

Total Knee Replacement

PATIENT GUIDE



Getting you back to your life, sooner



MARSHALLMEDICAL.ORG

Thank you for choosing
Marshall for your total
knee surgery.

This booklet contains essential information to help you feel confident throughout your surgical journey and to help you achieve your surgical goals.

Please bring this workbook with you to your Total Joint Class.

At Marshall, we are here to serve you. Our goal is to support you throughout your journey to provide you with the best possible surgical outcome.

TABLE OF CONTENTS

Preparing for Your Surgery..... 3

Before Your Surgery..... 8

Your Surgery..... 13

Your Recovery at Home..... 19

All About Physical Therapy.24

Supplemental Materials.....29

Hospital Maps.42



Caring.
Connecting.
Elevating.

Preparing for Your Surgery

APPOINTMENTS

Cardiac Clearance Date: _____ Time: _____

1004 Fowler Way, Suite 4, Placerville, CA 95667
530-626-9488

Primary Care Clearance Date: _____ Time: _____

Total Joint Class Date: _____ Time: _____

1100 Marshall Way, Placerville, CA 95667
Main hospital, South Wing Lobby
530-626-2669

Pre-op With Surgeon Date: _____ Time: _____

Pre-anesthesia Testing Appointment (PAT) Date: _____ Time: _____

1100 Marshall Way, Placerville, CA 95667
Main hospital entrance

REMEMBER to schedule your Dental Clearance appointment with your personal dentist ASAP.

Dental Clearance Appointment Date: _____ Time: _____

Surgery Date: _____

You will receive a call the evening before your procedure with an arrival time.

Important Numbers

Marshall Orthopedics& Sports Medicine.....530-344-2070

Marshall.....530-622-1441

Pre-anesthesia Testing (PAT) Nurse530-626-2782

Billing and Insurance Coverage Information.....530-626-2618

THE PURPOSE OF JOINT REPLACEMENT SURGERY

Healthy joints enable you to move without pain. However, when arthritis or injury damages a joint, the cartilage surface can become worn, leading to inflammation, stiffness, and pain. Total joint surgery removes the damaged joint surface and replaces it with artificial components made of plastic and metal. The objectives of the surgery are to alleviate pain, enhance function, and improve motion. While the new joint will improve motion and relieve pain, it may not be durable enough for strenuous, high-impact activities like running or heavy weightlifting. Your surgeon will assess your needs and discuss the most suitable treatment plan for you.

PREPARING FOR YOUR SURGERY

The majority of total joint surgeries are performed as outpatient or same-day procedures. This means you may be discharged home after your surgery if you meet certain criteria.

There are many benefits to same-day surgery, including:

- Recovering in the comfort of your own home
- Decreased risk of hospital-acquired infections
- Reduced stress
- Increased mobility
- Quicker return to your normal activities

PLEASE TELL US ABOUT YOURSELF

What are your goals for your health and lifestyle after your total knee surgery?

At Marshall, we promote a multimodal pain management approach to provide you with effective pain relief while minimizing the need for opioid medications.

Multimodal pain management can include:

- Non-opioid medications: Acetaminophen, NSAIDs, gabapentin, pregabalin
- Opioids: Morphine, fentanyl, oxycodone (used carefully and in smaller doses)
- Regional anesthesia: Nerve blocks, periarticular blocks
- Physical therapies: Massage, heat/cold therapy, exercise, acupuncture
- Cognitive behavioral therapy: Relaxation techniques, mindfulness, biofeedback
- Swelling control: Compressive therapy, ice, elevation, rest

Preparing for Your Surgery

What is your intended postoperative pain medication plan that was discussed with your surgeon?

What is your anticipated discharge destination plan that you discussed with your surgeon?

Who is your surgery support person?

A support person is a family member, close friend, or caregiver who will pick you up from your surgery and take care of you at home during your recovery.

Support person responsibilities include:

- Read this booklet
- Attend the Total Joint Class with you
- Provide emotional support
- Drive you home from surgery
- Stay with you at home to care for you after surgery
- Prepare meals
- Help with animals
- Do household chores
- Provide encouragement
- Transport to and from medical appointments



TOTAL JOINT CLASS

The Total Joint Class will help prepare you for your total joint replacement surgery. In this class, you will learn about the surgical procedure and what to expect before, during, and after the operation, including recovery steps and pain management strategies. The goal is to help you feel informed and prepared for your surgery. This class is an opportunity for you and your support person to ask questions about:

- Surgical process and expectations
- Pain management options
- Physical therapy exercises
- Home modifications for post-surgery adaptation
- Potential complications and how to manage them
- Diet and nutrition

Your support person should attend the Total Joint Class with you!

PRE-ANESTHESIA TESTING APPOINTMENT (PAT)

This appointment ensures that you are healthy and safe to receive anesthesia before surgery or other procedures.

What to Expect:

- Medical History Review: Review your medical history and chronic conditions, such as diabetes or high blood pressure.
- Medications Review: Please bring all the medications you are currently taking in their original bottles to this appointment.
- Vital Signs Check: Your blood pressure, heart rate, and oxygen levels will be measured.
- Addressing Concerns: Any questions or concerns you have will be addressed.

Feel free to ask any questions you might have during this appointment!

COMMUNITY CARE NETWORK (CCN)

CCN provides assistance to people needing healthcare coordination and management.

Various services are offered depending on your needs and desired level of involvement.

Discuss a referral with your Marshall Medical Provider or reach out to the CCN team at 530-626-2793.

Even if you are not enrolled in the CCN program, a healthcare representative from CCN will call you one to two business days after discharge to check in on you.



HOME SAFETY ASSESSMENT CHECKLIST

- ☐ Have a handrail next to stairs inside or outside the house.
- ☐ Remove or secure all loose floor rugs and mats.
- ☐ Make sure walkways in the home are clear of clutter and wide enough to maneuver a front-wheeled walker/assistive device.
- ☐ Make sure all loose electrical cords and phone wires are cleared or taped down.
- ☐ Make sure the home is well lit, with a night light, motion light, or bedside light available.
- ☐ Have a nonslip mat of adhesive strips in the bathtub or shower and appropriate assistive devices.
- ☐ Make plans for your pet. Pets increase your risk of developing an infection and are a trip hazard.
- ☐ Make sure you have a phone within reach of the bedside and rest areas in case of an emergency.
- ☐ Have sturdy shoes with nonslip soles and heel support.
- ☐ Keep the following items close to your rest area:
 - Grooming supplies
 - Extra socks with grips
 - Water and snacks
 - Electronic devices, books, glasses, and power strip to charge devices
 - Extra pillows
 - Throw blanket
 - Medications
 - Long-handled grabber for reaching objects

KITCHEN & BATHROOM CARE

- Do not use any oils that could cause you to slip
- Consider installing handrails in the shower
- Always check for water on the floor

Do you have any concerns about your home after completing the Home Safety Checklist?

Before Your Surgery

SURGICAL FINANCIAL CONSIDERATIONS

At Marshall, we are committed to offering support and guidance to assist you in navigating and preparing financially for your medical procedure. We trust that this will equip you with useful information and resources.

INSURED: An estimate for the Marshall facility and providers will be provided at least eight business days prior to the services. Estimated out-of-pocket costs will be calculated based on the amount your insurance carrier indicates is your remaining out-of-pocket allowance. If you have any governmental insurance, such as Medicare, Medi-Cal, Veterans, Tricare, secondary insurance, discount payment, or charity, we will not provide an estimate.

SELF-PAY: Marshall is required by law to provide an estimate within three business days of the surgery being scheduled. This estimate will include the charges for the facility, any other providers generally associated with your procedure, their estimated costs, and their contact information. You will also be informed of any discounts you may qualify for and the availability of discounted payment or charity care programs you can apply for. If you have any questions, please contact our staff at 530-626-2618 or by email at hpfc@marshallmedical.org.

NON-MARSHALL SURGEONS

Marshall does allow outside surgeons to perform surgery at our facility. If you have insurance, please inquire with your surgeon regarding their fees.

OUTSIDE PROVIDERS

Marshall teams up with outstanding providers to ensure you receive the best clinical care you need. These providers bill for their own services and will bill your insurance or you directly. The providers are as follows:

- El Dorado Anesthesia
- El Dorado Pathology
- Placerville Radiology

MEDICAL EQUIPMENT

Surgical fees do not cover the costs of medical equipment (e.g., walker, cane, or crutches). Your physical therapist and surgeon will help you determine if you need to purchase any equipment to assist in your recovery.

Questions to Ask Your Insurance Company

Is the anesthesia group in my network?

- If not, is there a process to receive full benefits since this is the anesthesia group my surgeon uses?

Does my policy cover outpatient physical therapy care?

- How many sessions are covered in a calendar year?
- What is my co-payment for each visit?

Does my health insurance cover home physical therapy care?

- How many sessions are covered in a calendar year?
- What is my co-payment for each visit?

Does my policy cover durable medical equipment?

- Walker or cane: _____
- Raised toilet seat: _____
- Shower chair: _____
- Bedside commode: _____

YOUR ROLE IN PREPARING FOR SURGERY

Sign Up for MyChart Today!

MyChart is an important tool you will use throughout your surgical journey. Preoperatively, your surgeon will send health questionnaires for you to complete through MyChart. This is also the best way to communicate directly with your doctor and send pictures of your incision postoperatively.



To sign up for MyChart, visit Marshallmedical.org/mychart or scan this QR code.



