

Ankle Replacement Guidebook



PANORAMA
Orthopedics & Spine Center



Welcome

Welcome to Panorama Orthopedics & Spine Center!

We, as your Foot and Ankle team, are excited to guide you through your journey to improving your quality of life so you can feel better and do more!

This journey represents a commitment between all of us to give you the best quality experience with every effort to optimize your outcome. We continually review patient experiences, discuss the latest advancements and strive to improve our ability to deliver the best total ankle replacement experience possible.

Panorama Orthopedics & Spine Center performs more total ankle replacements than any group in the Rocky Mountain region, which has helped us develop the most complete ankle replacement program that we can offer.

Please take the time to review this guidebook, as it has been carefully prepared to specifically educate you on the entire surgical process and answer as many questions as we can. We welcome additional questions and discussion from you and your loved ones to make sure we are on the same page. We look forward to helping you through this experience and are honored you have chosen us to be your orthopedic providers. We are committed to helping you feel better and do more!

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Ankle Replacement: Brief Overview

Ankle Replacement: Brief Overview

Your ankle joint is made up of three bones, the tibia, fibula and talus. The tibia (lower leg) and talus (foot) contain the majority of the joint cartilage surface, which enables fluid and painless motion during movement. The bones are joined by strong ligaments and together they provide support, balance and shock absorption. Muscles and tendons also support the joint and provide the strength to make them move. This intricate framework is responsible for a wide range of ankle movements to include standing, walking and running. Significant destruction of the joint cartilage in your ankle can result in pain, swelling, stiffness and can make it hard for you to do daily activities. Most commonly, this is a result of osteoarthritis, but also occurs as a result of other conditions such as rheumatoid arthritis and post-traumatic arthritis.

Your surgeon may recommend ankle replacement surgery if conservative strategies to improve your ankle pain and function are ineffective. While this problem has seriously impacted your life, a joint replacement can offer improvement in pain, function, and enhance your overall quality of life.

With ankle replacement, the surgeon replaces the damaged joint with a metallic implant. This new, artificial joint can relieve arthritic pain and closely mimic the natural movement of a healthy ankle. Please consult with your specific surgeon's team for guidance on implant specifics as your surgeon will customize your surgery and implant based on your personal history, exam and radiographic findings.



For additional resources regarding ankle replacement education and implant information, please visit: www.wright.com/healthcare-professionals/foot-ankle#three

Important Phone Numbers

Panorama Ortho 303.233.1223

Please refer to the front cover insert for your surgery team's contact information.

Department	Reasons to Call	Contact Information
<p>Triage (7am-5pm M-F) *Excluding Holidays</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Medical questions or concerns that require immediate attention 	<p>Call: 303-233-1223 Option 2 To be connected to Clinical Care Team</p>
<p>Pharmacy Questions (7am-5pm M-F) *Excluding Holidays</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Refills for Prescriptions <ul style="list-style-type: none"> <input type="checkbox"/> New Prescriptions <input type="checkbox"/> Questions about medications 	<p>Call: 720-497-6662 (Requests after 3pm are handled the next business day)</p>
<p>Appointment Scheduling (9am-5pm M-F) *Excluding Holidays</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Schedule follow up appointments and office visits 	<p>Call: 303-233-1223 Option 2, then option 1</p>
<p>Panorama Physical Therapy (8am-6pm M-F)</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Schedule physical therapy appointments <input type="checkbox"/> Questions or concerns for your therapist 	<p>Central Scheduling 303-274-7330</p>
<p>Navigation Central (AFTER HOURS)</p>	<ul style="list-style-type: none"> <input type="checkbox"/> 24 hour call service <input type="checkbox"/> Live Emergency Medical Technicians to help with all questions and urgent situations; you will get to talk directly to a person 	<p>Call: 303-233-1223 To connect to our after hours Clinical Care Team</p>
<p>Non-medical Questions</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Billing <input type="checkbox"/> Workers Compensation <input type="checkbox"/> Privacy Office 	<p>Call: 303-233-1223 Option 2 then 3 (For Billing)</p>

Facility Locations and Contact Information

OrthoColorado Hospital

11650 W. 2nd Place

Lakewood, CO 80228

720-321-5061 Pre-operative Testing Questions

www.orthocolorado.org/education to view Pre-operative education videos

St. Anthony Hospital

11600 W. 2nd Place

Lakewood, CO 80228

Main Line 720-321-0000

www.centura.org/locations/st-anthony-hospital.org

Littleton Adventist Hospital

7700 S. Broadway

Littleton, CO 80122

303-738-2750 Pre-operative Testing Questions

www.centura.org/locations/littleton-adventist-hospital

St. Anthony North Hospital

14300 Orchard Parkway

Westminster, CO 80023

720-627-3028 Pre-operative Testing Questions

720-627-0211 For pre-operative education information

www.centura.org/locations/st-anthony-north-health-campus.org

Centennial Hospital

14200 E Arapahoe Road

Centennial, CO 80112

303-269-3493 Pre-operative Testing Questions

303-949-1178 Nursing Supervisor (if unable to reach pre-op testing)

www.healthonecares.com/campaigns/centennial-medical-center.org

South Denver Surgery Center

300E. Mineral Ave., Suite 9

Littleton, CO 80122

720-360-3400

www.southdenversc.com

The Orthopedic Surgery Center

14190 Orchard Parkway, Suite 100

Westminster, CO 80033

720-856-0008

<https://www.orthosurgery-colorado.com/>

Surgery Planning

1. Your surgeon and care team will discuss with you the following:

- Indications for surgery
- Benefits/Risks of surgery
- Alternatives to surgery

2. Finalize with your surgeon that you wish to proceed with ankle replacement surgery.

3. You will be contacted by our surgery scheduler to schedule your surgery.

4. If you would like financial guidance or clarification on your insurance coverage, please contact CustomerServiceTeam@panoramaortho.com 720-497-6637 (M-F 7:30 a.m. - 4:00 p.m.). Please refer to **page 33** for detailed information.

