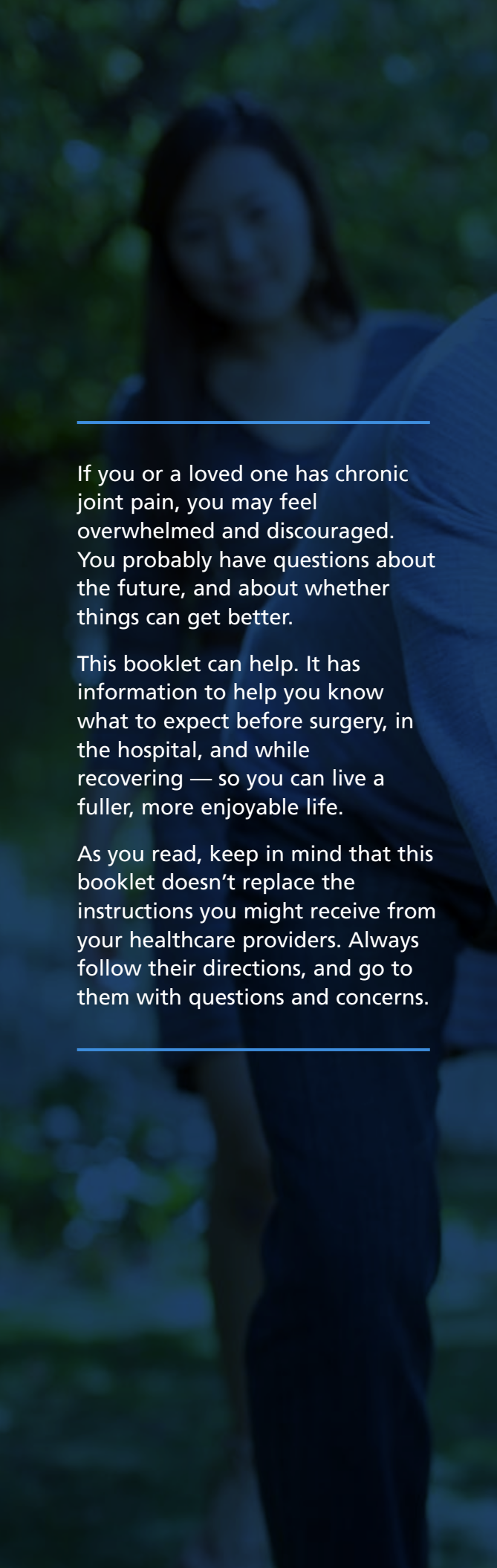


Your Guide to Joint Replacement

What to expect before surgery, in
the hospital, and while recovering

A woman with dark hair, wearing a dark blue long-sleeved shirt, stands in a garden. She is looking towards the camera with a slight smile. The background is filled with green foliage and trees, creating a soft, natural setting.

If you or a loved one has chronic joint pain, you may feel overwhelmed and discouraged. You probably have questions about the future, and about whether things can get better.

This booklet can help. It has information to help you know what to expect before surgery, in the hospital, and while recovering — so you can live a fuller, more enjoyable life.

As you read, keep in mind that this booklet doesn't replace the instructions you might receive from your healthcare providers. Always follow their directions, and go to them with questions and concerns.



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About this Guide

Now that you have decided to have joint replacement surgery, we want to help you learn more about:

- The best way to prepare for your surgery
- What to expect while you are in the hospital before, during, and after surgery
- How to recover as quickly as possible

Research tells us that patients who participate in pre-operative education opportunities (attending a class, reviewing printed materials) do better after joint replacement surgery. This guide is your reference for each phase of your care and helps you keep everything you need to know for your surgery in one place.

Plan to get the most from this guide by:

- **Writing in it.** This guide is designed to help you keep track of information, progress, and questions.
- **Sharing it with your partner in healing** (a family member or friend who will help you for a few days once you go home from the hospital). Help your partner in healing understand how to best support you at each phase of your care.

Preparing for Surgery

Being in the best health possible lowers your risk of complications during and after surgery. Your surgeon will assess your overall health and determine if you should have a total joint replacement. Certain risk factors may result in a greater chance of having complications after surgery. These include obesity, uncontrolled diabetes, and smoking. These risk factors should be addressed before total hip or knee surgery as much as is reasonably possible.



"My doctor told me that doing regular exercise could make it easier for me to come out of anesthesia after surgery. Plus, if I lost a few pounds, she said that I would heal faster. That was all I needed to hear to join a water aerobics class."

— Phyllis, Knee Replacement Patient

Getting your body ready for surgery

Here are some things you can do to get your body ready for surgery, making it easier to come out of anesthesia and to heal faster after surgery:

- ☐ **If you smoke, chew tobacco, or vape, QUIT!**
You need to quit smoking 6 weeks before surgery and continue for at least 6 weeks afterward. Those who quit have a lower risk of developing blood clots and infection after surgery.
- ☐ **Get control of any other health conditions you have.** Managing your blood pressure, blood sugar, and other conditions are essential to a successful surgery. If you have diabetes, make sure your A1c is less than 8.0 to help your wound heal faster.
- ☐ **DO NOT USE alcohol or street drugs, including marijuana.** These substances can seriously impact how you react to anesthesia and medications.
- ☐ **Do daily strengthening exercises** for your lower body to give your muscles a head start on your recovery. Try walking, water aerobics, or swimming for about 30 minutes a day, 5 days a week.
- ☐ **If you are overweight, try to lose a few pounds.** For every pound you lose, you take pressure off of your joints, which will make it easier to get around after surgery. Eating **more** fruit, vegetables, and whole grains and **less** fat, sugar, and red meat will help speed up your recovery.
- ☐ **If you need any invasive medical or dental procedures, ask your surgeon how far in advance you should schedule these.**
 - **Invasive medical procedures.** Any procedure that requires a cut in the skin can introduce bacteria (germs) into your body. This puts you at higher risk for an infection that could impact your new joint.
 - **Dental procedures.** Just like medical procedures, dental cleaning and having root canals, a tooth pulled, or a crown exposes you to bacteria.
- ☐ **Talk to your surgeon BEFORE getting a steroid injection** into the joint being replaced. This can increase the risk of infection and related complications.
- ☐ **If you take any opioid pain medications, try to cut back.** Decrease your use of these medications as much as possible so your care team can effectively control your pain after surgery. If your body is tolerant of high doses of pain medication, discuss this with your surgeon. Your pain may be more difficult to control.