TAKING THESE STEPS CAN HELP TO ENSURE A SAFE SURGERY AND QUICK RECOVERY

- If you smoke, vape, or use any nicotine products, quit or at least cut down before surgery. People who do not smoke heal more quickly than people who smoke. Smoking puts you at higher risk for infection, and your surgeon may require you to quit before surgery.
- Stop drinking alcohol (liquor, beer, and wine) at least two weeks before surgery. Alcohol use can increase your fall risk postoperatively and increase complications; you should not be drinking postoperatively. If you drink more than two (for women) or three (for men) drinks per day, please let your surgeon know, as this can increase the risk of withdrawal around the time of surgery, and you may need to work with your primary care doctor to quit ahead of time.
- Do not put anything in your mouth after midnight the night before your surgery. Starting at midnight on _____ before your surgery, no vaping, smoking, eating, or drinking; no gum, mints, candy, chewing tobacco, nicotine, cannabis, pouches, or illicit products. Exception: You may have a sip of clear water (non-carbonated, non-flavored) up to two hours before your arrival time.
 - » If you are provided with a pre-op drink, please complete it two hours before your arrival time.
 - » If you take weight loss medication (GLP-1 inhibitors), you may need to stop all solid food 24 hours ahead of surgery.
- Consult your surgeon about stopping aspirin and blood thinners (including ibuprofen) prior to surgery.
- If you get a fever, cold, wound, or rash, call your surgeon's office. Your surgeon may need to postpone your surgery until you are well. We must optimize the timing of surgery to minimize risk.
- Ask your doctor about taking your regular medications the morning of surgery, including diabetes and blood-thinning medications.
- Ask your doctor about your pain management plan for discharge.
- No pets in bed one day before surgery and at least two weeks after surgery. It is best if pets can stay somewhere else until you are fully healed.

MEDICATIONS

Your healthcare team will ask about the medications you take. Some medications can affect anesthesia or cause excessive bleeding during surgery. It is important to tell them about all your medications, including:

- Diet medications or weight loss injections
- Prescription medications
- Blood thinners
- Aspirin
- Diabetic medications
- Steroids
- Immunosuppression medications
- Over-the-counter medications
- Vitamins
- Dietary supplements
- Herbal supplements
- Any sort of chemotherapy

NICOTINE AND YOUR RECOVERY

If you smoke, vape, or use any form of tobacco, you need to know: Smoking/vaping/nicotine use can lead to complications after surgery!

To lower your risks during recovery, you should stop using all tobacco products at least six weeks before surgery. This includes any kind of tobacco or nicotine replacement product, vapes, e-cigarettes, or chewing tobacco.

Please talk to your primary care doctor today about the best way for you to stop smoking, vaping, or using nicotine.

AVOIDING ALCOHOL BEFORE SURGERY

Studies show that drinking alcohol can have harmful effects on your body and increase your risk for complications after surgery.

Drinking alcohol:

- Increases risk of infection
- Increases stress
- Causes flare-ups of other health problems
- Increases bleeding risk
- Slows healing process

ALCOHOL AND ANESTHESIA

Anesthesia is generally very safe, and serious complications are rare. However, how you respond to anesthesia can be influenced by factors like the type of surgery, the anesthesia method used, and your overall health before the procedure.

If you drink alcohol, it is important to know that having it in your system during surgery can negatively affect how your body responds to anesthesia. Alcohol can increase urination, which may lead to dehydration, even if it is mild. This dehydration could potentially create issues with how anesthesia works. If you consume alcohol daily, you may be at risk for withdrawal during surgery. Please let your surgeon know if you drink more than two alcoholic drinks on a daily basis.

You should never drink while taking pain medications.

RECREATIONAL DRUGS

Recreational drugs may have negative effects on your body when taken with anesthesia. Taking recreational drugs such as amphetamines, methamphetamines, opioids, or cocaine puts you at an increased risk of having a cardiac event during surgery.

Be sure to have an open and honest discussion with your surgeon about any nicotine, alcohol, or other drugs you use.

Before Your Surgery

DIET & NUTRITION

Proper nutrition is essential for proper wound healing. Quality protein, proper calorie intake, hydration, and fiber are all important in your healing.

A high-protein diet plays a vital role in healing because it helps the body rebuild tissue after surgery. It is recommended to consume 60 to 100 grams of protein per day to promote wound healing.

Eating healthier

Improving your diet can have a positive impact on your health, helping to lower cholesterol and blood pressure while maintaining a healthy weight. Healthy eating doesn't have to be bland or boring. By managing your calorie intake and following these simple steps, you can enjoy a nutritious diet.

Reduce unhealthy fats

- Choose lean meats and fish instead of fatty cuts of meat.
- Opt for less butter, lard, and margarine.
- Avoid foods with palm, coconut, or hydrogenated oils.
- Limit high-fat dairy products like cheese, ice cream, and whole milk.
- Try low-fat recipes from a heart-healthy cookbook.

Cut back on salt

- Keep the salt shaker off the table.
- Limit high-sodium items like soy sauce, bouillon, and garlic salt.
- Season your food with herbs, lemon, garlic, onion, or salt-free herb blends instead of salt.
- Limit processed foods like canned or boxed meals and restaurant foods.
- Check food labels and choose lower-sodium options.

Limit sugar intake

- Think twice before adding sugar to foods like cereal, coffee, or tea. Reduce your usual amount by half.
- Consider using non-sugar sweeteners like monk fruit, stevia, aspartame, or sucralose for a sweet taste without added calories.
- Switch sugary sodas and drinks for sugar-free or low-calorie options. Water remains the healthiest choice.
- Read labels and select foods with lower added sugar content.

Diabetes

If you are diabetic, managing your blood glucose levels is essential before, during, and after surgery to reduce the risk of infection and promote effective wound healing. Your physician may refer you to a nutrition specialist for additional support and guidance on adjusting your diet, medication, and insulin regimen to ensure the best possible outcome for your surgery.

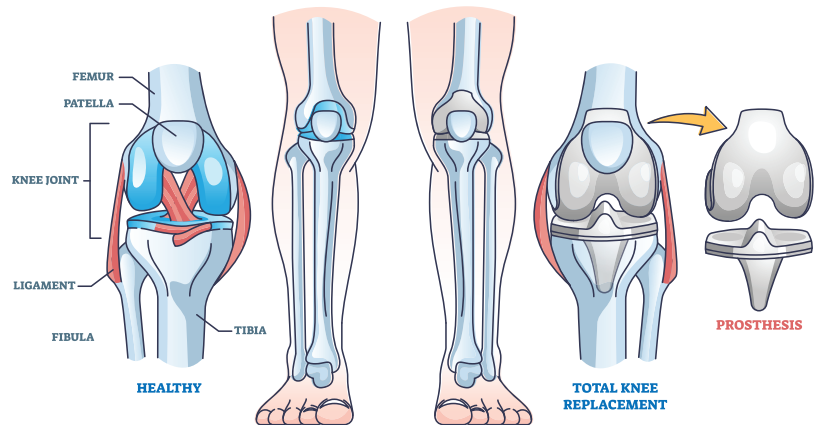
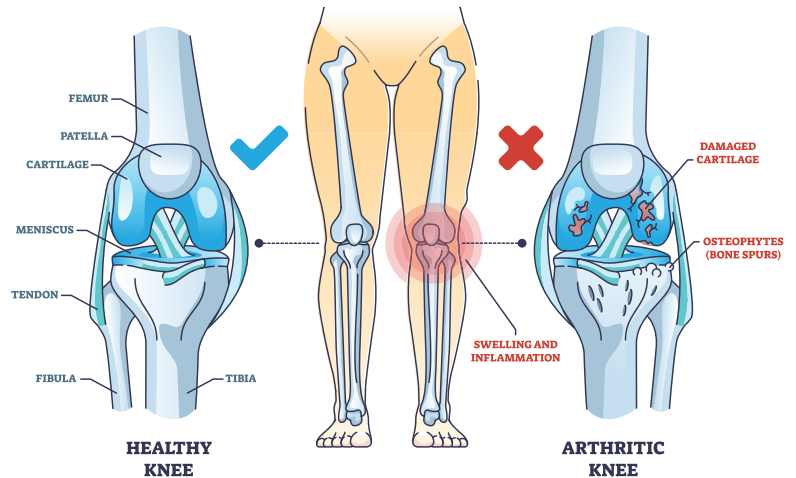


Your Surgery

UNDERSTANDING TOTAL KNEE REPLACEMENT SURGERY

Total knee replacement is a procedure in which the damaged or worn-out bone and cartilage of the knee is replaced with an artificial joint made of metal and plastic. It's done to relieve pain and improve mobility.

- **Incision:** A cut is made on the front of the knee to access the joint.
- **Bone Removal:** Damaged cartilage and a small amount of bone are removed.
- **Implant Placement:** New metal replacement parts are fitted onto the prepared bone surfaces to match your anatomy, then a plastic spacer is fitted between the metal parts.
- **Closure:** The wound is washed and closed with stitches or staples.

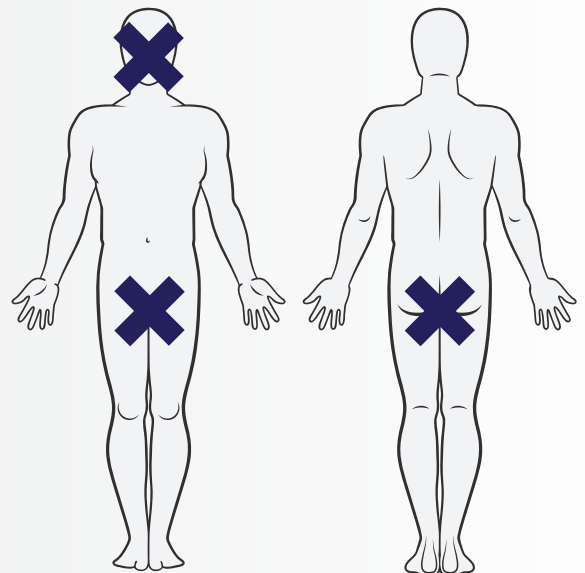


PREPARING THE SKIN BEFORE SURGERY

To reduce the risk of infection at your surgical site, Marshall Hospital has chosen to use 2% Chlorhexidine Gluconate (CHG) antiseptic solution disposable wipes.

