

**KNEE** replacement  
patient education  
handbook



**hillcrest**  
Hospital | South

**IMPORTANT TELEPHONE NUMBERS  
(AREA CODE 918)**

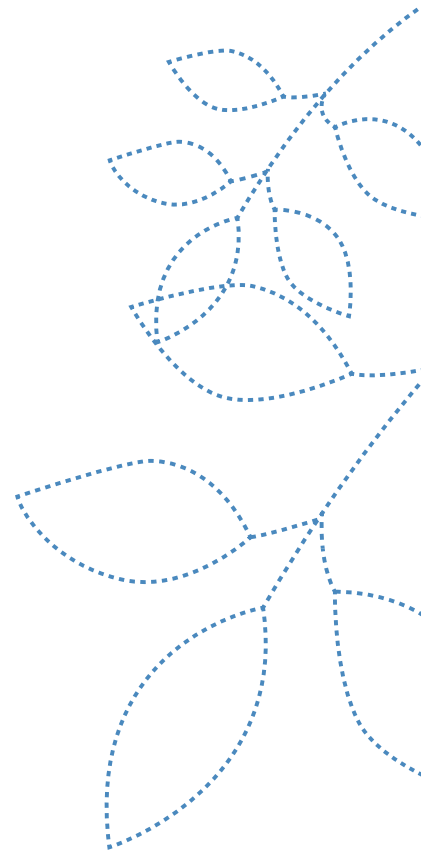
Main .....294-4000  
Nurses Station.....294-4550  
Nurse Manager.....294-4534  
Physical Therapy .....294-4077