Factors that may delay your surgery

Several factors may cause your surgery to be rescheduled. They include:

- Eating or drinking after a specified time
- Any respiratory (airway or lung) illness
- Any open wounds or breaks in the skin on the operative leg
- Fever of 101°F (38.3°C) or higher
- Failure to stop taking medication as directed by your surgeon before surgery (for example, aspirin or other blood-thinning medications)

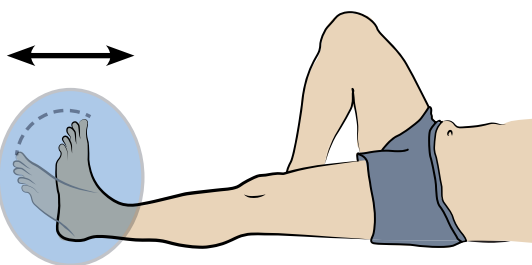
Strengthening and balance exercises for getting surgery-ready

Studies have shown that your level of function before surgery impacts how well you do after surgery.

Specific exercises

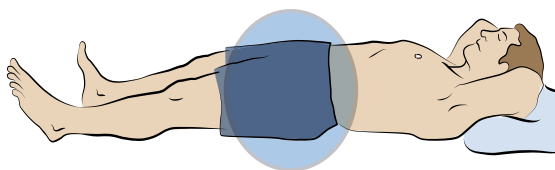
Ask your surgeon about specific exercises you can do to help you prepare for your joint replacement surgery. Specific strengthening exercises may help prevent blood clots and help to strengthen muscles around the joint to be replaced (see examples below).

Your surgeon or therapist will recommend exercises depending on your specific needs.



Ankle Pumps

- Point, then flex both feet.
- **Before surgery:** Do this exercise 10 to 15 times, 3 times a day.
- **After surgery:** Do this exercise 10 times an hour while awake.

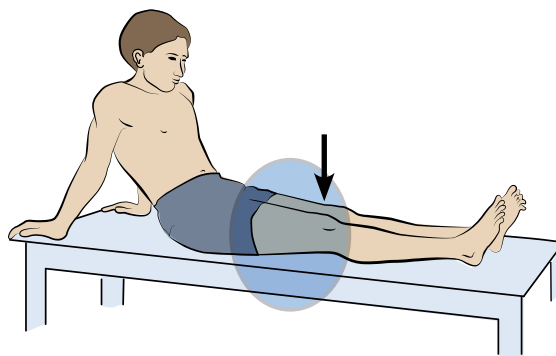


Gluteal [GLOO-tee-uhl] Squeezes

- Squeeze your buttock muscles together tightly. Your hips should rise slightly off the bed.
- Hold for 3 to 5 seconds, then release.
- **Before surgery:** Do this exercise 10 to 15 times, 3 times a day.

General exercises

General strengthening exercises include biking, swimming, walking, and water aerobics. Try to exercise 150 minutes a week (or 30 minutes a day, 5 days a week) to improve your health and strength before surgery. Even if your surgery is only a week or so away, starting exercises now can help give you a head start on your rehabilitation and recovery afterward.



Quadriceps [KWOD-ruh-seps] Sets

- Lie in bed with your legs straight. Tighten the front thigh muscle of the leg that will undergo surgery while gently pressing your knee down toward the bed.
- Hold for 3 to 5 seconds, then relax the leg.
- **Before surgery:** Do this exercise 10 to 15 times, 3 times a day.
- **After surgery:** Do this exercise 10 times an hour while awake.

Preparing your home

When you come home after surgery, you will need to be extra careful to prevent falls and injuries while you recover. There are a lot of small changes you can make at home now to make your recovery as safe and speedy as possible.

Set up your recovery space

- ☐ Leave space around furniture for using a walker, cane, or crutches.
- ☐ Place a sturdy chair with arms near a table.
- ☐ Ensure that chair seats are high enough to get into and out of easily. Add cushions if necessary.

Arrange for assistive equipment

- ☐ **DO NOT expect people to lift or move you** — they could get injured. Use the prescribed assistive equipment instead.
- ☐ Plan on needing a front-wheeled walker or crutches (at minimum). You may also want a raised toilet seat or toilet safety frame and a shower chair.

Reduce tripping hazards

- ☐ Remove throw rugs or small objects on the floor.
- ☐ Tack down or tape carpet edges.
- ☐ Remove clutter.
- ☐ Clear pathways of furniture and electrical cords.

Improve lighting

- ☐ Use night lights and add lamps if necessary.
- ☐ Make sure your stairs and hallways are well lit.

Manage pets

- ☐ Make a plan to keep your pets from tripping you once you come home. For example, you could keep pets in a different area of the house or put a bell on each pet's collar to alert you when they are near.
- ☐ Consider boarding your pets or having them stay with a friend or family member when you first come home.

Prepare your kitchen and bathroom

- ☐ Stock up on supplies and groceries. Prepare and freeze meals ahead of time to warm up while you are recovering.
- ☐ Store commonly used items on lower shelves or on countertops in your kitchen and bathroom.
- ☐ Place items where you can reach them without bending below your waist, reaching, or lifting.
- ☐ **DO NOT USE step stools.**

Notes

Tips for a safe bathroom after surgery

Check the items in the illustration below that apply to your situation.

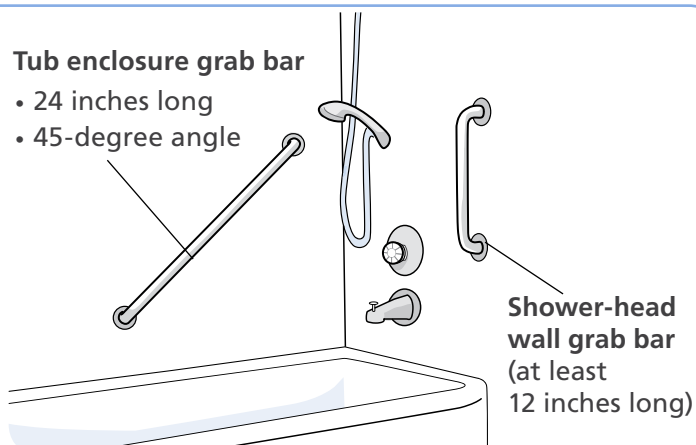
- ☐ Use an **elevated toilet seat** or **toilet safety frame** to raise the height of your toilet and steady yourself when standing up from the toilet.
- ☐ Install a **hand-held shower hose** and **single-lever water mixing faucet** for better temperature control.
- ☐ Keep a **long-handled sponge** handy to wash hard-to-reach areas.
- ☐ Install **grab bars** for support as you get into and out of the tub or shower.
- ☐ Prevent slips and falls by using **ONLY non-slip bath mats** on the floor and in your tub and shower.
- ☐ Sit on a **bath bench** or **shower chair** while you bathe. A shower chair can also be used for dressing and grooming at the sink.

Other safety considerations include keeping your hot water heater set at no more than 120 degrees, putting daily-use items within reach, and not using bath oils in the tub or shower.

