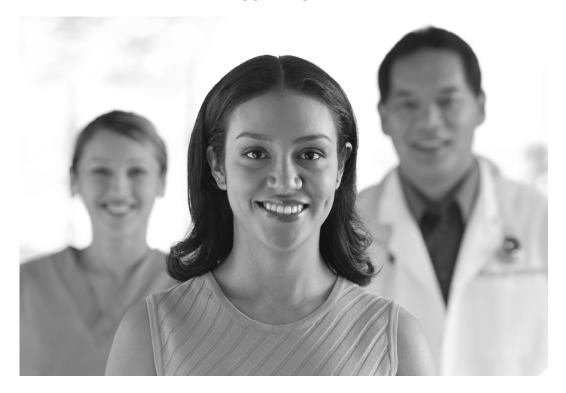


total knee replacement



Teamwork



A team of healthcare providers is ready to help you prepare for your knee replacement and care during your recovery. Physicians, nurses, physical therapists, and discharge planners are the principal players on your team. Taking an active role in your care is very important to a fast and smooth recovery.

As a patient, your role before and after your knee replacement is important for a fast and successful recovery.

This handbook has been developed to give you information and help prepare you for your surgery and recovery process.

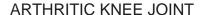
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Your new knee:

Technological advances have made it possible for your painful knee to be replaced with a prosthesis (artificial knee). The knee is a hinge joint and is formed where the thigh and lower leg meet. When you bend your knee to walk the bones rotate and glide on each other and help support your weight.







KNEE WITH PROSTHESIS

Your orthopedic surgeon has prescribed a Total Knee Replacement to lessen your pain and make walking easier. Unlike your present knee, your prosthesis has a limited safe range of motion and will need special care after surgery.

Before Your Hospital Stay

Preparing for Your Surgery

Preparing for surgery varies depending upon your surgeon. You may be told to take a multivitamin or iron tablet for three to four weeks prior to your operation. Occasionally a patient is requested to make a blood donation prior to surgery.

The day before your operation, you will most likely be instructed by your doctor not to eat or drink anything after midnight.

Medications

Two weeks before your surgery, you may be required to discontinue or avoid aspirin containing products (for example: baby aspirin, Bufferin, Anacin, Excedrin, Fiorinal, Aspirin with Codeine, Darvon Compound, Soma Compound, all Alka Seltzer products, Pepto Bismol) and non-steroidal anti-inflammatory medications (Ibuprofen, Nuprin, Advil, Motrin, Alleve, Indocin, Naprosyn, , and Relefen). If you are taking or need pain medicine during this time, the following products may be used: Tylenol, Vicodin, Darvocet, and Tylenol with Codeine.

You should also avoid Ginko Biloba, Vitamin E, Fever Few, and Green Tea capsules. All of these can thin your blood, increasing the risk of blood loss during surgery.

If you are on any of these medications for a medical condition, talk with your surgeon before discontinuing use.

If taking any diet pills, discuss these medications as soon as possible with your doctor to avoid having to reschedule your surgery. Some of these medications should be discontinued a minimum of 14 days prior to surgery.

Bring a list of <u>ALL</u> medications you take to your pre-op appointment. Be sure to include both prescription and over the counter medications and include the dose and frequency. At this time, your doctor may give you your discharge medication prescriptions so that they may be prefilled prior to surgery.

Smoking

Smoking is not only harmful to your lungs, heart, and blood vessels; it slows the healing process and places you at increased risk during surgery. It is very important that you stop smoking. If you need help, call the Health Education Department at (916) 614-4035 or the American Lung Association for available smoking cessation programs.

Illness

If you develop any illness such as a cold, flu, temperature, skin rash or infection, or "flare-up" of a health problem in the 10 days prior to your surgery, it is important that you notify your surgeon's office immediately. Sometimes minor health problems can be quite serious when combined with the stress of surgery. Please try not to damage, cut, or scratch the skin, especially on your operative leg. Animal scratches/bites or infection, etc., could result in your surgery being postponed.

Have Help Available

Until you learn to become more independent, you will need help with your daily activities and so it is important that you arrange for someone to be available to assist you for about 2 weeks after you are discharged from the hospital. It is recommended that you make these arrangements **before** coming to the hospital

Pre-Surgery Exercises

It is important to begin to exercise as soon as you know you are having surgery. These exercises strengthen your arms, thighs, and knee muscles, increase range of motion, and promote mobility after surgery.

Start slowly, and if exercise causes pain, fatigue, or shortness of breath, call your orthopedic surgeon.

