath seat:

- + Lift your legs over the outside of the tub.
- + Scoot to the edge of the bath seat.
- + Push up with one hand on the back of the bath seat while holding on to the center of the walker with the other hand.
- + Balance yourself before reaching for the walker.

## LIFELONG RECOMMENDATIONS

### Exercise and Activity

Whether you have reached all the recommended goals in five months or not, all joint patients need to have a regular exercise program to maintain fitness and health of the muscles around the new joint. With your orthopedic and primary health care provider’s permission, you should be on a regular exercise program three to four times a week lasting 20 to 30 minutes. Choose a low-impact activity, such as an exercise class or routine at a fitness center, walking, stationary bike or low-impact sports (such as golf, bowling or dancing).

Impact exercises, such as running and tennis, may put too much strain on the joint and are not recommended. High-risk activities and contact sports are also discouraged, because of the risk of fracture around the prosthesis.

## Avoiding Infection

Although the risks are very low for postoperative infection, it is important to realize that there are risks. A prosthetic joint could possibly attract bacteria from an infection located in another part of your body or from bacteria released into the blood during dental work or other procedures.

- + Take antibiotics before you have any dental work or other invasive procedures. It is recommended that this be a lifelong preventative measure.
- + If you sustain an injury, such as a deep cut or puncture wound, you should clean the wound as best as you can, put a sterile dressing on it, and notify your health care provider. The closer the injury to your joint replacement (prosthesis), the greater the concern. Occasionally, antibiotics may be needed. Superficial scratches may be treated with topical antibiotic ointment. Notify your health care provider if the area is painful or reddened.

## FOLLOW UP APPOINTMENTS

Over the past several years, orthopedic surgeons have discovered that many people are not following up with their surgeon on a regular basis. The reason for may be that they do not understand why follow up appointments are important.

### General rules

- + Follow up every year, unless instructed differently by your physician.
- + Follow up with your surgeon anytime you have mild pain for more than a week.
- + Follow up with your surgeon anytime you have moderate or severe pain.

### Reasons for routine follow-up visits

- + The need to evaluate the integrity of the implant/bone interface. With time and stress, components may loosen. Many people are unaware of this happening because it usually happens slowly over time. Loosening does not necessarily mean another surgery is needed but it does mean there is a need to follow things more closely.

The need to follow things more closely could mean a couple things. Your ankle could become loose and may lead to pain, or the cracked cement could cause a reaction in the bone called “osteolysis”, which may cause the bone to thin out and cause loosening. In both cases you might not know this is happening for years. Orthopedists are constantly learning more about how to deal with both issues. The sooner potential problems are known, the better chance in having to avoid more serious problems.

- + The plastic liner in your ankle may wear. Little wear particles combine with white blood cells and may get in the bone and cause osteolysis. Replacing a worn liner early and grafting the bone can keep this from worsening.

X-rays taken at follow-up visits can detect these problems. New x-rays can be compared with previous films to make these determinations. This should be done in your health care provider’s office.

Ridgeview wants to continue to provide you with the best care and advice. If you are unsure how long it has been or when your next visit should be scheduled, contact your health care provider.

# **8. POSTOPERATIVE EXERCISES**

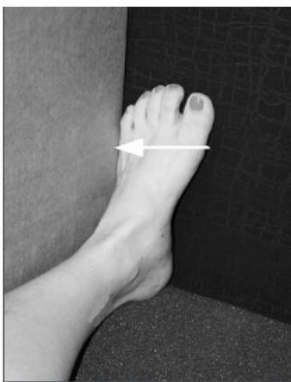
## POSTOPERATIVE EXERCISES

Exercising is important to obtain the best results from ankle replacement surgery. You should do your home exercises twice a day. You will receive additional exercises from a physical therapist at an outpatient facility or at your home.

