

**The Advanced Orthopaedic & Spine
Center of Excellence
at
Houston Physicians' Hospital**

“Lift off to Joint Success”

Table of Contents

Section One – Before Surgery

Using the Guidebook	5
Joint Center Overview	5
Your Joint Replacement Team	6
Knee Replacement	7
Joint Replacement Calendar	8
Medication List	9
Get Started - Six Weeks Before Surgery	10
Plan for Leaving Hospital	10
Joint Care Team Call	10
Medical Optimization	10
Laboratory Tests	10
Medications That Increase Bleeding.....	11
Herbal Medicine	11
Healthcare Decisions	11
Stop Smoking.....	11
Start Pre-operative Exercises.....	12
Exercising Before Surgery.....	12
Pre-operative Knee Exercises	13
Prepare Your Home	18
Breathing Exercises	18
Surgery Timeline	19
Four Weeks.....	19
Two to Three Weeks	19
Ten Days.....	19
Five to Seven Days	19
Night Before	19
HibiClens Pre-op Bathing.....	20
Day of Surgery	21
Items to Take to the Hospital.....	21
Special Instructions	21
Frequently Asked Questions	22

Table of Contents

Section Two – At the Hospital

Understanding Anesthesia	24
Anesthesiologists	24
Choosing an Anesthesiologist	24
Types of Anesthesia.....	24
Side Effects.....	24
Understanding Pain	24
Pain Scale.....	24
Hospital Care – What to Expect	25
Before Surgery	25
During Surgery	25
After Surgery.....	25
Post-op Day 1	26
Post-op Day 2	26
Post-op Day 3	26
Discharge Options	27
Frequently Asked Questions	28

Section Three – At Home After Surgery

Caring for Yourself at Home	29
Be Comfortable.....	29
Body Changes	29
Blood Clots	29
Compression Stockings	29
Incision Care.....	30
Dressing Change	30
Recognizing Complications	31
Infection.....	31
Blood Clots	31
Pulmonary Embolism.....	31

Table of Contents

Section Three – At Home After Surgery (Con't.)

Post-operative Goals	32
Weeks One to Two	32
Weeks Two to Four.....	32
Weeks Four to Six	33
Weeks Six to Twelve	33
Post-operative Exercises	34-42
At Home Exercises	34
Advanced Exercises	37
Advanced Stair Exercises	41
Activities of Daily Living	43
Standing	43
Bed Transfers	44
Walking.....	45
Stair Climbing	46
Tub Transfers	46
Car Transfers.....	47
Getting Dressed.....	48
Around the House	49
Dos and Don'ts	50
Recommended Exercise Classes	51
Lifetime Follow-up Visits	52
Frequently Asked Questions	53

Section Four – Appendix

Patient Education, VTE	54
Preventing Infection	55
Durable Medical Equipment	56-57
Glossary	58
Important Phone Numbers	59-60
Ownership Disclosure	61

Section One: Before Surgery

Welcome

We are pleased you have chosen *The Orthopaedic Center of Excellence at Houston Physicians' Hospital* to have joint replacement surgery.

The goal of surgery is to:

- Relieve pain.
- Restore independence.
- Return to an active lifestyle.

Using the Guidebook

The Guidebook will assist you with:

- What to expect.
- What you need to do.
- How to care for your new joint.

Your doctor, nurse, or therapist may add or change any of the recommendations. Always use their recommendations first and ask questions if you are unsure.

Joint Center Overview

We offer a unique program to encourage discharge from the hospital one to three days after surgery. Program features include:

- Nurses and therapists trained to work with joint patients
- Casual clothes
- Private rooms
- Group activities
- Family and friends as "coaches"
- Group lunches
- Joint Care Coordinator who coordinates pre-operative care and discharge planning
- Patient Guidebook
- Quarterly luncheons for former patients and coaches



We strive to enable patients to walk the first day after surgery and resume normal activity in six to 12 weeks.

Your Joint Replacement Team

Orthopedic Surgeon - will perform the procedure to repair your damaged joint.

Registered Nurse (RN) - will ensure orders by your doctor are completed.

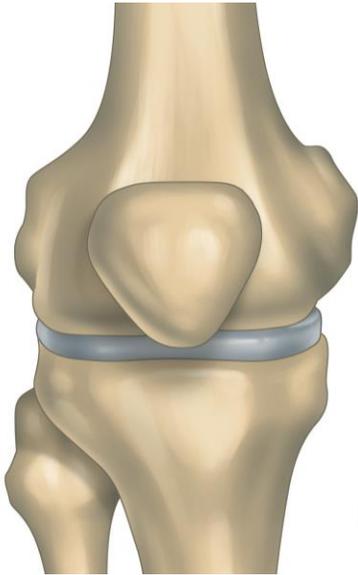
Physical Therapist (PT) - will guide you through functional daily activities and teach you exercises to regain your strength/motion.

Joint Care Coordinator (JCC) will:

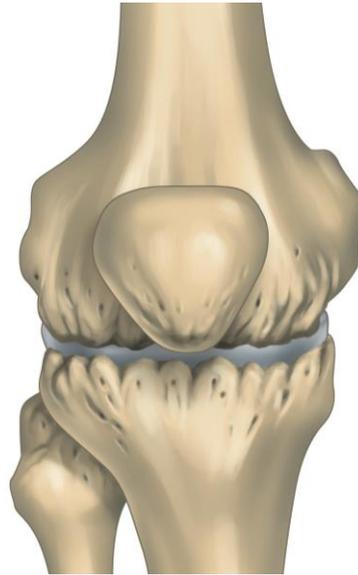
- Review at-home needs after surgery.
- Assess and plan for anesthesia and medical optimization for surgery.
- Coordinate discharge plan.
- Act as your advocate throughout treatment.
- Answer questions and coordinate hospital care.



Knee Replacement



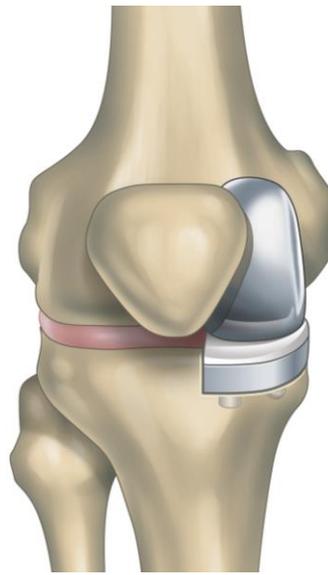
Healthy Knee



Arthritic Knee



Total Knee Replacement



Partial Knee Replacement

Joint Replacement Calendar

Write in the date for your appointments for pre-op labs or tests; pre-op class; and any additional appointments to see your primary care doctor or specialist.

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 6					
Week 5					
Week 4					
Week 3					
Week 2					
Week 1					

Medication List

Please fill out the Medication List with the requested information.

Name:		Family Doctor:	
Medication Name/Dosage	Instructions	Reason for Therapy	Duration
What is the name of your medication? What is the dosage?	When and how do you take this medication?	Why are you taking this medication?	How long have you been taking this medication?

Get Started - Six Weeks Before Surgery

Plan for Leaving the Hospital

The Joint Care Coordinator (JCC) will develop a discharge plan that meets your needs. Patients should expect to go directly home to recover in the privacy and comfort of their own surroundings.

Joint Care Team Call

After surgery has been scheduled, you will be contacted by a member of the Joint Care Team to:

- Schedule your pre-operative class and verify appointments for medical testing.
- Act as a liaison for coordination of your pre-operative care.
- Verify you have made an appointment, if necessary, with your doctor and have obtained pre-operative tests your doctor ordered.
- Answer questions and direct you to hospital resources.

Medical Optimization

You should receive a letter from your surgeon. The letter will tell you whether you need to see your primary care doctor and/or a specialist.

Follow the instructions in the letter. If you need to see your primary care doctor, he or she will perform an assessment and make sure you are medically fit for surgery it. This is in addition to seeing your surgeon before surgery. Additional doctor consults may be ordered after discussing your medical history with the anesthesiologist.

Laboratory Tests

You should also receive a laboratory-testing letter from your surgeon. Follow the instructions in this letter. Additional testing may be ordered.

Importance of Your Coach

Involving a friend or relative as your coach is very important.

Your coach should plan to come with you to attend the pre-operative class, to visit during your hospital stay, to provide support during exercise classes, and keep you focused on healing.

Guidebook for Knees

Medications That Increase Bleeding

Your doctor should tell you when to stop any medications before surgery. For example, discontinue all anti-inflammatory medications such as aspirin, Motrin®, Naproxen, Vitamin E, Q-10, Fish Oil, Omega 3, etc. These medications may increase bleeding. If you are taking a blood thinner, you will need instructions for stopping the medication. The JCC will instruct you about your other medications.



Co-

Herbal Medicine

Herbal medicines and supplements can interfere with other medicines. Check with your doctor to see if you need to stop taking your herbal medicines before surgery.

Examples of herbal medicines: echinacea, ginkgo, ginseng, ginger, licorice, garlic, valerian, St. John's wort, ephedra, goldenseal, feverfew, saw palmetto, and kava-kava.

Healthcare Decisions

Advance Medical Directives are printed instructions that communicate the patient's wishes regarding healthcare. There are different directives. Consult your attorney concerning the legal implications of each.

- **A Living Will** explains your wishes if you have a terminal condition, irreversible coma, and are unable to communicate.
- **Appointment of a Healthcare Agent** (sometimes called a Medical Power of Attorney) lets you name a person (your agent) to make medical decisions if you become unable to do so.
- **Healthcare Instructions** are your choices regarding use of life-sustaining equipment, hydration, nutrition, and pain medications.