1. Begin a cardiovascular conditioning program

Start slow and increase your time as your endurance and knee will allow. If your pain increases, slow down, decrease your time or stop the program. Work up to a 20 minute program per day. You should be able to converse normally while exercising, but feel as though you are working fairly hard.

- Swim: This would ideally be done in a warm pool. Swim laps or perform general exercise in the pool to get your cardiovascular exercise.
- Bike: If you are unable to use a pool, biking would be the next choice. If balance is challenging for you, use a stationary bike.

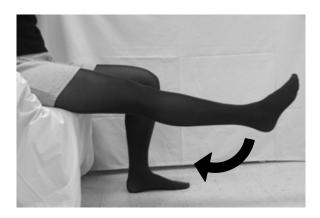
2. Chair Push Ups

Put your hands on the arms of the chair and push down in order to lift your body up. Repeat 10 times, 2-3x per day as able.



3. Long Arc Quads

While sitting in a chair, slowly raise your foot until your knee is completely straight. Repeat 15 times, 2-3x per day as able. Don't forget to exercise both legs.



4. Straight Leg Raises

Lie down on your back with your good knee bent and foot flat on the ground. Lift the other leg up while keeping the knee straight. Raise your leg no higher than the height of the other leg's knee. Repeat 15 times, 2-3x per day as able for both legs.



Getting Your Home Ready

For your safety, it is important to make some alterations in your home environment. This should be done **before** you come to the hospital for surgery.

Useful Items

Many useful items can be purchased together in a "Hip Kit" from the Health Education office at either **1600 Eureka Rd, Bldg C, 1st floor**, or at **Point West 1650 Response Rd, 1**st **floor.** The hip kit includes a reacher, contoured scrub sponge, dressing stick, elastic shoe laces, shoehorn, leg lifter and sock assist. These items may also be available at your local medical supply store.

Bedroom

- If you have a two story home, arrange a bed/sleeping area on the ground floor.
- Make sure that you have lighting at night between your bed and bathroom.
- Keep a flashlight at bedside.
- Place a phone within reach on a nightstand without having to turn or twist in bed. Consider purchasing a cordless phone if you don't already have one.

Bathroom

- Consider installing grab bars on walls of the shower or tub
- Move toilet paper so you don not have to reach forward or twist around when using the bathroom
- Explore purchasing a hand held shower head and shower chairs which will allow sitting while bathing once showers are allowed; a long handled sponge is useful.
 - Note: High rise toilet seat and shower chairs are not covered by Kaiser Permanente or Medicare and must be purchased at your own cost.

Living Space

- Remove scatter rugs or other objects on the floor, (such as electrical or telephone cords) which could cause you to trip and fall
- Have a firm chair that has arm rest, a high seat and a straight back available for you to sit in.
- Arrange your furniture allowing clearance for a walker. Walkers are at least 2 feet wide.
- Low chairs, swivel chairs, or rolling chairs are not safe for you to sit in after surgery.
- Place a list of emergency numbers by each telephone.

Wardrobe/Closet

- You will need low, broad-heeled or flat shoes that are properly fitted.
- Allow ease in dressing by wearing elastic waist or draw string garments.
- Find some knee length gowns/night shirts and robes that won't get in the way when you are walking.
- Find an apron with pockets to hold things like a cordless or cellular telephone, tissues, TV remote, medications, juice boxes, etc.
- Place frequently worn items in dresser drawers that do not require bending or stooping.
- Purchase a grabber to pickup dropped items; practice using it before surgery.
- Obtain a shoe horn with extension to reach your feet.

Your Hospital Stay

What to Bring to the Hospital

- List of <u>all</u> medications and supplements you take, including dose and frequency.
- Lose slippers with non-skid soles and heel backs. Your feet will be swollen after surgery.
- Knee-length or short bathrobe
- Toiletries such as a toothbrush, toothpaste, comb, brush, etc.
- Glasses, hearing aids with extra batteries and their containers.
- A container for dentures or partials
- Comfortable clothing to wear home
- This Total Knee Replacement Handbook
- Kaiser Permanente and other medical insurance card(s), photo identification.
- Co payment (If your health plan coverage requires a co-payment for hospitalization or discharge medications, bring ONLY the amount of cash necessary, a check or credit card to cover these expenses.)
- Pre-op Packet
- Copy of your Advanced Directive if you have one.

Leave valuable items such as money, jewelry, watches, additional credit cards, laptop computers, and cellular phones at home (cellular phone use is not permitted in the hospital).