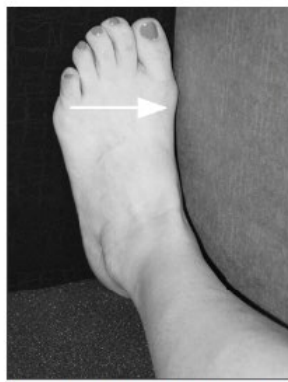
This section shows many exercises for stretching and strengthening. **DO NOT** start any new exercises until you are instructed by your physical therapist. Your therapist will teach you the exercises that you did not do in the hospital. He or she may also add other exercises or modify the ones in this guidebook to meet your individual needs. Plan to do most of the exercises on your bed or in a chair, as you will not be able to get down onto the floor for several weeks. The standing exercises should be done by a railing, kitchen sink or other area where you have a stable surface to hold onto.

### ISOMETRICS

#### Eversion and inversion



Eversion (turning the foot outward)



Inversion (pulling the foot inward)

- + With your foot in the boot or cast, push against the boot to the right, then to the left. (See images above).
- + Hold for 5 seconds.
- + Relax.
- + Repeat 10 times.

#### Scar massage

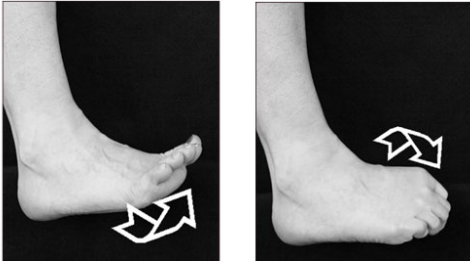
To improve range of motion and decrease scarring, you can mobilize and massage your incision when it has completely healed over.

- + Using lotion or Vitamin E, massage the surgical area (including incision) using circular motions and a pressure that you can tolerate. This will loosen scar tissue and decrease adhesions.

## ADVANCED EXERCISES

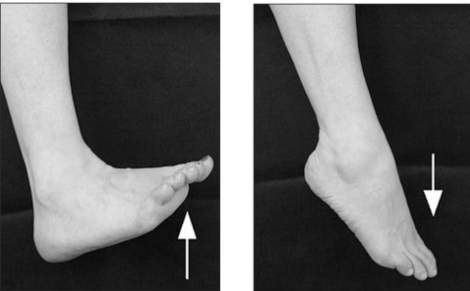
(Two to three weeks post-surgery)

### Toe Curls



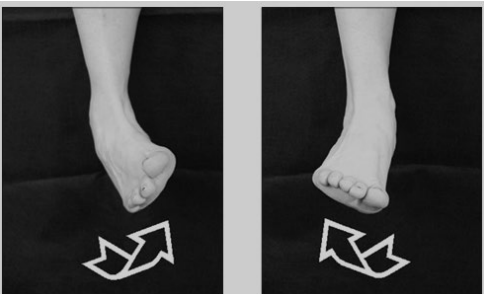
- + Sitting or lying with your heel supported, gently curl and straighten your toes.
- + Repeat 10 to 15 times per set
- + Complete 2 to 3 sets per session.

### Ankle Dorsiflexion and Plantar Flexion



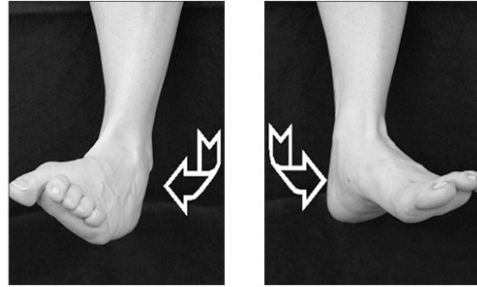
- + With your leg relaxed, gently flex and extend the ankle.
- + Pull your toes up towards your knee and then point the foot away from the knee, moving through the full range of motion (avoiding any pain).
- + Repeat 10 to 15 times per set.
- + Complete 2 sets per session.

### Ankle Inversion and Eversion



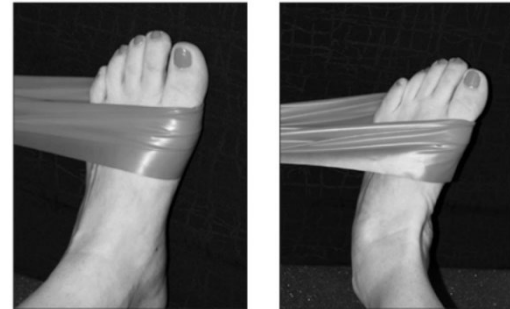
- + With your leg relaxed, gently turn your ankle and foot in and out, moving through the full range of motion (avoiding any pain).
- + Repeat 10 to 15 times per set.
- + Complete 2 sets per session.