Warnings

- Do not use CHG wipes if you are allergic to Chlorhexidine. Instead, use a NEW container of liquid soap (non-fragrant, no other additives) for your shower.
- Stop using CHG wipes if redness or irritation occurs.
- Avoid using wipes on your face and genital area. Dispose of wipes in the trash, not the toilet.
- Do not shave any part of your body (this may cause infection).



TWO NIGHTS BEFORE SURGERY

Before Bed:

- Take out all ear and body piercings before proceeding.
- Shower, wash your hair, and rinse thoroughly.
- Dry off with a clean towel.
- Allow your skin to dry for 15 minutes before applying the wipes.
- Take one wipe:
 - » Starting at your neck, down to your hips, front and back.
 - » Wipe skin back and forth for three minutes (do not scrub too hard – that may cause irritation).
 - » Pay special attention to carefully cleaning your surgical site.
- With the second wipe:
 - » Wipe starting at your hips, cleaning down to the toes, front and back. Avoid the genital area.
 - » Wipe skin back and forth for three minutes (do not scrub too hard – that may cause irritation).
 - » Pay special attention to carefully cleaning your surgical site.
- Allow your skin to air dry.
- Do not apply anything to your skin after prepping (lotion, moisturizer, deodorant, powder, makeup, sunscreen).
- Dress in clean sleepwear.

THE NIGHT BEFORE SURGERY

Before Bed:

- Repeat steps 1-9 (above).
- Dress in clean sleepwear and sleep on clean sheets.
- No pets in bed.

THE DAY OF SURGERY

Before Arriving at the Hospital:

- Shower, rinse, and dry off with a clean towel. Dress in clean clothes.
- DO NOT apply lotion, moisturizer, deodorant, powder, face/body makeup, or jewelry.
- Take medications as instructed with a small sip of water. Most heart, lung, and blood pressure medications are continued until the time of surgery, but ask if you are uncertain.



GENERAL SKIN CARE

- For one week before surgery, avoid activities that could cut or scratch your skin, especially on your legs.
- Do not get a manicure or pedicure for one week prior to surgery.
- Refrain from shaving below the waist for five days before surgery. Do not shave around the surgical site, as this can cause microscopic cuts in the skin.
- Minimize contact with pets for three days before surgery. Even the cleanest pet can carry germs and bacteria.

WHAT TO BRING TO THE HOSPITAL

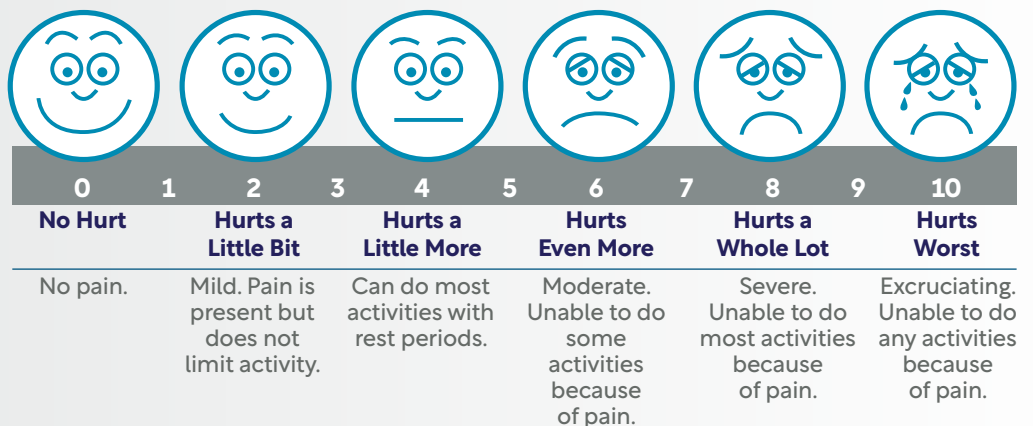
- We recommend wearing comfortable, easy-to-remove clothes such as elastic-waist pants or shorts, loose shirts or tops, or loose dresses.
- Bring shoes with rubber, nonslip soles that are easy to put on and take off.
- If applicable, bring your glasses, CPAP, hearing aids, and dentures.
- You may bring your cell phone and tablet, but please note that the hospital is not responsible for any personal property.
- Please leave jewelry and valuables at home.
- Please DO NOT bring your medications on the day of your procedure. If you are staying in the hospital, your normal medications will be provided for you.

PAIN CONTROL

Before your surgery, your surgeon and anesthesiologist will discuss your pain management plan, which may include:

- Nerve block
- Spinal anesthesia
- Injections
- Medications

Members of the care team will ask you to rate your pain based on the following scale:



SURGERY AND RECOVERY

Surgery Day – Arrival at the Hospital

- Enter through the main entrance and check in at the front lobby.
- An acute care assistant (ACA) will call you from the waiting area and take you to your pre-op room.

While in Pre-op

- Change into a hospital gown.
- Review your medical information.
- An IV will be placed in your hand or arm.
- The anesthesiologist will come to discuss your anesthesia plan.
- The surgeon or designee will visit you to mark the site of your surgery with their initials.

TYPES OF ANESTHESIA

There are four main types of anesthesia: general, spinal, regional or local, and monitored sedation. Your anesthesiologist will meet with you preoperatively to discuss your anesthesia plan.

General anesthesia: With general anesthesia, you are completely asleep and using a machine to help you breathe.

Spinal anesthesia: This involves an epidural injection, which can numb the entire body from the waist down and can last 90 minutes to six hours, depending on the medication chosen.

Regional or local anesthesia: Regional or local anesthesia numbs certain areas of the body so you do not feel pain. You may also receive additional medication to help you relax.

Monitored sedation: With monitored sedation, you are kept relaxed and comfortable. There is a possibility you will remain awake and aware throughout the surgery, or you may be drowsy or in a light sleep.

There is no one-size-fits-all option for anesthesia, and each patient's needs and goals will be

considered in choosing the proper anesthetic plan. Most patients will undergo spinal anesthesia with sedation or general anesthesia.

RECOVERY ROOM

While you are in recovery, the nurses will:

- Monitor your blood pressure, breathing, and temperature.
- Check your legs and bandages.
- Assess your pain levels and administer pain medication if necessary.

MEDICAL DEVICES AFTER SURGERY

- **Sequential Compression Device:** You will wake up with compression sleeves on your legs to help prevent blood clots. Your doctor will also prescribe anticoagulant medication to take at home. Additionally, you will be instructed to move your feet and ankles to aid in clot prevention.
- **Incentive Spirometer:** To promote deep breathing and help prevent pneumonia, you will use an incentive spirometer. This device encourages you to take deep breaths to prevent fever and improve lung function. You will be shown how to use it properly. Incentive spirometry is meant to complement, not replace, deep breathing exercises and coughing on your own.



Your Surgery

AFTER LEAVING THE RECOVERY ROOM

- If you are going home the same day, nurses will take you back to the Outpatient Surgery area, where you will prepare to be discharged home.
- If you are staying overnight, you will be taken to the Medical/Surgical unit.
- Nurses will check for any pain and provide pain relief as necessary.
- They will inspect your incision and bandages.
- They will ensure you have feeling and movement in both legs.

Physical Therapy will work with you prior to discharge.

MOBILITY BEGINS ON SURGERY DAY

Your recovery team, including physical therapists, nurses, and care associates, will assist you with mobility after you return from the recovery room. This includes getting in and out of bed or a chair, standing, and walking with an assistive device. Research shows that early mobilization can help reduce postoperative complications. A physical therapist will work with you to improve your mobility, strength, range of motion, endurance, and balance so you can move around safely at home.



Your Recovery at Home

Your Recovery at Home

PAIN CONTROL

Always take pain medications as directed by your doctor. You should take your medication as soon as you start to feel discomfort or mild pain. Do not wait until the pain becomes severe.

Zero pain after surgery is an unrealistic goal. The pain management goal you will establish with your surgeon is to make the pain tolerable. This can be done through a multimodal approach that includes rest, ice, compression, and a variety of medications.

ALTERNATIVE PAIN RELIEF METHODS

If you typically use techniques like these to manage or minimize pain, you can continue to use them after your joint replacement surgery:

- Relaxation techniques
- Imagery
- Music
- Deep breathing exercises

GENERAL CARE TIPS

DO:

- Bend and straighten your knee and hip often throughout the day to prevent stiffness
- Take pain medications as prescribed 30 minutes prior to exercise
- Ice often
- Elevate the extremity above the level of the heart
- Walk, but you don't need to force yourself to overdo it
- Treat your surgery like an injury, and please allow yourself to heal

DON'T:

- Continue with any activity if it causes uncontrolled pain
- Walk more than household distances until your swelling is controlled
- Lay immobile in bed with minimal movement or activity



INCISION CARE AFTER SURGERY

Proper care of your incision is important for healing and preventing infection. Please follow these guidelines:

- **Keep the incision clean** and protected. Avoid getting debris in the wound, and try to prevent the area from rubbing against clothing.
- **Some drainage or light bleeding is normal** during the first few days after surgery, especially when you begin range-of-motion exercises.
- If your dressing becomes **saturated with blood**, call the clinic for advice. You may simply need a dressing change and gentle pressure.
- If you have a **home health nurse**, they will help manage your wound care and dressing changes unless your surgeon provides different instructions.
- **Keep the incision covered** with a clean bandage until your first postoperative visit, unless told otherwise by your surgeon.
- The original **surgical dressing may remain in place for several days up to one week**. Your surgeon or home health nurse will change the dressing for you unless you are instructed to do it yourself.
- **Keep the incision dry**. When showering, avoid getting the dressing wet. If it does get wet or saturated, change it using the clean dressings provided in your care package, or contact your home health nurse for assistance.
 - » Avoid creams, lotions, and ointments (no Neosporin or hydrogen peroxide)
 - » Wash your hands before touching the incision
 - » Keep pets away from incision
 - » Wear loose clothing
 - » DO not submerge in water (pool, hot tub or bath) until cleared by your surgeon
 - » White TED stockings should be worn during the day for the 1st 2 weeks

If you have any questions or concerns about your incision, please contact your home health nurse or your surgeon's office. You can also use MyChart to send messages and photos of your incision directly to your care team.