If you have an Advance Medical Directive, bring a copy of the document with you to the hospital.

Stop Smoking¹

Smoking:

- Delays your healing process.
- Reduces the size of blood vessels and decreases the amount of oxygen circulated in your blood.
- Can increase clotting which can cause heart problems.
- Increases blood pressure and heart rate.
- Increases risk of developing blood clots

Smoking can impair oxygen circulation to your healing joint. Oxygen circulation is vital to the healing process.

Guidebook for Knees

If you quit smoking before surgery, you will increase your ability to heal.

When you are ready:

- Decide to quit.
- Choose the date.
- Limit the area where you smoke; don't smoke at home.
- Throw away all cigarettes and ashtrays.
- Don't put yourself in situations where others smoke.
- Reward yourself for each day without cigarettes.
- Remind yourself that this can be done – be positive!
- Take it one day at a time – if you slip, get back to your decision to quit.
- Check with your doctor if you need products like chewing gum, patches or prescription aids.

It is important to be as flexible and strong as possible before having knee surgery.

**Houston Physicians' Hospital is a Tobacco Free Facility*

*Smoking Threatens Orthopedic Outcomes. Negative effects should prompt orthopedists to address the issue with patients. S. Terry Canale, MD; Frank B. Kelly, MD; and Kaye Daugherty <http://www.aaos.org/news/aaosnow/jun12/cover2.asp> Motrin is a registered trademark of McNeil-PPC, Inc. All rights reserved by trademark owner.

Start Pre-operative Exercises

Many patients with arthritis of the knee avoid using their painful leg. Muscles become weaker, making recovery slower and more difficult. Beginning an exercise program before surgery can help make recovery faster and easier.

Exercising Before Surgery



Consult your doctor before starting pre-operative exercises. Eleven exercises are listed below that your doctor may instruct you to start doing and continue until your surgery. Take 15 to 20 minutes, twice a day to do your exercises. Perform exercises on both legs, as tolerated to pain level.

It is also important to strengthen your entire body, not just your legs before surgery. Strengthen your arms by doing chair push-ups because you will be relying on your arms when walking with the walker or crutches; getting in/out of bed and chairs; and on/off the toilet. Perform light endurance activities for your heart and lungs – walking for 10 to 15 minutes each day.

Pre-operative Knee Exercises

(Do not do any exercise that is too painful.)

1. Ankle Pumps
2. Quad Sets
3. Gluteal Sets
4. Abduction and Adduction
5. Heel Slides
6. Short Arc Quads
7. Hamstring Stretch with Optional Strap
8. Straight Leg Raise
9. Armchair Push-ups
10. Seated Knee Flexion
11. Knee Extension Stretch

1 Ankle Pumps

Flex and point your feet.

Perform 20 times.



Guidebook for Knees

2 Quad Sets (Knee Push-Downs)

Lie on your back, press knees into mat by tightening muscles on the front of the thigh (quadriceps). Hold for a 5 count. Do NOT hold breath. **Perform 20 times.**



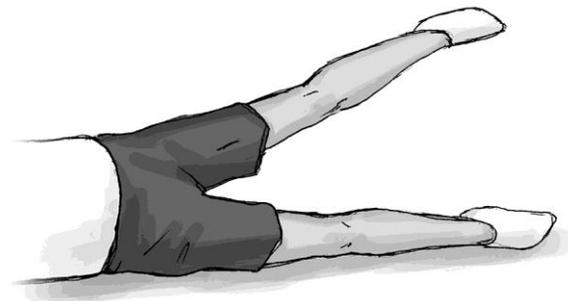
3 Gluteal Sets (Bottom Squeezes)

Squeeze bottom together. Hold for a 5 count. Do NOT hold breath. **Perform 20 times.**



4 Hip Abduction – Side Lying

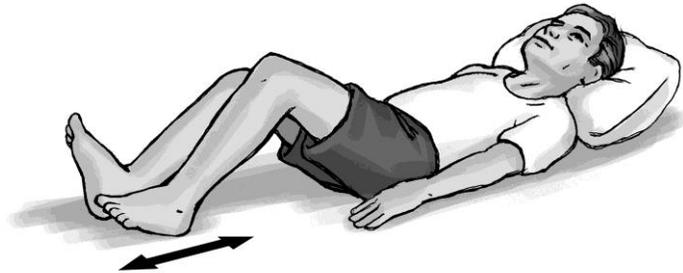
While lying on your side, slowly raise up your top leg to the side. Keep your knee straight and maintain your toes pointed forward the entire time. The bottom leg can be bent to stabilize your body. **Perform 20 reps.**



Guidebook for Knees

5 Heel Slides (Slide Heels Up and Down)

Lie on your back and slide heel up a flat surface bending knee. After surgery, your therapist may have you use a strap around foot to assist gaining knee bend. **Perform 20 times.**



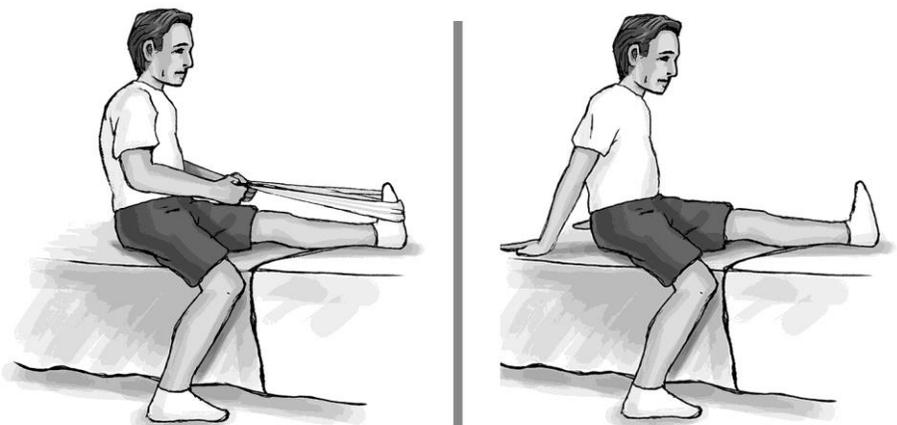
6 Short Arc Quads

Lie on your back and place a 6-8 inch rolled towel under knee. Lift foot from surface, straightening knee as far as possible. Do not raise thigh off rolled towel. **Perform 2 sets of 10 times.**



7 Seated Hamstring and Gastroc Stretch With or Without Strap

Sit on couch or bed with exercised leg extended and other leg dangling off side. Keeping exercised knee straight, gently lean forward until slight stretch is felt in back of thigh. As you become more flexible, use strap to pull up on foot. Hold for 20 to 30 seconds. **Perform 5 times.**



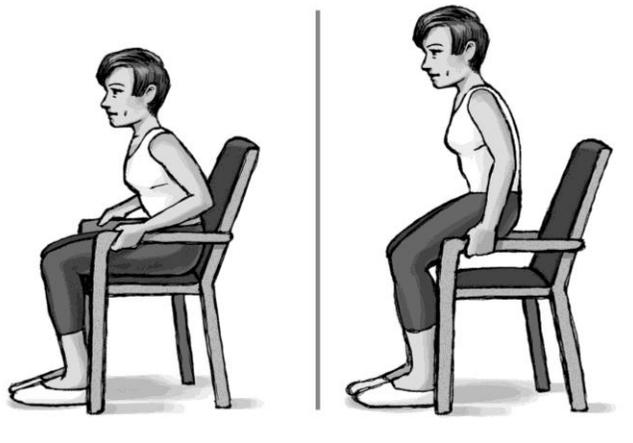
8 **Straight Leg Raises**

Lie on your back with unaffected knee bent and foot flat, tighten quad on affected leg and lift leg 12 inches from surface. Keep knee straight and toes pointed toward your head. **Perform 2 sets of 10.**



9 **Armchair Push-ups**

Sitting in sturdy armchair with feet flat on floor, scoot to front of seat and place hands on armrests. Straighten arms raising bottom up from seat as far as possible. Use legs as needed to lift. Progress to using only arms and unaffected leg to perform push-up. Do not hold breath or strain too hard. **Perform 2 sets of 10.**



Guidebook for Knees

10 Seated Knee Flexion

Sitting in straight-back chair, bend affected leg as far as possible under chair (can use opposite foot to help). When maximum bend is reached, plant foot and slide hips forward further bending knee. Hold for 20 to 30 seconds. **Repeat 10 times.**



11 Knee Extension Stretch

Sitting in comfortable chair, prop affected foot on chair or stool. Place towel roll under ankle so calf is unsupported, and apply an ice pack and 5 pound weight (or bag of rice) on top of knee. **Hold position for 15 minutes.**



Guidebook for Knees

Prepare Your Home

- Put things you use often on a surface that is easy to reach.
- Check railings to make sure they are not loose.
- Complete house cleaning, do laundry, and put it away.
- Put clean linens on the bed.
- Prepare meals and freeze them.
- Cut the grass, tend the garden and other yard work.
- Pick up throw rugs and tack down loose carpeting.
- Remove electrical cords and other obstructions from walkways.
- Install nightlights in bathrooms, bedrooms, and hallways.
- Install grab bars in the shower/bathtub and put adhesive slip strips in the tub.
- Arrange to have someone collect your mail and take care of pets.