### Ankle Circles



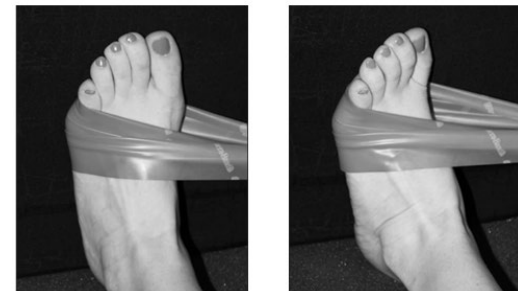
- + Slowly rotate your surgical foot and ankle clockwise, then counterclockwise.
- + Gradually increase your range of motion, avoiding any pain.
- + Complete 10 circles in each direction.
- + Complete 2 sets per session.

### Resisted Plantar Flexion



- + Place a light resistance band around the surgical foot near the toes.
- + Push your toes down against the band, pointing your foot away from you.
- + Repeat 15 times.

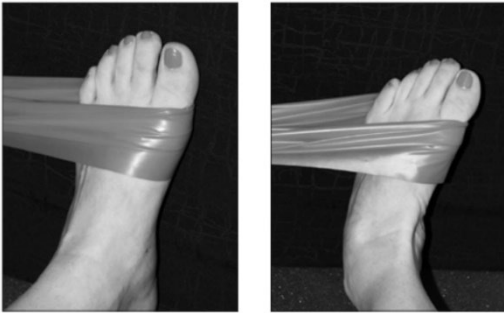
### Resisted Eversion



- + Secure the resistive band/ tubing around a stable piece of furniture.
- + Place the surgical foot in other end of the loop, near the toes.
- + Pull outward with inside of your foot toward the furniture, rolling outer edge of the foot up.
- + Repeat 15 times.

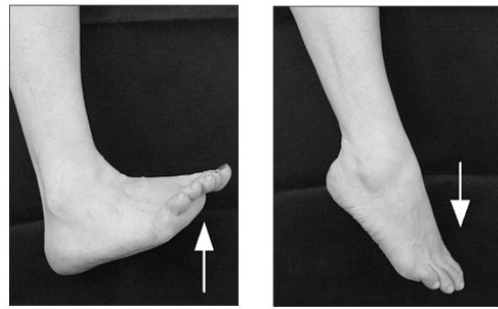


## Resisted Inversion



- + Secure resistive band/tubing around a stable piece of furniture.
- + Place surgical foot, the other end of the loop, near the toes.
- + Pull away from the furniture, with the outside of your foot toward the furniture, turning the inner edge of the foot up.
- + Repeat 15 times.

## Resistive Dorsiflexion



- + With your leg relaxed, gently flex and extend the ankle.
- + Pull your toes up towards your knee and then point the foot away from the knee, moving through the full range of motion (avoiding any pain).
- + Repeat 10 to 15 times per set.
- + Complete 2 sets per session.

## ADVANCED EXERCISES

(Three to five weeks post-surgery)

### Single Leg Stance



- + Standing next to a counter or sturdy object, attempt to balance on your surgical leg, keep your eyes open.
- + Hold for 5 to 10 seconds.
- + Repeat 3 to 5 times per set.
- + Complete 2 sets per session.

### Standing Mini Squats



- + Standing next to a counter or stable object, bend your hips and knees into a small squat, as if you are going to sit.
- + Repeat 20 times.

## Heel Raises



- + Stand behind a high-back chair or hold onto a counter or railing.
- + Rise up on your toes.
- + Keep your knees straight. **DO NOT** lean or rock your body forward.
- + Return to starting position (toes and heels on the ground/floor).
- + Repeat 20 times.

## Calf Stretch



- + Using a door or wall for support, bend your non-surgical leg and straighten your surgical leg behind you, toes pointed slightly inward, heel on the floor.
- + Stretch the calf muscle.
- + Hold for 30 seconds.
- + Relax.
- + Repeat stretch.

