

An elderly couple is shown from the chest up, smiling warmly. The man, on the left, has a mustache and is wearing a light-colored polo shirt and dark trousers. The woman, on the right, has short grey hair and is wearing a green and white striped polo shirt and white pants. They are both wearing white golf gloves. The woman's hands are resting on a brown leather golf bag. The background is a clear blue sky. A large, dark blue, curved graphic element is on the left side of the image, containing the text.

Your
pathway
to shoulder
surgery
recovery



SSMHealth.
Orthopedics

Contact information

Nurses' station

4 South
636-755-3353

Nurse manager

636-755-3353

Case manager

636-625-5359

Clinical nutrition

636-625-5424

Insurance | Billing | Information

1-855-989-6789

Monday – Friday, 8 am – 5 pm

Surgical Evaluation Center (SEC)

636-755-3167

Patients scheduled for surgery at SSM Health St. Joseph Hospital will go to the SEC for medical evaluation and testing. The SEC is located in the Complex Care Clinic in the 200 Medical Office Building at the west end of the hospital campus.

Drive past the hospital main entrance to the 200 Medical Office Building. Park in the west parking lot and enter the west entrance. The Complex Care Clinic is located to the left once you enter the building.

Someone from the SEC will call you to schedule your appointment.

Day of surgery check in

On the day of surgery, please enter through the south entrance and register in the Surgery Waiting Room. If you are having any problems on the day of surgery, please call **636-625-5375**.

Bring your patient education booklet with you the day of surgery.



Welcome

Welcome to SSM Health Orthopedics, a first-class experience in patient care! We are committed to the highest quality clinical outcomes and patient satisfaction. We have a dedicated team of surgeons, physician assistants, nurses, therapists, and support staff to provide education to you and your family for your recovery and rehabilitation.

Our goal is to prepare you to go home where you can return to a healthy and active lifestyle as quickly as possible. This booklet provides an overview of what you need to know about your total joint replacement.

Thank you for choosing SSM Health Orthopedics. We look forward to working with you!

Our Mission

Through our exceptional health care services, we reveal the healing presence of God.

Vision

Peace, hope, and health for every person, family, and community, especially those most in need.

Values

Compassion | Respect | Excellence
Stewardship | Community

ssmhealth.com/orthopedics



SSMHealth.
Orthopedics

Introduction 1

Preparing for surgery 3

Day of surgery 11

Therapy 14

After surgery 16

When to call 911 19

Frequently asked questions 20

Introduction

Read this book to help you prepare for your surgery. Research has shown that patients who are educated about their surgery have better results. Please bring this book to the hospital on the day of your surgery.

Basic anatomy of the shoulder

A joint is where two bones come together. The shoulder is the most flexible joint in the body. The shoulder is a ball-and-socket joint where the rounded head or ball of the upper arm bone (humerus) and the cup-like formation of the shoulder blade (scapula) meet. The rotator cuff is a group of muscles and tendons in the shoulder connecting the upper arm to the shoulder blade. The rotator cuff helps lift the arm over the head and also helps hold the arm (humeral head) in the shoulder socket (glenoid).

A healthy shoulder joint has smooth cartilage covering where the bones of the upper arm and shoulder meet. Cartilage can wear over time from arthritis or injury. This causes the bones to rub against each other and leads to pain, stiffness, limited movement, and difficulty doing activities of daily living.

Your surgeon will recommend anatomic total shoulder replacement, reverse total shoulder replacement, or hemiarthroplasty (partial replacement) based on your symptoms.

Anatomic total shoulder replacement

Total shoulder replacement is a surgical procedure that involves replacing the arthritic or “worn out” cartilage. It is selected for patients who have a normal or intact rotator cuff. Your surgeon will make an incision on the front of your shoulder and remove cartilage and some bone damaged by arthritis or injury. The upper arm bone (humerus) is resurfaced with a metal stem and ball (titanium, cobalt chrome). The socket is resurfaced with a metal cup and plastic liner (polyethylene). These specially designed metal and plastic parts are called prostheses. Occasionally, only the humeral head is replaced, called a hemiarthroplasty.



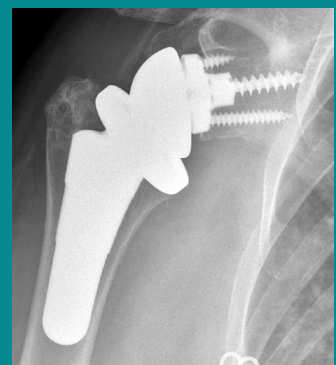
Normal shoulder



Arthritic shoulder



Anatomic shoulder replacement



Reverse shoulder replacement

Reverse total shoulder replacement

Reverse total shoulder replacement is a surgical procedure for patients who have arthritis and damage to their rotator cuff that cannot be repaired. Reverse shoulder replacement also can be used to treat shoulder fracture. Your surgeon will make an incision on the front of your shoulder. The upper arm bone (humerus) is resurfaced with a metal stem and plastic cup liner. A metal ball is placed in the shoulder socket.

Surgical procedure

The surgical procedure will take one to two hours. Your doctor will determine if you can go home that day or if you will need to stay one night in the hospital.

Therapy

After surgery, an occupational therapist will provide instructions about movement and safety for activities of daily living.

Complications

When considering shoulder replacement surgery, you should be aware of potential complications associated with the procedure and the precautions to prevent them. Although rare, the most common complications include:

Infection

- Although infection risk is low, it can be a major complication of surgery.
- Infection prevention may include pre-surgical blood and nasal screenings, benzoyl peroxide gel, antibacterial soap showers, following postoperative incision care instructions, and frequent hand washing by patients, staff, and visitors.