Breathing Exercises

To prevent problems such as pneumonia, practice breathing exercises using the muscles of your abdomen and chest.

Deep Breathing

- Breathe in through your nose as deep as you can.
- Hold your breath for five to 10 seconds.
- Breathe out as if you were blowing out a candle. Notice your stomach going in. Breathe out for 10 to 20 seconds.
- Take a break and then repeat the exercise 10 times.

Coughing

- Take a slow deep breath. Breathe in through your nose and fill your lungs completely.
- Breathe out through your mouth and concentrate on your chest emptying.
- Repeat.
- Take another breath, but hold your breath and then cough hard. When you cough, focus on emptying your lungs.
- Repeat all steps twice.

Techniques such as deep breathing, coughing, and using an Incentive Spirometer may help prevent respiratory complications after surgery.

Surgery Timeline

Four Weeks Before Surgery

Start Vitamins, Iron

You may be instructed to take multivitamins, as well as iron. Iron helps build your blood count, which may help prevent the need for a blood transfusion.

Two to Three Weeks Before Surgery

Pre-operative Class

Attend a class for joint surgery patients. Bring your coach. If you cannot attend, inform the JCC.

Class Outline	- Joint Disease	- Review Pre-operative Exercises
	- What to Expect from Coach/Caregiver	- Learn About Assistive Devices and Joint Protection
	- Meet the Joint Replacement Team	- Discharge Planning/Insurance/Equipment
	- Learn Breathing Exercises	- Complete Pre-operative Forms

Ten Days Before Surgery

Pre-operative Visit to Surgeon

Have an appointment in your surgeon's office seven to 10 days before surgery.

Five to Seven Days Before Surgery

Receive a phone call from the pre-operative nurse instructing you what time to arrive at the hospital

Night Before Surgery

Your surgeon will provide instructions for the night before surgery. Generally: Do not eat or drink anything after midnight, EVEN WATER, unless otherwise instructed. Shower and wash your hair. Use your CHG soap as instructed at your pre-admission visit (see instructions p. 20).

Pre-Surgery CHG Bathing INSTRUCTIONS

Getting your skin ready for surgery is extremely important! To help prevent a surgical site infection, you should clean your skin with CHG. This is a special chemical found in soaps such as Hibiclens and other brands.

- Gather clean, freshly-laundered washcloths, towels and clothes for each shower
- Before using, read all instructions!

For best results, bathe with CHG the day before your surgery and on the morning of surgery.

If you experience an allergic reaction (rash, facial swelling) to the soap, stop using and use regular dial soap.

Steps for showering or bathing with CHG /Hibiclens:

1. If you plan to wash your hair, use your regular shampoo; then rinse your hair and body to remove any shampoo residue.
2. Wash your face with your regular soap or water only.
3. Thoroughly rinse your body with water from the neck down.
4. Apply CHG/ Hibiclens directly on your skin or on a clean wet washcloth and wash gently; move away from the shower stream when applying the CHG soap/ Hibiclens to avoid rinsing it off too soon.
5. Rub the soap filled washcloth over your entire body for 3 minutes; apply more soap as needed (1/2 of bottle should be used with each shower).
6. Avoid scrubbing your skin too hard.
7. Avoid contact with your eyes, ears, mouth and genitals; if the solution comes in contact with these areas rinse out promptly.
8. Turn on the shower/return to the shower stream, and rinse the soap off your body completely with warm water.
9. Do NOT use regular soap after washing with the CHG/ Hibiclens.
10. Use a clean washcloth with each shower.
11. Pat your skin dry with a freshly-laundered, clean towel after each shower/bath cleansing.
12. Dress with freshly-laundered clothes after each shower/bath cleansing.
13. Apply clean sheets to your bed the night before your surgery.

Additional instructions for preventing a surgical site infection:

1. Sleep on clean bed linens the night **before** surgery. Do NOT apply any lotions, deodorants, powders, or perfumes to your body.
2. Do NOT shave the night **before** or the day of surgery! Facial shaving is the only thing permitted before surgery. Do NOT remove any body hair below the neck.
3. Good hand hygiene is important. Wash hands with soap and water for the time it takes to sing “Row, Row your boat” to ensure adequate cleansing.
4. Do not sleep with your pet the night before or several days after your surgery.

I completed the CHG/Hibiclens showers as instructed:

_____ 1 day before your surgery

_____ Morning of your surgery

Day of Surgery

Do not eat or drink anything to morning of surgery. Do not chew gum, mints or hard candy. Arrive at hospital as instructed by the pre-op nurse or JCC. This will give staff time to start IVs, prep, and answer questions. It is important you arrive on time as occasionally the surgery time is moved up.

Items to Take to the Hospital

- Personal hygiene items (toothbrush, deodorant, battery- operated razor, etc.)
- Watch or wind-up clock
- Loose fitting clothes (shorts, tops)
- Slippers with non-slip soles; flat shoes or tennis shoes
- Guidebook
- Copy of Advance Medical Directives (if you have one)
- Insurance card, driver's license, or photo I.D.
- Co-payment required by insurance company
- Home medications in original bottles

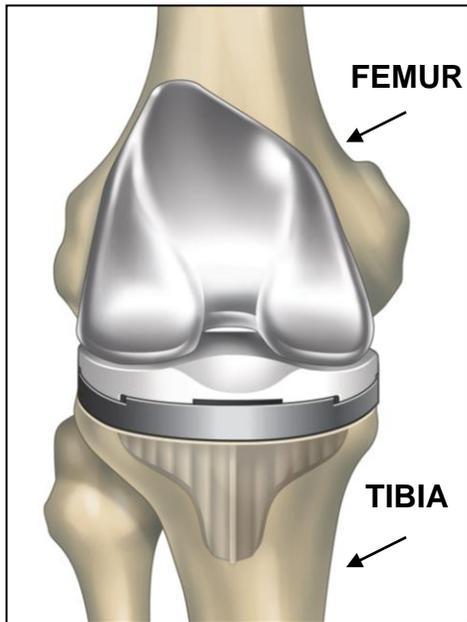
Special Instructions

- The pre-op nurse will instruct you on which medications to take the night before and the morning of your surgery. Leave jewelry, valuables, and large amounts of money at home.
- Remove makeup before procedure.
- Nail polish is okay to leave on.
- No body lotion.
- No contact lenses during surgery.
- You will be asked to remove hearing aids.
- You will be asked to remove unfixed dental appliances (dentures, bridges, partials, etc.)

Frequently Asked Questions (FAQs)

What is osteoarthritis and why does my knee hurt?

Osteoarthritis, the most common form of arthritis, is a wear and tear condition that destroys joint cartilage. Joint cartilage is tough, smooth tissue that covers the ends of bones where joints are



located. It cushions the bones during movement, and because it is smooth and slippery, it allows for motion with minimal friction. Trauma, repetitive movement, or for no apparent reason, the cartilage wears down exposing the bone ends. Over time, cartilage destruction can result in painful bone-on-bone contact, swelling, and loss of motion.

What is total knee replacement?

The term total knee replacement is misleading. The knee is not replaced, but rather an implant is used to re-cap the worn ends of the bone.

This is done with a metal alloy on the femur and a plastic spacer on the tibia and patella (kneecap). This creates a new, smooth cushion and a functional joint that can reduce or eliminate pain.

How long will my new knee last and can a second replacement be done?

All implants have a limited life depending on an individual's age, weight, activity level, and medical condition(s). A joint implant's longevity will vary in every patient. An implant is a medical device subject to wear that may lead to mechanical failure. There is no guarantee that your implant will last for any specified length of time.

What are the major risks?

Most surgeries go well, without complications. However, infection and blood clots are two serious complications. To avoid these complications, your surgeon may use antibiotics and blood thinners.

How long will I be in the hospital?

You will probably stay in bed the day of surgery. The next morning most patients get up, sit in a chair, and should be walking with a walker or crutches. Most patients will be hospitalized for one to three days after surgery. Patients are generally discharged to home once they are able to sit, stand, and walk safely with the walker or other assistive device.

What if I live alone?

Three options are available to you.

- Return home and receive help from a relative or friend.
- Have a home health nurse and physical therapist visit you at home for two or three weeks.
- If you meet the required criteria, you may be able to stay in a sub-acute facility following your hospital stay; this option requires approval from your insurance company.



Section Two:

At the Hospital

Understanding Anesthesia

Anesthesiologists

The Pre-Operative Care Unit, Operating Room, and Post Anesthesia Care Unit (PACU) at the hospital are staffed by Board Certified and Board eligible anesthesiologists.

Choosing an Anesthesiologist

Although most patients are assigned an anesthesiologist, you may be able to request one based on personal preference or insurance considerations. Requests for specific anesthesiologists should be submitted in advance through your surgeon's office.

Types of Anesthesia

- **General anesthesia** - produces temporary unconsciousness.
- **Regional anesthesia** - involves the injection of a local anesthetic providing numbness, loss of pain, or loss of sensation to the body (spinal blocks, epidural blocks and specific nerve blocks).

Side Effects

Your anesthesiologist will discuss the risks and benefits associated with each anesthetic option, as well as complications or side effects that can occur.

You will be given medications to treat nausea and vomiting which sometimes occurs with the anesthesia. The amount of discomfort you experience will depend on several factors, especially the type of surgery. Your discomfort should be minimal, but do not expect to be totally pain free. Staff will teach you the pain scale to assess your pain level.

Understanding Pain

Pain can be chronic (lasting a long time) or intense (breakthrough) — and pain will change through the recovery process.