PREVENTING SURGICAL SITE INFECTION

- Wash your hands often with soap and water and/or use hand sanitizer.
 - » Always wash before caring for your incision.
 - » Have others clean their hands upon entering your home.
- If you do not see providers, visitors, friends, and family clean their hands, ask them to do so.
- Family and friends who visit you should not touch your surgical wound or dressings.
- Clean your body (shower) regularly, as directed by your surgeon.
 - » Use a clean towel each time you shower.
 - » Pat dry; do not rub the surgical site.
 - » Do not bathe or soak in the tub or swim until cleared by your surgeon.
 - » Do not apply creams or lotions to your incision.
- Do NOT sleep with animals. It is best if animals can be removed from the home until surgical incisions are healed. If this is not possible, do not sleep with or cuddle animals. Wash your hands after animal contact. Bacteria are held in their fur and can cause surgical site infections.
- Change your bed sheets often.
- Wear clean clothes daily.
- Use the nasal cleansing swabs provided to you.

WHY USE NOZIN® NASAL SANITIZER® ANTISEPTIC?

Why is it important to decolonize nasal vestibule skin?

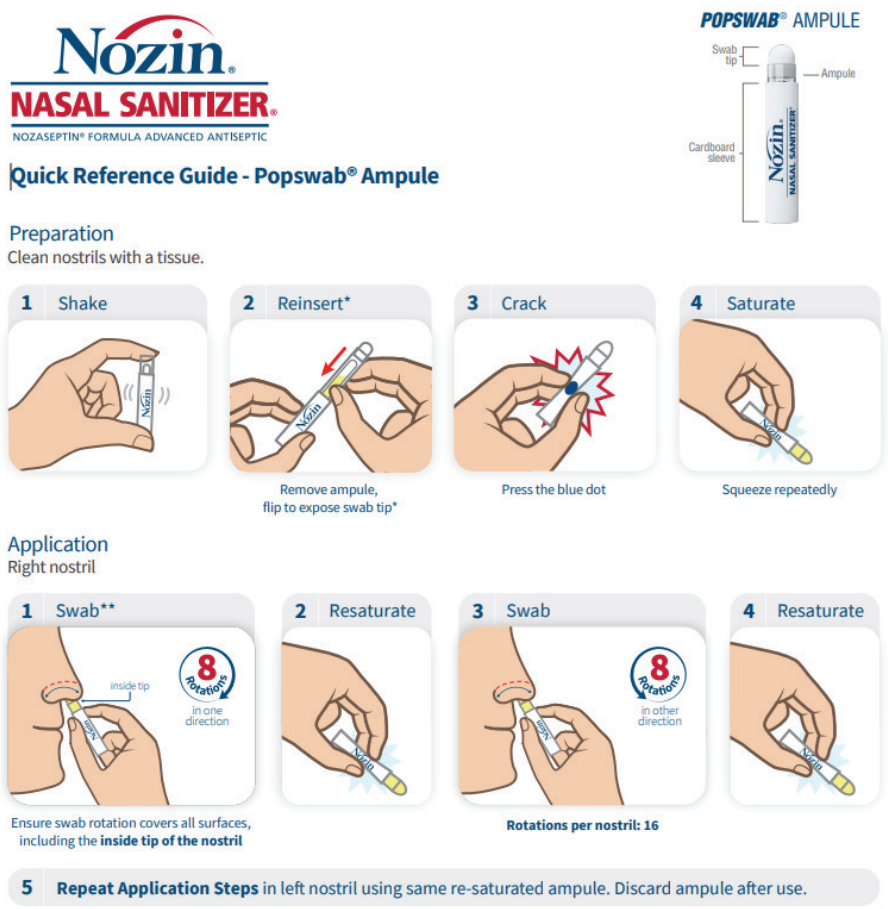
The nose is a primary gateway into the body for germs. On average, a person touches their nose 100 times per day. Nose touching can contaminate your hands and spread germs to yourself and to others. Nasal decolonization decreases germs on nasal vestibule skin. This helps interrupt the cycle of germ transmission and reduce the risk of infection.

What is the role of the nasal vestibule in infection?

The nasal vestibule skin at the front of the nose is warm, moist, and hairy. This environment allows germs to grow, multiply and flourish. The presence of these germs is referred to as nasal colonization because the germs “colonize” this area. Sneezing, coughing, or touching someone or something after touching your nose can cause germs to spread to yourself and others. The nose is like a revolving door for germs, where potentially harmful germs enter and leave your body and can put you and others at risk of infection.

What Is Nozin® Nasal Sanitizer® antiseptic?

Nozin® Nasal Sanitizer® is an over-the-counter, alcohol-based, nasal antiseptic that is used to decrease germs on nasal vestibule skin. It is pleasant and moisturizing to use. In testing by independent FDA registered laboratories, Nozin® Nasal Sanitizer® kills 99.99% of a broad spectrum of germs.



SIGNS OF INFECTION

Call your surgeon's office if you see any of the following signs of infection:

- Pus or drainage
- A foul smell coming from your incision
- Fever or chills
- Redness surrounding your incision and/or skin is hot to the touch
- Pain not controlled by your pain medication or increasing pain

SIGNS OF BLOOD CLOTS

Call your surgeon's office if you see any of the following:

- Pain and swelling in one or both legs
- Extremity redness and warmth to the touch
- Leg pain that gets worse when you bend your foot
- Leg cramps (especially at night and/or in your calf)
- Skin discoloration
- Calf tenderness

BLOOD THINNERS (ANTIPLATELET DRUGS OR ANTICOAGULANTS)

Why are blood thinners prescribed?

Blood thinners, like aspirin, prevent blood clots that could travel to your lungs or heart, causing serious complications.

When should they be used?

Your doctor will advise when to start taking anticoagulants. It is essential to take them consistently at the same time every day. They will usually be prescribed for one month after surgery.

Instructions while using blood thinners:

Follow your doctor's instructions carefully. Taking too much can increase the risk of bleeding, while too little may allow harmful clots to form.

What to do if you miss a dose:

Take the missed dose as soon as possible on the same day. Do not double up on the dose the following day. Notify your doctor if you forget a dose.

Common side effects:

The primary side effect is an increased risk of bleeding complications.

Portable leg compression devices can also be used along with blood thinners to help prevent blood clots and improve circulation in your legs. Please note that these devices are typically not covered by insurance. You can ask your surgeon or physical therapist for recommendations on where to purchase them.



NUTRITION AFTER SURGERY

After surgery, some people may experience nausea due to medications, dehydration, or the stress of the procedure. It is important to listen to your body and eat when you are ready – do not force yourself. If you followed a specific diet (such as low salt) before surgery, check with your healthcare provider to see if you should continue it during recovery.

Always follow any postoperative instructions provided by your surgeon, nurse, or dietitian.

Call 911 or go to the nearest emergency room if you experience chest pain or shortness of breath.

Start slowly

- Begin with clear liquids and soups, which are easier to digest.
- Gradually move to soft foods like mashed potatoes, applesauce, and gelatin as you feel ready and able to tolerate them.
- Slowly transition to solid foods, avoiding rich, fatty, or spicy items initially.
- Eat smaller portions more frequently.

Stay hydrated

- It's normal to lose fluids during surgery. Rehydrating helps you feel better and maintain a proper balance of electrolytes in your body.
- Try to drink six to eight glasses of water per day.
- Dehydration can worsen postoperative constipation.

Focus on good nutrition

- Proper nutrition supports your body's ability to repair tissue and heal after surgery.
- Follow a low-fat, high-protein diet, or follow specific dietary guidelines from your healthcare provider.
- Whole grains and proteins, like fish and chicken, help rebuild tissue and aid in recovery.

HELPFUL TIPS AND POSITIONING

- Expect swelling in your surgical leg, which may persist for a few weeks.
- Elevate your surgical leg above heart level when lying down and whenever you sit during the first two weeks to reduce swelling.
- Apply ice to your surgical knee for 20 to 30 minutes every two to three hours during the first month to reduce pain and swelling.
- Sleeping on your back is recommended, but if you prefer to sleep on your side, sleep on the nonsurgical leg side.
- Treat this like an injury and follow the simple principles of rest, ice, elevate, compression (using compressive stockings or knee sleeve).

CARE AFTER DISCHARGE

Depending on the level of care you require, your doctor will order home health or outpatient physical therapy.

Home Health May Include:

Nursing Care

Registered nurses (RN) and licensed vocational nurses (LVN) will provide you with skilled care while giving you the support needed to manage your medical care at home.

- Incision and dressing care
- Medication management
- Education
- Communication with your provider

Physical Therapy (PT) and Occupational Therapy (OT)

- A physical therapist will visit you twice a week for approximately two weeks.
- Take your pain medication one hour before the therapist arrives.

- Tasks like dressing, bathing, and toileting may be challenging at first.
- Occupational therapy can offer tips and equipment to help you safely manage daily activities.

Home Health Aides

- Dressing
- Personal grooming
- Toileting
- Changing linens

Outpatient Physical Therapy

- The focus will be on improving strength, range of motion, balance, and coordination.
- You'll work on walking and may progress from using a walker to a cane, and eventually no assistive device.
- Outpatient therapy offers a variety of therapeutic equipment to help you achieve the highest possible level of function.
- Outpatient physical therapy is NOT mandatory after surgery; however, most patients find that a therapist can help improve their balance and strength.