**PHYSICIAN INFORMATION**

Name: \_\_\_\_\_

Telephone: \_\_\_\_\_

8801 S. 101st E. Ave.  
Tulsa, OK 74133





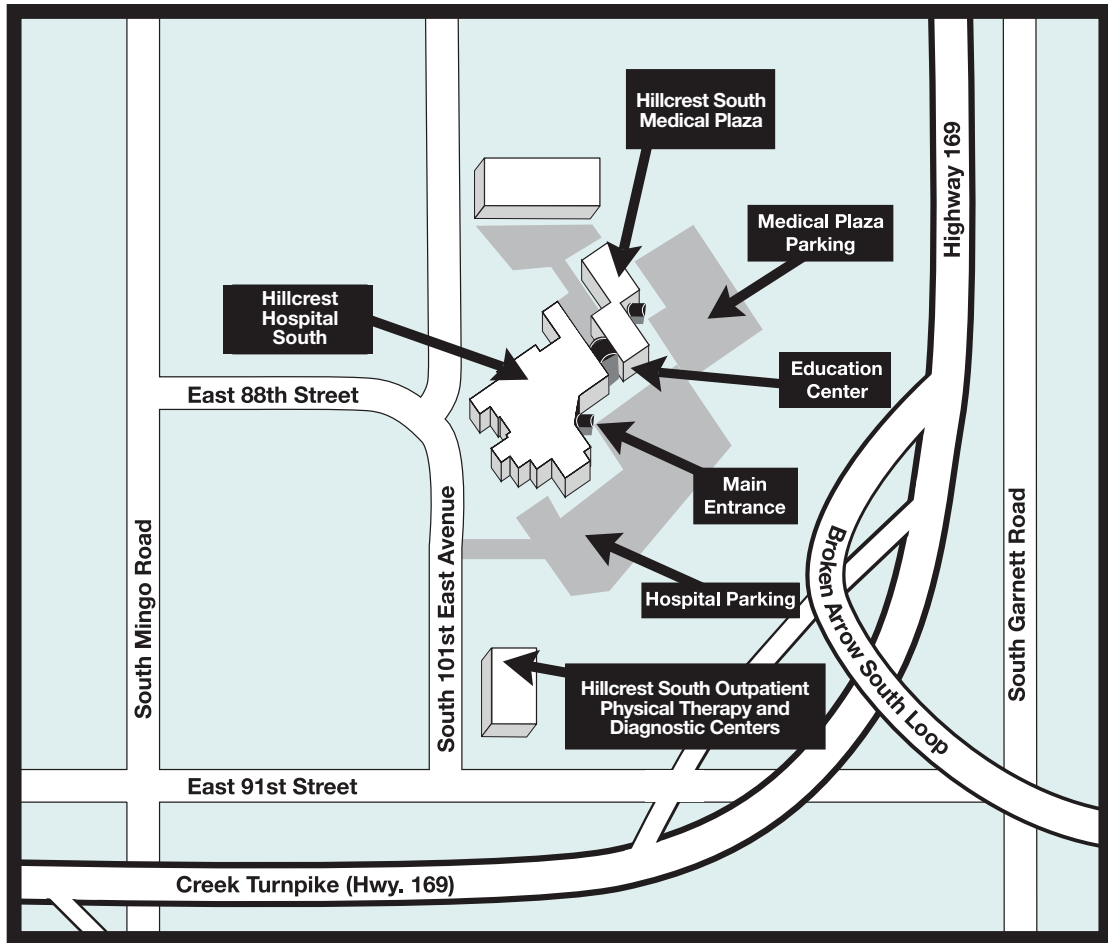


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# HILLCREST HOSPITAL SOUTH

## Campus Map





This patient handbook is the result of combined efforts by physicians, nurses, therapists and other team members at Hillcrest Hospital South. It is a resource for the patient undergoing total knee replacement surgery and contains helpful information to prepare you for surgery and recovery at home.

An active partnership between the patient, physician, hospital staff and family members is vital to the success of your surgery. Read through the information in this handbook prior to your surgery; it will help you to better understand what to expect during and after your procedure. Your participation and commitment are important to the success of your surgery and recovery.

Please read and complete everything given to you. All of the information can be placed in this handbook - bring it with you to the pre-education class-related appointments and to the hospital on the day of surgery. As you move through the surgical process, you may receive various instructions, informational booklets, consent forms or other printed materials. It is important to have the information at your fingertips when needed.

Our goal is to help you achieve measurable, positive results; we are committed to assisting you throughout this process.



Below is an overview of the medical disciplines who will be involved in your surgical procedures, recovery and therapy.

### **SURGEONS / PHYSICIANS**

Your orthopedic surgeon or his assistant will visit you daily, beginning the day after surgery. The surgeon's physician assistants and nurses will be highly involved in overseeing your care and will maintain close contact with your surgeon. You may also have a hospital physician assigned to you who will handle aspects of care not associated directly with your orthopedic procedure (i.e. diabetes, hypertension, home medications, etc.).

### **PHYSICAL THERAPY**

Dedicated physical therapists who specialize in joint motion and exercise will provide evaluation and treatment daily. Physical therapy begins the day of surgery, if possible, and continues for the duration of your hospital stay. Therapists will review your home exercise program prior to your hospital discharge.

### **NURSING TEAM**

You will have a nursing team assigned to your care. This team consists of an RN and a nursing technician. Members of your nursing team will communicate your progress and needs with one another and with other healthcare disciplines.

### **CASE MANAGEMENT AND SOCIAL WORKER**

Hospital case managers and social workers work with patients to help identify and meet their health care needs. A case manager or social worker will meet with you the day after surgery to discuss the equipment that will be needed after joint replacement surgery. They will also assist with discharge planning and arrangements for a smooth transition from the hospital to your home.

### **PRE-REGISTRATION APPOINTMENT**

Before your orthopedic surgery, a hospital pre-registration appointment will be scheduled for you with a representative from Registration/Admitting at Hillcrest Hospital South. You may receive a call in advance from the Registration office confirming your appointment; the correct spelling of your name, current address, insurance information and name of your primary care physician.

The pre-registration appointment will last approximately two hours. If you cannot keep the appointment, please call the office to reschedule. Registration is open Monday through Friday, 8 a.m. to 5 p.m.

The Registration/Admitting Office is located to the left of the main lobby of Hillcrest Hospital South.

### **INFORMATION TO BRING TO PRE-REGISTRATION**

- Valid identification
- Insurance/Medicare card
- Important telephone numbers:
  - Family, friends and caregivers
  - Primary Care Physician (PCP)
- Detailed list of current medications including dosage and frequency
- Detailed list of your medical and surgical history

### **PRE-SURGERY EDUCATION CLASS**

Patients scheduled for joint replacement surgery should plan to attend a preparatory class before surgery to gain an understanding of the total joint replacement program. It is strongly recommended that you bring a family member or friend to serve as your coach throughout the process.