Pain Scale

Using a number to rate your pain can help the Joint Team understand and help manage it. “0” means no pain and “10” means the worst pain possible. With good communication, the team can make adjustments to make you more comfortable.

From Wong D.L., Hockenberry-Eaton M., Wilson D., Winkelstein M.L., Schwartz P.: *Wong's Essentials of Pediatric Nursing*, ed. 6, St. Louis, 2001, p. 1301. Copyrighted by Mosby, Inc. Reprinted by permission.

Hospital Care - What to Expect

Before Surgery

- Your anesthesiologist will review your information to evaluate your general health and determine the type of anesthesia best suited for you. This includes your medical history, laboratory test results, allergies, and current medications.
- Intravenous (IV) fluids will be started and pre-operative medications may be given.
- Before you receive the anesthesia, monitoring devices will be attached (blood pressure cuff, EKG, and other devices).

During Surgery

- The Anesthesia Provider will manage vital signs — heart rate and rhythm; blood pressure; body temperature and breathing; as well as monitor your fluid and need for blood replacement if necessary.

After Surgery

- You will be taken to the Post Anesthesia Care Unit (PACU). Your pain level will be assessed, vital signs monitored, and an x-ray of your new joint may be taken.
- Depending on the type of anesthesia used, you may experience blurred vision, a dry mouth, and chills.
- Most of the discomfort occurs the first 12 hours following surgery, so you may receive pain medication orally, intramuscularly and/or intravenously.
- ***Only one or two very close family members or friends should visit on surgery day.***
- At some point on this day, physical therapy will assist out of bed to walk or sit in a chair. Mobility helps to relieve discomfort. It is important you begin ankle pumps. This will prevent blood clots from forming in your legs.
- Begin using your Incentive Spirometer and doing the deep breathing exercises you learned.

Hospital Care - What to Expect

Post-op Day One

- Expect to be out of bed, cleaned up, dressed in your own clothes, and seated in a recliner. Shorts/tops are best; long pants are restrictive.
- Your surgeon will visit.
- The physical therapist will get you walking with crutches or a walker.
- Intravenous (IV) pain medication will likely be stopped; you may begin oral pain medication.
- Group therapy will begin.
- Your coach is highly encouraged to be present. Visitors are welcome anytime, but will not be allowed in group therapy sessions.
- For patients being discharged today, you will walk in the halls and learn to climb stairs and attend a discharge class prior leaving the facility.

Post-op Day Two

- Day will start with a morning walk.
- You will have Group Therapy twice today; it would be helpful if your coach participates.
- You will eat lunch with other patients, nursing staff, and your coach. You will have a second group therapy session as well as walk the halls and up/down stairs.
- Most patients will be discharged today.

Post-op Day Three

- Day three morning is similar to day two.
- You should walk up/down stairs.
- The goal is to discharge you after the morning exercise class.

Discharge Options

Going Directly Home

- Have someone pick you up.
- Receive discharge instructions concerning medications, physical therapy, activity, etc.
- Confirm equipment delivery, if applicable.
- Take your Guidebook with you.
- Most patients going home will begin therapy at an outpatient PT facility.
- If Home Health services are needed, the hospital will arrange.



Going to a Sub-acute Rehabilitation Facility

- The hospital will arrange for transportation.
- Transfer papers will be completed by nursing staff.
- Your doctor or a doctor from sub-acute facility will care for you in consultation with your surgeon.
- Sub-acute stays must be approved by your insurance company. In order to transfer to a sub-acute rehabilitation facility, you must meet admission criteria established by the facility in accordance with your insurance company or Medicare.
- If a sub-acute rehabilitation is not approved, you may still choose to go there and pay privately or the hospital will make alternate arrangements for home care.

Frequently Asked Questions (FAQs)

What happens during surgery?

Hospital reserves approximately one to two hours for surgery. Time will be taken by operating room staff to prepare you for surgery. You will have general anesthetic - “being put to sleep.”

Will surgery be painful?

You will have discomfort following surgery, but we keep you comfortable with appropriate medication. Most patients will receive oral pain medication with some additional IV medication for “breakthrough” pain.

How long and where will my scar be?

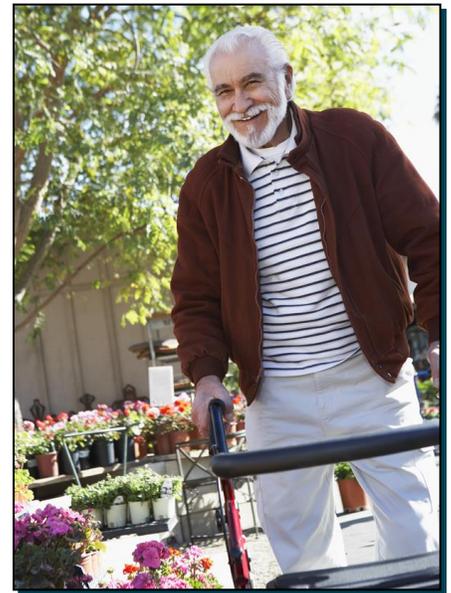
Surgical scars will vary in length, but most surgeons make it as small as possible. It will be straight down center of your knee, unless you have previous scars, in which case your surgeon may use an existing scar. There may be lasting numbness around the scar.

Will I need a walker, crutches, or a cane?

Patients progress at their own rate. We recommend you use a walker, crutches, or a cane for four to six weeks. The JCC or the Case Manger can arrange for equipment as needed.

Where will I go after discharge from the hospital?

Most patients are able to go home directly after discharge. Some patients may transfer to a sub-acute facility. The JCC, physical therapist and surgeon will help with this decision and make necessary arrangements. Check with your insurance company to see if you have sub-acute rehab benefits.



Section Three:

At Home after Surgery

Caring for Yourself at Home

Things you need to know for safety, recovery, and comfort.

Try not to nap during the day so you will sleep at night.

Be Comfortable

- Take pain medicine at least 30 minutes before physical therapy.
- Wean off prescription medication to non-prescription pain reliever as instructed by your physician.
- Change position frequently (every 45 minutes – 1 hour) to prevent stiffness.
- Use ice for pain control at least 30 minutes each hour. Use before and after exercise program.

Body Changes

- Appetite may be poor, but your desire for solid food will return.
- Drink plenty of fluids.
- May have difficulty sleeping.
- Energy level will be low; this may last for up to the next four weeks.
- Pain medication that contains narcotics promotes constipation. Use stool softeners or laxatives, if necessary.

Blood Clots

You may be given a blood thinner to avoid blood clots in your legs. The amount may change depending on how your blood thins.

Compression Stockings

You will wear special stockings to compress veins in your legs. This helps keep swelling down and reduces chance for blood clots.

- If swelling in operative leg is bothersome, elevate leg for short periods. Lie down and raise leg above heart level.
- Wear stockings continuously, removing one to two hours twice a day.
- Notify your doctor if pain or swelling increases in either leg.
- Wear stockings for three weeks after surgery; ask surgeon when you can discontinue.

Incision Care

- You will receive specific instructions at discharge regarding when you can get your incision wet
- Notify surgeon if increased drainage, redness, pain, odor, or heat around the incision.
- Take temperature if feeling warm or sick. Call surgeon if temperature/fever exceeds 101 degrees.
- Plan for a follow up appointment with your surgeon 10-14 days after surgery for staple removal
- When providing any care for the incision, wash hands before and after

Dressing Care

Your nurse will provide instructions regarding dressing changes prior to discharge based off your surgeons' preferences.

Recognizing and Preventing Potential Complications

Infection

Signs	<ul style="list-style-type: none">• Increased swelling and redness at incision site.• Change in color, amount, and odor of drainage.• Increased pain in knee.• Fever greater than 101 degrees.
--------------	---

Prevention	<ul style="list-style-type: none">• Take proper care of incision.• Notify doctor and dentist you have a joint replacement.• Notify dentist or surgeon before having dental work or other invasive procedures done—prophylactic antibiotics are generally prescribed.
-------------------	--

Blood Clots

Surgery may cause the blood to slow and coagulate in veins of legs, creating a blood clot. If a clot occurs, you may need to be admitted to the hospital to receive intravenous blood thinners.

Signs	<ul style="list-style-type: none">• Swelling in thigh, calf, or ankle that does not go down with elevation.• Pain, heat, and tenderness in calf, back of knee, or groin area.• Blood clots can form in either leg.
--------------	--

Prevention	<ul style="list-style-type: none">• Perform ankle pumps.• Walk several times a day.• Wear compression stockings.• Take blood thinners as directed.
-------------------	---

Pulmonary Embolism

An unrecognized blood clot could break away from the vein and travel to the lungs. This is an emergency — **CALL 911**.

Signs	<ul style="list-style-type: none">• Sudden chest pain.• Difficult and/or rapid breathing.• Shortness of breath.• Sweating.• Confusion.
--------------	--

Prevention	<ul style="list-style-type: none">• Follow guidelines to prevent blood clot in legs.
-------------------	--

Post-operative Goals

Weeks One to Two

Goal is discharge from the hospital within one to two days. Most patients go directly home, but some may go to a rehabilitation center.

- Continue with walker or two crutches unless otherwise instructed.
- Walk at least 300 feet with walker or support.
- If you have stairs, climb and descend flight of stairs (12-14 steps) with rail once a day.
- Straighten knee completely.
- Sponge bathe or shower (after staples are removed) and dress.
- Gradually resume homemaking tasks.
- Do 20 minutes of home exercises twice a day.