POST-OP FOLLOW-UP APPOINTMENT WITH YOUR SURGEON

- You'll have a follow-up appointment with your surgeon to assess your recovery. Typically, there is a wound check at two weeks, then regular follow-up around six weeks, twelve weeks, six months, and one year.
- The need for ongoing outpatient physical therapy will be determined at this appointment.
- Joint replacements require surveillance over the rest of your life with periodic X-rays (around every three to five years).

All About Physical Therapy

All About Physical Therapy

BED MOBILITY

Bed mobility refers to your ability to move in and out of bed on your own. It's helpful to practice at home before surgery. Key things to consider:

- How high is the bed you'll be using?
- Which side of the bed do you typically get off of at home? This can be trickier than it seems, so practicing beforehand is helpful.

TRANSFERS

Transfers involve moving from one surface to another – such as getting out of bed, getting up from a chair, or getting in and out of a car.

- If possible, use the armrests of your seating surface to help push yourself up.
- Otherwise, place one hand on the surface you're sitting on and one hand on your walker.

WALKING

Your physical therapist will help you learn to walk with an assistive device, typically a front-wheeled walker.

- “Weight-bearing status” refers to how much weight you can place on your surgical leg. Your therapist will explain this to you.
- Initially, the goal is to walk short distances within your home with the walker. As your pain decreases, the distance you can walk will gradually increase.
- The ultimate goal is to walk normally without limping.

SAFETY TIPS WHEN USING A WALKER

- Avoid carrying items while using a walker.
- Remove throw rugs to reduce the risk of tripping.
- Attach a bag or apron to your walker for carrying items like your phone, snacks, or remote.
- Place frequently used items in higher drawers or shelves to make them more accessible.
- Always keep your phone nearby in case of an emergency.



All About Physical Therapy

STAIRS

Your physical therapist will help you practice going up and down stairs. Be sure to ask yourself:

- How many steps or stairs do you have at home?
- Which side are the handrails on?

When navigating stairs, remember: “Up with the good, down with the bad.” That means leading with your good leg when going up and using your surgical leg when going down.

CLOTHING TIPS

- Opt for elastic-waist pants or shorts.
- Put your pants on starting with the surgical leg, followed by the nonsurgical leg.
- Flat, slip-on shoes are the easiest to wear.
- Consider using dressing aids for added convenience.

HELPFUL DRESSING AIDS



Long-handled reacher



Long-handled shoehorn



Long-handled bath brush



Sock aid

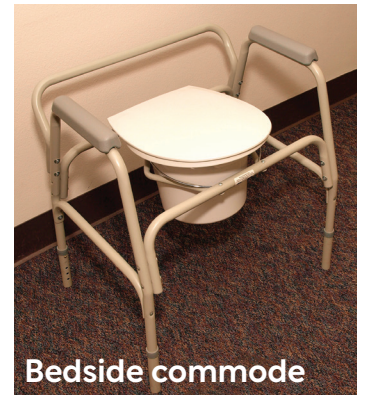
HELPFUL TOILET EQUIPMENT

Normal toilet seats may feel too low after surgery. Here are some solutions:

- Toilet Seat Riser: A molded plastic seat that comes with or without armrests. Choose a riser with a lock-on feature for added stability.
- 3-in-1 Commode: Adjustable in height. It can be used next to the bed with a bucket, over the toilet without a bucket, or in the shower as a seat.



Raised toilet seat



Bedside commode

The above dressing and toilet care items are generally not covered by medical insurance and can be purchased at your local pharmacy or online.

BATHING PRECAUTIONS

- Always sit for safety, especially when washing your legs.
- Use a long bath brush or sponge to reach below your knees.
- Consider installing a mounted grab bar in your bathroom.
- Do not bring your walker or cane into the shower; keep them dry.
- A handheld shower hose can make showering easier.
- Use a rubber bath mat to prevent slipping.

SHOWER TIPS USING THE 'STEP-BACK METHOD'

- Place a commode or shower chair facing the door.
- Step back into the shower with your nonsurgical leg leading.
- Sit on the commode or shower chair facing the door while showering.
- When exiting the shower, hold the walker and step out with your surgical leg first.



Shower/tub chair



Tub transfer bench

TRANSFERRING TO A BATHTUB

- This requires being able to support your weight on both legs before stepping over the tub's edge.
- Use a shower chair once you can safely step over the tub's edge.

If your tub lacks a sliding door, a tub transfer bench may be helpful.

ACTIVITY, SPORTS, AND EXERCISE

- After knee replacement surgery, you can return to an active lifestyle.
- Walking and leg exercises will be your primary activities initially.
- Your surgeon will inform you when it's safe to resume driving.
- Activities like swimming, golfing, biking, and light hiking can be resumed when cleared by your surgeon.
- High-impact activities such as running and jumping are not recommended, as they may impact the longevity of your new joint.



All About Physical Therapy

EXERCISE ROUTINE

The following exercises should be started before surgery and continued during your recovery. Preoperative exercise will help prepare your body for surgery, while postoperative exercise will help rehab your leg to get back to your normal activities more quickly. Each exercise should be performed in sets of 10 repetitions two to three times daily.



Ankle Pumps

Flex ankles to point your toes toward your knees, hold, flex ankles to point toes away from knees.



Straight Leg Raises

Tighten thigh muscle and lift leg, keeping the knee straight and toes pointed up.



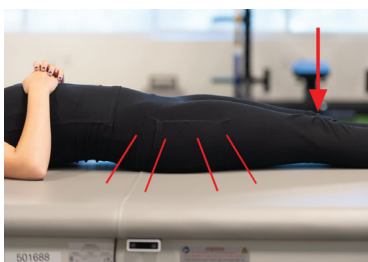
Heel Slides

Bend one leg at a time, keeping the opposite leg straight, allow the foot to be flat on the surface. You can use plastic or strap to assist.



Short Arc Quads

Place a rolled towel or pillow under your knee. Tightening your thigh muscles, raise your heel off the surface and hold for 3-5 seconds.



Gluteal Squeezes/ Quad Set

Squeeze your thigh and buttocks muscle pressing your knee down into the table, hold for 3-5 seconds then release.



Seated Push-ups

Scoot to the edge of a chair, feet under knees, nose over toes. Reach for chair handles for safety. With your hands on the armrests, push yourself up and hold for several seconds, then slowly lower back to the seated position.



Hip Abduction

Keep your toes pointed up while moving your leg out to one side as far as possible.

Supplemental Materials

FREQUENTLY ASKED QUESTIONS

How much pain will I have after my surgery?

Everyone perceives pain differently. You will have pain after your procedure, but it should be tolerable.

When can I drive?

Many people can drive once most of their pain is gone without the use of pain medications; however, you need to discuss this with your surgeon. You cannot drive as long as you are taking narcotic pain medications.

Will I have issues going through security metal detectors?

When going through security at the airport or other business, let them know you've had a knee replacement before you go into the metal detector. It is not a problem; they may use a wand to scan your knee.

When can I have sex again?

The goal of joint replacement is to improve your quality of life, and intimacy is important. A knee replacement generally makes it possible to have less pain or no pain during sex. It's usually okay to have sex once you feel up to it.

When can I go back to work?

Many people go back to work six to 12 weeks after surgery. If your job involves heavy, physical work, like lifting, talk to your surgeon. Ask your employer if there are any rules about when you can return to work. If you need a return-to-work form, bring to your follow-up appointment or fax to our office.

Will I feel sad, down, or depressed after my surgery?

It's important to know that your body has been through a lot, and it may take a while before you feel like yourself again. You may feel sad or upset. These feelings usually go away as you heal and can also be related to narcotic pain medication. If you feel very sad, overwhelmed, or helpless, and these feelings persist, call your surgeon or primary care physician for an appointment. They are here to help

USEFUL TERMS

Advance Medical Directive: A formal document stating your choices for healthcare or naming someone to make those choices if you cannot.

Anesthesia: Medication to prevent pain during surgery and medical procedures. There are three different types: general, regional or local, and monitored sedation.

Anesthesiologist: A doctor who specializes in administering anesthesia medications.

Drainage Tube: A tube that has been temporarily inserted at the incision site to drain excess fluid.

ECG or EKG: Electrocardiogram. A test that gives information about how the heart is working.

Epidural: Medication is delivered through a catheter – a very thin, flexible, hollow tube – that's inserted into the epidural space just outside the membrane that surrounds your spinal cord and spinal fluid.

Healthcare Provider: A doctor, nurse, or other trained medical person.

ICU: Intensive care unit. Section of the hospital that is equipped for patients who need constant, close monitoring.

Incentive Spirometer (IS): An important tool for you to use to keep your lungs clear, strengthen your breathing muscles, and help prevent postoperative complications such as pneumonia.

Inpatient: A patient who will spend at least one night in the hospital. Inpatients are admitted to the hospital on the day of surgery.

Intravenous or IV Line: A thin tube that delivers medications, fluids, or blood directly into a vein.

OR: Operating room. The room where surgery is performed.

Outpatient: A patient who is admitted and discharged on the day of surgery.

PACU: Post-anesthesia care unit. This is the recovery room where patients may stay until their anesthesia wears off.

PAT: Pre-anesthesia testing. A screening is done to identify possible risks before surgery. It includes an interview with a PAT nurse (to review allergies, medications, and medical history), blood test, X-ray, and EKG.

PCA: Patient-controlled analgesia. A pain relief method in which the patient pushes a button to get pain medication through an IV line.

Pneumonia: A serious lung disease that sometimes occurs after surgery. Deep breathing and coughing can help prevent it.

Surgery Consent: A legal form the patient signs before surgery, after discussing the risks and benefits of surgery with the doctor.

Total Joint Arthroplasty: Also known as total joint replacement, it is a surgical procedure that replaces a damaged joint with an artificial implant (prosthesis).

ADVANCE DIRECTIVES

Advance medical directives are crucial for ensuring that your healthcare wishes are respected, especially in situations where you might not be able to communicate them yourself.

