

Shoulder Replacement Guidebook



PANORAMA
Orthopedics & Spine Center



Welcome

Using this Guidebook

Your shoulder replacement team, is 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 shoulder replacement experience possible.

Panorama Orthopedics & Spine Center performs more shoulder replacements than any group in the Rocky Mountain region, which has helped us develop the most complete shoulder replacement program available.

Please take the time to review this guidebook, as it has been prepared to specifically educate you on the surgical process and answer many common questions. 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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Shoulder Replacement

Brief Overview

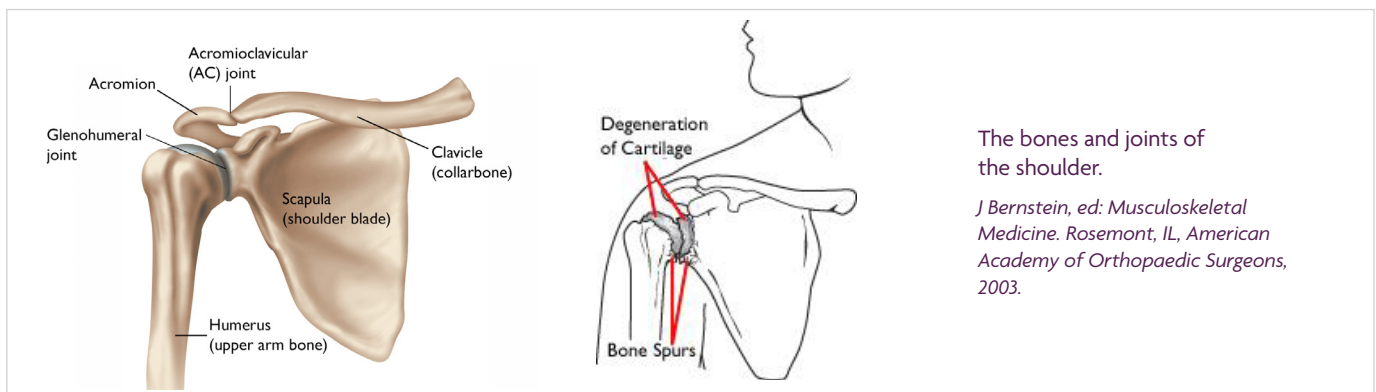
Your shoulder is made up of three bones: your upper arm bone (humerus), your shoulder blade (scapula), and your collarbone (clavicle). The head of your upper arm bone fits into a rounded socket in your shoulder blade. This socket is called the glenoid. A combination of muscles and tendons keeps your arm bone centered in your shoulder socket. These tissues are called the rotator cuff.

There are two joints in the shoulder, and both may be affected by arthritis. One joint is located where the clavicle meets the tip of the shoulder blade (acromion). This is called the acromioclavicular (AC) joint. Where the head of the humerus fits into the scapula is called the glenohumeral joint.

Shoulder arthritis is common and can greatly impact your life, resulting in shoulder pain and limiting your shoulder motion. These limitations can affect your quality of life and make daily activities challenging and sometimes impossible. While this problem has seriously impacted your life, a joint replacement can offer significant pain relief, improved function, and enhance your overall quality of life.

To provide you with an effective treatment, your surgeon will perform a detailed medical history, physical examination and medical imaging of your shoulder to determine which joint is affected and what type of arthritis you have. There are 5 common types of arthritis that affect the shoulder. The most common form of shoulder arthritis is osteoarthritis and occurs with “use and overuse” of your shoulder throughout your life. This condition occurs as the smooth cartilage of your shoulder is worn down and with periods of movement these rough surfaces rub together causing you pain. Additionally, arthritis can occur as a result of Rheumatoid (Autoimmune) disease, trauma or fracture, AVN (Avascular Necrosis) or rotator cuff tear arthropathy.