Weeks Two to Four

Goal is to gain more independence. Follow home exercise program to achieve the best results.

- Achieve one- to two-week goals.
- Move to cane or single crutch, as instructed by physical therapy.
- Walk at least one-quarter mile.
- Climb and descend flight of stairs (12-14 steps) more than once daily.
- Bend your knee more than 90 degrees.
- Straighten knee completely.
- Shower and dress.
- Resume homemaking tasks.
- Do 20 minutes of home exercises twice a day.
- Begin driving if left knee had surgery (need permission from physical therapy).

Weeks Four to Six

Goal is recovery to full independence. Home exercise program is important as you receive less supervised therapy.

- Achieve one- to four-week goals.
- Walk with cane or single crutch.
- Walk one-quarter to one-half mile.
- Progress on a stair from one foot to regular stair climbing (foot over foot).
- Actively bend knee 110 degrees.
- Straighten knee completely.
- Drive a car (regardless of which knee had surgery).
- Home exercise program twice a day.

Weeks Six to 12

Goal is to resume all of your activities.

- Achieve one- to six-week goals.
- Walk without cane or crutch — and without a limp.
- Climb and descend stairs in normal fashion (foot over foot).
- Walk one-half to one mile.
- Bend knee to 120 degrees.
- Improve strength to 80%.
- Resume activities including dancing, bowling, and golf.

Post-operative Exercises

Exercise is important to achieve the best results from knee surgery. Consult your doctor before starting an exercise program. Receive exercises from a physical therapist, at an outpatient facility, or participate in a home exercise program.

At Home Exercises

Ankle Pumps

Flex and point your feet.

Perform 20 times.



Quad Sets (Knee Push-Downs)

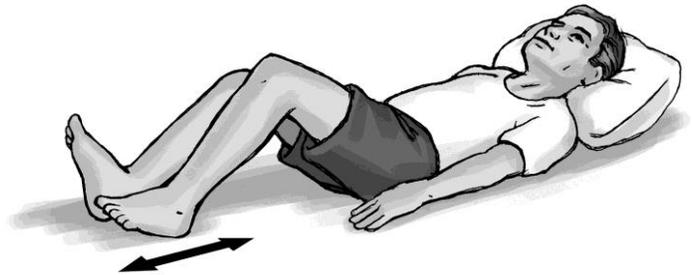
Lie on your back, press knees into mat by tightening muscles on front of thigh (quadriceps). Hold for 5 count. Do NOT hold breath. **Perform 20 times.**



Heel Slides (Slide Heels Up and Down)

Lie on your back; slide heel up the surface bending knee. Post-operative, your therapist may have you use a strap around foot to assist with knee bend.

Perform 20 times.



Short Arc Quads

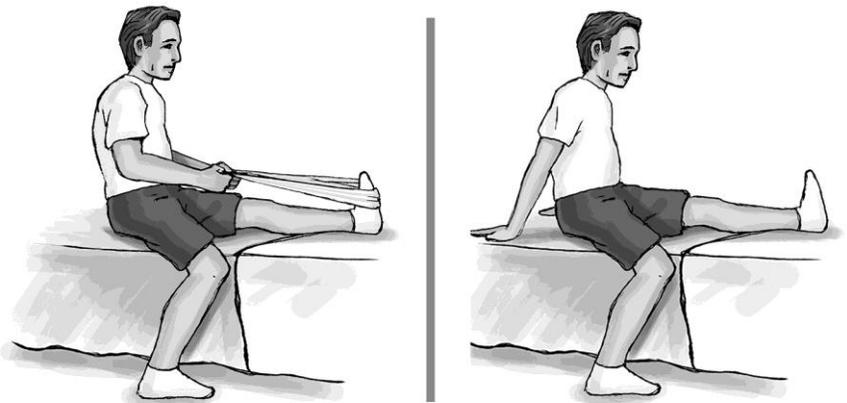
Lie on your back, place a 6-8 inch rolled towel under knee. Lift foot from surface, straightening knee as far as possible. Do not raise thigh off roll. **Perform 2 sets of 10.**



Seated Hamstring and Gastroc Stretch With or Without Strap

Sit on couch or bed with exercised leg extended and other leg dangling off side. Keeping exercised knee straight, gently lean forward until slight stretch is felt in back of thigh. As you become more flexible, use strap to pull up on foot. Hold for 20 to 30 seconds.

Perform 5 times.



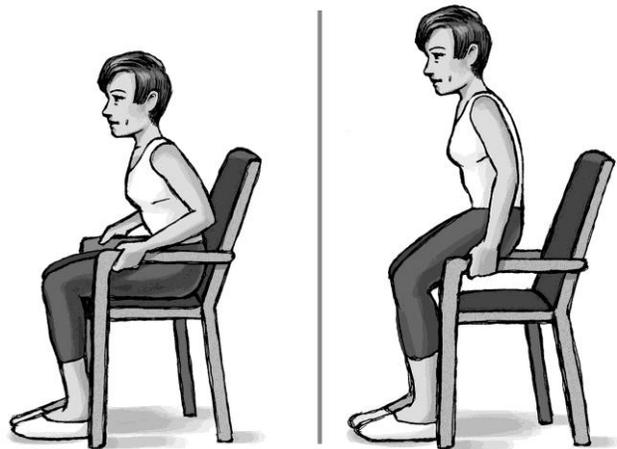
Straight Leg Raises

Lie on your back with unaffected knee bent and foot flat, tighten quad on affected leg and lift leg 12 inches from surface. Keep knee straight and toes pointed toward your head. **Perform 2 sets of 10.**



Armchair Push-ups

Sitting in sturdy armchair with feet flat on floor, scoot to front of seat and place hands on armrests. Straighten arms raising bottom up from seat. Use legs as needed to lift. Progress to using only arms and unaffected leg to perform push-up. Do not hold breath or strain too hard. **Perform 2 sets of 10.**



Seated Knee Flexion

Sitting in straight-back chair, bend affected leg as far under chair (use opposite foot to help). When maximum bend is reached, plant foot and slide hips forward further bending knee. Hold for 20 to 30 seconds. **Repeat 10 times.**



Knee Extension Stretch

Sitting in comfortable chair, prop affected foot on chair or stool. Place towel roll under ankle so calf is unsupported. This stretch can be done throughout the day every 30-60 minutes holding for 3-5 minutes. When performing this stretch as part of your exercise session place an icepack on top of the knee and hold the stretch for 15 minutes. .



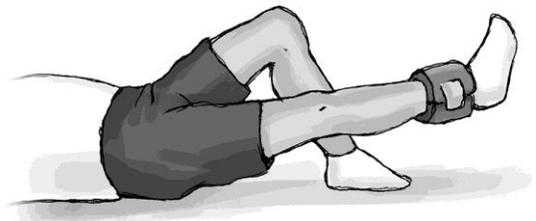
Advanced Exercises

Added by therapist after surgery.

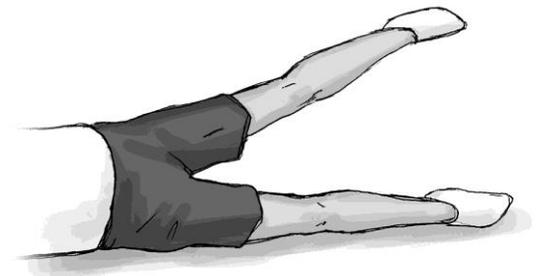
Three-Position Straight Leg Raises

Perform straight leg raise in three positions (Start without weight and progress to adding weight once performing 30 repetitions without difficulty.

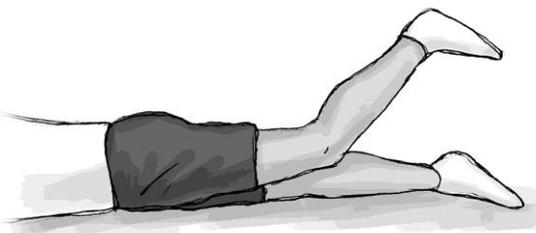
1. Lie on your back, straight leg progression using weights



2. Lie on your non-surgical side



3. Lie on your stomach

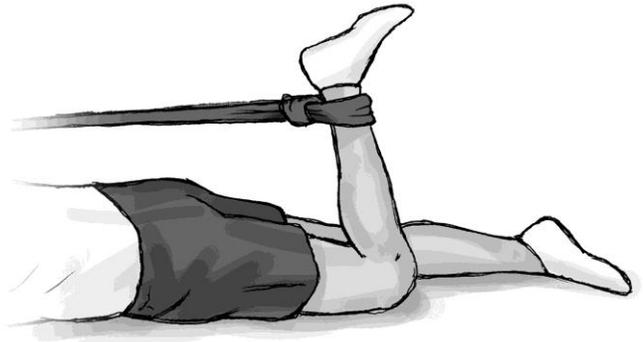


Guidebook for Knees

Quadriceps Stretch

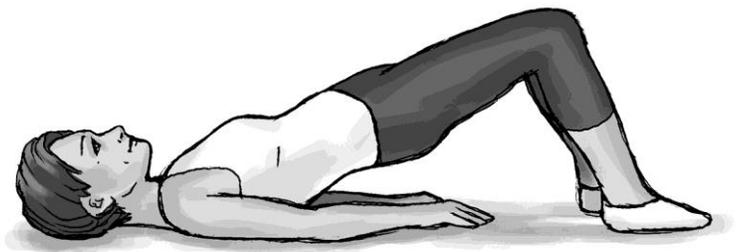
Lie on your stomach, bend surgical knee, raising foot from surface as far as possible. If able, place a strap around ankle to pull foot toward bottom. Hold for 20 to 30 seconds.