- Notify your surgeon if you develop a fever, flu/cold-like symptoms, or any open sores on your skin before the day of your surgery.

Blood clots

- Development of blood clots, called deep vein thrombosis (DVT), is another complication, but this risk is rare after total shoulder replacement.
- Regular activity and frequent movement is the best prevention of blood clot formation.
- Precautions may include:
 - Mechanical devices to help circulate blood in your legs and ankle pump exercises
 - Prescription medication to thin the blood may be used in patients with known risk for blood clot, or you may be instructed to take baby aspirin (81 mg) twice daily for a few weeks for patients at low risk for blood clot formation.

Dislocation

You will be instructed about precautions to lessen the risk of dislocating your shoulder. Follow these precautions after surgery as instructed by your surgeon.

Other complications

- Nerve or vessel damage can occur, but these complications are extremely rare.
- Blood loss may occur during surgery, but blood replacement/transfusion rarely is required.
- Stress fracture is rare but can occur with a shoulder replacement.

A successful recovery requires your active participation in therapy and following all instructions from your care team after surgery.

Preparing for surgery

Your surgeon looks at your overall health before scheduling joint replacement surgery. If you have any condition that will increase your risk of complications after surgery, your surgeon may recommend seeing a specialist for clearance.

Health and lifestyle changes before your surgery

Uncontrolled diabetes

If you have been diagnosed with diabetes (or you have been told you are pre-diabetic or borderline diabetic but are not on medication or under medical supervision), your risk of complications increases during and after surgery. Your surgeon may require medical clearance by your physician. It is important to maintain blood sugar levels for at least 2 weeks before surgery and for 4 weeks after surgery to promote optimal healing. If you need assistance with diabetic meal planning, ask your physician for a referral to an outpatient dietitian near you.

Smoking

If you use tobacco products, now is the ideal time to stop. Research studies suggest that people who stop smoking at least 4 weeks before surgery have a faster recovery time and heal with fewer complications. Nicotine slows healing and increases chance of infection. Your surgeon may delay your surgery if you use nicotine. Resources are available to help you with a smoking cessation plan. Please talk with your surgeon or nurse, or call the free coaching hotline at **1-800-QUIT-NOW**.

Long-term use of opioid pain medications

If you have been using narcotic (opioid) pain medication for your joint pain or other chronic pain condition, talk with your prescribing provider about seeing a pain management physician to reduce opioid use before surgery. Pain control is one of our top priorities, but people who use opioids for pain before surgery have more difficulty managing post-surgical pain.

It is ideal to be off all opioid medication by the time of your surgery.

Nutrition guidelines for surgery recovery

Good nutrition is important before and after surgery to support your body's response to surgery and recovery, to maintain lean muscle and strength, and to reduce the risk of complications and hospital readmission. Starting now and for 4 weeks after surgery, eat 5-6 small meals daily with protein in each meal (unless your doctor restricts high protein).

We recommend a high-protein, anti-inflammatory diet to optimize recovery. Refer to the Nutrition Guidelines for Surgery Recovery packet. Some suggestions include:

- Eat fruits and vegetables.
- Snack on nuts every day.
- Choose lean proteins such as fish, poultry, and beans more often than red meat.
- Choose heart-healthy fats such as olive oil, canola oil, or avocado oil.
- Use herbs and spices instead of salt.
- Switch to whole grains rather than foods with refined (white) flour. If you are unable to eat food for a meal, drink a nutritional supplement.

Nutritional supplements

- When you don't feel well, which may happen before or after surgery, it can be difficult to get all the nutrients you need from food.
- Nutritional supplements can provide the protein, vitamins, and minerals you need to prepare for surgery, and to help your body recover after surgery.
- You may wish to try over-the-counter products such as Premier Protein®, Ensure®, Boost®, Carnation Breakfast Essentials®, or store-brand versions at a reduced cost.
- Nutritional supplements also may be offered during your hospital stay to help with recovery. If you have questions, please call the clinical nutrition department listed on the table of contents page in the front pocket of this book. If you are on a special diet, check with your primary care physician before making any dietary changes.

Surgery scheduling

The staff at your surgeon's office is responsible for scheduling your surgery. You will receive information from your surgeon about the date and time of your procedure, and the time to arrive at the hospital on the day of your surgery.

Joint replacement education class

Please watch a short preoperative patient education class video to help you prepare for surgery. Using your phone or tablet camera, scan the QR code below to watch the video as many times as you wish. A nurse will discuss how to prepare for surgery, and what to expect after your surgery and during the recovery period.



Your surgeon recommends that you watch this class with a **PAL** (your **Personal Assistance Leader** who is a responsible adult family member or friend). Your PAL(s) should be willing and able to:

- Drive you home the day of discharge.
- Help you get into and out of your car and home.
- Stay with you for at least 24-48 hours at your home, or their home if needed.
- Help you with meals, errands, and transportation for the first few weeks after surgery.
- Drive you to any therapy appointments and to your first postoperative clinic appointment.
- Be a contact for you, if needed, after surgery.

Research has shown that patients who are educated about their surgery have better results. Please bring this booklet to the hospital on the day of your surgery.

Pre-surgical testing

Your surgeon's office will tell you how to schedule an appointment for testing before surgery. Appointments ideally should be scheduled **4-6 weeks before your surgery date** to allow enough time to review your testing results and avoid cancellation of your surgery.