### **ASPECTS OF EDUCATION CLASS**

- Total Joint Replacement Overview
- Expectations of Surgery, including your Patient Pathway
- Role of Your Caregiver
- Anesthesia & Pain Management
- Physical Therapy Discussion, including hip precautions and pre & post surgery exercises
- Occupational Therapy Equipment
- Discharge Planning
- Obtaining Home Health Equipment
- Equipment Used in the Hospital
- Prevention of Complications
- Questions and Answers

Please bring this Patient Education Handbook with you to the Pre-Surgery Education Class.



## THINGS TO BRING TO HOSPITAL

- Patient Education Handbook
- Identification and Medicare and/or insurance cards
- Toiletries, eye glass case, contact lens case, hearing aid batteries, etc.
- Knee-length robe, pajamas, socks, undergarments
- Loose fitting clothing like shorts and tee shirts for exercise
- Minimal amount of money. No more than \$5 or \$10 (unless money is needed for transportation at discharge)
- Home Medication List
- CPAP machine

## THINGS TO LEAVE AT HOME

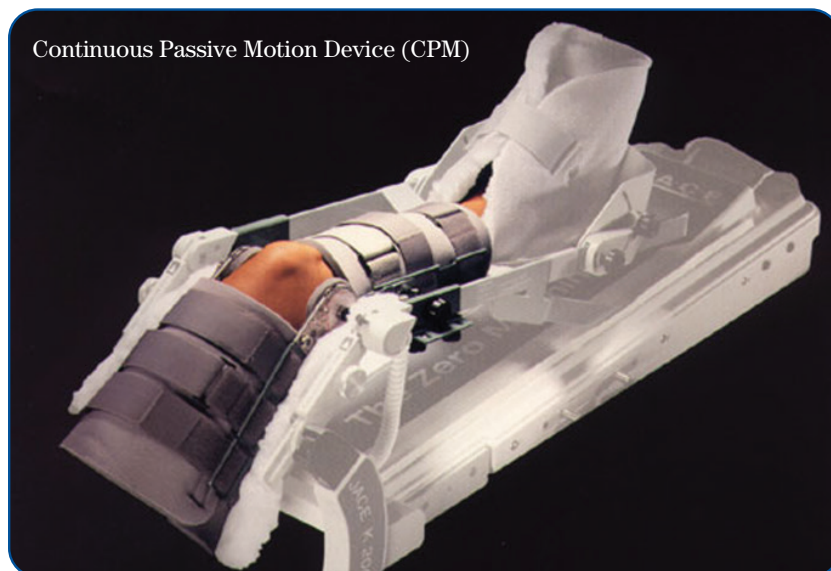
- Large amounts of money
- Valuables, such as jewelry
- Credit cards
- Remove makeup before surgery
- Remove nail polish from fingers and toes
- Medications (except for eye drops and inhalers)

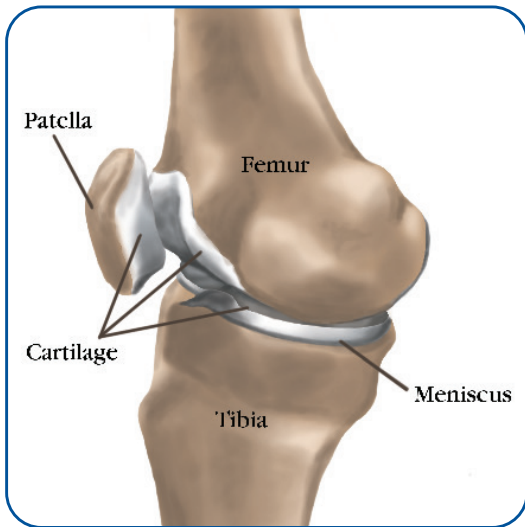
## HOME HEALTH CARE EQUIPMENT

Following total joint replacement surgery, patients need certain medical devices for assistance with daily activities at home. Hospital case managers and therapists work with patients to identify the specific equipment needed for continuing their recovery safely at home. The equipment most commonly used:

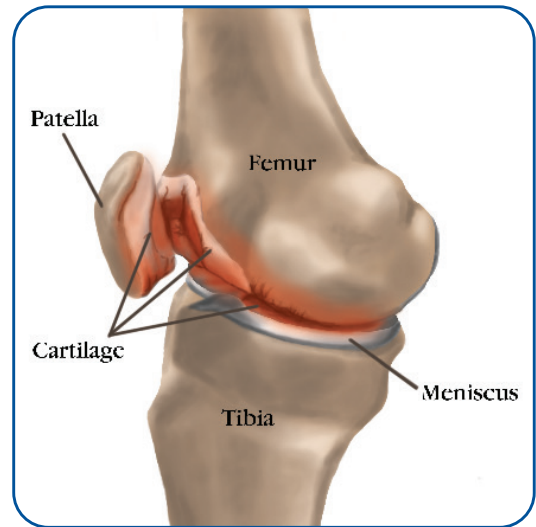
- Elevated / raised toilet seat
- Shower chair or bathtub transfer bench
- Walker with 5" diameter wheels on front
- Continuous Passive Motion (CPM) device
- Ice Machine/Cooler

Continuous Passive Motion (CPM) is a post surgery treatment method designed to aid recovery after joint replacement surgery. CPM devices are machines that have been developed for patients to use after surgery. Passive range of motion means that the joint is moved by the device without the patient's muscles being used, gradually increasing the amount of flexion and extension.

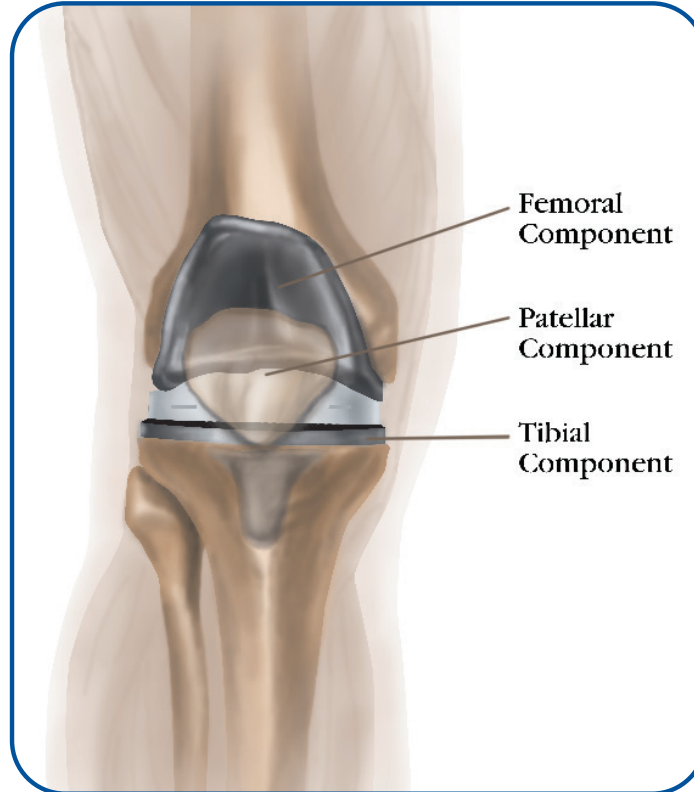




The Healthy Knee



The Arthritic Knee



## TOTAL KNEE REPLACEMENT

## **UNDERSTANDING THE RISKS**

As with any major surgery, there are certain risks. Listed below are some of the common complications associated with joint replacement surgery and the precautions you can take to help prevent them.

### **BLADDER INFECTIONS**

Bladder infections may occur, especially if you have had a urinary catheter. In the event one is used, it is important to drink plenty of fluids to help prevent infection. The catheter will usually be removed the day after surgery.

### **BLOOD CLOTS / DEEP VEIN THROMBOSIS (DVT)**

With knee replacement surgery, circulation is impaired during the surgery and healing process. To counterbalance this effect and promote circulation, you will be asked to pump your feet and exercise your ankles. A blood thinning medication that helps prevent blood clots will also be prescribed. You may be asked to elevate your feet while sitting to prevent blood from pooling in the lower part of your legs.