Do not wear any metal products such as hair clips, bobby pins, jewelry, or metallic nail polish on the day of surgery.

Inform hospital staff of any medication and non-medication allergies you may have. Non-medication allergies include latex, flower/plants, surgical or paper tape.

Mobility and Comfort Measures

Shortly after your surgery, the nurse or Physical Therapist will get you out of bed. Getting up and out of bed will help prevent blood clots, constipation and pneumonia.

The goal is to keep you comfortable. If the medication to control your pain is not working, tell your nurse. You and your nurse will plan together to control your pain.

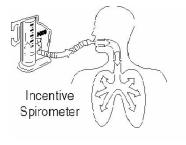
You may not have a bowel movement while you are in the hospital; however, constipation is a common problem following surgery, so please request a laxative if you think you need one.

DON"T BE AFRAID TO SPEAK UP IF YOU'RE UNCOMFORTABLE!

Treatments

There will be a plastic drainage tube leading to a container which removes fluids that collect at the surgical site. Your doctor will remove the drain 24 to 72 hours after surgery.

A small tube (Foley catheter) may be inserted into your bladder to drain urine. This catheter will be removed 24 to 48 hours after surgery. If you don't have a catheter and you think your bladder is full, please let your nurse know.



You will need to take deep breaths using your incentive spirometer (ICS) to open your lungs and clear secretions after surgery. You should use your incentive spirometer 10 times every 1 to 2 hours while you are awake.

Therapy in the Hospital

Physical Therapy

Starting your exercise program and mobility early is vital to making your rehabilitation successful.

- Your first session with a Physical Therapist may be on the day of your surgery, but more often on the day following surgery.
- You may participate in therapy twice each day while you are in the hospital.
- Your physical therapist will go over the exercises that you will be doing daily and make sure you are performing them properly. This will include range or motion and strengthening exercises.
- Your physical therapist will assist and instruct you in activities of daily living, (getting in and out of bed, using the restroom, etc).
- Your physical therapist will teach you how to use a walker to ambulate while you are in the hospital.
- Once you are discharged from the hospital you will continue your physical therapy either at home, an outpatient clinic or a skilled nursing facility as determined by your Doctor.

Physical Therapy Exercises

In order to help improve your range of motion, strengthen your legs, decrease your pain, and increase circulation, it is important to do your exercises often during the day.

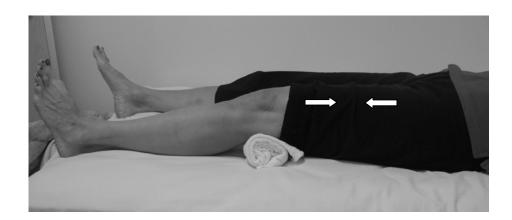
1. Passive Knee Extension

Place a large enough towel under the ankle of the operative leg so that your calf clears the bed. Let your knee go as straight as possible. Try and hold this position for 3-5 minutes every 2 hours. This will work on increasing your knee extension range of motion.



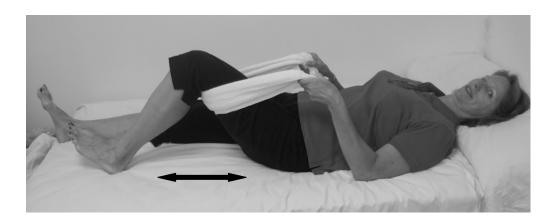
2. Quad sets

Place a small towel roll behind the operative knee. Try to slowly squish the towel by tightening the muscles in the thigh. Hold for 6-8 seconds and repeat 10-20 times, 3-4 times per day.



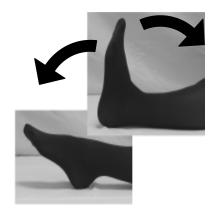
3. Heel Slides

Loop a towel behind your knee. Bend your knee and pull your heel toward your buttocks using the towel to assist the motion. Allow the heel to slide back down slowly until the knee is straight again. Repeat 10-20 times, 3-4 times per day.



4. Ankle Pumps

Bring your toes towards your shin as far as possible and then point your toes down as far as possible. Do both feet together. Repeat 10-20 times, every hour if possible.



5. Short Arc Quads

Place a pillow under your operative knee. Slowly raise the foot up, while keeping your knee on the pillow, until your knee is fully extended. Hold 6-8 seconds. Repeat 10-20 times, 3-4 times per day. This exercise is a more advanced exercise for early stage rehabilitation and should only be completed if your physical therapist feels you have an adequate quad contraction.