## Single Leg Stance on Foam



- + With your eyes open, balance with your surgical leg on dense foam.
- + Hold 10 to 15 seconds.
- + Repeat 2 to 3 times per set.
- + Complete 2 sets per session.

## Step-Ups



- + With your surgical foot on a 4-to-6-inch step, straighten your leg, lifting your other foot off the floor.
- + Keep your pelvis level and do not “launch” yourself up with the non-surgical side.
- + Repeat 10 times for 1 minute.

## Resisted Hip Motions



- + Place a resistance band around your ankle.
- + Close the knotted end inside a door or otherwise attach it to a heavy stable object.
- + Standing on one leg, face the door and swing the leg forward and backward, keeping the knee straight and the trunk (torso) and pelvis stable.
- + Repeat 20 times.
- + Turn 90 degrees and repeat, swinging the leg out to the side and back.
- + Continue, turning 90 degrees until you have performed facing all four directions.
- + Then, place the band around the other leg and repeat the exercise. (Be sure to maintain your balance, keeping your trunk and pelvis stable.)

## Walk on Heels, Toes and Outsides of Feet



Standing in upright position, lift your toes from the floor and walk on heels for 10 yards without flattening feet or letting toes touch the floor.

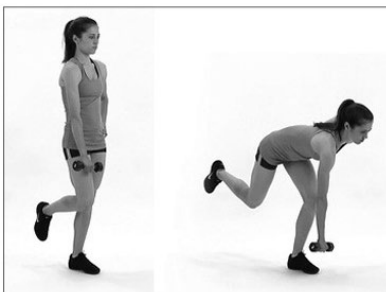


Then keeping legs straight, walk on your toes with heels pulled up off the floor for 10 yards. (10 yards should be equal to approximately 50 steps).



Finally, for additional ankle mobility, walk on the outside edges of your feet for 10 yards.

## Balance and Reach



- + Stand on your surgical foot, holding a 1-to-2-pound weight in the other hand.
- + Bend your knees, lowering your body and reach across.
- + Hold for 5 seconds.
- + Return to standing.
- + Repeat 3 to 5 times per set.
- + Complete 2 sets per session.

## Braiding (Karioka or Grapevine)



- + Walk sideways, crossing one leg in front of the other, bring other leg out to the side.
- + Then, bring the first leg behind the other and the front leg out to the side, and so on.
- + Walk 10 yards or for 1 minute.



## **9. GLOSSARY**

## GLOSSARY

### A

#### **Abdomen**

The part of the body between the chest and hips, including the area containing the stomach and other digestive organs. May also be referred to as “abdominal”.

#### **Adaptive equipment**

Any tool, device, or machine that is used to help with any [daily activity](#) task. (Example: walker, crutches, shower chair, sock aid, etc.)

#### **Advanced directive**

A legal document that states a person’s wishes about receiving medical care if that person is no longer able to make medical decisions because of a serious illness or injury.

#### **Altered mental status**

Refers to general changes in brain function, such as: confusion, memory loss, loss of alertness, disorientation, unusual/strange behavior, etc.

#### **Anesthesia**

A drug typically used with surgery or specific medical procedures that pertains to a loss of feeling in all or part of the body with or without a loss of consciousness.

#### **Anesthesiologist**

A doctor who specializes in [perioperative](#) care, and administration of [anesthesia](#).

#### **Anesthesiology**

Pertaining to anesthesia and anesthetics. See [anesthesia](#).

#### **Ankle fusion**

Is a type of surgery to fuse the bones of the ankle into one piece. Also known as “ankle arthrodesis”.

#### **Anti-inflammatory drug**

A drug that reduces inflammation, pain, and fever. Also known as a [non-steroidal anti-inflammatory drug \(NSAID\)](#).

#### **APAP**

Abbreviation for acetaminophen. Sometimes found on prescription bottles.

#### **Arthritis**

A condition that causes swelling, stiffness, and tenderness in a person’s [joint\(s\)](#).

#### **Assistive device**

See [adaptive equipment](#).

### B

#### **Bedridden**

Pertains to the inability to get out of bed because of illness or injury.