Grab bar guidelines

If you decide to install grab bars for general safety, follow these guidelines:

- Consider a professional installation for wall-mounted grab bars.
- Use grab bars that are 1 ¼ to 1 ½ inches in diameter.
- Choose a bar with a textured surface to make it easier to grip.



What your healthcare providers need to know

The more your healthcare providers understand your current condition, the better they can reduce the risk of surgical complications. The information below explains why your care providers need to learn as much as possible about your medical history and medications.

- **Infections.** A current or past infection on any part of your body can lead to surgical complications. Problems, such as active dental infections or urinary tract infections, should be diagnosed and treated before surgery.
- **History of heart problems.** Discuss these with your primary care doctor and cardiologist (if you have one) so that your care team can help prevent heart-related complications.
- **Other medical conditions.** Your care team needs to know if you have ever had certain conditions or allergic reactions. These include diabetes, a transplant, a bleeding disorder, deep vein thrombosis (DVT), pulmonary embolism (PE), sleep apnea, complications with anesthesia, latex allergy, or a pacemaker.
- **Current skin conditions.** Open sores, areas of infection or irritation, and old incisions can increase the risk of infection, slow wound healing, and cause other problems. This is especially true for the skin around the incision site. Tell your surgeon about skin issues—wounds, abrasions, skin injuries, and any other changes—that occur between your last office visit and the day of surgery.
- **Your medications.** Some medications can cause problems or slow your recovery when taken together. Give your care providers a complete list of all medications you take, including vitamins, herbal remedies, or supplements.
- **General physical health.** Your surgeon may require a physical exam, blood work, and other pertinent tests.
- **Quality surveys.** You may be asked to complete surveys that measure your ability to function before and after surgery.



Notes

My pre-surgery health record

Gather the information below that your hospital staff will need to know before your surgery. Having this information handy will make the process much smoother. You can also request a list of your medications from your primary care doctor.

Check the items below that apply to you.

- ☐ I do not currently smoke, vape, chew tobacco, or use nicotine products.
- ☐ I have had the pre-surgical tests my doctor ordered, such as ECG, blood work, and x-rays.
- ☐ I have not traveled outside of the country in 30 days.

I currently have the following:

- ☐ Diabetes.
- ☐ Obstructive sleep apnea.
- ☐ A breathing disorder or a need to use oxygen at home.
- ☐ A pacemaker or defibrillator. If so, record the make and model: _____

Date of the last check to ensure proper operation and charged batteries: _____

- ☐ A heart stent.
- ☐ History of DVT or PE (including in family).
- ☐ History of chronic infection such as MRSA, VRSA, VRE, C-diff, or ESBL.
- ☐ Allergies to medications, food, materials, or other. If so, list your allergies below:

- ☐ An advance directive (check all that apply):
 - Power of attorney – POLST (UT)
 - Living will – POST (ID)

List every medication, vitamin supplement, or herbal remedy you take in the space provided.

In the “dose” column, write how much you take. (For example, include the number of milligrams [mg] per pill printed on the **pill bottle label**, and how many pills you take each time.)

Prescription medications I take	Dose	How often	Reason
Example: Metoprolol ER	25 mg	daily	for blood pressure

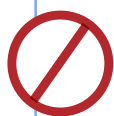
Over-the-counter medications I take (including vitamins and herbal remedies)	Dose	How often	Reason
Example: Fish Oil	100 mg	daily	

Packing your bag

Check the items below that you need to pack.

What to bring to the hospital

- Bring *Your Guide to Joint Replacement* booklet.
- A partner in healing who can stay with you until the time of surgery and will be responsible for taking you home afterward.
- A small bag of personal items with:
 - ☐ A pair of fully-fitted, non-skid shoes or slippers. You'll need these during physical therapy.
 - ☐ Loose, light-weight clothing, such as T-shirts and shorts or sweat pants, that will fit easily over bulky dressings (bandages).
 - ☐ Personal care items such as a toothbrush and deodorant.
 - ☐ Your cell phone, e-reader, laptop, or book, if you choose. Don't forget the charger for your electronic devices.
 - ☐ Your CPAP and mask, if you use one.
 - ☐ A "rescue inhaler," if you use one.
 - ☐ A case for glasses, contacts, or hearing aids.
 - ☐ Your picture ID, insurance card, and a form of payment for prescriptions (if you choose to fill them at the hospital pharmacy).
 - ☐ A list of all medications you take including herbal supplements and over-the-counter medications.
 - ☐ A list of any questions or new concerns you want to discuss with your surgeon or anesthesia provider.
 - ☐ A copy of your advance directive form.



What NOT to bring to the hospital:

- Valuables such as cash or jewelry
- Medications or supplements (unless otherwise directed)

Surgery and Recovery

When you have surgery, your care team can help you determine the best anesthesia for your surgery and health. During surgery, they will perform your joint replacement using internationally-recognized best practices of surgical and medical care. After surgery, your pain will be managed and side effects kept to a minimum.



"I really appreciated how carefully the staff explained what I could and could not do when I woke up. I had no idea how the spinal anesthesia would affect me!"

— JoAnn, Hip Replacement Patient

What to expect before surgery

When you go to the pre-surgery area, here's what to expect:



- You will have your height and weight measured.
- You will change into a hospital gown and be asked to remove your glasses, contacts, hearing aids, dentures, jewelry, and undergarments.



- A nurse will check your blood pressure, heart, lungs, and ability to breathe normally.



- A nurse may draw some blood and will start an IV (a small tube inserted into a vein) for you to get fluid and medications during surgery.



- Compression devices will be placed on your lower legs to improve circulation and prevent blood clots from forming.



- You will meet with your surgeon and anesthesiologist to discuss your questions and concerns. (Be sure to write down any questions you have).



- A caregiver will prepare the surgical site, and the site will be marked by your surgeon.

Understanding anesthesia

Before surgery, you will be given anesthesia, a type of medication that keeps you comfortable during surgery.

There are several types of anesthesia. The type that will be best for you depends on the surgery you are having and your overall health and risk factors. With any type of anesthesia, there may be some side effects or complications (although rare).

What will it feel like when the anesthesia wears off?

When your anesthesia begins to wear off, you may feel tingling or burning as well as aching. **Remember:** You will have pain following a major surgery like this. The goal is to be able to manage your pain so you can rest, heal, and do physical therapy. Also, if you used opioids to manage pain before the surgery, it may make it more difficult to manage your pain afterward.

General anesthesia

Used during many major surgeries, this type of anesthesia affects your entire body and puts you into a deep sleep. It's usually given by injection (shot), gas inhalation, or through an intravenous (IV) catheter inserted into a vein.

Once you are asleep, the anesthesiologist will place a breathing tube down your throat and give you oxygen to assist your breathing during the surgery.



Spinal regional anesthesia

This type of anesthesia is given as an injection before surgery to prevent feeling in the lower part of your body. It will wear off a few hours after surgery.