5. Prior to your scheduled surgery, we will **REQUIRE medical clearance from your primary medical provider**. Medical clearance typically includes a physical examination, blood work, EKG, and any other tests deemed necessary by your provider. Surgery cannot proceed without prior clearance! Please schedule this **as soon as you possible**. If you do not have a primary medical provider, please let us know and we will arrange medical clearance for you.

6. Your surgeon and care team **STRONGLY SUGGEST** that you review all pre-surgical education materials provided by your facility to help prepare you and answer any questions. Please refer to **Page 8** for the surgical facility contact information to access your pre-surgical ankle education.

7. In addition, we ask you to have a family or friend support person review pre-surgical education with you, take you home from the surgical facility and assist you while recovering at home.

Pre-Operative Checklist

45 Days Before Surgery:

- Schedule your medical clearance appointment with your primary care provider (PCP) AS SOON AS POSSIBLE. If you see a specialist, be aware that your primary care provider may request additional clearance from that specialist (ie Cardiologist) so please plan accordingly. Incomplete medical clearance is a common cause for surgery delay and cancellation.
- Make a discharge plan to include a family or friend support person that can take you home from the surgical facility and assist you while recovering at home.

30 Days Before Surgery

- Begin pre-operative exercises listed on **page 16** of this book as this will help with your strength after surgery.
- Arrange work and your social calendar to accommodate recovery time. Your surgeon and care team will let you know when you can return to work and other activities after surgery. Please email any disability or FMLA paperwork to the provider communication email box at least 2 weeks prior to surgery.
- Expect to be non-weight bearing for the first few weeks. Please discuss what adaptive equipment (i.e., walker, crutches) you will need with your surgeon. Walker or crutches can be issued at the surgical facility and are billed to your insurance company. Additionally, Panorama Orthopedics & Spine Center offers the option of purchasing equipment. Please contact the DME office at 303-233-1223 ext 1600 or DME@panoramaortho.com for questions and availability.
- Dental Appointments or major dental work must be completed 30 days prior to your surgery. Non-urgent dental work should be postponed 3 months following surgery.
- Please contact your surgeon or care team if you are having any minor medical procedures or urgent dental procedures 30 days prior to your surgery. Avoid joint injections around your surgical ankle for 3 months prior to joint replacement surgery.
- Review infection prevention instructions, please see **page 39**. Patients are to wash with an antiseptic solution the night before surgery. This is available for purchase at the Panorama DME store (303-233-1223 ext. 1600).
- If you smoke, you should MAKE EVERY EFFORT to stop smoking at least 2 weeks before surgery. Tobacco containing products can increase your risk of infection and complications after surgery. All surgical facilities are non-smoking facilities. If you need help with smoking cessation, talk with your primary care provider. Please visit www.coquitline.org.

7 Days Before Surgery

- Contact your surgeon if there is a change in your medical condition (cold, infection, fever, cuts/scrapes) as it may be necessary to reschedule your surgery.
- Please review **page 22** for detailed medication recommendations by your surgeon and primary medical provider before your surgery. Please contact your primary care provider with specific questions or concerns.
- You will receive a call from the surgical facility PATT department (preadmission testing and teaching) prior to your surgery. These nurses will review your medical history, surgical history and your current list of all medications, vitamins and supplements. Prior to your call, please have a list of all medications, vitamins and supplements ready, as well as a pen and paper to take notes.
- You will receive a call from the surgical facility scheduler 24-48 hours prior to your surgery with the time of your surgery. You will likely be asked to arrive 2 hours ahead of your scheduled surgical time to be prepared for surgery.
- Please refrain from shaving your legs 7 days prior to your surgery date to avoid cuts or nicks.
- Please review **page 14** for instructions to ensure a safe home environment prior to your return home. Since you will be non-weight bearing for the first few weeks, it would be beneficial to practice moving about your house while non-weight bearing to ensure you have made all necessary arrangements to accommodate your needs. If you have pets, please arrange for a family or friend to assist in caring for them for a few days after you return home.
- Stay well hydrated by drinking water and maintain a well balanced diet to include fiber rich foods such as fruits and vegetables. This will additionally help to prevent constipation after surgery. Please review **page 38** for a reference to improve your nutrition and prepare your body for surgery.
- Confirm your appointments for follow up with your surgeon and their team.

Pre-Operative Checklist

Night Before Surgery

- PLEASE Shower using Chlorhexidine (Hibiclens) to help prevent infection. Please see **page 39** for detailed instructions. Do not use any lotions, creams or deodorant on your skin prior to surgery.
- Please follow guidelines regarding when to stop food or drink prior to your surgery. This includes chewing gum, mints and all tobacco products. Please be advised that if these guidelines are not followed your surgery will be cancelled.

Day of Surgery

- Only take the medications you have been instructed to take the day of surgery with a small sip of water. Please see page 22 for medication instructions by your surgeon and your primary medical provider.
- Do not apply lotions, deodorants or perfumes.
- Please bring with you eyeglasses, hearing aids, dentures or any assistive device needed to aid in your care (i.e. walker, cane, crutches). Please leave jewelry or valuables at home.
- Wear loose fitting, comfortable clothes such as shorts, sweats and a top for returning home. Please wear shoes with a non-skid sole or a closed heel for walking after surgery.
- Please bring your picture ID, insurance card and a current list of medications, vitamins and supplements.
- Arrive at the surgical facility as instructed to check in and allow for traffic and inclement weather that could delay your arrival time.

Preparing Your Home

To ensure a safe environment, it is important to take specific measures to prepare your home for your return. Use the checklist below as a helpful resource.

- Practice using your crutches, walker or knee scooter throughout the house. Some bathrooms may need to have the door removed to accommodate easier access with these assistive devices.
- Arrange for sleeping accommodations to be close to a bathroom without the need to use stairs. Living on a single floor for the first few weeks may be easiest.
- Apply adhesive strips to bottom of bathtub or shower area. Wet floors are a high fall risk.
- Shop for groceries and stock up with nutritious food for your recovery.
- Prepare and freeze meals in single serving containers.
- Identify any uneven surfaces inside and outside your home. These are trip hazards. If a trip hazard can be removed, like a throw rug, a long bed skirt, or an electrical cord, please do so.
- Install or tighten any loose railings on stairways.
- Install nightlights in bathrooms, bedrooms and hallways and replace light bulbs.
- Keep pets in another room until you are safely settled in your home. Pets and small children can be trip hazards.
- Tend to any household chores like laundry and yard work.
- Put clean linens on your bed and have another set clean and ready.
- If you have purchased an ice machine, also purchase 8-12 pre-frozen water bottles 16 ounces or smaller to use in your ice machine. Remove the labels from bottles to prevent clogging the filter and store them in the freezer.

Building Your Support Team

Discharge planning is a very important step of preparing for a same-day ankle surgery. **Our goal is to return you to your home environment the day of your surgery.** You will be most comfortable and more active in your home setting, which will lead to your optimal recovery.

As a candidate for a same-day ankle replacement, we suggest a family member, friend or support to be with you for the first 72 hours after discharge from our surgical facility. This may vary depending on your personalized needs. Although you will be independent, having someone to help with medication administration, meal preparation, and daily chores will ensure your safety needs will be met.

As your family and friends play a pivotal role in your surgical process, we would like you to involve them throughout the preparation, surgery and recovery from your ankle replacement. Your support person is encouraged to participate in all facets of the surgical process to include pre-surgical education, day of surgery process, and therapy/surgeon visits.

Foot/Ankle Physical Therapy Exercises

Strong, healthy individuals recover significantly faster. You are encouraged to walk/workout at least at least 20 mins, 3 times per week to increase exercise activity prior to surgery. Every little bit of strength will help during your postsurgical recovery. Start practicing the exercises below twice a day for at least four weeks before your surgery.

Please Note: Sets and repetitions are based on low intensity guidelines. All below exercises are appropriate for pre-operative preparation for foot/ankle surgical interventions.

PRE-OPERATIVE EXERCISES

Lower Extremity Stretching



HAMSTRING STRETCH WITH TOWEL/STRAP

While lying down on your back, hook a towel or strap under your foot and draw up your leg until a stretch is felt along the backside of your leg. Ensure opposite knee is bent and that your knee on the leg being stretched is in a straightened position.

3 sets, 30 second hold, 1-2x/day



SINGLE KNEE TO CHEST STRETCH

While lying on your back, hold your knee and gently pull it up towards your chest. Keep opposite knee bent.

3 sets, 30 second hold, 1-2x/day



PIRIFORMIS STRETCH

While lying on your back, cross your leg as shown and pull your leg towards your chest as shown.

3 sets, 30 second hold, 1-2x/day



ILIOTIBIAL BAND STRETCH WITH TOWEL/STRAP

Place a strap around your foot. While lying on your back and leg up in front of you and knee straight, bring your leg across midline for a gentle stretch felt along your outer thigh.

3 sets, 30 second hold, 1-2x/day



CALF STRETCH WITH TOWEL – GASTROCNEMIUS

While in a seated position, place a towel around the ball of your foot and pull your ankle back until a stretch is felt on your calf area. Keep your knee in a straightened position during the stretch.

3 sets, 30 second hold, 1-2x/day



CALF STRETCH WITH TOWEL - SOLEUS

While in a seated position, place a towel around the ball of your foot and pull your ankle back until a stretch is felt on your calf area. Keep your knee in a bent position during the stretch.

3 sets, 30 second hold, 1-2x/day

POST-OPERATIVE EXERCISES

Non-Weightbearing In Cast/Boot

These strengthening exercises are safe to perform while in cast/boot and during non-weight bearing status based on provider protocol. See notes on each exercise for diagnosis specific restrictions.



ABDOMINAL BRACE

Laying on your back with your knees bent, draw in your belly button as if putting on a tight pair of pants. It should feel like you are flattening or pushing your back into the table/bed.

2 sets, 10 repetitions with 10 second hold, 1-2x/day



STRAIGHT LEG RAISE - SLR

While lying on your back, raise up your leg with a straight knee. Keep the opposite knee bent with the foot planted on the ground. Ensure core muscles are activated.

2 sets, 10 repetitions, 1-2x/day

Foot/Ankle Physical Therapy Exercises



STRAIGHT LEG RAISE ABDUCTION

While lying on side raise top leg up towards ceiling without allowing top hip to roll backwards. Keep body in one straight line from head to toe.

2 sets, 10 repetitions, 1-2x/day



STRAIGHT LEG RAISE EXTENSION

While lying face down with your knee straight, slowly raise your leg up off the ground. Maintain a straight knee the entire time.

2 sets, 10 repetitions, 1-2x/day



ABDOMINAL BRACE SUPINE MARCHING

While lying on your back with your knees bent, slowly raise up one foot a few inches and then set it back down. Next, perform on your other leg. Use your stomach muscles to keep your spine from moving.

2 sets, 20 repetitions, 1-2x/day



HIP ADDUCTION SQUEEZE - SUPINE

Place a rolled up towel, ball or pillow between your knees and press your knees together so that you squeeze the object firmly. Ensure core is activated. Hold and then release and repeat.

2 sets, 10 repetitions 10 second hold, 1-2x/day



SUPINE HIP ABDUCTION – CLAMSHELL

Lie down on your back with your knees bent, tighten your core and then draw your knees apart.

2 sets, 10 repetitions, 1-2x/day



SIDELYING CLAMSHELL

While lying on your side with your knees bent, draw up the top knee while keeping contact of your feet together. Do not let your pelvis roll back during the lifting movement.

2 sets, 10 repetitions, 1-2x/day



LONG ARC QUAD

While seated with your knee in a bent position, slowly straighten your knee as you raise your foot upwards as shown. Ensure core muscles are activated.

2 sets, 10 repetitions, 1-2x/day



Foot/Ankle Physical Therapy Exercises

POST-OPERATIVE EXERCISES

When cleared by surgeon and able perform out of boot.

These range of motion exercises are safe to perform once active range of motion is cleared by surgeon/PT team. .



ANKLE PUMPS

Bend your foot up and down at your ankle joint as shown.

3 sets, 20 repetitions, 1-2x/day



ANKLE CIRCLES

Move your ankle in a circular pattern one direction for several repetitions and then reverse the direction.

3 sets, 20 repetitions, 1-2x/day



ANKLE ABC's

While in a seated position, write out the alphabet in the air with your big toe. Your ankle should be moving as you perform this, not your lower leg.

2 sets of the alphabet, 1-2x/day



TOE YOGA

Sit with knee stacked above ankle. Maintain the ball of the foot and heel on the floor the entire exercise.

- 1) Lift the big toe, keeping the little toes planted on the floor.
- 2) Lift the little toes, keeping the big toe planted on the floor.

3 sets, 20 repetitions, 1-2x/day



ARCH ACTIVATION

1. Start in a sitting neutral position.
2. Activate the arch stabilizers, 'doming' the arch into the air.

2 sets, 20 repetitions with 5 second hold, 1-2x/day

Medications To Stop Before Surgery

Stop at Least 7 Days Prior to Surgery

Stop all Aspirin* containing products such as:

Coated ASA Uncoated ASA Ecotrin BC Powder	Disalcid Salsalate Dolobid Diflunisal Alka-Seltzer	Goody Powder Norgesic Pepto Bismol Percodan
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Stop all Antiplatelet* Medications such as:

Aggrenox (aspirin + dipyridamole)	Plavix(clopidogrel)	Pletal(cilostazol)	Trental(pentoxil)
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***If You Have Heart Stents: DO NOT STOP PLAVIX OR ASPRIN UNTIL SEEN AND DIRECTED BY A CARDIOLOGIST PRIOR TO SURGERY.**

Anticoagulation Medications such as Coumadin, Lovenox, Eliquis or Xarelto need special instructions and please discuss with your primary medical provider prior to surgery.

Stop all birth control pills & any male or female hormone (including creams or patches) such as:

Estrogens Estradiol Estraderm Estratest	Premarin Prempro Estrace	Ogen Emcyt Testosterone
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Stop all herbal & weight loss medications such as:

Alpha lipoic acid Cinnamon Chamomile Creatine Echinacea Acetyl L-carnitine	L- carnosine Ephedra Fish oil Garlic Ginkgo Milk Thistle	Glutamine Goldenseal Licorice Kava Ginseng	Skullcap Saw Palmetto St. John's Wort Tumeric
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Stop all vitamins and joint supplements containing products such as:

Vitamin A Vitamin C Vitamin E Vitamin K	Fish Oil Omega 3,6,9 CoQ10 Juice Plus	Krill Oil Glucosamine Chondroitin MSM
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Stop all non-steroidal anti-inflammatory (NSAID) medications such as:

Ibuprofen Advil Nuprin Ketoprofen Oruvail Orudis Cataflam Clinoril Sulindac Piroxicam Naprelan	Relafen Nabumetone Arthrotec Voltaren Tolectin Tolmetin Lodine Meclomen Meclofenamate Mediprin	Diclofenac Etodolac Mobic Meloxicam Naproxen Naprosyn Indocin Oxaprozin Daypro Indomethacin	Celebrex Celecoxib Aleve Anaprox Ansaid Feldene Naprelan Lodine Meclomen Meclofenamate
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Medication Recommendations

Contact your primary care provider or specialist for instructions if you take any of the following medications:

Humira Remicade Imuran	Enbrel Rituxan Actemra Kineret Cosenty	Benlysta Xeljanz Cimzia Orencia	Stelara Librium Librax Cytosan Adderall
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Your prescribing provider should help with monitoring these medications

You may continue taking the following medications:

- Cholesterol medications
- Psychiatric medications
- Gabapentin
- Tylenol (regular, extra strength, arthritis)
- Ultram (Tramadol)
- Thyroid medications
- Ultracet
- Iron supplements
- Blood pressure medications – see additional instructions below regarding your blood pressure medication.

Preventing and Treating Narcotic-Induced Constipation:

- For constipation start Senna-S (Senna + Docusate) 2 days before surgery (can substitute with Senna and Docusate as separate medications)
- Take 2 tablets, twice a day starting 2 days before surgery - if you experience loose or watery stools, STOP using the Senna-S and resume it the night of surgery

Day Of Surgery Medication Recommendations:

You should NOT take the following blood pressure medications on the day of surgery:

- ACE Inhibitors. Common ACE Inhibitors include:
benazepril (Lotensin), captopril (Capoten), enalapril (Vasotec), lisinopril (Prinivil, Zestril), quinapril (Accupril)
- Angiotensin Receptor Blockers (ARBs). Common ARBs include:
losartan (Cozaar), olmesartan (Benicar), telmisartan (Micardis), valsartan (Diovan)
- Diuretics. Common diuretics include:
hydrochlorothiazide (HCTZ, Microzide), furosemide (Lasix) spironolactone (Aldactone), triamterene (Dyrenium), chlorthalidone, bumetanide(Bumex)
- Pills that contain combinations of ACE Inhibitors, ARBs or diuretics
triamterene + hydrochlorothiazide (Dyazide, Maxide), spironolactone + hydrochlorothiazide (Aldactazide), amiloride +hydrochlorothiazide (Moduretic), bisoprolol + hydrochlorothiazide (Ziac), amlodipine +benazepril (Lotrel), captopril and hydrochlorothiazide (Capozide), enalapril + hydrochlorothiazide (Vaseretic), losartan +hydrochlorothiazide (Hyzaar), bisoprolol + hydrochlorothiazide (Ziac), metoprolol + hydrochlorothiazide (Lopressor HCT)

It is OK to take the following blood pressure medications on the day of surgery (with a small sip of water):

- Beta blockers. Common beta blockers include:
atenolol (Tenormin), metoprolol (Lopressor, Toprol), carvedilol (Coreg), propranolol (Inderal), acebutolol, bisoprolol, nadolol, penbutolol, pindolol
- Calcium channel blockers. Common calcium channel blockers include:
amlodipine (Norvasc), diltiazem (Cardizem, Tiazac), nifedipine (Procardia), verapamil (Calan, Verelan, Covera-HS, nicardipine (Cardene SR), felodipine
- Vasodilators. Common vasodilators include:
hydralazine, minoxidil, clonidine (Catapres), doxazosin (Cardura)

What To Expect The Day Of Surgery

The surgical facility will inform you of your check in time at least 24 to 48 hours in advance of your scheduled surgery and we appreciate your timely arrival.

Pre-operative Area

In the pre-operative room, your nurse will take your vital signs, review your medical and social history, and start your intravenous (IV) access line. You will visit with your surgeon, anesthesiologist, and the other members of the care team, who will be available to answer any additional questions prior to your surgery.

During your time in the pre-operative area, you and your support person will receive updated information on what you can expect throughout the day as you progress through your subsequent phases of care. The phases of care during your surgical experience include your pre-operative phase, surgical procedure, recovery phase and preparation for discharge. Our team anticipates you will be able to discharge home the **SAME DAY OF YOUR SURGERY**. You will work with our surgical team to ensure you meet our criteria to safely discharge home.

Anesthesia

Our anesthesia team is made up of board-certified anesthesiologists who specialize in orthopedic procedures and regional nerve blocks. They work alongside Certified Registered Nurse Anesthetists (CRNAs) to provide a comprehensive anesthesia care team to monitor you throughout your surgical experience. Your anesthesiologist will speak to you before surgery to discuss any health concerns and types of anesthesia that will be used during surgery. He or she will explain the risks and benefits associated with the different anesthetic options, as well as any complications or side effects that can occur with each type of anesthetic.

Comprehensive Anesthesia:

The combined use of general and regional anesthesia has been shown to reduce postoperative pain and narcotic pain medication requirements and complications related to anesthesia. Your anesthesiologist will speak to you directly regarding the benefits of both approaches and how this approach is optimal for your individualized surgery.

General Anesthesia:

- General anesthesia is administered, which requires a breathing device placed after you are asleep to protect your airway and removed prior to you being woken up.
- You will be fully asleep during your surgery. With modern techniques patients are now able to wake up in the recovery room with almost no nausea, vomiting or confusion.

Regional Anesthesia: Peripheral Nerve Blocks

- Your anesthesiologist will discuss with you the various options for regional nerve blocks. He or she will customize an anesthesia plan based upon your medical history and surgical procedure.

A nerve block is a procedure used to temporarily numb the nerves to a surgical area to minimize pain and the subsequent need for narcotic medications for the first few hours or days. This block is performed with the use of specialized ultrasound to ensure accuracy and “bathes” the nerve with anesthetic medication.

Preparing for Discharge

Phase One: Recovering from surgery

After surgery, you will be transferred from the operating room to a recovery area where you will stay for 1-2 hours as you wake from surgery. Your nurse and anesthesiologist will closely monitor your vital signs and manage your pain. If any surgical drains are used for your surgery, they may be removed.

Phase Two: Discharge planning

Once your vitals are stable, you will begin to mobilize with nursing assistance using an assistive device (crutches, walker or knee scooter). During this phase, the care team will review mobility, home safety and activities of daily living that can be directly affected by your surgery. Your discharge nurse will review your discharge instructions with you AND your support person. Your discharge instructions will address pain management, infection prevention, blood clot prevention measures and surgeon specific instructions..

In order to be safely discharged, you must meet the following criteria:

- Able to tolerate a regular diet
- Have met mobility goals with physical therapy
- Pain is at a tolerable level

What To Expect After Surgery

EXPECT TO HAVE PAIN AFTER SURGERY. Ankle replacement surgery is a major operation and can be very painful. Although we cannot eliminate all your pain, we want it to be tolerable enough so that you are able to rest, recover and safely participate in your daily activities. This is accomplished with appropriate pain medications in addition to ice, elevation, and positioning. You may have pain that is greater while you are mobilizing for the first several weeks due to normal swelling in the foot and ankle that occur with gravity. Patients often describe throbbing and pulsating in the foot/ankle when the leg is down, which is relieved with elevation-this is a normal part of the recovery process.

Ice and elevation are essential strategies to help reduce swelling. If the surgical splint/dressing is a barrier to icing the ankle, then you may place ice behind the knee to indirectly ice the leg. You may use ice packs or the cold therapy unit. Always keep a barrier between the ice pack or cold therapy unit and your skin. Elevate your leg, especially after you have been up walking or standing for prolonged periods. This is accomplished laying on a couch or in bed with one or two pillows positioned lengthwise to elevate your ankle above the level of your hip.

Sleeping may be difficult in the first several weeks. This is commonly due to the combination of physiologic stress of surgery on your entire body, your post-operative medications and a change in your activity level. Napping during the day is normal, but may make sleeping at night more difficult. If sleeping is an issue please let our team know for further guidance.

Fatigue is also common following surgery for the same reasons outlined above. Eventually, you WILL get your energy back, but this may take several weeks or even several months for some people.

Although you may experience a decrease in appetite, surgery is a stress on your body and increases the need for adequate nutrition. If your appetite has decreased, eat smaller, more frequent well-balanced meals. Remember to drink water and stay hydrated.

Pain medications can cause constipation. Chewing gum, contraction of your abdominal muscles and mobilization to reduce sedentary activity can all assist with mechanical efforts to improve motility of your gastrointestinal tract. Please be sure to stay hydrated and continue laxatives/stool softeners while on pain medication to decrease constipation risk.

It is common for some patients to experience nerve irritation for several weeks to months following surgery around the ankle. This irritation is due to the mobilization of the nerves during the surgery and inflammation that occurs around the nerves and ankle following the procedure. Most patients will experience some form of numbness, tingling, burning, pins & needles or electrical sensations around the foot and ankle. These are normal and improve slowly over several weeks to months. Symptoms are often worse when the leg is allowed to hang down, such as traveling to/from the bathroom. Symptoms generally improve initially in the upper leg, then towards the toes last. If symptoms do not improve, please make sure to notify your surgical team at your next visit. If these symptoms are worsening, particularly while you are in your surgical dressing, you must contact your surgeon.

Medications after Surgery

You will be on SOME of these medications based on your personalized medication plan. Please see a detailed discharge medication list for your personalized medication plan given to you at the surgical facility.

Please review your detailed discharge medications for recommendation of your personalized blood thinner which minimizes your risk of a blood clot after surgery. Either Aspirin or a prescription based blood thinner will be used based on your medical and personal risk profile. Please note, you will only be on **ONE** of these agents and they should not be combined.

Aspirin: 81mg tablet to be taken twice a day for **28 days** after surgery to help prevent blood clots

-OR-

Lovenox (Enoxaparin): 40mg injection administered daily for 14 days after surgery to help prevent blood clots.

-OR-

Xarelto (Rivaroxaban): Take one tablet daily for 14 days after surgery to help prevent blood clots.

-OR-

Eliquis (Apixaban): Take one tablet twice a day for 14 days after surgery to help prevent blood clots.

Opioid Pain Medications for pain control

These medications are as needed for pain and will be prescribed at the time of your discharge from the surgical facility based on your history and tolerance.

Oxycodone: Short-acting pain pill to be used as needed for breakthrough pain. You may take 1-2 tablets every 4-6 hours.

-OR-

Hydrocodone/Acetaminophen (Norco): Short-acting pain pill to be used as needed for breakthrough pain. You may take 1-2 tablets every 6 hours. This medication contains Acetaminophen (Tylenol) and is NOT to be used with over-the-counter Tylenol and NOT to exceed 3,000mg daily.

OPTIONAL and will be prescribed at your surgeon's discretion based on your surgery and medical history.

Prescription Muscle Relaxant

This medication may be prescribed and is used as needed to treat muscle spasms after surgery.

Robaxin (Methocarbamol): Take prescribed dose every 8 hours as needed for muscle spasms.

Prescription Non-Steroidal Anti-Inflammatory (NSAID)

Meloxicam (Mobic): Take prescribed dose for a total of 4 weeks after surgery. Make sure you take this medication with food. DO NOT use any over the counter NSAIDS (Advil, Motrin, Ibuprofen, Aleve, Naproxen) while taking Meloxicam.

Prescription Nausea Prevention

Ondansetron (Zofran): Nausea medication to be used as needed. You may take one tablet every 4-6 hours..

Over The Counter(OTC) Pain Medication

Acetaminophen (Tylenol): 650mg every 6 hours as needed for mild-moderate pain, headache or fever. Do NOT exceed 3,000mg of Tylenol daily.

Over The Counter(OTC) Constipation Prevention

Senokot-S (Senna Plus): Stool softener/laxative for constipation. Take 2 tablets twice a day starting 2 days before surgery until you are off all narcotics. May additionally utilize over the counter alternatives(if needed) to include: Miralax, Milk of Magnesia, Magnesium Citrate. If you are not passing gas, having increased abdominal pain/bloating, or unable to keep liquids down please contact your primary care provider for further instructions.

Post-Surgical Office Visits

- We will ask you to return to the office at routine times after your discharge from the surgical facility. The initial follow up appointment has been made prior to your surgery. If you are unaware of your appointment date, time or location please feel free to email your surgeon's team or call our office at 303-233-1223 for verification.
- Please consult with your surgeon regarding the specific followup time frames. It is important to come in for routine evaluations and medical imaging of your ankle even if you are feeling great. This recommendation is to monitor the implant for any signs of loosening, wear or early failure that may need to be addressed ahead of the ankle becoming symptomatic.
- Should you desire to schedule a visit for any reason you are always welcome to do so.

Financial Information

Financial Information

We understand that financial planning is an important step toward feeling prepared and informed about your upcoming surgery. Please expect Panorama Orthopedics to collect at least 60% of the bill due for surgery in advance of your surgery date. This amount is based on the amount that you are responsible for according to your insurance plan (i.e. deductible, copay, or co-insurance). You may anticipate additional billing from the surgical facility and anesthesia team that is not included in Panorama's bill.

If needed, a payment plan may be created to help manage the cost of surgery. This typically involves monthly payments and requires a credit card on file where monthly charges are made.

If you have questions regarding your bill, please contact our Billing Customer Service Team at:

CustomerServiceTeam@panoramaortho.com

720-497-6637 (M-F 7:30 a.m. - 4:00 p.m.)

FAQ's

1. I need a refill of my surgical medications. Who do I call?

If you need a refill of your medication at any point, please reach out to the surgical team's communication mail box for a timely response. Additionally, you may call Panorama's Prescription line (720-497-6662) and follow the prompts. Please be aware that requests made after 3pm are handled the next business day. Weekend or holiday requests will be handled on the next business day.

2. I went home with oxygen; how long do I need it and how do I get rid of it?

Occasionally, patients are sent home from the surgical facility with oxygen to help improve breathing for the initial 2 weeks. The decision to put you on oxygen is made by the internal medicine providers and respiratory therapists at the surgical facility. Prior to discontinuing home oxygen, contact your primary medical provider for an evaluation. If discontinuation of oxygen is recommended, please contact the oxygen company on the form that was given to you at the time of your discharge. Most often, there is a contact phone number on the oxygen tank or equipment. If you are unable to locate this contact information, please contact the Respiratory Department at the surgical facility for further instruction to set up a date and time to pick up the oxygen tank.