Pre-surgical testing may include laboratory tests or an EKG. Surgeons may require medical, cardiac, or dental clearances before your surgery.

For safety and accuracy of your hospital medication record, please bring all of your current prescription and nonprescription medications, including herbal medications, prescription eye drops, and inhalers in their original containers, to your pre-surgical testing appointment.

Dental work

- Minor dental work, routine cleaning, or a dental checkup should be completed at least one month before your joint replacement surgery.
- If you need MAJOR dental work, including treatment for an infected or abscessed tooth, please discuss this work with your surgeon. We request this be done before your elective joint replacement surgery to minimize risk of infection after surgery.
- We recommend that you avoid routine dental work for at least 3-6 months after your joint replacement. After your surgery is complete, please ask your surgeon when you should take antibiotics before going to the dentist.

Avoid a fall with these precautions

Prepare your home **before surgery** to avoid hazards that could cause a fall after surgery.

- Clear walkways, remove throw rugs and floor clutter, fasten loose carpet or flooring, move electrical and phone cords, and make sure you have clear space around your bed, chair, and bathroom.
- Make sure lighting is bright at the entrance and in your home where you will be walking, and that light switches are accessible at room entrances and at the top and bottom of stairs. Replace light bulbs in overhead lights or lamps, install night lights, and place a flashlight near your bed and chair for emergency.
- Check that stair handrails are sturdy, and that steps and door thresholds are marked and clearly visible.
- Ensure that your bed height is set to allow your feet to touch the floor as you sit on the side of the bed. Raise or lower the height for ease of lying down and standing up from your bed.
- In the bathroom, make sure toilet tissue is within easy reach.
- Use a sturdy shower chair and place on top of a rubber mat in your tub/shower. If you have grab bars, make sure they are secure. Use a nonskid rug on the bathroom floor.
- Move all necessary items you will use to an area between waist and shoulder height so you won't need to reach or bend, especially in the kitchen and bathroom.
- Prepare frozen meals or buy pre-cooked meals to eat after you return home. Refer to the anti-inflammatory diet and nutrition guidelines on page 3.
- Obtain a life alert device, if needed. Use a cordless or cell phone and have a list of emergency numbers available.

Medications

All blood thinning medications need to be discontinued before surgery including, but not limited to: Coumadin® (warfarin), Plavix® (clopidogrel), Pradaxa® (dabigatran), Eliquis® (apixaban), Savaysa® (edoxaban), Xarelto® (rivaroxaban), Effient® (prasugrel), and Brilinta® (ticagrelor).

If you currently take any blood-thinning medications, please call the physician who ordered the medication for specific instructions about how to safely stop before your surgery.

Aspirin or aspirin-containing products such as Excedrin® should be stopped 7 days before surgery. If a doctor prescribed the aspirin, please call that doctor for specific instructions about stopping it before surgery.

You do not need to contact your prescribing physician, but the following medications thin your blood or interact with anesthesia and should be stopped 7 days before surgery:

- Prescription anti-inflammatory drugs such as Clinoril® (sulindac), Feldene® (piroxicam), Mobic® (meloxicam), Naprosyn® (naproxen), Arthrotec® (diclofenac sodium), or rheumatoid arthritis medications such as Trexall® (methotrexate)
- All non-prescription anti-inflammatory drugs such as Advil®, Aleve®, ibuprofen, or naproxen
- Glucosamine and chondroitin sulfate
- All herbal medications such as fish oil, flaxseed oil, primrose oil, ginkgo, echinacea, or St. John's wort
- Vitamin E capsules
- Weight-loss medications

It is safe to continue vitamin D supplements until the night before surgery unless your surgeon instructs you to stop them.

Tylenol®

- You may take Tylenol® (acetaminophen) medications for pain or headache any time before surgery, as long as you are not allergic or sensitive to Tylenol®.
- Your surgeon recommends you take 1000 mg Tylenol® 3 times daily for 3 days before surgery, which has been reported to help with pain control after surgery. Do not exceed 4000 mg/day.
- Do NOT take Tylenol® if you have history of liver disease, allergy, or instructions from your provider to avoid it.

Other medications

Unless otherwise instructed, all your other prescription medications should not be stopped and should be taken exactly as prescribed until midnight, the night before surgery.

If you have diabetes, please talk to your prescribing doctor about eating instructions and taking your diabetic medications on the morning of your surgery.

Avoiding and relieving constipation

Many factors contribute to constipation, including a sedentary lifestyle, use of opioid pain medication, and poor nutrition. Physical activity, hydration, and a diet high in fruits and vegetables that naturally contain fiber and a high-water content will assist bowel health.

Pain medications that cause constipation include: Norco® (hydrocodone with Tylenol®), Percocet® (oxycodone with Tylenol®), Oxy-IR® or Roxicodone® (oxycodone), Tylenol® with codeine, Ultram® (tramadol) and Ultracet® (tramadol with Tylenol®).

Signs of constipation

- Bowel movements are less often than normal.
- Stools are small, dry, and hard to pass.
- Prolonged constipation can cause stomach pain, nausea, or vomiting, and feelings of confusion.
- Call your doctor if any of these symptoms occur.

Suggestions to relieve constipation

- Drink at least 8 glasses of water every day (unless your fluid intake is restricted by your doctor).
- When you feel the urge to use the bathroom, don't hold it.
- Avoid using bulk laxatives (Metamucil®, psyllium).
- Do not eat foods with high fat or sugar content.
- Eat foods to get 25-30 grams of fiber every day (e.g. black beans, All-Bran® cereal, peas, bananas).