Perform 5 times.



Bridges

Lie on your back with knees bent and feet flat on surface; push down on feet as you tighten buttocks and hamstring muscles and lift hips from surface. Concentrate on pushing equally through both feet. Hold for 5 count then return to start position. **Perform 2 sets of 10.**



Knee Extension – Long Arc

Sit with back against chair and thighs fully supported. Lift the affected foot up, straightening the knee. Do not raise thigh off of chair. Hold for 5 count. **Perform 2 sets of 10.**



Standing Heel/Toe Raises

Stand, with a firm hold on to a stationary object. Rise up on toes then back on heels. Stand as straight as possible.

Perform 2 sets of 10.



Mini Squat

Stand, with feet shoulder width apart, and holding on to a stationary object. Keep heels on floor as you bend knees to slight squat. Make sure your knees do not go past your toes. Return to upright position tightening buttocks and quads. Keep body upright, heels on floor and do not squat past 90 degrees hip flexion. **Perform 2 sets of 10.**



Standing Terminal Knee Extension

Standing against wall, with feet about 4-6 inches out, place 6-8" ball behind knee. Push ball into wall by tightening hip and quadriceps muscle.

Perform 2 sets of 10.



Wall Slides

With feet shoulder-width apart and back to wall, slide down wall as far as comfortable. Make sure your knees do not go past your toes. Your therapist will guide you on how far to slide down wall. Make sure you keep equal weight on both legs. Push back up equally through both legs and come to standing.

Repeat 2 sets of 10.



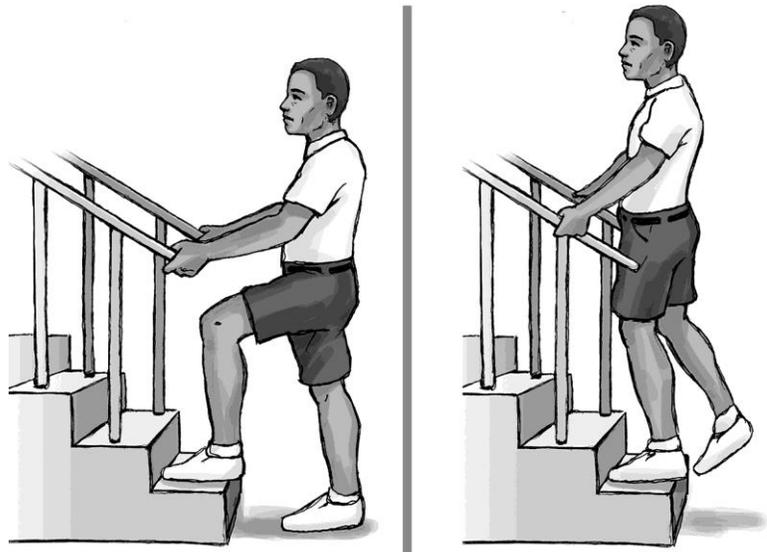
Advanced Stair Exercises

Started 6-12 weeks after surgery; the physical therapist will instruct you on what step height on which to start.

Single Leg Forward Step-up

Hold onto stair railing – place affected foot on first step. Step up on stair with affected leg. Return to start position. May need to begin with 2-4” step (book/block) and progress to higher step as tolerated.

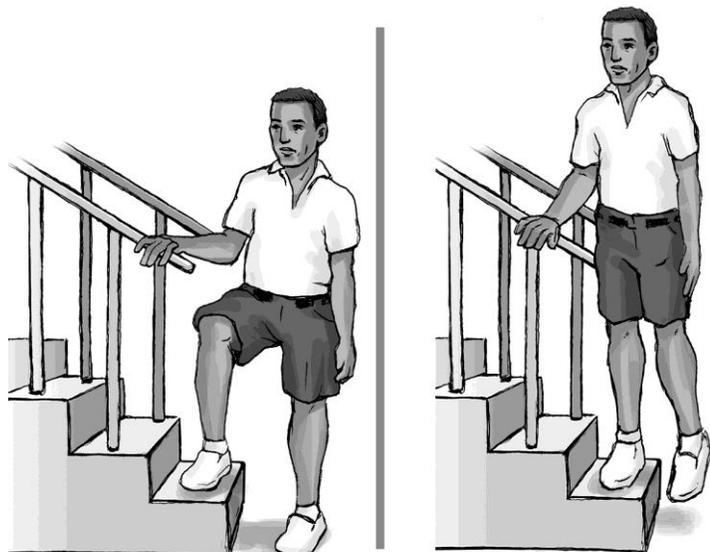
Perform 2 sets of 10.



Single Leg Lateral Step-up

Face railing, with affected leg nearest step. Holding onto railing, place foot on step and slowly step up lifting unaffected leg from floor; slowly lower foot to start position. May need to begin with 2-4” step and progress to higher step as tolerated.

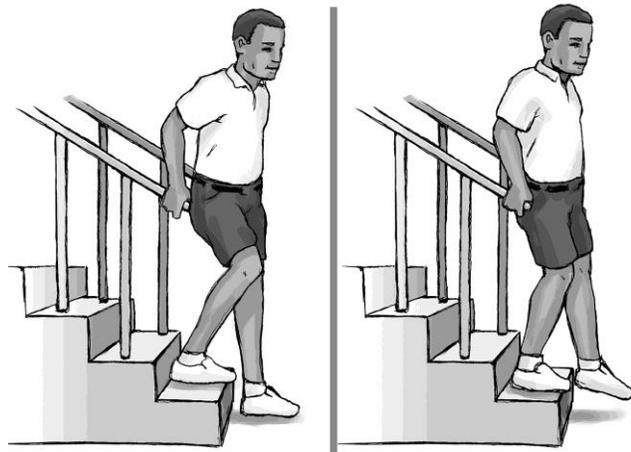
Perform 2 sets of 10.



Guidebook for Knees

Retro Leg Step-up

Stand with back to steps and holding railing. Place affected foot on step and step up backwards until other foot is on step. Return to start position by lowering unaffected leg back down to floor. May need to begin with 2-4" step and progress to higher step as tolerated. **Perform 2 sets of 10.**



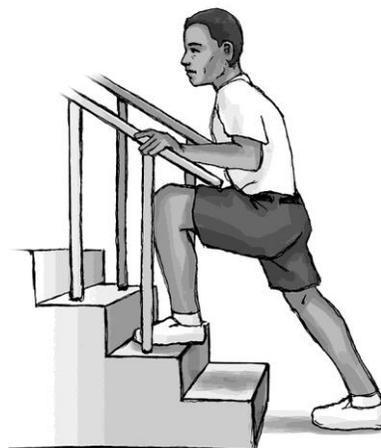
Standing

Stand, holding onto railing, with toes on stair and over edge. Relax and let heels hang down. Hold for 20 seconds. **Repeat 5 times.**



Knee Stretches

Stand, holding onto railing and place surgical foot up on first or second step (Your therapist will instruct on which level to begin). Keeping non-surgical leg straight and on floor, stretch forward, bending surgical knee. Hold for 20 seconds. **Repeat 5 times.**



Then repeat with surgical foot on floor, and non-surgical foot on step. Try to keep surgical foot heel flat on floor and knee straight.

Activities of Daily Living

Stand From Chair

Do NOT pull up on walker to stand! Sit in chair with armrests.

1. Extended surgical leg so knee is lower than hips.
2. Scoot hips to front edge of chair.
3. Push up with both hands on armrests. If a chair doesn't have an armrest, place one hand on walker while pushing off side of chair with other. Balance before grabbing for walker.



Stand to Sit

1. Back up to center of chair until you feel chair on back of legs.
2. Slide out foot of surgical knee, keeping strong leg close to chair for sitting.
3. Reach back for armrest one at a time.
4. Slowly lower body to chair, keeping surgical leg forward as you sit.



Bed Transfers

Getting Into Bed

1. Back up to bed until you feel it on back of legs (need to be midway between foot and head of bed).
2. Reaching back with both hands, sit down on edge of bed and scoot back toward center of mattress. (Silk pajama bottoms, satin sheets, or sitting on plastic bag may make it easier.)
3. Move walker out of way, but keep it within reach.
4. Scoot hips around so you are facing foot of bed.
5. Lift leg into bed while scooting around (if this is surgical leg, you may use other leg, a cane, rolled bed sheet, belt, or elastic band to assist with lifting leg into bed).
6. Keep scooting and lift other leg into bed.
 7. Scoot hips toward center of bed.



Back up until you feel leg on bed.



Sit keeping knee lower than hip.



Scoot back on bed lifting leg onto bed.

Getting Out of Bed

1. Scoot hips to edge of bed.
2. Sit up while lowering non-surgical leg to floor.
3. If necessary, use leg-lifter to lower surgical leg to floor.
4. Scoot to edge of bed.
5. Use both hands to push off bed. If bed is low, place one hand in center of walker while pushing off bed with other.
6. Balance before grabbing walker.



Guidebook for Knees

Lying in Bed



Keep pillow between legs when lying on back. Position leg so that toes are pointing to ceiling – not inward or outward.



To roll from back to side, bend knees slightly, place pillow between legs so surgical leg does not cross midline. Roll onto side.