Planning for Your Discharge

Discharge Planning

Discharge Planning is an integral part of your hospitalization. Coordinating services, medical equipment and care (as ordered by your doctor) after hospitalization can sometimes take a few hours to several days. This is why discharge planning begins on the day you are admitted to the hospital.

Patient Care Coordinators (also known, as Discharge Planners) are registered nurses. They are available to assess and discuss your needs for post hospitalization care. By doing this they hope to achieve a smooth and successful discharge for you and your family when your doctor feels you are ready.

Some of the areas that Patient Care Coordinators can assist you and your family with are as follows:

- Assistance in determining your medical benefits
- Obtaining Medical Equipment
- Medical Social Worker referrals
- Transportation coordination
- Home Health coordination
- Skilled Nursing Facility referrals and placement
- Board and Care/Residential Home referrals

Patients that have Knee Replacement Surgery are generally discharged on the 2nd or 3rd post-operative day. Please make sure someone is available to give you a ride home as soon as you are discharged.

Medical Equipment

Medical equipment and the amount of insurance coverage vary and are determined by your health plan. It is important that you understand which equipment will be covered and which you will need to take on as an additional expense of your surgery.

- 1.) Standard medical equipment that will be needed at the time of your discharge from the hospital is a front wheeled walker.
- 2.) The Doctor may also recommend a bedside commode; this may be covered under your insurance policy if specific criteria are met.
- 3.) Elevated toilet seats and hip kits are **NOT** a covered benefit by any health plan, and can be purchased at any medical equipment store.
- 4.) For patient's undergoing knee replacement surgery, a portable CPM machine may be ordered for home use. Cost of the copayment will vary by health plan. Your patient care coordinator can

make arrangements for this item.

These items can be arranged for by the discharge planning department. If your plan does not cover durable medical equipment, Kaiser Patients are eligible for preferred rates from Apria Health Care.

You will need medications to prevent blood clots after your surgery. Prior to your discharge your nurse will teach you and those involved with your post surgery care, how to administer injections. Most people learn quickly and are able to accomplish the injections without difficulty. Coumadin therapy will require blood test for monitoring-usually home health RN will visit at the same time as physical therapy to monitor this.

Home Care

- Use your walker or crutches for at least 4 weeks after surgery. Do
 not stop using your walker until you are instructed otherwise by
 either your Physical Therapist or your Doctor.
- Use an adjustable commode seat if needed.
- Put frequently used items on counter tops within easy reach.
- Use an assistive device for dressing, such as a sock-aid or dressing-aid for pulling pants up if needed.
- Walk for function only, for the first 2 4 weeks. This means that it is
 o.k. to walk in and around your home but don't go outside for
 extended walks. This may cause more swelling in your knee.
- **Do not** put a pillow or rolled towel under your operated knee. This interferes with getting your knee straight.

Pain Control

It is normal to have pain in your knee following surgery. Pain at night can persist for 8-12 weeks after surgery.

- Use your pain medication as needed to manage the pain. Keeping your pain managed will help you do your exercises and prevent loss of motion.
- Keep the leg elevated to reduce the swelling and pressure.
- Use ice on your knee for 15-20 minutes at a time. Repeat this as often as you wish up to one time per hour.
- Do not leave your leg down for long periods.
- If you experience significant pain or swelling, contact your doctor immediately.
- Increase activities gradually as instructed by your health care provider. Use your crutches or walker for the full amount of time that your doctor recommends. You need to exercise, but don't overdo.

Wound Care

- Keep a clean, dry dressing on your incision until the staples are removed.
- Change the dressing if it becomes wet or dirty.
- Check with your MD about bathing or showering.

Important Reminders

Be aware that your prosthesis may activate metal detectors.

You may acquire a temporary disabled parking permit from the Department of Motor Vehicles. Forms are available in the Orthopedic Clinic.

If you are scheduled for dental work, you may need to take antibiotics. Prophylactic antibiotic therapy will prevent spread of infection to your prosthesis.

Call Your Doctor for the Following:

- 1. Incision becomes swollen, red, or if you notice drainage.
- 2. Pain develops with weight bearing or if the leg looks misaligned.
- 3. Pain develops in calf or chest.
- 4. Temperature over 100 degrees Fahrenheit.

This information is not intended to diagnose health problems or to take the place of medical advice or care you receive from your physician or other health care professional. If you have persistent health problems, or if you have additional questions, please consult with your doctor.