The following medications are recommended to prevent constipation while taking opioid medications:

- Take a stimulant laxative twice daily (Senna®, Dulcolax® tablets, milk of magnesia or cascara, with or without Colace®). If diarrhea develops, take only at bedtime.
- Use Miralax® daily at bedtime. If diarrhea develops, use every other day.
- If the above treatments are unsuccessful, try an over-the-counter rectal intervention (first, a glycerin suppository; if unsuccessful, an enema).

To help avoid problems after surgery, make sure you are not constipated when you arrive for surgery.

Living will/advance directive

- A hospital staff member will talk to you about advance medical directives, which are decisions you make about life-support treatments.
- These directives include:
 - Living will (your wishes regarding withdrawal of life support if you are not able to communicate),
 - Do not resuscitate order (DNR), and
 - Durable power of attorney for health care (allows you to appoint someone to make health care decisions for you if you are unable to make these decisions).
- If you have a living will or advance directive, please bring a copy to the hospital on the day of your pre-surgical testing appointment or on the day of your surgery.

Equipment

Your care team will make arrangements for any equipment needed for your care at home. An occupational therapist also will evaluate and instruct you about any necessary adaptive equipment to help you with bathing and dressing.

Preparations for going home

Before you leave the hospital, your care team will help to make sure you are ready and able to move independently. You will be able to go to the bathroom, move around your house, and get in and out of a car.

Most patients are ready to be discharged directly home after surgery and do not require going to a rehabilitation or skilled nursing unit. If you live alone, it is best to make arrangements to have family members and/or friends help you with meals, laundry, errands, etc., for at least a few days after you go home.

Checklist

What to bring the day of surgery

❑ **Driver's license, medical insurance card, and copayment**

You will need to bring your driver's license for identification, your insurance cards, and copayment if owed to the hospital to register for your hospital admission.

❑ **Clothing**

Please bring a change of clothing, including a loose-fitting pullover or t-shirt, shorts or slacks, socks, and underclothes. Bring a pair of sturdy shoes for walking.

❑ **Miscellaneous items**

If you anticipate an overnight stay, place your personal items in a bag or suitcase. You may bring personal hygiene items such as deodorant, makeup, toothbrush, shaving kit, dentures, hearing aids, and glasses/contact lenses. Hearing aids, dentures, and contact lenses will be removed before you go to surgery. The suitcase can be brought to a hospital room by your PAL if you are admitted.

❑ **CPAP/BiPAP machine**

If you use a CPAP or BiPAP machine at home, please have your PAL or a family member bring your machine into the hospital along with your suitcase.

❑ **Copayment for medications at the time of discharge after surgery**

Medication delivery service may be available at the time of discharge. If you wish to use this service, Please have your PAL or a family member bring your insurance copayment for medications before you are discharged after surgery.

❑ **Medications**

You will need to bring your inhaler and prescription eyedrops to the hospital on the day of your surgery. Unless instructed, **do not bring any other of your medications with you to the hospital.** Your doctor will order appropriate home medications to be given to you after surgery.

❑ **Education booklet**

Please bring this education booklet to the hospital. Your care team will use it to review information after your surgery.

What not to bring the day of surgery

❑ **Anything valuable except for copayments**

Please do **not** bring a wallet, jewelry, or any other valuables except necessary copayments for your hospital stay.

Shoulder skin cleansing

You will receive an over-the-counter acne gel (5% or 10% benzoyl peroxide) that you will apply to your shoulder and armpit area twice a day for **2 days before surgery** to help reduce a common skin bacteria called *C. acnes*.

- After you wash and dry your surgical shoulder in the morning and evening, rub a half-dollar size dollop of benzoyl peroxide gel over the shoulder, into the armpit, and across the top of the arm.
- Spread the benzoyl peroxide gel evenly across the skin until it is absorbed.
- Allow the skin to air dry for 3 minutes before dressing in clean clothing.
NOTE: benzoyl peroxide can whiten or stain clothing.

Skin preparation before surgery

- Do not shave skin near the surgical shoulder or armpit for 5 days before surgery.
- Do not shave any area of your body the day before and the day of surgery.
- Change your bed linens the night before surgery and wear clean clothing to bed.

Pre-surgery bathing instructions

A bottle of chlorhexidine antibacterial soap will be given to you at your pre-surgical testing appointment. This soap helps to decrease bacteria on your skin. If you are allergic to chlorhexidine, use Dial® antibacterial soap or a clean bar of regular soap.

Shower with chlorhexidine antibacterial soap **the night before and the morning of your surgery** before you come to the hospital.

Please follow these bathing instructions, exactly in the order as written.

- Wash your face, body, and genital area with your regular soap and rinse.
- Wash your hair with shampoo.
- Rinse your hair and body thoroughly after you shampoo to remove all shampoo and soap.
- Turn off the shower. Apply chlorhexidine soap with a clean, wet washcloth to your entire body, **only from your neck down**.
- Do not use this soap on your face, near your eyes or ears, or on your genital area to avoid injury.
- Wash your body thoroughly, **but very gently, for five minutes**, paying special attention to your surgical site.
- Do not wash with your regular soap after the chlorhexidine soap is used.
- Turn the water back on and rinse the soap from your body thoroughly.
- Pat your body dry with a clean, soft towel.

After your shower, apply the benzoyl peroxide gel to your dry shoulder and armpit. Allow to dry for 3 minutes, then dress in clean clothing.

Do not use lotion, cream, or powder on your body.

Do not apply any deodorant to either underarm.