#### **Blood clot**

A thick and sticky clump of dried blood that stops blood from flowing through a blood vessel.



**Blood thinner**

A type of medication that help to prevent [blood clots](#) from forming.

**Blood transfusion**

A routine medical procedure which donated blood is provided to the patient through an [IV](#), that helps to replace blood lost due to surgery or injury.

**Bowel**

Refers to the large intestine (gut).

**C****CAM**

See [controlled ankle motion](#).

**Certified nurse anesthetist**

An advanced practice registered nurse who provides [anesthesia](#)-related care before, during, and after various procedures.

**Coagulate**

To clot; gather together or form into a mass or group.

**Compression stockings**

Special socks designed to help maintain blood flow and reduce discomfort and swelling.

**Constipation**

A condition in which there is difficulty in emptying the [bowels](#), due to hardened stool (feces).

**Continuous positive airway pressure**

A type of therapy that keeps the airway open by gently providing air through a mask that is worn while the person sleeps. The device splints the airway open and eliminates the breathing pauses cause by sleep apnea.

**Controlled ankle motion**

Also known as a “walking boot/cast”. It is an assisted device that helps support the foot or ankle during the healing process after an injury or surgery.

**CPAP**

See [continuous positive airway pressure](#).

**D****Daily activities**

Also known as activities of daily living (ADLs). Routine activities people do every day without assistance (Examples: eating, bathing, getting dressed, toileting, mobility, and continence).

**Deep vein thrombosis**

A blood clot in the leg. Also known as a [DVT](#).

**Diabetes**

A chronic health condition in which an individual’s body does not make enough insulin or cannot use as well as it should, in affecting how the body turns food into energy.

**Dietary Supplement**

A product that is taken by mouth ([orally](#)) that contain one or more ingredients (such as vitamins) that are intended to supplement one’s diet and are not considered food.

**Dietitian**

An expert on diet and nutrition.

## **DVT**

Abbreviation for [deep vein thrombosis](#).

## **E F**

### **Fahrenheit**

A term used in measurement, as in temperature.

## **G**

### **Gastric reflux**

The backward flow of stomach acid contents into the esophagus (the tube that connects the mouth to the stomach).

### **Gluteal**

Pertains to the buttock muscles.

### **Groin**

The area that includes the lower [abdomen](#) and upper thighs.

## **H**

### **Health care agent**

A person who is chosen in advance to make health care decisions in the event the individual is unable to make decisions for his/herself.

### **Hemoglobin**

A protein in red blood cells that helps carry oxygen from the lungs to tissues and organs.

### **High blood pressure**

Also known as HBP or hypertension. Known when the blood pressure, the force of blood pushing against the walls of the blood vessels, is consistently too high.

### **Home health care**

A variety of health care services that can be given in an individual's home environment, after an illness, surgery, or disability.

### **Hospitalist**

A physician who specializes in providing and managing the care and treatment of hospitalized patients.

## **I**

### **Incentive spirometer**

A device that helps to expand an individual's lungs by helping breathe more deeply and fully.

### **Infection**

A condition that is typically caused by germs that enter the body, multiply, and cause harm or illness. Germs that typically cause infections are bacteria and viruses.

### **Injection**

Pertains to a shot, or a dose of medicine that is given by a syringe and a needle.

### **Inpatient**

Refers to someone who has been admitted to the hospital.

### **Incision**

A cut or wound made from a surgical procedure.

### **Intravenous**

Within a vein. The giving of something (Example: drugs/medication) into a vein.

## IU

Abbreviation for international units. A unit of measurement, typically used with [supplements](#) and vitamins.

IV see [Intravenous](#).

## J

### Joint(s)

Are where two bones meet, allowing our bodies to move. Examples of joint include: the hips, knees, ankles, elbows, shoulders, knuckles, etc. Joints contain synovial fluid, which acts as a lubricant to help them move easily.

### Joint replacement surgery

The complete removal of the damaged joint and tissues to be replaced with an artificial joint ([prosthesis](#)).

## K

## L

### Living will

A written, legal document spells out medical treatments that an individual would and would not want to be used to keep him/her alive, as well as preferences for other medical decisions, such as pain management or organ donation.