For more information about shoulder arthritis please see the American Academy of Orthopaedic Surgeons website at: <https://orthoinfo.aaos.org/en/diseases--conditions/arthritisof-the-shoulder/>



Shoulder Replacement

Brief Overview

Your surgeon may recommend shoulder replacement surgery if other strategies to improve your shoulder pain and function are ineffective. In a shoulder replacement surgery, the damaged arthritic surfaces are removed and replaced with metal and plastic surfaces. Based on your history, medical imaging and an extensive examination your surgeon will determine the size, type and method used to ensure the optimal fit and outcome.

There are 3 common surgical replacement (arthroplasty) options in the shoulder:

Hemiarthroplasty- in this procedure just the head of the humerus is replaced by an artificial metal surface.

Total Shoulder Arthroplasty- in this procedure the head of the humerus and the glenoid are replaced. A plastic “cup” is fitted into the glenoid and a metal “ball” is attached to the top of the humerus.

Reverse Total Shoulder Arthroplasty- in this procedure, the ball and socket are “reversed” compared to a standard total shoulder arthroplasty. The metal ball is fixed to the glenoid and the plastic cup is fixed to the top of the humerus.

Shoulder Hemiarthroplasty



Total Shoulder Arthroplasty



Reverse Total Shoulder Arthroplasty



How to Contact Us

MyChart

We recommend all of our patients sign up for Mychart, the Epic patient portal. Mychart can be used to send clinical questions and requests to your care team, request prescriptions, appointment scheduling, viewing test results, and accessing your medical record.

If you need assistance, the Mychart help desk can be reached at 866-414-1562

Main Phone Line – 303-233-1223

Select option 3 will navigate you to your care team and other options including:

- Billing
- Authorization
- Durable Medical Equipment
- Medical records

After Business Hours:

Please call 303-233-1223 if you have urgent clinical questions. You will be connected to an after hours provider on call. If your call is not for an urgent medical issue, you will be redirected to contact us the next business day.

Email:

Please refer to the information provided by your care team for their direct email address.

Facility Locations and Contact Information

OrthoColorado Hospital

11650 W. 2nd Place
Lakewood, CO 80228
Main Line 720.321.5450 for Class Scheduling or
Pre-operative Testing Questions
.orthocolorado.org/education

St. Anthony Hospital

11600 W. 2nd Place
Lakewood, CO 80228
Main Line 720.321.0000
centura.org/locations/st-anthony-hospital.org

Littleton Adventist Hospital

7700 S. Broadway
Littleton, CO 80122
303.738.2750 Pre-operative Testing Questions
303.738.2721 or email LAHMainOrPreOp@Centura.org
for Class Information (Now on Zoom/PDF)
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 Class Scheduling
centura.org/locations/st-anthony-north-health-campus.org

Centennial

14200 E Arapahoe Road
Centennial, CO 80112
303.269.3493 Pre-operative Testing Questions
and Class Scheduling
healthonecares.com/campaigns/centennial-medical-center.org

SkyRidge Medical Center

10101 Ridgeway Pkwy
Lone Tree, CO 80124
720.225.1000
healthonecares.com/locations/sky-ridge

South Denver Surgery Center

300E. Mineral Ave., Suite 9
Littleton, CO 80122
720.360.3400
southdenversc.com

Surgery Scheduling and Requirements

1. Finalize with your surgeon that you wish to proceed with shoulder replacement surgery.
2. Complete additional presurgical medical history questionnaire specific to becoming a surgical candidate.
3. You will be contacted by a surgery scheduler to schedule your surgery.
4. If you would like financial guidance or information about what your insurance plan will cover, please refer to detailed financial information in this booklet for answers to questions regarding billing and insurance.
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 know your surgery date. 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 **REQUIRE** that you attend a pre-surgery education class to help prepare you and answer any questions. Please refer to the surgical facility contact information page to arrange your pre-surgical education class. These classes are also available online for your convenience.
7. We ask you to have a family or friend support person that can attend the class with you, take you home from the surgical facility, and assist you while recovering at home. You should prepare support at home for 72 hours after surgery while you make your initial recovery.