DO NOT eat anything after midnight the night before surgery. No chewing gum, candy, mints, lozenges, or nicotine products.

If you are instructed to take any medications the morning of your surgery, please swallow these with a clear liquid.

Hydration with clear liquids list

Studies have shown that drinking clear liquids before surgery can help your recovery after surgery.

To reduce the risk of postoperative nausea, vomiting, and constipation, we strongly encourage you to drink a low-sugar sports hydration drink (at least 20 oz) the day before surgery and the morning of surgery. In addition to a sports hydration drink, you may drink other clear liquids in the list below.

You may consume these clear liquids until 4 hours before your surgery time.

Approved clear liquids include:

- Any liquid you can see through
- Gatorade® or Powerade®. Patients with diabetes should drink a low-sugar sports hydration drink
- Water or noncarbonated flavored water
- Tea, unsweetened hot or iced
- Black coffee, unsweetened
- Apple or grape juice
- Gelatin

Liquids NOT allowed include:

- Liquids you cannot see through
- **No** milk, cream, creamers, or sugar in coffee
- **No** milk or milk products (no soy or almond milk)
- **No** orange, grapefruit, or tomato juice
- **No** carbonated beverages
- **No** alcoholic beverages

Day of surgery

Check in day of surgery

Please arrive at the hospital at the time instructed. The directions to the surgical department are located on the contact information sheet.

Preparation

If you wear nail polish, it may be removed when you arrive for surgery. If you wear contact lenses, dentures, or hearing aids, you will be asked to remove them before surgery.

Anesthesia

A staff member from the anesthesia department will review your medical history and discuss the anesthesia plan with you at your pre-surgical testing appointment or on the day of your surgery. The types of anesthesia for total shoulder replacement surgery are general anesthesia and an interscalene block.

General anesthesia is medication administered through your intravenous (IV) site. After you are asleep, a tube is placed in your throat to assist with your breathing and it is removed before you wake. Your throat may be slightly sore and you may experience a hoarse voice for a short time after surgery.

An **interscalene block** is medication injected into your shoulder to produce temporary numbness during your surgery, and provide some postoperative pain relief for several hours after surgery. Arm numbness or inability to use the arm is common, and may last a few days after surgery.

Procedure

- Surgery usually takes 1-2 hours. Your surgeon will talk to your family members or friends in the waiting area or by phone after the procedure.
- After surgery you will be taken to the recovery area to monitor blood pressure and pain, and then discharged or moved to your hospital room.
- You may experience blurred vision, dry mouth, chills, or nausea when you wake after surgery. You may have a sore throat if a breathing tube was placed in your throat.
- Expect to have your shoulder bandaged and placed in a sling.
- If you are admitted for an overnight stay, family members may visit you once you are moved to your hospital room.

Activities

- Your care team will help you to stand and walk after surgery.
- Your care team will instruct you about activities that are allowed.

Medications after surgery

- Your physician will order appropriate medications for you.
- Some medications may not look like the medications you take at home, due to different supply companies.
- Please ask your nurse if you have any questions about your medication.

Pain medication and pain control

- If you use opioid medication for pain control before surgery, your pain will be more difficult to control after surgery. Please discuss this with your surgeon.
- Your care team will ask you to describe your pain on a scale of 0-10.
- Our goal is to keep your pain at a tolerable level, but you should expect some degree of pain after surgery.
- After surgery your nervous system is more sensitive to pain. Relaxation techniques, cold therapy, and medication reduce this sensitivity.
- Relaxation techniques such as deep breathing and listening to music will help to calm your nervous system and reduce sensitivity to pain.
- Cold therapy is highly effective to reduce pain and swelling after surgery and activity. Use cold therapy at least 20 minutes every hour while you are awake for the first 2 weeks after surgery.
- Other ways to reduce pain include repositioning and movement such as walking. If you feel anxious or worried, your sensitivity to pain will increase. Talk to your PAL or a member of your care team to assist you.
- The amount and intensity of pain that a person feels differs from one person to another because patients respond differently to pain medications.
- Pain medication is best taken before your pain becomes too severe.
- Ask for medicine when your pain is present and before it gets severe or out of control.
- Different types of medication are given based upon the degree of pain.
- Please tell someone if your pain medication is not providing enough relief, or if you don't like the way it makes you feel.

- Opioid medications may cause itching, nausea, and confusion. We will try to minimize these normal side effects.

Constipation

- Pain medications and lack of activity may cause constipation after surgery. You will be given medication to help with constipation as needed.
- Drink water and choose foods high in fiber, such as fruits and vegetables during your recovery. Follow recommendations on page 7.

Breathing with the incentive spirometer

- Your doctor will order breathing exercises for you after surgery using the incentive spirometer. Continue to use this at home for a week after surgery.
- Bed rest, drowsiness, anesthesia, and pain can make it more difficult for you to take normal deep breaths.
- It is important for you to breathe deeply to help keep your lungs clear and avoid complications, such as pneumonia.

Therapy and shoulder precautions

- Your therapy team will provide instruction about how to protect and to move your arm for the first few weeks after surgery, and will demonstrate how to safely perform activities of daily living before you are discharged.
- An occupational therapist will provide information about any necessary adaptive equipment, and may demonstrate how to safely perform activities of daily living such as bathing, dressing, and toileting.
- Your arm will be in a sling for 3-6 weeks after surgery, depending on your surgeon's instructions. Be aware that sling use can affect your balance while getting up from a chair or bed and as you are walking.

Activity restrictions and precautions

Activity guidelines

Your care team will instruct you about restrictions and movements to protect your new shoulder.