Advance directives are legal documents that state your choices about medical treatment or name someone to make decisions for you if you're unable to do so. California and federal law give competent adults, 18 years or older, the right to decide what medical care or treatment they want to accept, reject, or discontinue.

Types of Advance Directives:

- Advance Directive to Healthcare
- Healthcare Power of Attorney
- POLST (Physician Orders for Life-Sustaining Treatment)
- Living Will

If you have an advance directive, inform the hospital staff and bring a copy with you. If you don't have one, staff can assist you in creating one. Forms are available from Registration. Additional information is available from the following websites:

- Marshallmedical.org
- Nlm.nih.gov/medlineplus/advancedirectives.html
- Capolst.org

The American College of Surgeons provides information on surgery:

- www.facs.org/for-patients/

If you have any questions or need further assistance, feel free to ask!

PATIENT SATISFACTION

Our goal is to exceed your expectations. Marshall is dedicated to providing excellent clinical care and customer service. One way we strive to meet these expectations is by performing hourly rounding. Your nurse or nursing assistant will check in with you to ensure you are comfortable, assess your pain control, and help eliminate any other potential issues. Please let the nursing staff know if you have other needs as well. If at any time you feel that we are not meeting these goals, please notify one of the supervisors.

TELL US WHAT YOU THINK

You may also receive a survey after you leave the hospital. This is another chance to tell us about your experience throughout your hospitalization. Please take a few moments to complete the survey. Your feedback is very important to us.



To sign up for MyChart, visit Marshallmedical.org/mychart or scan this QR code.

PATIENT RIGHTS & RESPONSIBILITIES

Marshall Hospital board of directors, medical staff and employees are committed to assuring that all patients seeking care at our hospital are informed of and supported in exercising all rights without regard to sex, economic status, educational background, race, color, religion, ancestry, national origin, sexual orientation, gender identity/ expression, disability, medical condition, marital status, age, registered domestic partner status, genetic information, citizenship, primary language, immigration status (except required by federal laws) or source of payment for care.

You have the right to:

1. Considerate and respectful care, and to be made comfortable. You have the right to respect for your cultural, psychosocial, spiritual, and personal values, beliefs and preferences.
2. Have a family member (or other representative of your choosing) and your own physician notified promptly of your admission to the hospital.
3. Know the name of the licensed health care practitioner acting within the scope of his or her professional licensure who has primary responsibility for coordinating your care, and the names and professional relationships of physicians and non-physicians who will see you.
4. Receive information about your health status, diagnosis, prognosis, course of treatment, prospects for recovery and outcomes of care (including unanticipated outcomes) in terms you can understand. You have the right to access your medical records. You have the right to effective communication and to participate in the development and implementation of your plan of care. You have the right to participate in ethical questions that arise in the course of your care, including issues of conflict resolution, withholding resuscitative services, and forgoing or withdrawing life-sustaining treatment
5. Make decisions regarding medical care, and receive as much information about any proposed treatment or procedure as you may need in order to give informed consent or to refuse a course of treatment. Except in emergencies, this information shall include a description of the procedure or treatment, the medically significant risks involved, alternate courses of treatment or non-treatment and the risks involved in each, and the name of the person who will carry out the procedure or treatment.
6. Request or refuse treatment, to the extent permitted by law. However, you do not have the right to demand inappropriate or medically unnecessary treatment or services. You have the right to leave the hospital even against the advice of members of the medical staff, to the extent permitted by law.
7. Be advised if the hospital/licensed health care practitioner acting within the scope of his or her professional licensure proposes to engage in or perform human experimentation affecting your care or treatment. You have the right to refuse to participate in such research projects.
8. Reasonable responses to any reasonable requests made for service.
9. Appropriate assessment and management of your pain, information about pain, pain relief measures and to participate in pain management decisions. You may request or reject the use of any or all modalities to relieve pain, including opiate medication, if you suffer from severe chronic intractable pain. The doctor may refuse to prescribe the opiate medication, but if so, must inform you that there are physicians who specialize in the treatment of pain with methods that include the use of opiates.
10. Formulate advance directives. This includes designating a decision maker if you become incapable of understanding a proposed treatment or become unable to communicate your wishes regarding care. Hospital staff and practitioners who provide care in the hospital shall comply with these directives. All patients' rights apply to the person who has legal responsibility to make decisions regarding medical care on your behalf.

11. Have personal privacy respected. Case discussion, consultation, examination and treatment are confidential and should be conducted discreetly. You have the right to be told the reason for the presence of any individual. You have the right to have visitors leave prior to an examination and when treatment issues are being discussed. Privacy curtains will be used in semi-private rooms.
12. Confidential treatment of all communications and records pertaining to your care and stay in the hospital. You will receive a separate “Notice of Privacy Practices” that explains your privacy rights in detail and how we may use and disclose your protected health information.
13. Receive care in a safe setting, free from mental, physical, sexual or verbal abuse and neglect, exploitation or harassment. You have the right to access protective and advocacy services including notifying government agencies of neglect or abuse.
14. Be free from restraints and seclusion of any form used as a means of coercion, discipline, convenience or retaliation by staff.
15. Reasonable continuity of care and to know in advance the time and location of appointments as well as the identity of the persons providing the care.
16. Be informed by the physician, or a delegate of the physician, of continuing health care requirements and options following discharge from the hospital. You have the right to be involved in the development and implementation of your discharge plan. Upon your request, a friend or family member may be provided this information also.
17. Know which hospital rules and policies apply to your conduct while a patient.
18. Designate a support person as well as visitors of your choosing, if you have decision-making capacity, whether or not the visitor is related by blood, marriage, or registered domestic partner status, unless:
 - a. No visitors are allowed.
 - b. The facility reasonably determines that the presence of a particular visitor would endanger the health or safety of a patient, a member of the health facility staff, or other visitor to the health facility, or would significantly disrupt the operations of the facility.
 - c. You have told the health facility staff that you no longer want a particular person to visit.
 - d. However, a health facility may establish reasonable restrictions upon visitation, including restrictions upon the hours of visitation and number of visitors. The health facility must inform you (or your support person, where appropriate) of your visitation rights, including any clinical restrictions or limitations. The health facility is not permitted to restrict, limit, or otherwise deny visitation privileges on the basis of race, color, national origin, religion, sex, gender identity, sexual orientation, or disability.
19. Have your wishes considered, if you lack decision-making capacity, for the purposes of determining who may visit. The method of that consideration will comply with federal law and be disclosed in the hospital policy on visitation. At a minimum, the hospital shall include any persons living in your household and any support person pursuant to federal law.
20. Examine and receive an explanation of the hospital’s bill regardless of the source of payment. Exercise these rights without regard to, and be free of discrimination on the basis of economic status, educational background, race, color, religion, ancestry, national origin, sex, gender, sexual orientation, gender identity/ expression, disability, medical condition, marital status, age, registered domestic partner status, genetic information, citizenship, primary language, immigration status (except as required by federal law) or the source of payment for care.
21. If you believe that these rights have been denied to you, you may file a grievance with this hospital (see #22 below) or you can file a grievance with the Office for Civil Rights, by writing or calling:

U. S. Department of Health & Human Services
Office for Civil Rights - Region IX
90 7th Street, Suite 4-10
San Francisco, CA 94103 800-368-1019
800-537-7697 TDD

22. File a grievance. If you want to file a grievance with this hospital, you may do so by writing or by calling:

Patient Advocate Office
1100 Marshall Way
Placerville, CA 95667
530-344-5428.

The grievance committee will review each grievance and provide you with a written response within 45 days. For grievances regarding billing issues or care provider behavior we will respond with a resolution within 30 days. The written response will contain the name of a person to contact at the hospital, the steps taken to investigate the grievance and the final determination. Concerns regarding quality of care or premature discharge may also be referred to the appropriate Utilization and Quality Control Peer Review Organization (PRO).

23. File a complaint with the California Department of Public Health regardless of whether you use the hospital's grievance process. The California Department of Public Health's phone number and address is:

California Department of Public Health
Licensing and Certification
3901 Lennane Drive, Suite 210
Sacramento, CA 95815
916-263-5800

24. File a complaint with the Civil Rights Department at www.civilrights.ca.gov, (800) 884-1684 or (800) 700-2320 (TTY) or 2218 Kausen Dr. #100, Elk Grove, CA 95758.

25. File a complaint with the Medical Board of California at www.mbc.ca.gov/consumers/complaints. (800) 633-2322 or 2005 Evergreen St., #1200, Sacramento, CA 95815.

26. Patients and members of our community are encouraged to share concerns with Marshall Administration at (530) 626-2838. If concerns are not resolved, the patient or community member

may also contact the Joint Commission's Office of Quality Monitoring at (800) 994-6610, submit a complaint online at: <https://www.jointcommission.org/resources/patient-safety-topics/report-a-patient-safety-concern-or-complaint/>, or in writing to:

Office of Quality and Patient Safety
The Joint Commission
One Renaissance Boulevard
Oakbrook Terrace, IL 60181.

PATIENT RESPONSIBILITIES

Healing involves cooperation between patient and caregiver. It's a partnership where we ask for your active participation in:

- Providing accurate and complete information about present symptoms, past illnesses, hospitalizations, medications, and other health matters
- Reporting unexpected changes in your condition to those giving you care and letting us know if you don't understand your treatment
- Following the treatment plan your physician recommends, including instructions of nurses and other professionals carrying out your physician's orders
- Learning as much as possible about your condition, your medications, and your care needs following your discharge from the hospital
- Meeting the financial obligations of your care as promptly as possible
- Being considerate of the rights and property of other patients and hospital employees
- Asking questions whenever you are unclear about any aspect of your care
- Accepting the consequences for decisions in which you have participated

This Patient Rights document incorporates the requirements of The Joint Commission; Title 22, California Code of Regulations, Section 70707; Health and Safety Code Sections 1262.6, 1288.4, and 124960; 42 C.F.R. Section 482.13 (Medicare Conditions of Participation); and Section 1557 of the Affordable Care Act (42 U.S.C. 18116, 45 C.F.R. Part 92). (2/23)

How to Get the Most out of Your Joint Replacement



Hip and knee replacement surgeries are considered to be among the most successful treatments in the history of modern medicine. Because of the high rate of success of these procedures, your quality of life most likely will improve, and you most likely will return to the routine daily activities you performed before joint pain set in.