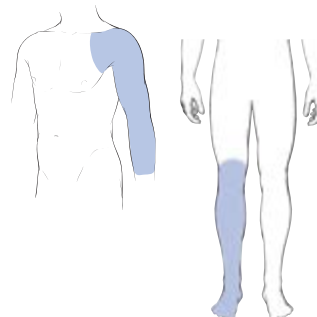
Regional anesthesia should not affect your breathing or heart rate, so you will be able to breathe and swallow on your own. Because you remain conscious, you will also be given sedatives to make you sleepy.



Peripheral nerve blocks

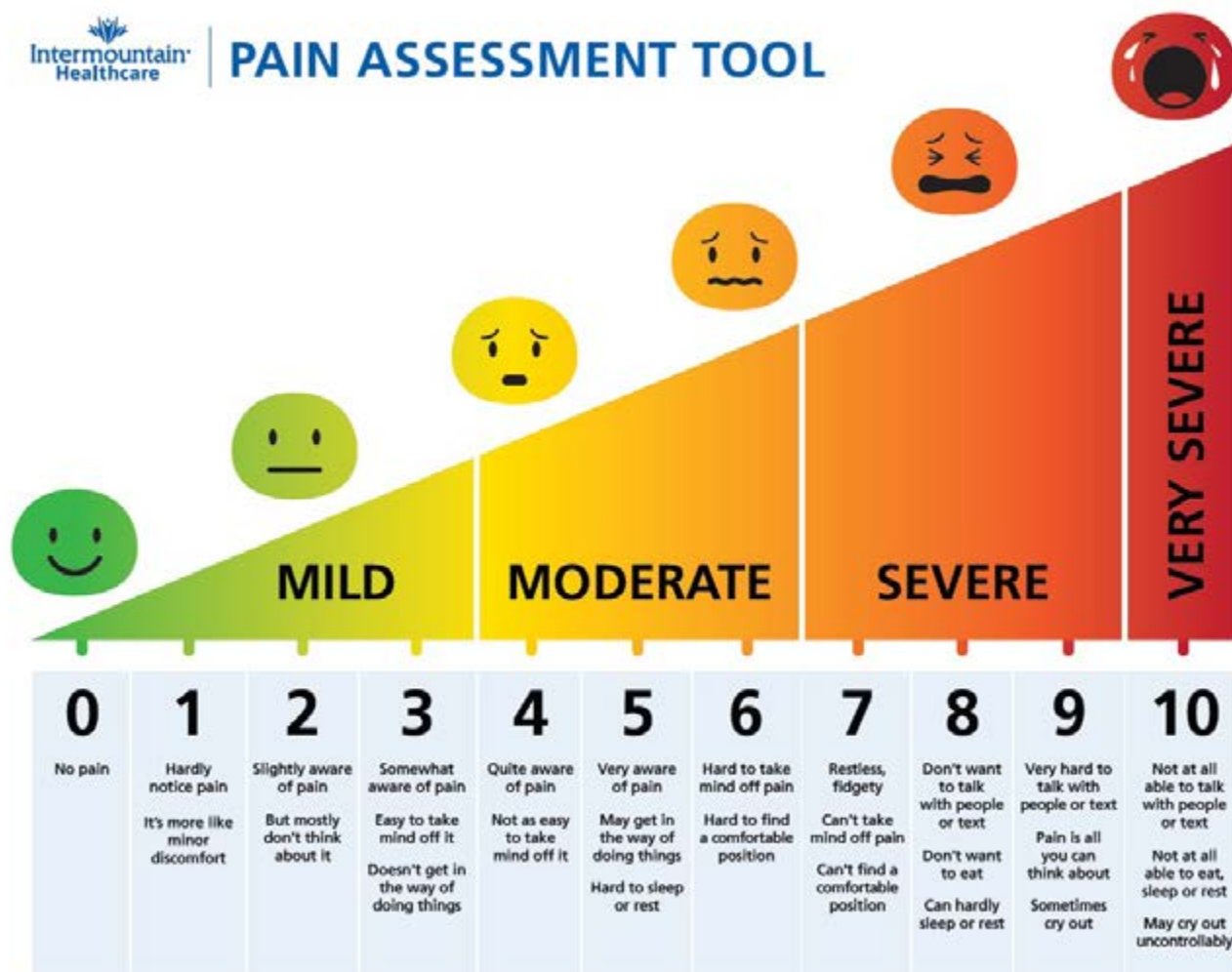
These blocks are a type of local anesthesia used to help with pain control after surgery. A local anesthetic is injected around some of the nerves to the joint being replaced.

A peripheral nerve block can be a one-time injection or an infusion of medication that lasts for several days after surgery.





PAIN ASSESSMENT TOOL



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Types of pain medications

You may be prescribed more than one type of medication depending on your specific needs. These medications could include acetaminophen (Tylenol), non-steroidal anti-inflammatories or **NSAIDs** (such as ibuprofen or naproxen), steroids, and topical pain cream. Opioids should only be used as needed.



Understanding the daily routine

While you are in the hospital, your goal is to build your strength and independence enough that you'll be able to continue your recovery outside of the hospital. Our goal is to help you become more mobile, prevent complications, and keep you safe.

Physician or provider rounding

Your surgeon or their assistant will visit you each day you are in the hospital. Most surgeons and / or physician assistants start their “rounds” in the mornings, but depending on their schedules, they may not come until later in the afternoon. In addition to seeing you, they will review your clinical notes, physical therapy progress, laboratory information, and coordinate a plan for your discharge from the hospital.

Hourly rounding

Care team members will be checking on you in your room every hour. Please take advantage of this time to have them assist you with any needs, especially when you feel you may need to go to the bathroom.

Bedside reporting

When one nurse goes home and transfers your care to another nurse, both nurses will meet at your bedside to discuss your progress. You are encouraged to participate in this conversation to help make the best plan for your recovery.

Blood draws

You may have your blood drawn to ensure you are recovering well.

Daily care

Your nurses will regularly check your vital signs, how much fluid you drink, and how much you eat. They will monitor drainage from your incision, increased pain and swelling, and how your legs and toes feel. In addition to your home medications, you will receive other medications to prevent blood clots, control pain, and prevent infection. Your care team will also offer help with getting dressed, changing your linens, ordering food, preparing you for physical therapy, and any nighttime care you may need.

Getting out of bed

Building strength also involves getting up and out of bed as soon as possible after surgery. You will get out of bed to go to the bathroom, to do physical therapy, and to start moving on your own with your new joint. **However, you must NOT get up without a staff member with you.** Remember: Your care team wants to help you get out of bed and become more mobile. You are never “bothering” your care team!

- **DO NOT:**

- Get up by yourself.
- Have family members help you up.