Walking

1. Push rolling walker forward.
2. Step forward placing foot of surgical leg in middle of walker area.
3. Step forward the non-surgical leg. Do NOT step past front wheels of walker.



Note:

- Take small steps. Keep walker in contact with floor, pushing it forward like shopping cart.
- If using a rolling walker, advance from basic technique to normal walking pattern. Holding onto walker, step forward with surgical leg, pushing walker as you go; try to alternate with equal step forward using non-surgical leg. Continue to push walker forward. When you first start, this *may not* be possible, but you will find this gets easier. Make sure that your foot does not go past the front of the walker when taking a step. Ideally, the foot should land in the center of the walker.

Stair Climbing

1. Begin climb (ascend) with non-surgical leg first (up with good).
2. Go down (descend) with surgical leg first (down with bad).
3. Always hold on to railing!

Tub Transfers

Getting Into Tub Using Bath Seat

1. Place bath seat in tub facing faucet.
2. Back up to tub until you feel it at back of knees. Be sure you are in line with bath seat.
3. Reach back with one hand for bath seat. Keep other hand in center of walker.
4. Slowly lower onto bath seat, keeping surgical leg out straight.
5. Move walker out of way, but within reach.
6. Lift legs over edge of tub, using leg lifter for surgical leg, if necessary. Hold onto shower seat or railing.

Getting Out of Tub Using Bath Seat

1. Lift legs over outside of tub.
2. Scoot to edge of bath seat.
3. Push up with one hand on back of bath seat while holding on to center of walker with other hand.
4. Balance before grabbing walker.

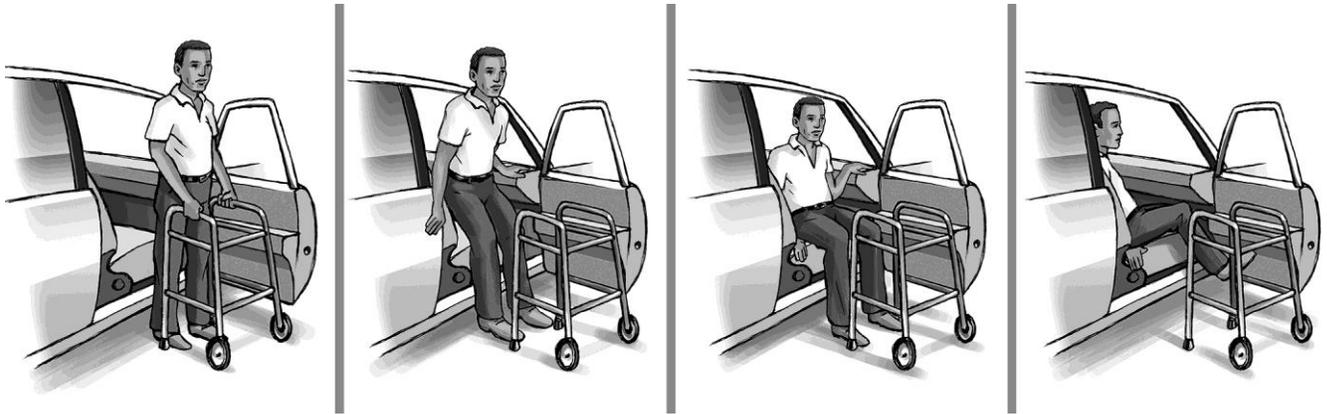


- Note:
- Although bath seats, grab bars, long-handled bath brushes, and hand-held showers make bathing easier and safer, they are typically not covered by insurance.
 - Use rubber mat or non-skid adhesive on bottom of tub or shower.
 - To keep soap within reach, make soap-on-a-rope by placing bar of soap in toe of old pair of pantyhose and attach it to bath seat.

Car Transfers

Getting Into the Car

1. Push car seat all the way back; recline seat back to allow for adequate room to get in and out, but always have it upright for travel.
2. Place plastic bag on seat to help you slide.
3. Back up to car until you feel it touch back of leg.
4. Hold on to immovable object – car seat or dashboard – and slide surgical foot out straight. Watch your head as you sit down. Slowly lower yourself to car seat.
5. Lean back as you lift surgical leg into car. Use cane, leg lifter, or other device to assist.



Getting Out of the Car

Bring your legs out one at a time. Lead with your hips and shoulders and do not twist your back. Place your right hand on back of the seat and the left hand on the frame or dashboard. Push up to stand. Reach for the walker when you are stable.



Getting Dressed

A reacher or dressing stick can help remove pants from foot and off floor.

Putting on Pants and Underwear

1. Sit down. Put surgical leg in first and then non-surgical leg. Use reacher or dressing stick to guide waistband over foot.
2. Pull pants up over knees.
3. Stand with walker in front to pull pants up.

Taking off Pants and Underwear

1. Back up to chair or bed.
2. Unfasten pants and let them drop to floor. Push underwear down to knees.
3. Lower yourself down, keeping surgical leg out straight. Take non-surgical leg out first and then surgical leg.



Around the House: Saving Energy and Protecting Your Joints

Kitchen

- Do NOT get on knees to scrub floors. Use a mop and long-handled brushes.
- Plan ahead! Gather all cooking supplies at one time. Sit to prepare meal.
- Place frequently-used cooking supplies and utensils where they can be reached without much bending or stretching.
- To provide better working height, use a high stool or put cushions on a chair when preparing meals.



Bathroom

Do NOT get on knees to scrub bathtub. Use a mop or other long-handled brushes.

Safety Tips and Avoiding Falls

- Pick up throw rugs and tack down loose carpeting. Cover slippery surfaces with carpets that are firmly anchored to the floor or have non-skid backs.
- Be aware of floor hazards such as pets, small objects, or uneven surfaces.
- Provide good lighting throughout. Install nightlights in bathrooms, bedrooms, and hallways.
- Keep extension cords and telephone cords out of pathways. Do NOT run wires under rugs — this is a fire hazard.
- Do NOT wear open-toe slippers or shoes without backs. They do not provide adequate support and can lead to slips and falls.
- Sit in chairs with arms to make it easier to get up.
- Rise slowly from either sitting or lying position to avoid getting light-headed.
- Do not lift heavy objects for first three months and then only with surgeon's permission.

Dos and Don'ts for Rest of Your Life

What to Do

- Notify your dentist or other doctor/surgeon in advance if you are having dental work or other invasive procedures. Generally, antibiotics are taken prior to procedure.
- Although risks are low for post-operative infections, the risk remains. A prosthetic joint could possibly attract bacteria from an infection located in another part of your body.
- If you develop a fever of more than 100.5 degrees or sustain an injury such as a deep cut or puncture wound, you should clean it as best you can, put a dressing or adhesive bandage on it, and notify your doctor. The closer the injury is to your prosthesis, the greater the concern. Occasionally, antibiotics may be needed. Superficial scratches may be treated with topical antibiotic ointment. Notify your doctor if area is painful or reddened.
- When traveling, stop and change positions hourly to prevent your joint from tightening.

Exercise

With permission from your orthopedic surgeon and primary care doctor, you should be on a regular exercise program three to four times per week, lasting 20 to 30 minutes.

- Impact activities such as running and singles tennis may put too much load on the joint and are generally not recommended.
- High-risk activities such as downhill skiing are discouraged because of risk of fractures around the prosthesis and damage to prosthesis itself.

Exercise – Do

- Choose low impact activity.
- Recommended exercise classes.
- Home program outlined in Guidebook.
- Regular one- to three-mile walks.
- Home treadmill (for walking).
- Stationary bike.
- Aquatic exercises.
- Regular exercise at fitness center.
- Low-impact sports such as golf, bowling, gardening, dancing, swimming, etc.
- Consult surgeon or physical therapist about specific sport activities.



Exercise – Don't

- Do not run or engage in high-impact activities or activities that require a lot of starts, stops, turns, and twisting motions.
- Do not participate in high-risk activities such as contact sports.
- Do not take up sports requiring strength and agility until you discuss it with surgeon or PT.

Recommended Exercise Classes

SilverSneakers

A comprehensive program that improves overall well-being, strength and social aspects. Designed for all levels and abilities, this program is generally provided by your health plan at no additional cost. SilverSneakers provides access to fitness equipment, group exercise classes, social networking, online education and a sense of community. To find a SilverSneakers program in your area, go to www.silversneakers.com or call 1-866-584-7389.

Aquatic Exercise

Aquatic exercise is a low-impact activity that takes the pressure off your bones, joints and muscles. Water offers natural resistance, which helps strengthen your muscles. You can even do aquatic exercise if you don't know how to swim. You might start with water walking. Participants are led by certified aquatic fitness professionals through a series of designed exercises that, with the aid of the water's buoyancy and resistance, can improve joint flexibility and muscular strength. Warm water and gentle movements can help relieve pain and stiffness. Doctor's permission is required. Contact your local fitness center for a list aquatic exercise centers.

Arthritis Foundation Exercise Program (AFEP)

Developed by Arthritis Foundation, but not limited to individuals with arthritis. AFEP uses gentle activities to promote increased joint flexibility, range-of-motion, and maintain muscle strength. Advanced version helps increase overall stamina. Participants must be walking (ambulatory) and have a doctor's permission. To find a program in your area, go to www.arthritis.org or call 713-942-9063.

You need a regular exercise program to maintain the fitness and health of muscles around your joints.

Importance of Lifetime Follow-up Visits

When should you follow-up with your surgeon?

- Every year, unless instructed differently.
- Anytime you have mild pain for more than a week.
- Anytime you have moderate or severe pain.