The majority of people experience significant improvement in pain and regain the ability to walk, climb stairs, get in and out of the car and tie their shoes; however, some people who have a hip or knee replaced are dissatisfied with the results after the procedure. Patient satisfaction after hip and knee replacement surgery is important to surgeons as they strive for high quality and cost-effective care of their patients. **Studies have shown that there are steps you can take before and after surgery to improve the likelihood that you are satisfied with the results.**

How well are you getting around?

One study found that those who were getting around very well prior to hip replacement were less likely to experience meaningful improvement after surgery. In other words, **the less you have to gain, the less happy you will be with your outcome.** If you have severe arthritis, but your activities aren't significantly limited because of it, you may opt to delay surgery. The definition of "significantly limited" is different for everyone; however, it is important to weigh those limitations in your routine activities against the risk of having surgery.

How high are your expectations?

In a recent study, researchers found that **people with high expectations for their hip replacement surgery experienced greater satisfaction.** You should not be afraid to have high expectations following your replacement surgery. You should also realize that there may be certain limitations following surgery. It is important to discuss what your expectations for your new joint are with your surgeon prior to the procedure; however, don't be afraid to "shoot for the stars" in your recovery!

How committed are you to your overall health?

The same study that looked at expectations before surgery also looked at how actively involved people are with their medical treatment and how much they feel in control of their overall health. **Those who take a more active approach to their health are less likely feel their outcome after surgery is out of their control.** The more proactive you are about managing your overall health before hip or knee replacement surgery, the more likely you will have greater satisfaction, better pain relief and better mental health following surgery. Conversely, if you view your overall health as fair or poor, you may experience higher levels of depression and feel less in control of your health and recovery. Additionally, there is an association with a higher risk of dissatisfaction. It is important to be sound of mind *and* body when signing up for surgery. The recovery is not always easy, but the more you put into it, the more you will get out of your joint replacement.

Good Health = Good Recovery after Joint Surgery



Your overall health is important and can have a major impact on how well you do after hip or knee replacement surgery. It is important to discuss your health with your physician so they can help you prepare in the time leading up to surgery. Your surgeon will want to know your health history, surgical history, medicines you are taking, allergies you may have, family history and social activities. You will also likely have a discussion about optimizing your health before surgery.

Health History

There are certain health issues that increase your risk of complications during and after joint replacement surgery. Your primary physician and surgeon will determine which risk factors can be changed with improvements to your health (modifiable) and which factors cannot be changed, but must be addressed as best as possible (non-modifiable).

Modifiable Risk Factors	These are problems that can be improved or fixed before having surgery. Examples are: • Getting blood sugar under good control if you have diabetes • Stopping smoking if you smoke • Losing weight if you are obese Your surgeon may recommend delaying surgery if you have modifiable risk factors that need to be improved.
Non-Modifiable Risk Factors	These are problems that cannot be fixed before surgery, but that your surgeon will address and determine if you can proceed with surgery. Examples are: • Cancer • Rheumatoid arthritis • Lung disease Some patients have severe health problems that can create a greater risk of problems with surgery. In these situations, you should have a discussion with your surgeon about other options for treatment.

Surgical History

Your surgeon will want to know what surgeries you have had in the past. This may affect your joint replacement surgery even if they weren't orthopaedic surgeries. Certain surgeries, such as abdominal surgery or vascular surgery, can put you at risk for problems after joint replacement surgery. It is important to know if you had problems after any previous surgery such as infection, poor wound healing or a blood clot in the leg, arm or lung (deep vein thrombosis or pulmonary embolism).

Medication

It is important to provide details about all medications you take. This includes prescription and over-the-counter medicines and supplements. Many medicines can interfere with healing or place you at risk for problems like increased bleeding. Examples of this are medicines used to treat rheumatoid arthritis that alter the immune system or blood thinners such as aspirin or warfarin used for various health issues.

Allergies

It is important to inform your treatment team of any allergies you have. This includes allergies to medicines, foods and metal. Knowing about medicine allergies are very important because many medicines will be given around the time of your surgery. Medicine reactions can be severe and even life threatening.



Decreasing Your Risk of Infection



Infection is a difficult problem that affects one out of 100 people after joint replacement surgery. If your joint becomes infected after surgery, it usually means additional surgery will be needed to treat the infection. It also means, your results will not be as good as they could be.

Your overall health is very important to prevent infection. **Research shows that any health issues made better before surgery could decrease your surgical infection risk.** The three most common problems that increase infection risk are obesity, tobacco use and uncontrolled diabetes.

Obese or Overweight

Obesity means a person has a body weight that is more than normal based on height. Physicians define this by a measure called body mass index (BMI). This takes your height and your weight and generates a number that tells if you are a healthy weight or weigh more than normal. You can use an online calculator such as the one provided by the American Diabetes Association to see what your BMI is and where you fall on the scale.

Being overweight or obese is a concern for a successful joint replacement surgery. Research on joint replacement in obese patients found an increased risk of having a problem after surgery. **If you are obese, the decision to proceed with surgery must be made between you and your surgeon.**

There are usually other medical problems that go along with obesity like heart disease, diabetes mellitus and poor nutrition. These other medical problems put you at an even higher risk of having a problem after surgery. Your surgeon may recommend against surgery based on your weight and health.

If your surgeon determines you should lose weight before surgery, there are options such as working with a nutritionist or your primary physician or having weight-loss surgery.

Smoking and Tobacco Use

Tobacco puts you at risk of having problems after your joint replacement. This includes blood clot, infection and poor wound healing. Nicotine is the main addictive chemical in tobacco, and it causes blood vessels to narrow. This means less blood makes it to your healing joint replacement and increasing the chances of your joint replacement getting infected.

Your surgeon may require you to quit using tobacco and anything with nicotine before surgery. It is recommended to stop all these products for at least 4-6 weeks before surgery. Your primary provider and surgeon can frequently provide resources such as prescription medicines and smoking cessation programs to stop this damaging habit.

For more information on the benefits of quitting tobacco, follow this link:

<https://www.cancer.gov/about-cancer/causes-prevention/risk/tobacco/cessation-fact-sheet#q1>

Opioid Use Before Hip or Knee Surgery Can Mean Trouble



“Doc, I know I need to do the surgery, but can you give me some oxycodone for pain until then? I’ll stop once I have the surgery.” This is a common conversation in the office of a joint replacement surgeon. In the past, narcotic medication, commonly known as opioids, were given by physicians hoping to alleviate their patients’ pain and suffering. Unfortunately, we have learned that these medications may do more harm than good.

Opioids are powerful prescription pain-reducing medications that have benefits and potentially serious risks. Common opioid medications prescribed include oxycodone, hydrocodone, morphine, Norco (acetaminophen/hydrocodone), Vicodin (acetaminophen/hydrocodone), Percocet (acetaminophen/oxycodone), hydromorphone (Dilaudid), and tramadol.

Overuse of opioids has become an epidemic in the United States. According to the Centers for Disease Control and Prevention, “From 1999 to 2017, almost 218,000 people died in the United States from overdoses related to prescription opioids. Overdose deaths involving prescription opioids were five times higher in 2017 than in 1999” (<http://wonder.cdc.gov>). Many states have now adopted new laws that limit opioid prescriptions.

Could short-term use of these opioids in weeks or months prior to total hip arthroplasty (THA) or total knee arthroplasty (TKA) still be considered safe? According to multiple studies, **the answer is NO**. While easing symptoms of pain, use of opioids has negative, long-term consequences such as developing tolerance, drug dependence and hyperalgesia - a condition in which sensitivity to pain increases as a result of taking opioids.

If you suffer from arthritis pain, multiple strategies other than using opioids can be employed for pain control before surgery is necessary. Read this article about how to relieve hip and knee pain without surgery: <https://hipknee.aahks.org/relieving-hip-and-knee-pain-without-surgery>. Potential therapies include nonsteroidal anti-inflammatories (NSAIDs), injections, weight loss, and physical therapy. **If these non-operative methods eventually stop working, pain can become severe enough to warrant surgery.** Pain in the time between deciding to move forward with surgery and actually having surgery can be difficult to endure. But one thing is clear: **opioids are not a viable treatment option for the vast majority of patients.**

Multiple studies show that people who use opioids prior to THA and TKA have **worse** outcomes after surgery. Additional studies have shown that they also have **more difficulty with pain control after surgery** and are at **increased risk for readmission** to the hospital, **infection**, and **revision surgery**. In addition, patients who take opioids prior to THA and TKA have a **more difficult time discontinuing** them after surgery. Studies show that people who **do not use opioids** prior to surgery are less likely to need opioids in the months after surgery and will have a better outcome after surgery. It is important to discuss this subject with your physician and work together as a team to develop an opioid-free plan that works best for you.

AAHKS has written a position on prescribing opioids for arthritis pain and advises that **opioids should be avoided and reserved for only exceptional circumstances**. Read the statement.

[\[http://www.aahks.org/position-statements/opioid-use-for-the-treatment-of-osteoarthritis-of-the-hip-and-knee/\]](http://www.aahks.org/position-statements/opioid-use-for-the-treatment-of-osteoarthritis-of-the-hip-and-knee/)

Marshall participates in the American Joint Replacement Registry (AJRR). Please see below for an explanation of how the AJRR uses and protects patient information.