- **DO:**

- Call staff at least 15 to 20 minutes before your urge to “go” is immediate.
- Expect a staff member to stay in the bathroom with you. **Safety comes before privacy.**

Communication

There are 2 very important ways that you and the hospital staff will be able to communicate during your stay:

- 1 **The communication board.** Your caregivers will help you understand this board that is located in your room. It will include the names of those caring for you and other information depending on the facility and your needs.
- 2 **The call button.** The nursing call button at your bedside is an important communication tool for you when you need assistance. **Don't forget: You MUST HAVE a staff member with you EVERY time you get up.**



Physical and occupational therapy

The goal at Intermountain is to have you out of bed on the day of your surgery. A physical therapist will evaluate your mobility as soon as you are able.

The therapist will have you sit on the edge of the bed, move to a chair, walk in your room, or walk in the hallway. You will learn a series of exercises prescribed for you to help with recovery both in the hospital and when you go home. If you need to use stairs at home, the therapist will teach you how to go up and down them safely. Plan on 1 or 2 daily sessions of physical therapy. Your partner in healing is encouraged to attend at least 1 inpatient physical therapy session.

You may have an occupational therapist (OT) visit you to help make sure you can complete activities of daily living (such as dressing and personal hygiene tasks). The OT will teach you how to use adaptive equipment safely for transferring on and off the bed and toilet, and into and out of tubs and showers.



Understanding realistic expectations and potential complications

Talk to your caregivers if you are experiencing side effects so they can treat them appropriately.

Nausea

Nausea can be a problem with any surgery. It can be caused by anesthesia or pain medication. To prevent nausea:

- Alert your nurse when you are feeling nauseated. Nausea medication is generally available as ordered by your healthcare provider.
- Avoid taking pain medication on an empty stomach. While you may not feel like eating, it's important to refuel your body.
- Drink small amounts of 100 % fruit juice or broth. Eat or drink something small every few hours.

Opioids and constipation: What you need to know

Opioid medications are regularly prescribed after surgery to help manage pain.

Some common opioids include:

- Percocet (oxycodone / acetaminophen)
- Roxicodone (oxycodone)
- Norco (hydrocodone / acetaminophen)
- Dilaudid (hydromorphone)
- Ultram (tramadol)

Opioids are usually safe when used exactly as ordered by your doctor, but they do have many side effects. One major side effect is **constipation** (can't poop). This is caused by opioids slowing down the movement of your bowels. About 6 out of every 10 people who take opioids after surgery have constipation.

Constipation

Bowels need to move. However, inactivity and certain pain medications lead to constipation. To prevent constipation:

- Eat more whole grains, fruits, and vegetables as they contain higher levels of fiber.
- Walk! Be sure to have a caregiver with you at all times.
- Stop taking opioids as soon as possible.
- Drink plenty of fluids unless your doctor says otherwise.



It's important to prevent constipation following surgery to prevent having to go back to the hospital or the emergency room. See the steps on the next page to help you trigger a bowel movement (BM) and stay regular while taking opioids. Continue to follow your bowel care plan until you are done taking opioids, you have regular BMs without treatment, or you get diarrhea.

Getting things moving

Follow these steps to find relief and prevent constipation while taking opioids following surgery. The medications for constipation on this list are available over-the-counter at most drug or grocery stores.

STEP 1

GET THINGS MOVING

TAKE 1 capful or packet of **Miralax** (polyethylene glycol) mixed with at least 8 ounces of water or juice **2 times** daily, **AND/OR**

TAKE 1 tablet of **Senna-S** (sennosides / docusate) **2 times** daily.

- Once you are regular, you may adjust as needed (for example, stop Senna-S and continue Miralax).
- If you don't have a BM for a total of 3 days, move to Step 2.

STEP 2

KEEP THINGS MOVING

INCREASE Senna-S to 2 tablets **2 times** daily, **AND CONTINUE Miralax**, taking 1 capful or packet mixed with at least 8 ounces of water or juice **2 times** daily.

- Once you are regular, you may adjust as needed.
- If you don't have a BM for a total of 5 days, begin Step 3.

STEP 3

REALLY GET THINGS MOVING

ADD 1 dose (30 milliliters [ml]), of **Milk of Magnesia** (magnesium hydroxide).

- If you are able to have a BM, return to Step 2 until you are done using opioids or you have constipation or diarrhea. If you don't have a BM within 8 hours,

ADD 1 tablet (10 milligrams [mg]) of **Dulcolax** (bisacodyl) **OR 1** rectal suppository.

- If you are able to have a BM, return to Step 2.
- If you don't have a BM,

TAKE another dose of **Milk of Magnesia** and **1** tablet of **Dulcolax**.

- If you are able to have a BM, return to Step 2.
- If you don't have a BM or have continued symptoms, move to Step 4.

STEP 4

REALLY, REALLY GET THINGS MOVING

Take ½ to 1 bottle of magnesium citrate.

- Once you finally have a BM, return to Step 2
- If you don't have a BM while you are using opioids or symptoms of constipation continue, call your doctor.

Preventing complications

You will be asked to get up out of bed soon after your surgery. Movement and good pain management allow your mind and body to focus on healing and preventing possible complications.

Blood clots

Blood needs to be pumped through the vessels in your legs to prevent blood clots or **deep vein thrombosis (DVT)**. To prevent blood clots from forming:

- Participate in physical therapy, do ankle pumps, and use the devices that are designed to help prevent clots, such as sequential compression devices (SCDs) and the TED hose.
- Walk as often as recommended.
- Take blood-thinning medications as prescribed.

Falls

After surgery, you are at a higher risk of falling. You may be attached to tripping hazards, such as IV lines, oxygen tubing and sensors, and compression boots. You may also have a nerve block which causes numbness in your limbs. To reduce your risk of injury and a longer hospital stay:

- **Do not get up without assistance.** Use your call light and only get up with the help of a caregiver. Notify your nurse if you can't use the call light.
- Use non-slip footwear and a walker, cane, or crutches.
- Use grab bars and assistive devices.

Respiratory precautions

To prevent low oxygen levels and pneumonia:

- Use incentive spirometry (IS).
- Cough and take deep breaths.
- Eat meals sitting up.
- Do not take sleep medication unless it is approved by your doctor.
- Report any difficulty with breathing or awakening from sleep.
- Understand that some pain medications can slow your breathing.



Swelling

Swelling is best controlled by using the **R.I.C.E.** method (shown below):

Rest. Getting enough rest will help your body heal and reduce swelling.

Ice. Use an ice pack or ice machine. Your physical therapist will tell you how long to keep using ice.

Compression. Your doctor may recommend that you wear compression stockings, or use an ACE wrap, for a few weeks after you come home from the hospital.

Elevate. Keep your leg elevated above the level of your heart when you sit or lie down.