There are reasons for routine follow-up visits with your orthopedic surgeon.

If you have a cemented knee, the integrity of cement needs to be evaluated. With time and stress, cement may crack. A crack in cement does not necessarily mean you need another surgery, but it means things need to be followed more closely.

Your knee could become loose and this might lead to pain. Alternatively, the cracked cement could cause a reaction in the bone called osteolysis, which may cause the bone to thin out and cause loosening.

A second reason for follow-up is the plastic liner in your knee may wear. Tiny wear particles combine with white blood cells and may get in the bone and cause osteolysis (similar to what can happen with cement).

X-rays taken at follow-up visits can detect problems. New x-rays can be compared with previous films to make these determinations. This will be done in your doctor's office.

If you are unsure how long it has been or when your next visit should be scheduled, call your doctor.



Frequently Asked Questions (FAQs)

Will I need help at home?

For the first few days or weeks, depending on your progress, you will need someone to assist you with meal preparation, etc. If you go directly home from the hospital, the JCC will develop a discharge plan based on your needs. Family or friends need to be available to help. Preparing ahead before surgery can minimize amount of help needed. Having laundry done, house cleaned, yard work completed, clean linens, and single portion frozen meals will reduce the need for help.



Will I need physical therapy when I go home?

Yes, you will have either outpatient or in-home physical therapy. Patients are encouraged to utilize outpatient therapy. Your JCC will arrange for outpatient physical therapy. If you need home physical therapy we will arrange for a physical therapist in your home. Following this, you may go to an outpatient facility several times a week to assist in your rehabilitation. Length of time for this type of therapy varies with each patient. You will need transportation to and from physical therapy 3 days a week. Talk to your family and friends now about assisting you.



Will my new knee set off security sensors when traveling?

Your joint replacement is made of metal alloy and may or may not be detected when going through some security devices. Inform the security agent you have a metal implant. The agent will direct you on security screening procedure.

Patient Education Handout

Venous Thromboembolism (VTE)ⁱ

What is a VTE?

Venous thromboembolism (VTE) is a disease that includes both deep vein thrombosis (DVT) and pulmonary embolism (PE).

Deep Vein Thrombosis (DVT) – is a blood clot that forms in your lower leg or thigh

Pulmonary Embolism (PE) – is a condition when one or more of the arteries in your lungs become blocked

What Causes a VTE?

Sitting still for long periods of time, such as long airplane rides, and some medications or certain disorders that increase your risk for blood clots can lead to a DVT.

Signs and Symptoms of a Blood Clot

Always be aware of changes that occur to your body, but keep in mind a few examples that may indicate you have a blood clot (see picture).

- Warmth and tenderness over the vein
- Pain or swelling in your legs
- Skin redness

Seek medical attention, even if you are not feeling sick.

DVTs can occur in all types of people, even those that are healthy, and when left untreated they can break apart and travel to your lungs where they can form a pulmonary embolism. Pulmonary embolisms can be life-threatening by preventing adequate blood flow to your lungs, but quick treatment with anti-clotting medications can reduce the risk of death.

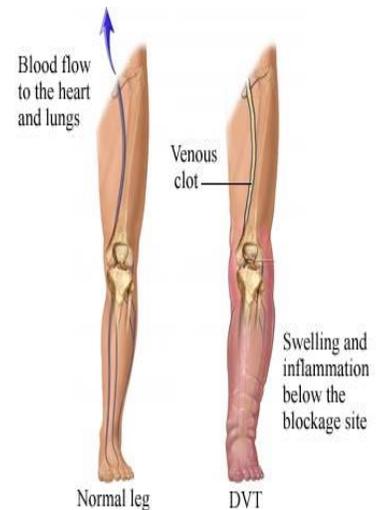
Treatment

Medications are available to treat this condition. They will act to:

- Eliminate pain
- Reduce inflammation
- Break up clots and prevent new clots from forming

Prevention

- Maintain a healthy weight by consuming a balanced diet and exercising as your body can tolerate daily.
- If you are taking a long car or plane ride, try to walk around from time to time and stretch your legs.
- Stay hydrated and drink plenty of liquids.
- Know the signs and symptoms of a blood clot.



Copyright © 2011 Nucleus Medical Art, Inc. All rights reserved.

¹ National Institute of Health. Deep Vein Thrombosis. Accessed at URL: <http://www.nlm.nih.gov/medlineplus/deepveinthrombosis.html> on 9/21/11

Preventing Infection

Post-operative Instructions to Help Prevent SSIs

- Wash hands before and after dressing changes and any contact with the surgical site.
- As a rule of thumb, loved ones should not touch your wound or surgical site.
- Carefully follow your doctor's instructions about wound care after surgery.
- Continue changing bed sheets at least weekly or more frequently if needed until your first office visit.

Symptoms to Report to Physician

- Foul Smelling Drainage from Incision or Wound
- Temperature of 101 degrees F (38 degrees C) or Greater
- Increased Redness, Pain, Swelling or Discharge at Incision Site

If you have any questions or concerns, call the Doctor's office and ask to speak with the Nurse.



Guidebook for Knees

DURABLE MEDICAL EQUIPMENT (DME)

After your surgery, you will need equipment to assist you with your recovery. If you do not have a rolling walker or do not have access to one, please inform your nurse during your Orthopaedic Center of Excellence preadmission appointment and one will be ordered for you. Pictured below are the recommended items. A rolling walker (pictured below) is required following your procedure. Your insurance will most likely cover the rolling walker (coverage varies by policy). Equipment not usually covered by insurance can be purchased through Amazon or retailer of your choice.

Rolling Walker *



3in1 (Toilet Seat Elevation, shower chair, bedside commode)



Shower chair



Hip Kit (Sock aid, Bathing sponge, grabber, shoe horn)
(For total hip replacements)



Suggested DME

MOJO Compression Sleeves: Mojo Sports Full Leg Support & Recovery Compression Thigh Sleeve - Treat Hamstring and Quad Injuries - Hamstring Compression Sleeve - Running Compression Thigh Sleeve

Walker: Drive Medical Deluxe Two Button Folding Walker with 5-Inch Wheels

Toilet Safety Rails: Medline Toilet Safety Rails, Safety Frame for Toilet with Easy Installation, Height Adjustable Legs, Bathroom Safety

Bedside Commode/Shower Chair: Drive Medical Steel Folding Bedside Commode

Extended Transfer Bench Seat: Drive Medical Plastic Tub Transfer Bench with Adjustable Backrest

Hip Kit: Vive 6 Piece Hip and Knee Replacement Kit - Surgery Recovery Set - Handicap Aid Package, Leg Loop Lifter, Reacher Grabber, Long Handle Shoe Horn, Shower Loofah Scrubber, Sock Assist, Dressing Stick

Section Four:

Appendix

Glossary

- **Abdomen:** Part of body commonly thought of as the stomach; it's situated between hips and ribs.
- **Ambulating:** Walking.
- **Assistive Devices:** Walker, crutches, cane, or other device to help you walk.
- **Compression Stockings:** Special stockings that encourage circulation.
- **Dorsiflexion:** Bending back foot or toes.
- **Dressings:** Bandages.
- **Embolus:** Blood clot that becomes lodged in a blood vessel and blocks it.
- **Incentive Spirometer:** Breathing tool to help exercise lungs.
- **Incision:** Wound from surgery.
- **IV:** Intravenous.
- **Osteolysis:** Condition in which bone thins and breaks down.
- **Prothrombin:** Protein component in blood that changes during clotting process.
- **PT:** Physical therapy.

Orthopaedic Center of Excellence Clinic Contacts

Amanda Wolf, RN –Nurse Navigator..... 281-557-2885; awolf@hphtx.org

Deborah Palumbo, RN –Nurse Navigator.....281-557-2880; dpalumbo@hphtx.org

Elena Juarez, Medical Assistant.....832-340-2161; ejuaraz@hphtx.org

Nicole Galvan – OCE Program Coordinator.....281-557-2886; ngalvan@hphtx.org

Stephanie Stinson, RN – Clinical Director.....281-557-2912; sstinson@hphtx.org

Other Important Phone Numbers

Houston Physicians' Hospital Main Number281-557-5620

Houston Physicians' Hospital Inpatient Nurse Station.....281-557-5633

Houston Physicians' Hospital Emergency Room281-557-5639

Houston Physicians' Business Office.....281-557-2918

Houston Physicians' Hospital Orthopedic Surgeons

Dr. Joseph Allen	281-332-9537
Dr. Marilyn Copeland	281-332-9537
Dr. Omkar Dave'.....	281-724-8241
Dr. Jay Hoffman.....	979-297-3004
Dr. Venkata Jonna.....	281-985-9342
Dr. Cristin Mathew.....	281-335-1111
Dr. Anthony Melillo	281-286-3500
Dr. Daniel O'Neill.....	281-333-5114
Dr. Keith Schauder.....	281-331-3100; after hours 713-513-7316
Dr. Terry Siller.....	409-938-8161
Dr. Kelly Stephenson.....	281-724-8241
Dr. Laura Torres-Barre	713-486-7580
Dr. David Vanderweide	281-481-2649; after hours 281-968-4791

NOTICE TO PATIENTS DISCLOSURE OF OWNERSHIP

We are required by the Federal Law to notify you that this hospital meets the Federal definition of a “physician-owned hospital” as specified in 42 C.F.R. §482.13 (b) (2). A list of physicians who have a financial interest in this hospital is available upon request.

Notes: