

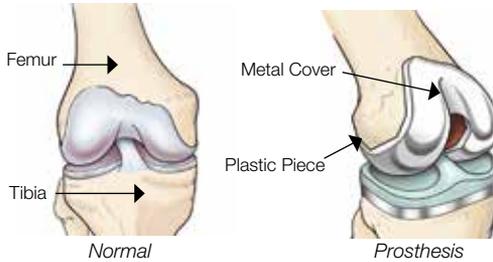
## Knee Replacement Surgery



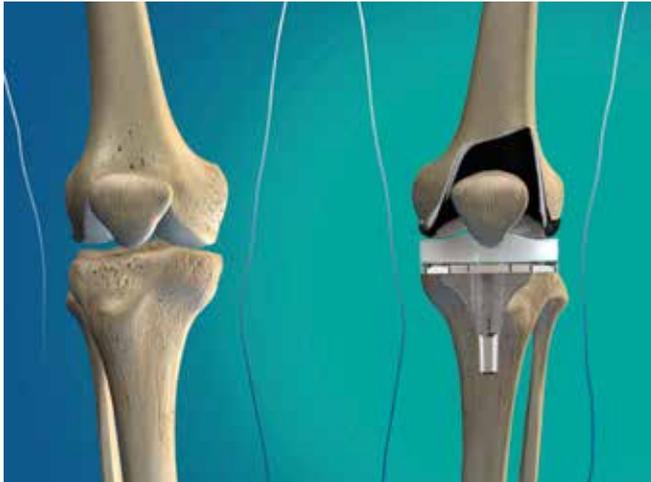
California Pacific Medical Center (CMPC) is a Bay Area leader in joint replacement surgery. Our orthopedic surgeons perform more than 1,300 knee, hip and shoulder replacements annually. Joint replacement surgery benefits people of many ages, including young adults, adults and seniors. Our goal is to help you get back to living your life, free of joint pain.

## What Is Total Knee Replacement?

A total knee replacement is a surgical procedure in which the weight-bearing surfaces of your knee joint are replaced with an artificial joint (prosthesis). During knee replacement surgery, your surgeon makes an incision (cut) on the front of your knee. The end of your femur (thigh bone) is trimmed and resurfaced with a metal cover or shell. The end of the tibia (lower leg bone) is trimmed and resurfaced with a plastic and metal implant.



The surgery takes one to two hours, and your hospital stay is usually one to two days. Most patients go directly home from the hospital. By planning ahead and following the steps outlined in this booklet, you can help ensure a successful knee replacement.



*Knee joint before (left) and after (right) knee replacement surgery.*

## Before Surgery

### Medical Information

You will be contacted by a **pre-admission testing nurse** about two weeks before your surgery. The nurse will take your health history and answer your questions by phone. Please have an updated medication list available so you can discuss all current drug names and dosages. The nurse may ask you to complete required medical testing (e.g. EKG, blood, urine and other tests) before your surgery.

You will need a physical exam with your primary care doctor within 30 days of your surgery.

### Medications

Once your surgery is scheduled, CPMC will send you a pre-registration packet (Surgery, Tests and Procedures – A Pre-Registration Guide). Complete the Medication Form included in this packet and bring it with you on the day of surgery. Please be sure to include drug allergies, plus all prescriptions, over-the-counter medicines, vitamins and herbal supplements.

**Note:** If you have diabetes or are taking blood-thinning medicines, please tell your primary care doctor.

A blood transfusion is sometimes needed to replace blood loss from surgery. If you have any concerns about blood transfusions, speak with your surgeon before surgery.

### Financial Information

You will also be contacted by a financial representative about two weeks before your surgery. Please have your health insurance information ready to discuss with the representative.

# Preparing for Surgery

## Prepare Your Home

- **Household help:** You may need help with groceries, meal preparation and housekeeping for several weeks. Find friends and family or consider hiring someone to help you until you can care for yourself.
- **Pathways:** Move furniture and clutter to make a clear path to your kitchen, bathroom and bedroom. The path should be wide enough for a walker or at least 26 inches wide.
- **Trip hazards:** Remove any loose rugs or other items you may trip over.
- **Meals:** Buy groceries and put cooking utensils within easy reach. Make and freeze simple meals that will be easy to prepare when you are home.
- **Living areas:** Place items you need every day within easy reach to avoid bending over or reaching too far overhead.
- **Pet care:** Arrange for care of your pets as needed.
- **Bathroom:** Place a nonskid bath mat in your tub or shower.
- **Furniture:** You will need a stable, high back chair with armrests. You should not sit on a chair that rocks, rolls or swivels during your recovery from surgery.

## Arrange for Transportation Home

After your surgery, you will likely be discharged from the hospital on the morning of your discharge date. Arrange for someone to drive you home from the hospital and stay with you at home that day and possibly longer. You will not be allowed to take public transit or a taxi home alone. You will also need someone to drive you to appointments for several weeks.

## Joint Replacement Registry

The Joint Replacement Registry provides CPMC with vital information that helps us and other hospitals track outcomes and identify how well certain surgical techniques, medications and orthopedic implants work. Your surgeon and CPMC hope you will join the registry and participate in this survey, which begins before your surgery and follows up with you at six months, 12 months and every year after that. Please see the phone number on this booklet's insert to begin the survey.

## Total Joint Class

Every Monday (except holidays) we offer a Total Joint class from 9 to 10 a.m., taught by our nursing or physical therapy staff. Surgeons at Sutter Health highly recommend you attend a class to ensure a smooth experience from surgery to the discharge home. Please see the insert in this booklet for instructions on how to confirm your place in one of our classes. If you are unable to attend a class in person, you and your family can watch a video of the class on the CPMC website at [cpmc.org/jointcare](http://cpmc.org/jointcare).

## Take Care of Your Health

- **Dental work:** Complete any dental work in progress before surgery. You may need antibiotics prior to having any future dental work to prevent infection.
- **Medications:** Check with your primary care doctor and surgeon about the medicines, vitamins and supplements you currently take. At least one week before surgery, you may need to stop taking some of these medicines, including blood thinners, nonsteroidal anti-inflammatory drugs (NSAIDs) and any drugs that contain aspirin.
- **Diabetes:** If you have diabetes, make sure you take your oral diabetic medicine the day before surgery but not on the day of surgery. If you take insulin, please check with your primary care doctor for detailed instructions.
- **Smoking:** Consider stopping smoking before surgery.

## Leg Strengthening Exercises

You will recover faster from surgery if you begin strengthening your leg muscles before surgery with the exercises below.

Do 10 repetitions of each exercise two times a day, unless your doctor tells you otherwise.



### Ankle Pumps

Bend ankles to move feet up and down, alternating feet.



### Quad Sets

Slowly tighten muscles on thigh of straight leg by pressing your knee down into the bed while counting to 10. Repeat with other leg to complete the set.



### Gluteal Squeezes

Squeeze buttock muscles as tightly as possible while counting to 10.



### Heel Slides

Make sure bed is flat. Bend knee and pull heel toward buttocks. Hold for 10 seconds. Repeat with other knee to complete set.



### **Straight Leg Raises**

Bend one leg. Keep the other leg as straight as possible and tighten muscles on top of the thigh. Slowly lift straight leg 10 inches from the bed and hold for 10 seconds. Lower straight leg and keep the muscle tight for 10 seconds. Relax. Repeat with other leg to complete set.



### **Long Arc Quads**

Straighten leg, hold for 10 seconds and relax. Repeat with other leg to complete set.



### **Knee Slides**

Slowly slide your foot forward in front of you until you feel a stretch in your knee and hold for 10 seconds. Then slide your foot back as far as you can and hold for 10 seconds and relax. Repeat with other foot to complete set.

# Preparing for the Hospital

## What to Pack

- Bring loose-fitting clothing, nonskid, closed-toe shoes and toiletries.
- Bring cases for glasses, contact lenses and dentures. You will need to remove them before your surgery. Do not wear or bring wedding bands, jewelry, body piercings or valuables such as cash, credit cards or checkbooks.
- Pack a small overnight bag with your personal items.
- Bring personal medical device(s) such as a CPAP machine and inhalers.
- Label all your personal items.

## Medications

- Complete and bring the Medication Form you received in your pre-registration packet.
- It is best not to bring your medicines to the hospital. If you don't know whether the hospital carries a special medicine, bring it in its original and labeled pharmacy bottle and give it to your nurse.

## Cleaning Your Skin Before Surgery

Before you go to the hospital for surgery, it is important to make sure your skin is germ free. Using a product with 4% chlorhexidine gluconate (CHG), an antiseptic solution, greatly reduces the amount of germs on your skin and has been shown to reduce surgical site infections. "Hibiclens" is a common brand name that can be found at most pharmacies. Do not use CHG if you are allergic to it and do not put it on your face or genitals.



## Notes:

1. Do not shave below the waist for at least five days before surgery.
2. Do not use a loofah or wash cloth that has been sitting in the shower.

## You will need to take two CHG showers at these intervals:

- Two days before surgery.
- Night before surgery.

## Showering with CHG

1. Shower with warm (not hot) water.
2. Shampoo hair and wash face with your regular products.
3. Rinse hair and body well.
4. Turn the water off.
5. Pour the CHG onto a clean, wet washcloth. Apply CHG to your entire body from the neck down. Avoid your eyes and genitals.
6. Wash for five minutes, paying special attention to the area where your surgery will be performed.
7. Turn the water back on and rinse thoroughly. Do not wash again with your regular soap after using CHG.
8. After you shower, pat dry with a clean towel.
9. Very important: Do NOT apply any lotion, perfume, powder or deodorant to your body. This will inactivate the CHG.
10. Wear clean pajamas after each shower and sleep on clean sheets
11. Wear clean, freshly washed clothes to the hospital.

## Things to Do the Day before Surgery

- **Confirm surgery:** On the **working day** before your surgery, contact your surgeon's office to confirm your arrival time and surgery location.
- **Hydrate:** Before midnight on the day before surgery, drink plenty of fluids to make sure you are hydrated.
- **Eating and drinking:** Follow your surgeon's instructions on when to stop eating food and drinking fluids. This is usually six hours for solids and two to three hours for clear liquids such as coffee without milk, tea and apple juice.
- **Medications:** The morning of surgery, take only the medicines you were told to take by the nurse, surgeon or your primary care doctor. Take medicine with a sip of water.

## Going to the Hospital

- You will be asked to arrive one to two hours before the scheduled surgery.
- Go directly to the CPMC campus where your surgery is scheduled.

## At the Hospital

### Anesthesia

The anesthesiologist will meet with you and your surgeon about an hour before surgery to choose an anesthetic. For joint replacement surgery, this is often a spinal block, also known as spinal anesthesia.

A spinal block produces a rapid numbing effect from your waist down. It is given in combination with sedatives to relax you and put you in a light sleep. In some cases, your doctors may use general anesthesia.

Your surgeon may also recommend a peripheral nerve block. A peripheral nerve block, done by our anesthesiologists, helps to control pain after your surgery.

### Hospital Room and Equipment

Following surgery, your care team may use certain medical equipment.

- **Sequential Compression Device (SCD):** These inflated cuffs wrap around your feet or leg and are attached to a pump. This helps blood flow from your legs while you are in bed and prevents blood clots.
- **Continuous Passive Motion (CPM) machine:** This may be used after surgery to help increase motion in your knee and reduce knee stiffness. The CPM machine will move your knee while you are in bed.
- **Foley catheter:** This may be inserted into your bladder during surgery and is used to drain urine. It is usually removed the day following surgery.
- **Call button:** You will have a nurse call button at all times. Always ask for help when getting up.

### Your Team at CPMC

Our nurses will be with you from the moment you arrive at the hospital, through surgery and until you leave the hospital. They work with your doctors, therapists and surgeon to make sure you are safe and on the right track toward recovery. They also make sure that your pain is under control.

Your nurse case manager helps you make arrangements for going home, such as receiving home therapy, obtaining medical equipment and, perhaps, getting extra help at home.

A rehabilitation therapist will visit you one or two times a day to teach you how to safely get in and out of bed, transfer to a chair and walk with the appropriate assistive device, such as a walker or crutches. They also teach you how to safely perform daily living activities.

# Managing Your Pain

Current evidence-based medicine and best practice guidelines no longer recommend opiates and narcotics as first-line treatment for pain following your knee replacement. At CPMC, we utilize a multimodal approach that includes nonsteroidal anti-inflammatory drugs, anti-nausea medications, acetaminophen and fluid hydration. Our approach has led to decreased pain, faster recovery, improved range of motion and fewer complications incurred from narcotic medications.