### Low-impact exercise

Pertains to any movement that is gentle on the joints or can be performed in a fluid motion, such as – swimming, cycling, yoga.

## M

### Malnourished

A condition caused by not getting enough calories or the right amount of key nutrients, such as vitamins and minerals, that are needed for health, or when the body cannot absorb nutrients from food.

### MCG (Micrograms)

Abbreviation for [micrograms](#). A unit of measurement, typically used with certain medications.

### MD

Abbreviation for [medical doctor](#).

### Medical doctor

A person who has been educated, trained, and licensed to practice the art and science of medicine. Also known as a [‘physician’](#).

### MG (Milligrams)

Abbreviation for [milligrams](#). A unit of measurement, typically used with certain medications.

### Muscle relaxant

A drug that affects skeletal muscle function, typically used to lessen or stop [muscle spasms](#) and pain.

### Muscle spasm

Pertains to sudden, painful contractions and tightening of muscles. Also known as muscle cramps.

### Musculoskeletal

Pertaining to the muscles, soft tissues, and bones of the body.

## N

### **Narcotic**

A type of prescribed drug that helps relieve moderate to severe pain.

### **Nasal**

Referring to the nose.

### **Nerve medication**

This type of medication works by suppressing nerve activity, pain and muscle spasms often caused by nerve damage.

### **Non-impact aerobic exercise**

Refers to any exercise that does not cause jarring impact on the joints or body. (Examples include walking, swimming, exercise biking, etc.)

### **Non-steroidal anti-inflammatory drug**

A type of [over-the-counter medication](#) that reduces pain, fever and inflammation (Example: Tylenol, Advil, etc.)

### **Non-weight bearing**

Pertains to not putting any weight on the injured lower limb (leg, ankle, foot) for a period of time.

### **NP**

Abbreviation for [nurse practitioner](#).

### **NSAID**

Abbreviation for [non-steroidal anti-inflammatory drug](#).

### **Nurse practitioner**

A nurse who is qualified to treat certain medical conditions without the direct supervision of a [physician](#).

## O

### **Occupational therapist**

Healthcare professionals who help patients to regain basic life skills (see [Daily activities](#)).

### **Oral**

Referring to the mouth, or taken by mouth (in regards to medications).

### **Orthopedic team**

A team consisting of an orthopedic [physician/surgeon](#), [physician assistant](#), and a [nurse practitioner](#), who specializes in the care of bone diseases and [musculoskeletal](#) injuries, and who supervises a patient's overall care.

### **Orthopedist**

An orthopedic surgeon (medical doctor) who specializes in the prevention, diagnosis, and treatment of disorders of the [musculoskeletal](#) system, including the bones, muscles, joints, ligaments, and tendons.

### **Osteolysis**

A progressive condition where bone tissue is destroyed, by losing minerals (mostly calcium), softens, degenerates and becomes weaker.

**OTC** see [Over-the-counter medications](#).

**Outpatient**

Any appointment or service or treatment at a clinic or specialty facility that does not require hospitalization. Also called ambulatory care.

**Over-the-counter medications**

Medications that can be purchased with a prescription. Also called [OTC's](#).

**P****PE**

Abbreviation for [pulmonary embolism](#).

**Perioperative**

Pertaining to the time period of a patient's surgical procedure.

**Peripheral nerve block**

A type of regional anesthesia that is injected near a specific nerve or bundle of nerves to block sensations of pain from a specific area of the body. Nerve blocks usually last longer than local [anesthesia](#).

**Personal hygiene**

Pertains to bathing, washing your hands, brushing your teeth, brushing your hair, etc.

**Physical therapist**

Healthcare professionals who teach patients how to prevent or manage their condition through prescribed exercises.

**Physical therapy**

A form of treatment for illness or injury by physical methods – such as massage, heat, or exercise rather than by medication or surgery.

**Physician** see [Medical doctor](#).**Physician assistant**

A mid-level healthcare professional who diagnoses illnesses, develops and manages treatment plans, prescribes medications, and may often serve as a patient's primary healthcare provider.

**Postoperative**

The period following a surgical operation. Also known as Postop or post-surgery.

**Post-surgical**

Pertaining to "after surgery", or the care you receive after a surgical procedure.