Pre-operative Surgery Checklist

45 Days Before Surgery

- Schedule your medical clearance appointment with your primary care provider ASAP. If your procedure is scheduled at Littleton Hospital, you can complete this process at their Pre-Admission Testing Clinic. Failure to complete medical clearance is a common cause for surgery delay and cancellation.
- Please anticipate seeing any specialist who has provided care to you in the past 12 months (i.e. cardiology, pulmonology).
- Make a discharge plan to include a family or friend support person that can attend the class with you, take you home from the surgical facility and assist you while recovering at home.
- Schedule pre-surgery shoulder class. (Please have your support person plan to attend class with you). Please refer to the surgical facility contact information page to arrange your pre-surgical shoulder education class.

30 Days Before Surgery

- Begin pre-operative exercise listed in this booklet 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 physician communication email box at least 2 weeks prior to your surgery.
- Please contact central scheduling at 303-274-7330 to schedule your first outpatient therapy session. Your surgeon recommends that you have your first formal therapy session with outpatient physical therapy 2-3 weeks after your shoulder replacement surgery and expect to have 2 sessions/week. Please arrange transportation to these biweekly sessions for the first 2 weeks or until cleared by your surgeon to drive.
- Consider purchasing a Cold Therapy Unit. These are available for purchase at our DME stores (303.233.1223 ext 1600). If your surgery is scheduled at St. Anthony North, please contact the hospital for information about obtaining a Cold therapy Unit. 1

Pre-operative Surgery Checklist

- 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 3 months prior to joint replacement surgery.
- Review infection prevention instructions. 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 attempt to stop smoking before surgery. Tobacco containing products can increase your risk of infection and complications after surgery. If you are unable to stop smoking, please ABSTAIN for 24 hours before your surgery and at least 48 hours after surgery. All surgical facilities are non-smoking facilities. If you need help with smoking cessation, please visit www.coquitline.org or call 1-800-QUIT-NOW.

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.
- Some commonly used medications need to be stopped 7 days prior to surgery. Please review detailed medication recommendations by your surgeon.
- You will receive a call from the surgical facility PATT department (pre-admission 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. They will also give you individualized medication instructions. Prior to your call, please have an updated list of all medications, vitamins and supplements ready.
- You will receive a call from the surgical facility surgery scheduler 24-48 hours prior to your surgery with the time of your surgery.

Pre-operative Surgery Checklist

- Please refrain from shaving the area of your surgery (including underarms) 7 days prior to your surgery date to avoid cuts or nicks.
- Please review instructions to ensure a safe home environment prior to your return home. 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 the nutritional guidelines page for a reference to improve your nutrition and prepare your body for surgery.
- Confirm your first post-op appointment date and time.

Night Before Surgery

- PLEASE** shower using Chlorhexidine (Hibiclens) to help prevent infection. Please review the appendix 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 gum chewing, mints and all tobacco products. Please be advised that if these guidelines are not followed your surgery will be cancelled.

Pre-operative Surgery Checklist

Day of Surgery

- Only take the medications you have been instructed to take the day of surgery with a small sip of water.
- Do not apply lotions, deodorants or perfumes.
- Please bring with you eyeglasses, hearing aids, dentures or any device needed to aid in your care. If you have a Cold Therapy Unit (ice machine) please bring it with you. Please leave jewelry or valuables at home.
- Wear an oversized overhead t-shirt and loose fitting pull on pants or shorts for returning home. We recommend wearing comfortable closed heel slip on shoes.
- 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 post-op return. Use the checklist below as a helpful resource:

- Clean up and declutter your house allowing for walking paths large enough for you to pass with a walker. This is especially important on your path from where you will spend most of your time and the bathroom.
- 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.
- Arrange items in kitchen, bathroom and bedroom to be easily accessible without having to lift or bend, including your phone and a phone charger.
- 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 Recovery Team

Discharge planning is a very important step of preparing for a same-day shoulder 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 shoulder replacement, we suggest a family or friend 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 needs are 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 shoulder replacement. Your support person is encouraged to participate in all facets of the surgical process to include joint class, day of surgery process, and therapy/surgeon visits.

Shoulder Physical Therapy Exercises

Strong, healthy individuals recover significantly faster. You are encouraged to walk 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 shoulder surgical interventions.