Although there may be some discomfort after your surgery, keeping your pain under control speeds your recovery. Less pain makes it easier to focus on getting around safely on your new joint. When you are comfortable, you are better able to walk, breathe deeply and cough.

## We Manage Pain In Many Ways

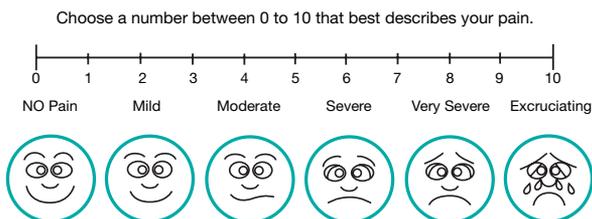
We use many ways to control your pain so you can focus on your physical and occupational therapy exercises.

- We may give you medicines before surgery to help minimize the pain you would otherwise experience after surgery.
- We use multiple types of pain medicines together (“multimodal analgesia”) to control pain.
- Since pain medication can make some people feel nauseous, we also give you medicines to prevent and control nausea.
- Ice and repositioning are also effective ways to control pain.

## Pain Tips

- Do not wait until the pain is bad to take your pain medicine.
- Good pain control helps you recover faster.
- Tell your nurses and doctors if you have pain.
- If your pain suddenly gets worse or you experience chest pain or have trouble breathing, tell your nurses immediately.

You can help your doctors and nurses “rate” your pain using the pain scale. 0 means no pain and a 10 on the scale means the worst pain you can imagine.



**Note:** Constipation after surgery can be a problem due to inactivity and pain medicines. We recommend that you take a stool softener at least daily when you get home, drink plenty of fluids, and eat fresh vegetables and fruits. You may also need a laxative. Ask your doctor or home care team for advice if you become constipated.

## Follow-Up Care

Your nurse case manager will assist you with your going home plan and home care needs based on what your insurance provides.

Before you leave the hospital, you'll be given a follow-up appointment to see your surgeon in two to three weeks.

## Concerns

Call your surgeon if you have any questions or concerns about your recovery or any health problems after surgery. For urgent issues, consider going to your local emergency room.

### Warning signs include:

- Temperature higher than 101° F or 38.5° C.
- Increased redness and swelling around the incision.
- Changes in the amount, look or smell of drainage from the incision.
- Severe pain, difficulty breathing or swelling in either leg.

## Rehabilitation Therapy

The focus of our rehabilitation program is to help you learn to carry out your daily living activities on your own as much as possible. In the hospital, the rehabilitation therapist will usually see you two to three times a day. Once you meet the following goals, you are ready to go home:

1. Get out of bed
2. Walk in the hallway with a walker or crutches
3. Dress
4. Use the toilet
5. Stand for a short period of time

## Therapy

Some patients may need additional therapy at home. Your care team will determine what type of therapy you need and whether you should receive physical or occupational therapy at home or in an outpatient setting.

## Activity Restrictions After Knee Replacement

Follow these instructions and check with your surgeon about how long you need to keep these restrictions.

- Do not twist the knee.
- Do not place a pillow under the knee.

### To-Do Checklist

#### Before Surgery

- Make appointment with your primary care doctor for a physical exam within 30 days of your scheduled surgery.
- Start pre-operative exercises.
- Sign up and complete the Joint Replacement Registry survey. (See booklet insert for details.)
- Confirm your spot at one of our Total Joint classes. (See booklet insert for details.)
- Complete the Medication Form.
- Organize your house to make it easy and safe to move around.
- Ask for help from friends and family.
- Buy groceries and prepare food for the first week at home.
- Arrange transportation.
- Start washing with CHG (see “Cleaning Your Skin Before Surgery”).
- Make sure you have closed-toe shoes and clothes that are easy to put on.
- If you smoke, consider stopping as soon as possible.

#### After Surgery

- Keep your surgical dressing dry until your postoperative office visit or as directed by your surgeon.
- Schedule or confirm your postoperative office visit with your surgeon.





Visit us at [cpmc.org/jointcare](https://cpmc.org/jointcare).

To find a doctor call 888-637-2762.