DO NOT

- **Do not** actively reach with or move your surgical arm, elbow, or shoulder away from your body until instructed by your surgeon.
- **Do not** put any weight on your surgical arm.
- **Do not** move your surgical arm behind your body (extension).
- **Do not** lift, carry, pull, or push objects with your surgical arm.

DO

Wear your sling

- Your surgeon or therapist will discuss how long to wear your sling.
- Most surgeons require you to wear a sling for 2-6 weeks after surgery.
- You may remove the sling when sitting at rest in a chair, doing therapy exercises, dressing, and bathing.
- You must wear your sling while sleeping.

Protect your arm and shoulder

- Use a pillow to support your arm when sitting or lying down.
- When out of the sling and washing under your arm or putting on a shirt, lean over to allow your surgical arm to hang away from your body. Put your surgical arm into the shirt sleeve first.
- Drape your jacket over your shoulder when wearing the sling. Do not hesitate to ask for help.

Apply ice or cold pack for 20–30 minutes, four times a day or more, as needed.

If you usually use a walker, cane, or other assistive device for walking, it is important to protect your new shoulder from weight bearing for at least 4 weeks after surgery while the shoulder heals and your muscles and tendons regain strength and function.

The therapy team will work with you to find an alternative device for you to support yourself during healing. Your surgeon will tell you when it is safe to resume using your usual walking aid.

Therapy exercises for range of motion

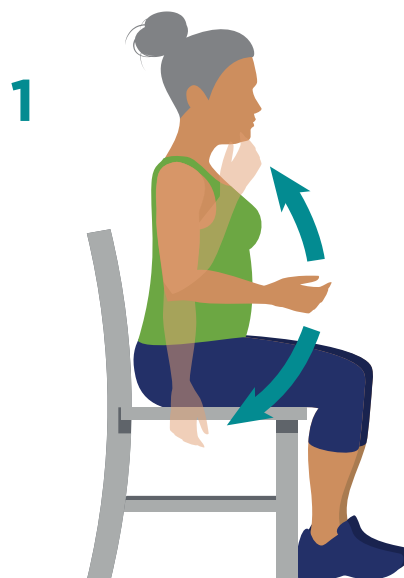
Perform therapy exercises every day to help rebuild your arm strength and ability to move.

Your care team will instruct and show you how to do your exercises and activities safely.

Do the following exercises 4 times a day. Do each exercise 10 times, pause, and do 3 sets.

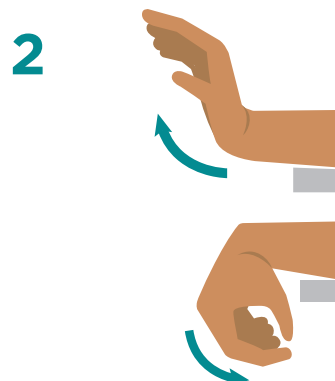
Active range of motion (AROM) Elbow flexion/extension (Figure 1)

- Sit in a chair.
- Rest your surgical arm with your palm up on your lap or on the seat of the chair.
- Move your hand toward your shoulder as far as you can tolerate.
- You may use your non-surgical hand to assist.
- Slowly lower your hand until your elbow is straight, or as close to straight as tolerable, as pictured.



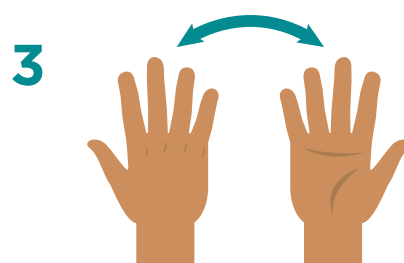
Active wrist flexion/extension (Figure 2)

- Sit with your surgical arm at your side.
- Support your forearm with your nonsurgical hand or rest forearm on your lap.
- Move your wrist up and down.



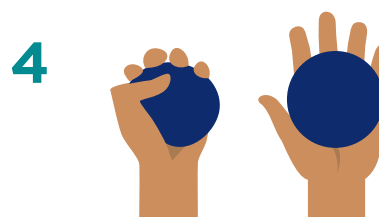
Assisted active range of motion (AAROM) Wrist supination/pronation (Figure 3)

- Support your forearm with your nonsurgical hand or rest forearm on your lap with your palm down.
- Rotate your forearm so that your palm faces up.
- Return to palm down position.



Sponge ball squeeze (Figure 4)

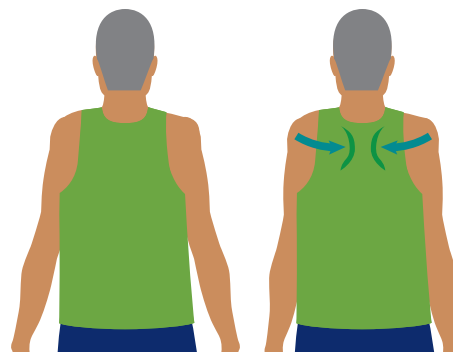
- Support your forearm with your nonsurgical hand or rest forearm on your lap.
- Hold sponge in the hand of your surgical arm.
- Squeeze the sponge with your fingers.
- Relax your fingers and repeat.



Scapular squeeze (Figure 5)

- Stand with your arms at your sides.
- Pinch your shoulder blades together.
- Hold for 10 seconds.
- Do 20 repetitions 2 times per day.

5



Codman's (pendulum) shoulder exercises

Do 4 times a day. Do each exercise 10 times, pause, and do 3 sets. For the following three exercises, **only move your body** to allow your surgical arm to move about the width of a basketball. Do not use your arm muscles to move the shoulder.

- Stand next to a large piece of furniture such as a table or sofa that does not slide. Hold on to the furniture with your unaffected arm for support.
- Bend forward at the waist and bend your knees slightly.
- Allow your surgical arm to dangle freely and keep your shoulder relaxed.

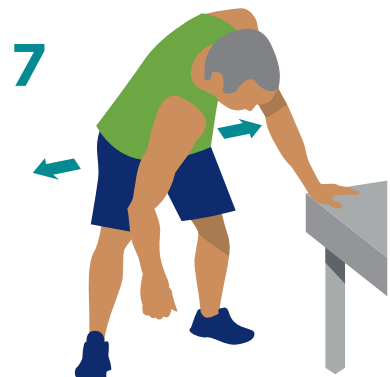
Forward and back (Figure 6)

- Stand with one foot about 8 inches in front of the other foot.
- Shift your body weight from the front foot to the back foot.
- Allow your surgical arm to move about 8-10".



Side to side (Figure 7)

- Stand with your feet about shoulder width apart.
- Shift your body weight from side to side.
- Allow your surgical arm to move about 8-10".



Circular (Figure 8)

- Keep your feet about shoulder width apart.
- Move your body around in a circle pattern, allowing your surgical arm to move about 8-10".



Your positive attitude and dedication to these exercises are very important for a successful recovery!

After surgery

Discharge instructions

- Someone will need to drive you home after surgery.
- You will be given an approximate discharge time, discharge instructions, a list of exercises, a prescription for pain medication, and instructions on a prescription for medications to prevent blood clots, if needed.
- Remember to continue the high-protein, anti-inflammatory diet (page 3) for at least 4 weeks after your surgery, unless instructed differently.

Avoid falling after surgery

Most falls occur within the first 24 hours after discharge. **Review the fall precautions listed on page 5.** Remember:

- Ask your care team or PAL for assistance when you walk for the first few days after surgery.
- Wear supportive shoes or non-skid socks.
- Pause when rising to make sure you are steady on your feet before walking.
- The effects of anesthesia after surgery and some medications can make you dizzy, drowsy, or unsteady on your feet. Take medications as directed and eat as instructed with medications.



Swelling

- Swelling in the surgical arm is expected after surgery and at home when you are more active. Swelling may continue for several months.
- To manage swelling, do your hand exercises, wear the sling properly, support your affected arm with pillows, and use ice or a cold pack on the affected area for 20-30 minutes each hour you are awake.
- Do not apply heat to your surgical arm for 3 months.

Recovery instructions

- Most patients recover from surgery at home. Follow all instructions received at the time of discharge.
- Most patients do not require home care after shoulder replacement.
- If home care is ordered, someone from your selected home care company will contact you to schedule your home care visits.

Preventing infection

- Do not touch or pick at your surgical dressing. Follow all incision care instructions.
- If you are instructed to change your surgical dressing, wash your hands thoroughly before and after dressing changes.
- Use proper hand washing after toileting, after blowing your nose, and before and after eating.
- Do not allow pets near your surgical site.
- Shower as instructed, NO tub baths are allowed until the incision has healed.
- Always use a clean washcloth to clean the skin around the incision. Always use a clean towel to pat dry the area around the wound. Do not use the same towel or washcloth around your incision that you use on your body for at least 6 weeks.
- Wear clean clothes and wash your bedding frequently. Replace any soiled bedding immediately.
- Ask your surgeon about taking antibiotics before invasive dental work after your surgery.

Care for your incision

- If steri-strips are used to close your incision, they are left in place for 2-3 weeks. They will fall off on their own. Do not pick at them.
- If staples are used, they will be removed at the office 2 weeks after surgery.
- A bandage is applied to protect the incision. Do not touch or remove the bandage unless instructed by your care team.



- Your care team will provide instructions on dressing changes.
- Do not shower after surgery until your care team tells you it is safe (No tub baths or soaking are allowed until the incision is healed).
- Please follow all instructions from your care team as they are directed by your surgeon.
- Always wash your hands with soap and water before touching your incision or shoulder area.
- Remember, do not use the same washcloth or towel around your incision that you use on your body for at least 6 weeks.
- Do not use lotion or skin cream on your incision for a minimum of 6 weeks after surgery until approved by your surgeon.

If you see redness or drainage along the incision, call your surgeon's office or your home care nurse.



Medications

- Patients may need some kind of pain medication for a few weeks after shoulder replacement surgery. As your pain decreases, you may switch from prescription pain medication to only Tylenol®, unless you are allergic or have been instructed to avoid Tylenol. Every week you should decrease the amount of prescription pain medication used.
- Prescriptions and instructions for pain and blood-thinning medications will be given to you when you are discharged after surgery.

When to call your doctor

We want to help you avoid an unnecessary ER visit or hospital readmission. Call your surgeon's office immediately if any of the following signs or symptoms occur after surgery:

- Wound concerns:
 - Increase in redness, separation or gap along the edges of incision
- - Drainage that is increasing, foul smelling, or an unusual color, or that continues more than 7 days after surgery
- Pain, redness, or excessive tenderness in your leg, calf, or surgical arm
- Excessive swelling in your arm, thigh, calf, ankle, or foot
- Ankle swelling that does not improve overnight
- Pain that does not improve with medication and cold therapy
- Fever greater than 101.5 degrees
- Blood in the stool or urine
- Constipation not relieved by use of over-the-counter laxatives and stool softener
- Nausea or vomiting caused by pain medication

All calls during office hours will be returned as quickly as possible.

If you call after office hours, you will be directed to the exchange or after-business hours telephone number. The on-call surgeon who returns your call may not be your surgeon, but he or she will be able to address your concerns.

All medication refills, including pain medication, will only be handled during regular office hours.

When to call 911

A blood clot in the leg can move to the lung, which can be very serious.

Call 911 if you have any of these symptoms:

- Shortness of breath
- Chest pain
- Coughing up blood
- Unexplained anxiety, especially with breathing

Call 911 for any symptom of stroke:

- Sudden numbness or weakness of face, arm, or leg, especially on one side
 - Sudden confusion or trouble speaking or understanding speech
 - Sudden trouble seeing in one or both eyes
 - Sudden trouble walking, dizziness, or loss of balance or coordination
 - Sudden severe headache with no known cause
-

Dental work after surgery

- Avoid routine dental work for 3-6 months after surgery.
- Please check with your surgeon about the need to take antibiotics before going to the dentist.
- Most dentists will order this antibiotic for you. If the dentist wants the surgeon to order the antibiotic, please call your surgeon's office at least one week before your dental appointment and provide your name, date of birth, and a pharmacy telephone number.

Please remember to tell your dentist or surgeon if you are allergic to penicillin as this type of drug is usually ordered before any dental procedures.

Return to driving

- Depending on which arm is affected, most patients cannot drive until 3-6 weeks after surgery.
- Do not drive if you are taking prescription (opioid) pain pills or do not feel safe.

Return to work

- If your work is sedentary, such as an office job, you may return to work about 3-4 weeks after surgery.
- If your work requires heavier lifting, pushing, or pulling, it may be 3-4 months before you can return to full duty.
- You can discuss a date to return to work with your surgeon at your first postoperative visit.

Return to exercise

- Exercise is essential for successful shoulder replacement recovery and a healthy lifestyle.
- Your surgeon will tell you when you can start exercising and doing more rigorous activities.

Traveling after joint surgery

- Your surgeon will tell you when it is safe to travel.
- It is recommended that you get up to stretch or walk at least once an hour when taking long trips. This is important to help prevent blood clots in your legs.
- It is likely that you will set off metal detectors in airports, bus stations, or government buildings after shoulder replacement surgery. Tell the security staff that you have a joint replacement before going through the security scanner. Security staff may use a hand-wand over your shoulder, if needed.

Frequently asked questions

Will I need to stay in the hospital?

- Some patients will be eligible for shoulder replacement surgery as an outpatient procedure.
- If an overnight stay is recommended, the average length of stay is 1 day.
- Your length of stay is determined by your physical and medical condition.

How long do I need to wear a sling?

- You must wear a sling for the first 3 weeks. Your surgeon typically will recommend a sling for 3-6 weeks.
- You may remove the sling while you are sitting at rest, and during dressing, bathing, and doing your exercises unless otherwise instructed.
- When your surgeon permits you to remove the sling, you may continue to use it for comfort.

How long will I need therapy after surgery?

- A physical therapist and/or an occupational therapist will see you after surgery and explain your therapy exercises.
- When you go home, your surgeon will determine if you need a home physical therapist to come to your house and help you with the exercises for the first 2-3 weeks.
- You will be progressed through therapy by your surgeon at your follow-up appointment.
- Some patients may go to an outpatient physical therapy clinic for a few weeks if the surgeon recommends it.

Can I sleep on my side?

- You may sleep on your side 3-6 weeks after surgery or when your surgeon permits you to come out of the sling. However, for many patients it may take 3-6 months to feel comfortable sleeping on the operative shoulder.

I feel depressed, is this normal?

- It is not uncommon to have feelings of depression after surgery.
- This may be caused by a number of things, such as limited mobility, discomfort, increased dependency on others, and medication side effects.
- Feelings of depression typically will decrease as you begin to return to regular activities.
- If you feel your depression is not improving, call your primary care physicians or call 800-273-TALK (8255) to talk to someone about your feelings of depression.





What is the recovery time?

- People heal after surgery at different rates.
- Total rehabilitation time is about one year, but most people are able to do normal activities of daily living by a few months after surgery. Many people feel their shoulder continues to improve and progress for one year after their surgical procedure.

Can I drink alcoholic beverages during my recovery?

- If you are taking narcotic (opioid) pain medication, you should avoid alcoholic beverages because it can change the effect of this medication.
- You also should avoid alcohol if you are taking blood-thinning medication.

Remember! Follow-up appointments with your surgeon after surgery are an important part of a successful shoulder replacement recovery.

I have difficulty sleeping (insomnia), is this normal?

- Difficulty sleeping is a common complaint after shoulder surgery. If you have a recliner chair, it may be more comfortable to use for sleeping.
- Please check with your primary care doctor if you continue to have trouble sleeping.

When may I resume sexual activity?

- Sexual activity may be resumed 6-8 weeks after surgery as long as you are not having significant pain or stiffness. Avoid prolonged weight-bearing on the affected arm.

When should I schedule follow-up appointments after surgery?

- Your surgeon will want to schedule follow-up appointments at 2-3 weeks, 6 weeks, 3 months, 6 months, and one year after surgery.
- Your surgeon will recommend when an office visit is needed or when you can complete a short questionnaire through MyChart to monitor the progress of your shoulder function.

What activities am I permitted to do following surgery?

- You may return to most activities as tolerated after 3-4 months.
- You typically can return to light non-contact sports such as golf, bowling, or tennis in about 4 months as long as you have had no complications during your recovery.