PROTECTING PATIENT PRIVACY

As providers and participating sites collect this data and submit it to the AJRR, the Registry Program must also have internal procedures to protect the confidentiality of this information. The registry adheres to the same patient privacy standards as medical providers and hospitals. Federal and state laws require the security and protection of private health information. Any collected information is de-identified, meaning all personally identifiable information is removed, and the data is then aggregated or combined and securely stored. Only the combined, de-identified data is available in the registry.

How Is the Registry Information Used?

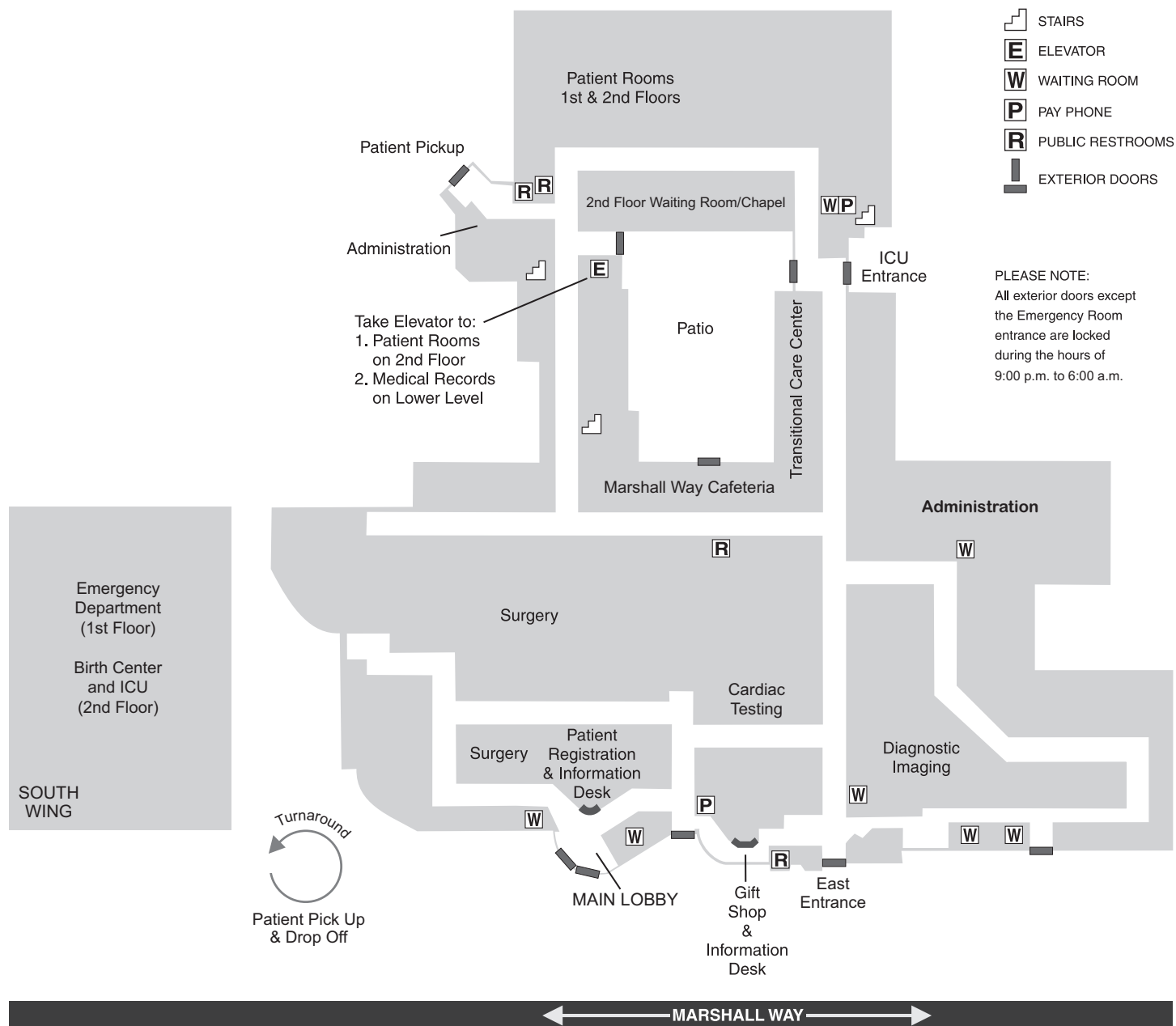
Data within the registry is used to evaluate patient outcomes, to look at trends, and to track

performance. Surgeons rely on this data to review the procedures they have performed and to compare their data to national averages. Hospitals and ambulatory surgical centers (ASC) collect data on the procedures performed within their facilities to better understand trends and patient outcomes. Using the information, participating sites and surgeons can identify opportunities and best practices to improve the quality of care they are able to provide to patients. In addition, medical device companies and implant manufacturers (the companies that make artificial joint components, called implants) rely on this data to evaluate how a device performs and how it may be improved for future patients.

While the registry serves to help providers, hospitals, ASCs, and manufacturers improve outcomes and patient care, it is also a resource for patients. Registry data can help patients better understand the procedure a physician may recommend as a part of a plan of care.

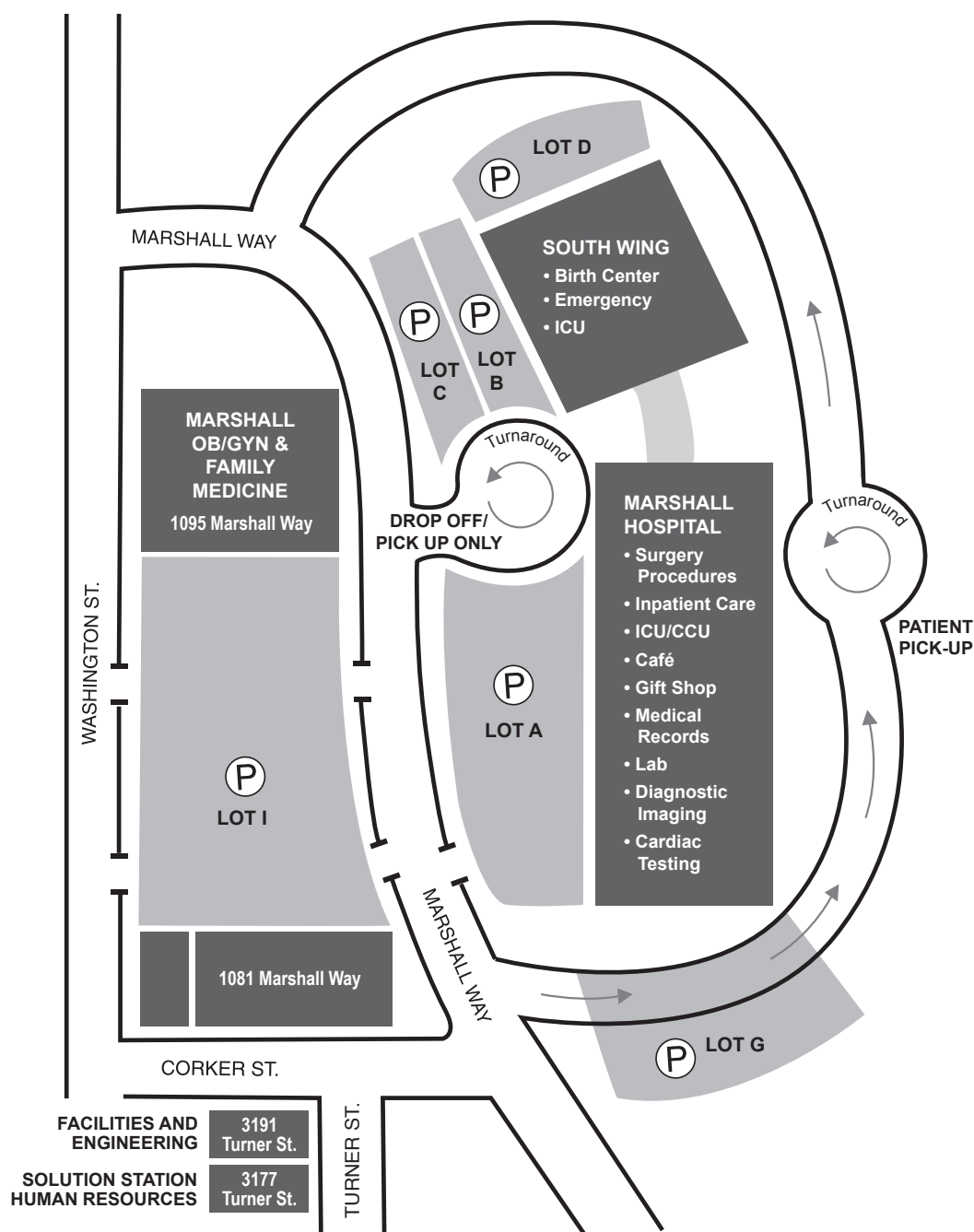
American Joint Replacement Registry (AJRR): 2024 Annual Report. Rosemont, IL: American Academy of Orthopaedic Surgeons (AAOS), 2024

Marshall Hospital Main Floor Map



1100 Marshall Way | Placerville, CA 95667 | 530-622-1441

Marshall Hospital Location and Parking



1100 Marshall Way | Placerville, CA 95667 | 530-622-1441



Founded in 1959, Marshall is an independent, nonprofit community healthcare provider located in the heart of the Sierra Foothills between Sacramento and South Lake Tahoe. Marshall includes Marshall Hospital, a fully accredited acute care facility with 111 beds located in Placerville; several outpatient facilities in Cameron Park, El Dorado Hills, Placerville and Georgetown; and many community health and education programs. Marshall has over 220 board-certified providers and a team of over 1,400 employees providing quality healthcare services to more than 180,000 residents of El Dorado County.



1100 Marshall Way
Placerville, California 95667
530-622-1441
916-933-CARE (2273)
Toll-free 866-340-1441

MARSHALLMEDICAL.ORG