**Prehab**

Also known as pre-rehabilitation. The practice of exercising before surgery to help improve physical strength and help to recover more quickly after surgery.

**Preoperative**

The period before a surgical operation. Also known as Preop or before surgery.

**Prescription**

A medicine that is only available with a doctor's written authority. Not available [over-the-counter](#).

**Pressure ulcer**

Damage to an area of the skin caused by constant pressure on the area for a long time, that may lead to tissue damage and/or tissue death.

**Prevention**

The keeping of something (such as an illness or injury) from happening.

**Proprioception**

The body's ability to sense movement, action, and location. Also known as kinesthesia. (Example, walking without thinking of each step.)

**Prosthesis** See [prosthetic device](#).

**Prosthetic device**

An artificial device designed to replace a missing part of the body or to make a part of the body work better.

**Pulmonary embolism**

A blood clot in the lung. Also known as a [PE](#).

**Q****Quads**

Refers to the quadriceps muscles. The large muscle in the top of the thigh.

**R****Range of motion**

Also known as ROM. Refers to how far an individual can move or stretch a part of the body, such as a joint or a muscle.

**Rehabilitative** See [Rehabilitation](#).

**Rehabilitation**

The process of helping a person restore lost skills to regain maximum self-care.

**S****Shearing**

Pertains to the force generated when the skin is moved against a fixed surface, typically leading to a tissue (skin) injury.

**Side effect**

Unwanted effect of treatments (or medications).

**Skilled rehabilitation facility**

An in-patient rehabilitation and medical treatment center staffed with trained medical professionals, who provide medically necessary services to help patients prepare to return home.

**Sock aid**

An assistive device that allows you to put on socks easier without being affected by pain or physical limitations.

**Spine**

Also known as the backbone or spinal column. A line of bones down the center of the back that provides support for the body and protects the [spinal cord](#).

**Spinal cord**

A bundle of nerves that go to and from the brain; enclosed and protected by the spinal column (spine).

**Spinal block**

A spinal anesthesia that is injected below the spinal column to provide pain relief that typically affects the arms, legs, neck and buttocks.

**Sponge bath**

A cleaning technique in which a person is cleaned by a wet sponge or washcloth dipped in water, without getting into a tub of water (or a shower).

**Steri-strips**

Thin adhesive bandages that help close edges of small wounds and encourage the skin to heal. Also known as butterfly stitches.

**Superficial**

Referring only affecting the surface (as in a scratch).

**Supplement**

See [dietary supplement](#).

**Supportive device**

An external device that assists a person in performing a particular task. (Examples: a brace, cane, crutches, walkers, wheelchairs, shower chairs, etc.). Also known as [adaptive equipment](#), or assistive device.

**Symptom**

A sensation or change in bodily function experienced by an individual, which is typically not seen. (Example: nausea, pain, headache, tiredness).

**T****Talus bone**

Also known as the ankle bone. The talus is a small bone that sits between the heel bone and the two bones of the lower leg ([tibia](#) and fibula).

**TED stockings**

Also known as [compression stockings](#) or anti-embolism stockings. These stockings are especially designed to help reduce the risk of developing a [deep vein thrombosis \(DVT\)](#) or [blood clot](#) in your lower leg.

**Tibia**

The larger of the two bones that make up the leg. The tibia forms the knee joint with the femur (thigh bone) and part of the ankle joint.

**Topical**

Referring to a surface, predominately the skin. Typically pertains to medication application (example: topical antibiotic).

**Tsp.**

Abbreviation for teaspoon. A unit of measurement, typically used with certain medications.

**U****V****Vascular disease**

Any abnormal condition of the blood vessels (arteries and veins).

**Vital Signs**

Blood pressure, pulse rate, respiration rate. Can also include level of oxygenation in the blood (oximetry).



## W

### **Weight-bearing**

Pertains to support of withstand the weight of the body (example: putting weight on an injured lower extremity [leg, ankle, foot]).

### **Wound**

Pertains to a type of physical injury where the skin is torn, cut, or punctured (open wound), or where blunt force trauma causes a bruise (closed wound).

## X

## Y

## Z