Wound infection

To prevent infection:

- Keep the dressing on as ordered by your doctor.
- Keep your dressing clean and dry. Notify your nurse if the dressing appears soiled or is coming off.
- Do not touch the incision area.
- Wash hands with soap and water before touching your operative leg.

Hip precautions

Protect the new joint from dislocation.

Avoid the following until your doctor or physical therapist say you may do so:

- Crossing your legs or ankles
- Kneeling down
- Turning (rotating) your legs inward or outward

Note: If you have a posterior approach hip replacement, avoid bending your hips past 90 degrees.

Recognizing and controlling your pain

Why is pain management important?

Good pain management allows both your mind and body to focus on healing, and healing faster can help prevent complications. As you and your healthcare providers manage your pain, expect that:

- **You'll feel less stress.** Feeling comfortable reduces the stress that comes with pain, which means your mind and body can work harder on healing.
- **You'll rest better at night.**
- **You can move around more easily.** If you feel less pain, it's easier to do the physical therapy and breathing exercises that will get your strength back quicker. You may even leave the hospital sooner.
- **You may have fewer complications after your procedure.** People whose pain is well controlled seem to do better after procedures, avoiding problems such as pneumonia or blood clots.

What causes pain after your surgery?

Many things can contribute to the pain you feel. These include:

- The surgical cut
- Muscle spasms or cramps near the site of the procedure
- Tubes inserted into the body during your surgery or that remain after the procedure
- Muscle pain as a result of the position you had to lie in during the procedure, or lying in bed for a long time after the procedure
- Constipation

What is my pain management goal?

You will have pain after joint replacement surgery. The goal is to reduce your pain enough that you can rest and do the activities that will help you recover. To best manage pain, your healthcare providers will consider 3 factors:

1 What recovery activities you need to do.

These include coughing or breathing deeply to prevent complications, physical therapy exercises, and self-care activities.

2 What level of pain you can manage and still do needed activities.

Everyone's ability to tolerate pain is different. You will rate your pain on a scale of 0 to 10 and identify the level of pain you can manage and still do your recovery activities.

3 What will help you to be comfortable.

When you're uncomfortable, your pain can feel even worse. Being comfortable may include listening to music, staying warm, sleeping without interruption, or quickly managing feelings of nausea.

With these factors identified, your healthcare providers will help you determine your best level of pain control. **This is your pain management goal.**

How is my pain controlled?

Your pain may be controlled using the **multimodal** [mull-tye-MODE-uhl] approach or other methods. The multimodal approach means using different types of medications that all work to manage pain. It may include the use of one or more of the following medications:

- **Pain relievers**, such as acetaminophen (Tylenol)
- **Non-steroidal anti-inflammatory drugs (NSAIDs)**, including ibuprofen (Motrin, Advil), naproxen (Aleve, Naprosyn), Celebrex, Meloxicam, or Toradol
- **Opioids**, including oxycodone (Roxicodone), hydromorphone (Dilaudid), hydrocodone (Norco, Lortab), and tramadol (Ultram)
- **Muscle antispastics**, including Diazepam (Valium)
- **Nerve pain treatments**, including gabapentin (Neurontin)

Additional methods to control pain include:

- Cold therapy (ice)
- Massage or therapeutic touch
- Spiritual or emotional counseling
- Distraction (music, TV, games)
- Relaxation or meditation techniques

How can I stay ahead of the pain?

If your pain starts to increase, let your healthcare providers know. It's easier to control the pain before it gets too strong. If you wait until it's severe, it may be harder to get under control. Also, if you used opioids to manage pain before the surgery, it may make it more difficult to manage your pain afterward.

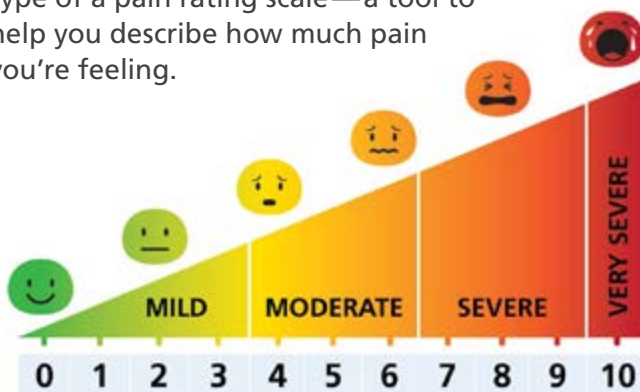
Before taking more pain medication

- Re-position yourself in the bed for comfort or sit in the bedside chair
- Elevate your operative leg above your heart
- Get up and walk or exercise
- Apply ice

How do I talk about pain to my nurse?

It's not always easy to describe pain.

Your care providers will likely use some type of a pain rating scale—a tool to help you describe how much pain you're feeling.



Preparing to go home

Studies show that joint replacement surgery patients who recover at home get better faster and with fewer complications.

It is important to identify a committed partner in healing long before your surgery. Your partner in healing should be able to stay with you for a few days after you go home. Talk to your family and friends about getting the support you need at home.

Your surgeon may recommend that you continue with outpatient physical therapy once you go home. If you are unable to leave home to go to outpatient physical therapy, or if you go home with medications that require assistance or monitoring, you may need to have home health services.

Your care team (such as your surgeon, nurse, care manager, physical therapist, and social worker) will decide when it is safe for you to recover at home.

You will receive specific guidelines from your care providers about your joint replacement, including precautions and rehab exercises.

Discharge from the hospital requires that you:

- Are medically healthy
- Have achieved your personal goals for discharge (see below)
- Have completed your home health arrangements, if appropriate
- Have a family member or partner in healing to take you home

When all hospital discharge criteria have been met, your surgeon will discharge you with:

- Prescriptions for the medications you need. Some medications may be new to you, so be sure to ask any questions you have about them.
- Any orders for home health or outpatient physical therapy based on the type of joint replacement you had and your individual needs.

Before you are discharged, your nurse will meet with you to review your discharge instructions, discuss your medications, and answer your questions.

My goals for when I go home

- | | |
|--|---|
| <input type="checkbox"/> Be able to get into and out of bed, up from a chair, into and out of the shower, and on and off the toilet without assistance | <input type="checkbox"/> Perform my therapy exercises on my own or with help from my partner in healing |
| <input type="checkbox"/> Go up and down a flight of stairs safely | <input type="checkbox"/> Manage pain so that I can complete exercises and daily activities |
| <input type="checkbox"/> Be able to put on socks and shoes and safely walk at least 50 to 100 feet on my own with crutches or a walker | <input type="checkbox"/> Eat and drink without difficulty |
| | <input type="checkbox"/> Have necessary support and equipment at home |

What to Focus on When You Go Home

When you first get home from surgery, there is a lot to focus on. You will be given prescriptions for medication to take and will be advised on how to best manage pain. You will also receive an exercise plan that will help you increase your mobility.

See the following pages for advice on how to be safe at home, control constipation, manage pain and swelling, and when to call your doctor.



"Once my physical therapist showed me how to use the walker correctly, I was up and moving whenever possible. I started out slow and steady and then soon developed a good gait that protected my joint and helped me keep up my daily exercise."

— Mark, Knee Replacement Patient

Being safe at home

It is important that you protect yourself from falling and keep your new joint in safe positions while you heal. You will need to use assistive equipment to prevent falls and help you with tasks while you are recovering at home.

Preventing falls

Preventing a fall or injury to your new joint is one of the most important things you can do to recover safely at home.

- **Do not** have others help you to stand up or walk. You risk falling as well as injuring the other person.
- Keep your walker, crutches, slippers, and other items you need within reach of your bed.
- Take your time! **Don't hurry** to answer the door or phone or wait too long to head for the bathroom.

Following your therapy plan

Your physical therapist will create an exercise plan especially for you. By doing your exercises just as your therapist instructs, you will improve how well the joint works once you are healed.



How to use your walker

Follow these safety guidelines to help reduce potential risks.

Standing up

Push up from your seat to a standing position—**don't use your walker to pull yourself up.**

Walking

- Make sure all 4 legs of the walker are on the ground before taking a step.
- Stand in the middle of the walker.
- Grasp the grips on each side of the walker with both hands.
- Push the walker forward at an arm's length that feels comfortable. The back legs of the walker should be even with your toes.
- Step forward with your weaker leg into the middle of the walker. Continue to grasp the walker grips with both hands.
- Step forward with your stronger leg. Keep weight off your weaker leg by supporting some of your weight with your arms.
- Work at keeping a good posture — keep your elbows bent slightly, and don't lean forward over the walker.
- Keep an eye on what's ahead of you.
- To turn or change direction, you may need to lift the walker.
- Your physical therapist may adjust the walker to meet your particular needs.
- Always have at least part of your body inside the frame of the walker.
- **Do not use** your walker on stairs or an escalator.



How to use your forearm or underarm crutches

You may be given forearm crutches (also called “elbow crutches”) or underarm crutches.

Walking

Your weight should be on the crutches when moving your stronger leg. Be sure to support your weight on your hands and not your armpits. Then, follow this pattern:

- Lean on your stronger leg.
- Lean forward slightly, and move both crutches about a foot in front of you.
- Begin your step as if you were going to use the weaker leg, but instead, shift your weight to your crutches.
- Finish the step with your stronger leg.
- Focus on where you want to go, not on your feet.

Sitting down

Only sit in sturdy chairs. Make sure the seat is high enough that you won’t have to fall into it. If necessary, add pillows. Then, do this:

- Back up to the chair.
- Hold your weaker leg a little bit in front of you, and put both crutches in the hand on the side of your stronger leg.
- Reach down with your free hand, and hold the arm or seat of the chair. Slowly lower yourself.
- Rest your crutches on their sides near your chair.

Standing up

- Slide yourself to the front of the chair.
- Hold both crutches in the hand on the side of your stronger leg.
- Put all your weight on the stronger leg, and push yourself up.



Going up and down stairs

When going up stairs, lead with your “good,” or stronger leg. When going down, lead with your “bad,” or weaker leg. To go up or down, start close to the stair and hold the handrail with one hand. In the other hand, hold both crutches:

- Use 1 crutch to support yourself.
- In the same hand as the supporting crutch, hold the other crutch horizontally with your fingers.

To go up stairs:

- Have someone walk behind you the first few times you climb the stairs.
- Keep the crutch on the step you’re standing on. Then, step up with your stronger leg.
- Push down on the crutch, and step up with the weaker leg.
- When both feet are on the upper step, bring your crutch up.

To go down stairs:

- Have someone walk in front of you the first few times you go down the stairs.
- Put your crutch on the lower step.
- Bring your weaker leg down.
- Step down with your stronger leg.

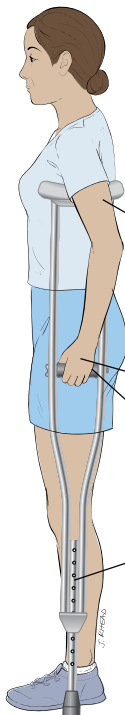
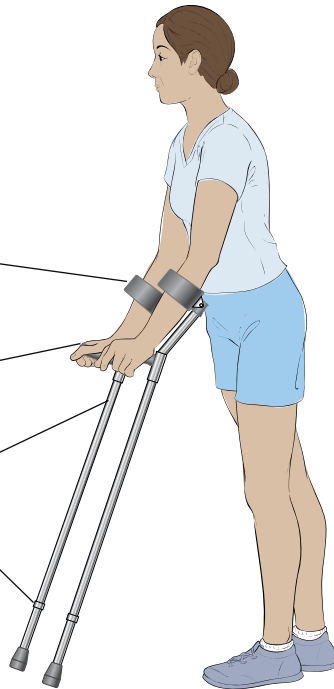
If you don’t feel steady, you may have to sit on each step and move up or down on your bottom. This may not be your favorite way to get around, but it can help you use the stairs safely and prevent a fall.

Forearm crutches

When standing up straight:

- The cuff should be about 1 to 2 inches below where your elbow bends.
- The handgrip should hit about where your wrist bends.

Use the buttons to adjust the length of the crutches.



Underarm crutches

When standing up straight:

- The underarm supports should fit about 2 inches below your armpits.
- Your weight should rest on your hands, not on the underarm supports.

Use the bolts to adjust the length of the crutches and the height of the handgrips.



Where can I rent or purchase assistive equipment?

Where to get equipment:

If you already have the equipment, let your surgeon and care manager know, and please bring it to the hospital so that it can be adjusted appropriately. If you do not already have the equipment, we will work with your insurance company to provide you with a device at the time of discharge.



Watching for blood clots

Surgery can increase your risk of developing blood clots, which can be dangerous and require immediate medical care.

To prevent this, your surgeon has prescribed a medication to prevent blood clots (aspirin, apixaban, enoxaparin, warfarin, Xarelto).

Symptoms of a blood clot can vary and are not always clear. Call your doctor if you have:

- More swelling than normal throughout your leg
- Pain or tenderness in your calf (the back of your lower leg) that gets worse when you pull your foot towards your nose
- A specific area on your calf that feels warmer to the touch than the rest of your leg

Caring for your wound

Prevent infection by following these guidelines:

- Always wash your hands before changing a dressing.
- Keep the incision dry and clean.
- Follow your doctor's instructions on how to clean the area and change the dressing.
- Follow your doctor's instructions for bathing (including submersion in a hot tub or pool) and showering.
- **Do not** allow pets on or around the wound until it is completely healed.



Controlling constipation at home

Because you are less active and taking pain medications after surgery, you will probably have some trouble with constipation. Use the tips found on pages 20 and 21 to control these side effects.

Usually, constipation after surgery gets better without major complications if you control it by:



Taking stool softeners and laxatives if recommended by your doctor. Continue taking these as long as you are taking pain medication.



Adding fiber to your diet. You can eat more whole grains, fruits, vegetables, and nuts or take a fiber supplement. Add fiber slowly to prevent feeling bloated.



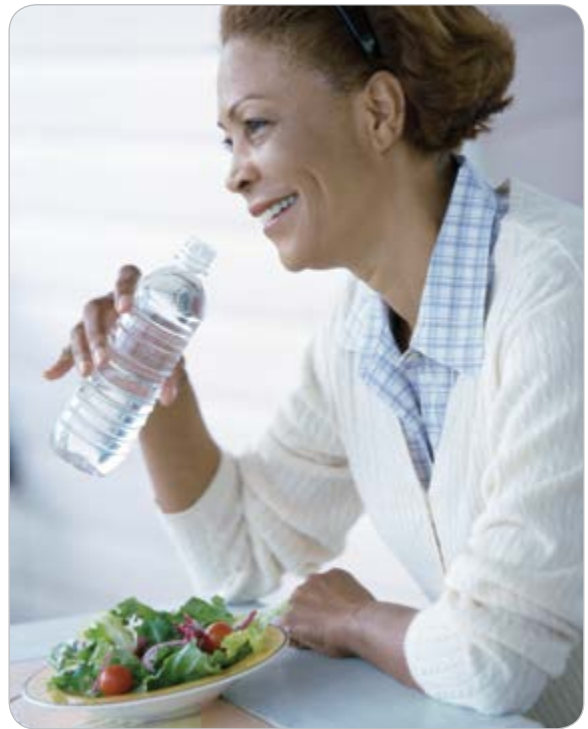
Walking. Exercise helps your colon be more active. Plus, it is important for your recovery.



Drinking water. It is important to give your body the fluid it needs to prevent constipation.



Avoiding foods that can cause constipation. Dairy products, bananas, white bread or rice, and processed foods can all make the problem worse.



If you are following these guidelines and still have symptoms of constipation after 7 days, contact your doctor.

Controlling swelling at home

Swelling is best controlled by using the **R.I.C.E.** method (shown below).



Rest. Getting enough rest will help your body heal and reduce swelling.

Ice. Use an ice pack or ice machine (see recommendations at right). Your physical therapist will tell you how long to keep using ice.

Compression. Your doctor may recommend that you wear compression stockings, or use an ACE wrap, for a few weeks after you come home from the hospital.

Elevate. Keep your leg elevated above the level of your heart when you sit or lie down.

Also, doing your exercises will help in the long run. You may experience more swelling right after doing your exercises in the first few weeks after you come home. Be sure to drink plenty of water — this will also help with swelling.

Using cold therapy

There are a variety of ways to apply cold to manage swelling. Most people use ice packs made of something that will mold to the body's shape without putting too much pressure on the surgical site. These packs can be filled with a gel, ice cubes, or even frozen peas, which don't melt and leak. Keep ice packs from having direct contact with your skin. You can wrap it in a thin towel or cloth to protect your skin.



Knowing when to call your doctor

It is important that you and your partner in healing or other caregivers know what to watch for as you recover and whom to call if needed.

What should I report to my surgeon?

- Pain that gets worse or that you can't control with prescribed pain medication.
- Problems with your incision such as:
 - Unusual bleeding or new drainage (your dressing becomes soaked before it's time to change it)
 - Separation of the edges of the incision
 - Blood, pus, or a foul odor coming from the incision
- Numbness, tingling, or weakness in your arms or legs — or where you don't expect it.
- Any kind of fall.
- Itching.
- A fever that doesn't get better after taking medication. Follow the guidelines on your discharge order.
- Dizziness, light-headedness, or fainting.
- Skin rash.
- An unexpected ringing, buzzing, or whistling sound in your ears.
- Blurred vision.
- Persistent headache.
- No bowel movement within 7 days after surgery.
- Nausea when eating and drinking.
- Signs of deep vein thrombosis (blood clot), such as:
 - Pain in leg, calf, or foot
 - Leg swelling or tenderness
 - Warm skin

What should I report to my primary care physician?

- Concerns about regular medications such as those you take for high blood pressure, diabetes, or heart conditions.
- Symptoms of a urinary tract infection, such as feeling like you need to urinate (pee) frequently, difficulty or pain when urinating, blood in the urine, pelvic or back pain, or fever.
- Trouble controlling your blood sugar (if you have diabetes).

Before you go to the emergency room, have you contacted your surgeon?

Go to the emergency room or call 911 if you have:

- **Difficulty breathing or shortness of breath**
- **Chest pain**
- **Black or bloody stool**
- **Bloody vomit**

Managing pain at home

When you go home, being able to control your pain will help you rest, do daily activities, and engage in the exercises and therapy needed to make your joint replacement a complete success.

You will still have some pain, especially when doing the recommended exercises, but if you manage your pain, you'll get better faster. Here are some strategies for managing pain.

Relieving pain with medication

You may be sent home with one or more prescription or non-prescription medications to relieve pain, to reduce inflammation, or to help your muscles relax. These medications control pain in different ways.

You can prevent problems and avoid the risk of addiction to pain medications by taking them **exactly** as your doctor directed.

Relieving pain without medication

You may be able to take fewer doses of pain medication when you use alternative ways to relieve pain. Ask your doctor about these options:

- Cold therapy
- Guided imagery and distraction
- Physical therapy or exercise
- Relaxation or meditation
- Massage
- Spiritual or emotional counseling

Pain medication safety

- **Never take more medication than prescribed** or take it more often than your healthcare provider tells you to.
- **Don't have someone wake you to take pain medication** or let you take pain medication if you can't stay awake for meals and daily activities.
- **Never use alcohol or street drugs when taking opioid pain medications.** The combination can kill you.
- **Keep medication in the bottle it came in.** The label has instructions and information you need.
- **Never share pain medication.** Don't give your pills to friends or family members, even if the person is in pain.
- **Lock up medications.** Don't keep your pain pills in your medication cabinet where anyone can find them. Dispose of leftover pills safely. Find out more about disposal locations at: useonlyasdirected.org.

Tips for refilling opioid pain medications

To make sure you don't run out of pain medication on the weekend, follow these 2 steps:

- 1 Count how many pills you take each day to see when you will run out.
- 2 Contact your doctor's office at least 48 hours before the date you will need more pills.

Medication tracker

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To find this booklet and other patient education, go to:
intermountainhealthcare.org



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