3. What is the healing process like after an ankle replacement?

Expect to go home the same day of your ankle surgery. Prior to your discharge, you should expect to mobilize with the nursing team using crutches, walker or a knee scooter as you will NOT be able to put weight on your surgical leg for the first several weeks. When you first begin to mobilize, you may have pain and this is normal. Pain generally improves dramatically in the first several days and weeks after surgery. The first 2 weeks are generally the most difficult. Ice and elevation are essential strategies to help reduce swelling and pain. You may apply ice behind the ankle and/or knee when at rest. You may use ice packs or the cold therapy unit. Always keep a barrier between the ice pack or cold therapy unit and your skin. Elevate your leg, especially after you have been up walking or standing for prolonged periods. This is accomplished laying on a couch or in bed with one or two pillows positioned lengthwise to elevate your ankle above the level of your hip, or heart if possible.

4. How long is the surgery?

Depending on the complexity of your individual surgery, most ankle replacements will take 1.5-3 hours to complete.

5. When can I drive?

Do not drive until you are cleared by your surgeon AND off all pain medications. Do not drive while in the post op splint, cast or in a walking boot as this can impair your ability to drive and jeopardize your safety and the safety of those around you.

6. When can I return to work? How do I get a disability or FMLA paperwork signed?

Patients will likely remain under some level of work restrictions for the first few weeks after surgery. Please be sure to speak with your surgeon before returning to work as recovery time is individualized based on your specific surgery. Time off of work should be arranged between you and your employer based on your office's policy and your post surgical restrictions. Panorama Orthopedics will not take patients off work, but we are able to provide you with work restrictions to keep you and your ankle safe. Please obtain the appropriate paperwork from your Human Resources team at work, which can be emailed or faxed to your surgeon's team. Please email any disability or FMLA paperwork to the provider communication email box. Please allow for 5-7 business days for completion of paperwork.

7. Will I need physical therapy when I go home?

Physical therapy is an important part of your recovery and ensures you have the best outcome possible. Physical therapy will begin in the first few weeks after your surgery and your surgeon will provide you individualized recommendations based on your surgical procedure.

Please see a detailed list of physical therapy locations and their contact information on **page 41** of this packet. Please work with your insurance company to determine "in network" locations and possible co-pays. Please make sure to arrange transportation to and from therapy sessions until cleared to drive by your surgeon.

8. What equipment will I need at home?

Most patients will use crutches, a walker or a knee scooter after surgery. Please expect to not be able to walk on your ankle for the first few weeks after surgery based on your surgeon's recommendations. If you borrow or purchase one of these devices please bring it with you to the surgical facility and the care team can utilize this device during your session. Please be prepared that most insurances will not cover multiple ambulatory devices, but flexible spending accounts (FSA's) or health savings accounts (HSA's) can be used to cover additional medical expenses. Please contact your insurance carrier for your specific coverage guidelines. Panorama Orthopedics & Spine Center offers the option of purchasing some forms of medical equipment, whereas some may need to be purchased or rented elsewhere. Please contact the DME office at 303-233-1223 ext 1600 or DME@panoramaortho.com for questions and availability.

9. Why do I have to take all these medications after my surgery?

Medications after surgery are prescribed to help ensure a safe and comfortable recovery.

Blood thinners are necessary to help prevent blood clots. IF YOU ARE HAVING A SIDE EFFECT FROM THE BLOOD THINNER PLEASE CALL YOUR SURGEON PRIOR TO STOPPING, AS THIS IS A NECESSARY MEDICATION.

Pain medications help decrease your discomfort after surgery. Your surgeon will use a “multimodal” pain control program, which has been clinically proven to be more effective after ankle replacement surgery. Multimodal pain control uses different types of medication, which can improve your pain and mobility, thus decreasing the need for narcotic pain medications.

Please refer to your discharge medication list provided by the surgical facility at the time of your discharge for instructions on the proper way to administer and wean off these medications.

10. When can I shower or bathe?

You will be in a splint after your surgery. This is NOT waterproof and you will need to keep this surgical dressing clean and dry until your sutures are removed to prevent infection. Do not remove your dressing until seen at your follow-up appointment. Cover your splint for showering. Commercially available waterproof cast covers are available in stores or online to protect your dressing during bathing. If you would like to purchase these covers from Panorama, please contact the DME office at 303-233-1223 ext 1600 or DME@panoramaortho.com for questions and availability. Please avoid soaking your ankle in tubs or baths until cleared by your surgeon or care team.

11. What should I do to avoid or alleviate constipation?

While taking narcotic pain medication, it is important to be aware of constipation. Continue to stay hydrated and increase intake of high fiber foods. Additionally, please start taking a stimulant laxative (Senna) two before surgery and continue it twice daily until you have a normal bowel movement or while taking narcotic pain medication. Stop the stimulant laxative if you start to experience loose or watery stools. If you continue to have constipation you can take Milk of Magnesia, Miralax or Magnesium Citrate, which are stronger laxatives. If constipation persists, it is safe to try Dulcolax suppositories or a Fleets enema. All of these medications can be bought over the counter at your pharmacy. Chewing gum, contraction of your abdominal muscles and mobilization to reduce sedentary activity can all assist with mechanical efforts to improve motility of your gastrointestinal tract. Please be sure to stay hydrated and continue laxatives/stool softeners while on pain medication to decrease constipation risk.

If you are not passing gas, having increased abdominal pain/bloating, or unable to keep liquids down please contact your primary care provider for further instructions.

12. When can I travel? Do I need a special card to give to the security agent for screening?

There are no formal travel restrictions following your ankle replacement, but we do recommend you walk frequently to avoid blood clots and stiffness. You do NOT need a special card or note for TSA or the airlines. Simply inform the security agent you have an ankle replacement and they will screen you appropriately. Consider arranging transportation from airport security to your gate through your airline carrier to avoid excessive walking on your ankle replacement for the first 2-3 months.

Appendix

Nutritional Guidelines

Surgery can stress your body, but if you prepare for it, you can reduce the stress. Improving your nutrition can have a significant impact on the speed and quality of your recovery. If able, increasing your activity will help prepare your body for surgery. Please note, if you use tobacco products, quitting is essential.

Good nutrition is important before and after surgery as part of your treatment and recovery plan. Eating healthy foods and a variety of foods will help you heal faster.

A balanced diet that includes a variety of fruits and vegetables offers many health benefits. Fruits and vegetables have antioxidant and anti-inflammatory properties that are essential for good health. To follow a balanced and healthy eating pattern:

- Fruits and vegetables: Select a variety of five or more servings a day. These plant foods have phytochemicals (plant chemicals) that provide health benefits for the body.

Vegetables high in phytochemicals include broccoli, cauliflower, kale, cabbage and brussels sprouts.

Eat the rainbow – choose fruits and vegetables of every color to increase your variety.

- Lean protein: Include a source of protein at each meal. Protein is an important nutrient needed to make and repair cells in the body and an increase in protein is required after surgery. Healthy sources of proteins include poultry, lean cuts of pork, fish, dried beans, low fat cheese and milk, Greek yogurt, legumes, and nuts. Avoid fried foods, and fatty meats.

- Limit refined sugar intake (sugar-sweetened beverages, desserts, etc.).

- Stay hydrated with plenty of water. □ If you have diabetes, make sure your blood glucose is under control prior to surgery.

Use the ChooseMyPlate.gov guidelines from the USDA as a model of a healthy diet. For more nutrition and meal planning resources, please visit Academy of Nutrition and Dietetics: www.eatright.org

Chlorhexidine Gluconate (CHG) Pre-Op Bathing Instructions

Panorama follows a standardized process for the prevention of surgical site infections. Below is a summary of the things you can do to help.

PLEASE READ ALL INSTRUCTIONS COMPLETELY PRIOR TO

BATHING All Surgical Procedures

- ☐ Most drug stores will carry small bottles(8oz) of chlorhexidine gluconate (4% CHG) that you may purchase for about \$5.00. Look for Hibiclens® or Dyna-Hex®, or ask the pharmacist. This is also available to purchase at our DME stores.

NOTE: this product will not be covered by insurance

- ☐ The night before surgery, place a fifty-cent piece size of CHG solution onto a clean washcloth and apply it to all body surface areas (excluding face, hair and genitals). Wash thoroughly with special attention on the area where your surgery will be. Use additional soap when needed to cover all areas.
- ☐ At the end of your shower, wait 2 minutes before rinsing the soap-like material off of your skin surfaces. Use a clean towel to pat dry.
- ☐ Do not apply lotions or creams to your surgical extremity.
- ☐ If possible, sleep in clean pajamas and on clean sheets the night before surgery.
- ☐ Do not shave the area of surgery. Do not shave legs 7 day prior to ankle surgery
- ☐ DO NOT use this product on your body or incision after surgery.

CAUTION: Do not use Chlorhexidine/Hibiclens on the face, eyes, ears, or mouth and avoid use in genital area. If you accidentally get some of the soap in those areas, rinse immediately. If you experience burning or irritation on the skin, rinse immediately and do NOT reapply.

Appendix

DONJOY Iceman Classic 3 Cold Therapy Unit

Cold therapy unit helps patients and medical practitioners easily manage post-operative pain and swelling, speeding up patient recovery and rehabilitation. The cold therapy unit can be purchased at the locations listed below. No appointment or reservation is needed to pick up. Please call to confirm availability (303-233-1223 ext.1600).

Item Price: \$195.00 plus tax (this item is not billable to insurance).



Westminster	Golden	Highlands Ranch
14190 Orchard Parkway Suite 200 Westminster, CO 80023	660 Golden Ridge Rd. Suite 250 Golden, CO 80401	1060 Plaza Drive Suite 200 Highlands Ranch, CO 80129

User Tips:

- If you are planning on bringing your cold therapy unit to recovery after surgery please leave it **sealed** in the box.
- Frozen disposable plastic water bottles can be used as a “reusable” ice cube. You can fit 3-4 standard size (16.9 oz.) water bottles inside the unit. Keep an additional 3-4 in the freezer to swap back and forth. **Be sure to take the labels off of the disposable plastic water bottles in order to prevent the paper from coming off in the water and clogging the motor.** Refresh the water daily to help keep the unit sanitary.
- Patients should ice 20 minutes on and 40 minutes off unless instructed otherwise by your provider. The easiest way to remember this is to ice for 20 minutes every hour on the hour.
- To clean, circulate warm water and 1-2 Tablespoons of white vinegar. Be sure to clean prior to storing.
- All units are non-refundable once they have been used. The unit has a 6 month manufacturer’ warranty. If any manufacturer issues arise with the unit please bring it to the point of purchase with the receipt in order to repair or replace the unit. **We are not able to honor warranty replacements without a receipt present.**

For questions **please call: 303-233-1223 ext. 1600.** If we are unable to answer please leave a voicemail. We aim to respond within 24 hours.

Panorama Physical Therapy Locations

Central Scheduling | 303-274-7330 | panoramaortho.com

Panorama Physical Therapy Golden

660 Golden Ridge Road
Suite 130
Golden, CO 80401

Panorama Physical Therapy at Bradburn

4550 Main Street
Suite #200
Westminster CO 80031

Panorama Physical Therapy Westminster

14190 Orchard Parkway
Westminster, Co 80023

Panorama Physical Therapy at Candelas

18068 W 92nd Lane
Suite 200
Arvada, CO 80007

Panorama Physical Therapy The Institute

1060 Plaza Drive
Suite 110
Highlands Ranch CO 80129

Panorama Physical Therapy at Town Center

1265 Sergeant Jon Stiles Drive
Suite D
Highlands Ranch CO 80129

Panorama Physical Therapy in Littleton

5005 S Kipling Parkway
Unit A-4
Littleton CO 80127

Panorama Physical Therapy Lakewood

437 S Wadsworth Blvd
Unit G
Lakewood CO 80226

Panorama Summit Orthopedics Frisco 68

School Road
Suite 150
Frisco CO 80443

**For Appointments: 303- 233-
1223 Panoramaortho.com**

Notes



PANORAMA
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www.panoramaortho.com