UPPER EXTREMITY STRETCHING

These stretches are safe to perform prior to surgery in a pain-free range



UPPER TRAPEZIUS STRETCH

While sitting in a chair, hold the seat with one hand and use other hand to slowly bend your head to the opposite side. You should feel a stretch to the side of your neck.

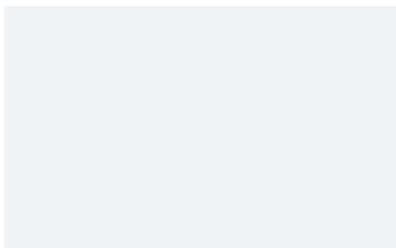
3 sets, 30 second hold, 1-2x/day



LEVATOR SCAPULAE STRETCH

While sitting in a chair, hold the seat with one hand and using the other arm rotate head and gently pull towards armpit. You should feel a stretch on the back side of your neck.

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



PECTORALIS MAJOR DOORWAY STRETCH

While standing in a doorway, place palms on door frame with your arms at waist height. Gently lean in until a stretch is felt along the front of your chest and/or shoulder. Step forward to feel the stretch, do not lean on your shoulders.

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

Shoulder Physical Therapy Exercises



PENDULUMS

Lean forward on table with affected arm hanging down. Slowly rotate at hips to create a circular motion with arm. Repeat in clockwise and counterclockwise direction

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



TABLE SLIDE FLEXION

Sit in a chair and place your affected arm on the table. Slowly slide arm forward until a stretch is felt. Hold, then return to starting position and repeat. It is ok to gently lean forward with your body.

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



TABLE SLIDE SCAPTION

Sit in a chair and place your affected arm on the table. Slowly slide arm out to side at a 45-degree angle until a stretch is felt. Hold, then return to starting position and repeat.

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



TABLE ABDUCTION

Sit in a chair and place your affected arm on the table. Slowly slide arm out to side until a stretch is felt. Keep elbow bent if needed. Hold, then return to starting position and repeat.

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

Shoulder Physical Therapy Exercises



CANE FLEXION

Laying on your back with a cane (or similar object) slowly raise cane above head until stretch is felt in shoulders.

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

SHOULDER STRENGTHENING

These strengthening exercises are safe to perform prior to your shoulder surgery in a pain-free range.



SCAPULAR RETRACTION

Squeeze shoulder blades together as if you were pinching a pencil between your shoulder blades. Try to avoid shrugging shoulders up.

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



BENT OVER ROW

Lean over on table with one arm for support, other arm hanging down. Pinch shoulder blade towards spine, bringing arm up in a rowing motion in line with torso. Allow elbow to bend as you pull your arm up. Can be performed with light weight in pain-free range.

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



BENT OVER SHOULDER EXTENSION

Lean over on table with one arm for support, other arm hanging down. Pinch shoulder blade towards spine, bringing arm back in a straight line up to height of your torso. Can be performed with light weight in pain-free range.

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

Shoulder Physical Therapy Exercises



BICEPS CURL

With arms hanging at your side, squeeze shoulder blades together and curl elbows up. This can be performed with light weight in painfree range.

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



TRICEPS KICKBACK

Lean on table with one arm for support, hold other arm at side in line with torso with elbow bent. Slowly extend at your elbow until arm is straight.

2 sets, 10 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

Stop all Antiplatelet* Medications such as:			
Aggrenox (aspirin + dipyridamole)	Plavix (clopidogrel)	Pletal (cilostazol)	Trental (pentoxil)
*If you have heart stents: DO NOT STOP Plavix or Aspirin until seen and directed by a cardiologist prior to surgery.			

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

Stop all birth control pills & any male/female hormones (including creams or patches) such as:		
Estrogens Estradiol Estraderm Estratest	Premarin Prempro Estrace	Ogen Emcyt Testosterone

Stop all herbal and weight loss medications such as:			
Alpha lipoic acid Cinnamon Chamomile Creatine Echinacea Acetyl L-Carnitine	L-Carnosine Ephedra Fish oil Garlic Ginko Milk Thistle	Glutamine Goldenseal Licorice Kava Ginseng	Skullcap Saw Palmetto St. John's Wort Turmeric

Medications To Stop Before Surgery

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 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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Contact your Primary Care Provider or specialist for instructions if you take any of the following medications:

Humira Remicade Imuran Enbrel Rituxan Actemra	Kineret Cosentyx Stelara Benlysta Xeljanz	Cimzia Orencia Librium Librax Cytoxan Adderall
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Your prescribing physician should help with monitoring these medications.

Day of Surgery Medication Recommendations

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 – Please see additional instructions on next page 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
- Pills that contain combinations of ACE Inhibitors, ARBs or diuretics

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), ifedipine (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 for your procedure and we appreciate your timely arrival. Once the registration process is completed, a pre-operative nurse will assist you to your pre-operative room.

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 other members of your care team who will be available to answer any additional questions. During your time in the pre-operative area, you and your support person will receive additional information on what you can expect throughout the day as you progress through the phases of care to prepare for discharge. The phases of care are pre-operative room, operating room, recovery room and discharge phase. Plan to go home the **SAME DAY OF YOUR SURGERY** when you meet all discharge criteria.

Anesthesia

The surgical facility anesthesia team is made up of Board Certified or Board Eligible Physician Anesthesiologists and Certified Registered Nurse Anesthetists (CRNAs). 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

What To Expect the Day Of Surgery

Anesthesia

The surgical facility anesthesia team is made up of Board Certified or Board Eligible Physician Anesthesiologists and Certified Registered Nurse Anesthetists (CRNAs). 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

General, Spinal and Regional Anesthesia

General Anesthesia

Anesthetic gas is administered, which requires a small breathing tube inserted after you are asleep and removed before you are awake. You will be fully asleep during your surgery.

Regional anesthesia: Peripheral nerve blocks (surgeon specific)

Your anesthesiologist may administer an indwelling nerve catheter(nerve block) with numbing medication to your operative leg. This block will help minimize pain and decrease the amount of narcotic pain medication needed after surgery, while still preserving the strength in your operative leg to allow for walking. The nerve catheter may provide pain relief for up to 5 days after surgery. Anesthesia will provide specific instructions and education prior to your discharge.

Preparing for Discharge

Post-Anesthesia Care Unit (PACU)

Phase One: Recovery Room

After surgery, you will be transferred to the recovery room where you will stay for 1-2 hours as you awaken from surgery. Your nurse and anesthesiologist will closely monitor your vital signs and manage your pain.

Phase Two: Discharge Phase

Once your vitals are stable, you will begin to mobilize with nursing assistance using your new sling. 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. Your discharge instructions will address medications, activity, pain management, infection, blood clot prevention 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
- Pain is at a tolerable level

What To Expect After Surgery

- **EXPECT TO HAVE PAIN AFTER SURGERY.** Shoulder 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 perform your therapy and daily activities. This is accomplished with appropriate pain medications in addition to ice, elevation, and positioning
- **Bruising and swelling are expected after surgery.** Initially, swelling and bruising will be mild. Over the first two weeks, expect swelling and bruising to spread down into the chest area and into the arm and elbow.
- **Ice is an essential strategy to help reduce swelling and improve pain.** Keep ice applied to the shoulder 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.
- **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 also is 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.

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.

Blood thinning medications to prevent blood clots

Please review your detailed discharge medications for recommendation of your personalized blood thinner. Either Aspirin or Eliquis will be used based on your medical history. In certain cases, other blood thinners may be used (Lovenox, Coumadin or Xarelto)

Aspirin: 81mg tablet to be taken twice a day for 30 days after surgery to help prevent blood clots.

AND

Protonix (Pantoprazole): Stomach protector. Take 1 tablet daily, in the morning to protect your stomach. You should continue to take this medication for 30 days while you take aspirin.

OR

Eliquis (Apixaban): 2.5mg table to be taken twice a day for 10 days after surgery to prevent blood clots.

Opioid Pain Medications for pain control

These medications are as needed 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.

AND

Protonix (Pantoprazole): Stomach protector. Take 1 tablet daily, in the morning to protect your stomach. You should continue to take this medication for 30 days while you take aspirin.

OR

Eliquis (Apixaban): 2.5mg table to be taken twice a day for 10 days after surgery to prevent blood clots.

Medications After Surgery

Prescription Muscle Relaxant

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

Robaxin (Methocarbamol): Muscle relaxant, take prescribed dose every 8 hours as needed for muscle spasms.

Prescription Non-Steroidal Anti-Inflammatory (NSAID)

Meloxicam (Mobic): Anti-inflammatory, 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-1000mg every 6 hours as needed for mild-moderate pain, headache or fever. Please refer to your surgical facility discharge medication list for your appropriate dosing instructions. DO NOT take Acetaminophen(Tylenol) if you are taking Norco for your opioid pain medication.

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 after surgery. May additionally utilize over the counter alternatives(if needed) to include: Miralax, Milk of Magnesia, Magnesium Citrate

Post-Surgical Office Visits

We will ask you to return to the office at routine times after your discharge from the surgical facility. You will be seen approximately two weeks and six weeks from the time of surgery for your post-surgical visit with your surgeon or physician assistant.

At two week visit:

- PLEASE bring in ALL of your post surgical medications that you are currently taking in their original bottles so your surgeon and care team can review and adjust them as needed.
- This appointment will include a physical examination with incision check and medication review.

At six week visit:

- This appointment will include a physical examination with incision check, medication review and possible X-ray of your new shoulder.

Please consult with your surgeon regarding the specific follow up time frames. It is important to come in for routine evaluations and medical imaging of your shoulder 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 shoulder becoming symptomatic.

Should you desire to schedule a visit for any reason you are always welcome to do so.

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.)

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

If you need a refill of your medication(s), please first check with your pharmacy if your medication has a refill already. If not, please contact your care team directly via MyChart, phone or email. Please be aware that requests after 3pm are handled the next business day. Weekend and 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 a shoulder replacement?

Expect to go home the same day of your surgery. On the day of surgery you should expect to walk with staff and your shoulder will be properly adjusted into your new sling to give your shoulder proper support. You will be educated on safe positions, restrictions and positioning tips for your new shoulder. The first few days are generally the most difficult. Ice and positioning are essential strategies to help reduce swelling and pain. You may apply ice to the shoulder 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.

4. When can I drive and return to work?

Do not drive until you are cleared by your surgeon AND off all pain medications. Do not drive while in your postoperative sling as this can impair your ability to drive and jeopardize your safety and the safety of those around you.

5. 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 shoulder safe. Please obtain the appropriate paperwork from your Human Resources team at work, which can be emailed to your surgeon's team. Please email any disability or FMLA paperwork to the physician communication email box at least 2 weeks prior to your surgery for timely completion.

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

You are recommended to start going to outpatient physical therapy 2-3 weeks after your surgical date. Please see a detailed list of physical therapy locations and their contact information on page 34 of this packet. Please work with your insurance company to determine "in network" locations and possible co-pays. Physical therapy typically lasts for 6-8 weeks, so please make sure to arrange transportation for the initial recovery period or until cleared to drive by your surgeon.

7. When can I shower or bathe?

You will be in a sling after your surgery. This is NOT waterproof and you will need to remove your sling for the shower. You may shower with your surgical arm directly at your side or place your hand on your stomach in the sling position. The surgical dressing on your shoulder incision is waterproof and may get wet from a shower. DO NOT submerge your shoulder in a bath, pool or hot tub until cleared by your surgeon. Please make sure someone is home for the first 2-3 showers to assist you and make sure you do not become lightheaded or fatigued

8. 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.

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

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

There are no formal travel restrictions following your shoulder 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 a shoulder replacement and they will screen you appropriately.

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

Appendix

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. These are also available for purchase at Panoramass DME Store.

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 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 lotion, creams, or deodorant after your shower.
- If possible, sleep in clean pajamas and on clean sheets the night before surgery.
- Do not shave the area of surgery.
- DO NOT use this product on your body or incision after surgery.

CAUTION: Do not use it 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

BREG Cold Therapy Units

Cold therapy unit helps patients and medical practitioners easily manage post-operative pain and swelling, speeding up patient recovery and rehabilitation. No appointment or reservation is needed to pick up. Please call to confirm availability (303-233-1223 ext.1600). Not billable to insurance, self pay only. HSA eligible.



BREG POLAR CARE CUBE ITEM PRICE: \$175.00 PLUS TAX

- Available in Golden, Highlands Ranch, Westminster.
- Universal/multi-use pad included.
- Each additional pad \$40



BREG POLAR CARE WAVE ITEM PRICE: \$325.00 PLUS TAX

- Available in Golden retail store.
- Body part specific pad included.
- Each Additional specific pad \$70

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.
- To clean, circulate warm water and 1-2 Tablespoons of white vinegar. Be sure to clean prior to storing.
- Patients should ice 20 minutes on and 40 minutes off unless instructed otherwise by your physician. The easiest way to remember this is to ice for 20 minutes every hour on the hour.
- All units are non-refundable once they have been opened. 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.

Golden

660 Golden Ridge Rd., Suite 250
Golden, CO 80401

Highlands Ranch

1060 Plaza Drive, Suite 200
Highlands Ranch, CO 80129

Westminster

14190 Orchard Pkwy., Suite 200
Westminster, CO 80023

Appendix

CONSTIPATION PROTOCOL

Let's talk "SMAC": Surgery, Medication - Associated Constipation

- Narcotic pain medications taken after surgery can cause the bowels to temporarily slow or stop, resulting in constipation.
- While taking narcotic pain pills at home, it is recommended that extra fluids, fiber, and laxatives be taken daily.

Extra Fluids:

6-8 cups of water per day (Avoid caffeine and alcohol, which may make constipation worse)

Extra Fiber

Foods with high 'insoluble' fiber (best for constipation per serving): Wheat bran cereals (Fiber One, All-Bran, Raisin Bran), beans (all types), sweet potato (with skin), whole wheat pasta, peas, and raspberries.

Stimulant Laxative

Activates intestines by contracting muscle lining and causing bowels to move.

- Senokot (Senna)
- Ex-Lax (Senna)
- Dulcolox (Bisacodyl)
- Correctol (Bisacodyl)

Osmotic Laxative

Activates intestines by pulling in water and causing bowels to move.

- Milk of Magnesia
- Miralax
- Magnesium Citrate

Stool Softeners (Colase, Docusate, etc.) may be taken for hard stools in combination with Laxatives.

Soluble" fiber laxatives (Metamucil, Fibercon, etc.) are less effective for constipation related to pain pills. Take all medications as directed. Notify your provider if constipation persists.

WHAT IS PATIENTIQ?

PatientIQ helps Panorama Orthopedics and Spine stay in touch with you to know how you're feeling and to make sure we provide you with the best care possible.



Why Did Panorama Orthopedics and Spine Partner with PatientIQ?

We care about you and your health – even when you're not at our office. PatientIQ helps Panorama Orthopedics and Spine stay in touch with you to follow your health, to understand how our care is helping you, and to get your feedback on what we can do better.

How Does It Work?

PatientIQ will contact you through email and/or text message to:

- Ask you questions about your health
- Ask you questions about how your visit went
- Send you educational videos or care instructions

While the emails or text messages come from PatientIQ, the questions being asked are from your healthcare team. **It is very important** to answer the questions so they can provide you with the best care possible.

How Long Will It Take To Answer Questions?

Just a few minutes! We know you are busy, so we make sure to ask only the most important questions.

How Often Will I Be Contacted?

Because our health is always changing, it's important to stay connected and make sure everything is going well. PatientIQ will reach out to you as your healthcare team suggests and at key times throughout your recovery. make sure you're only contacted when necessary.

How Will My Answers Kept Private?

Your responses are kept completely secure and will only be seen by your doctor and healthcare team.