Deep Vein Thrombosis is a condition resulting from the formation of a blood clot (thrombus) inside of a deep vein, commonly located in the calf or thigh. DVT can either partially or completely block the flow of blood in a vein. When the circulation of blood slows down due to reduced movement, there is a tendency for blood to gather or pool. The risk of DVT may be higher if you are hospitalized or off your feet for extended periods of time due to illness, injury or surgery.

### **INFECTION**

With any surgery, there is a risk of infection. Pre-admission test results will affirm that you have no active infections before surgery and antibiotics administered to you before and after surgery will further help prevent infection.

### **NUMBNESS**

It is important to know that you will experience some numbness on both sides of your knee following surgery. Numbness of this type is normal and should not cause concern. During surgery, the nerves around the knee are disturbed. As these nerves heal, you may experience tingling sensations. You may also experience numbness in the area around your incision, but this will not affect the function of your new knee.

### **PNEUMONIA**

To help prevent pneumonia, you will be asked to take very deep breaths and use an incentive spirometer to help prevent fluids from pooling in your lungs. For the same reason, it is also important to get out of bed often. Breathing deeply after surgery and using an incentive spirometer are important measures to prevent congestion in the lungs which can lead to pneumonia.

### **SEVERE COMPLICATIONS**

As with any major surgery there is a possibility that any of the above complications, or complications from the anesthesia, could be severe enough to result in death. If you have any questions or concerns regarding complications, please feel free to discuss them with your physician/surgeon and anesthesia provider.

Below are frequently asked questions and answers about knee replacements.

### **WHAT IS ARTHRITIS AND WHY DOES MY KNEE HURT?**

Smooth cartilage is present in the healthy knee: on the lower end of the femur or thigh bone; on the upper end of the tibia or lower leg bone; and the undersurface of the patella or kneecap. This cartilage allows for a smooth-gliding surface and cushions the weight load on this joint. Arthritis is the wearing away of this cartilage leading to pain, discomfort and swelling.

### **WHAT IS KNEE REPLACEMENT SURGERY?**

Total knee replacement is a surgical procedure in which a knee joint that is worn out or injured and painful is replaced with an artificial joint. The surgery will benefit you by reducing knee pain, increasing leg strength and providing easier movement.

### **HOW IS THE KNEE REPLACED?**

An incision is made on the front or side of your knee and the damaged bone is cleared away. The surfaces are prepared and shaped to hold the new joint. The new joint is aligned and secured to the thighbone, kneecap and shinbone.

### **WHAT IS COMPUTER ASSISTED SURGERY?**

The use of computer navigation in surgery has revolutionized the total joint replacement procedure. With the utilization of computer navigation, artificial joint components are accurately placed, which allows incredible precision in overall limb alignment and a promise of increased longevity of the joint replacement. Joint replacement surgeries using computer navigation have significantly smaller incisions which also reduces the amount of operative trauma for patients.

### **WHAT DOES A TOTAL KNEE REPLACEMENT INVOLVE?**

The tibia and the bottom of the femur are both shaved down surgically. A metal implant is then secured into the femur above the knee and a plastic spacer is inserted in the tibia below the knee. Your kneecap is resurfaced with a plastic kneecap. The new parts move freely and smoothly against each other.

### **AM I TOO OLD FOR THIS TYPE OF SURGERY?**

As long as you are in reasonable health and desire to devote time and effort into the rehabilitation process, you are a candidate for this type of surgery.

### **AM I TOO YOUNG FOR THIS TYPE OF SURGERY?**

Knee replacements may last 20 years or more. Prosthesis manufacturers are addressing the needs of the younger patient and are working to develop longer lasting joints.

### **SHOULD I EXERCISE PRIOR TO SURGERY?**

Yes, your surgeon will give you recommended exercises and you will also be shown specific exercises by a physical therapist at your pre-operative education class. It is important to build up the muscle groups prior to surgery as you will have soreness and stiffness after surgery that will require more effort for you to get up and around.

### **WHAT RISKS ARE ASSOCIATED WITH THIS SURGERY?**

Infection and blood clots are two of the biggest risk factors involved with a joint replacement. To avoid complications, antibiotics are started just prior to your surgery and continue until drains are out of the incision. We also use early mobility and blood thinners to minimize risk of blood clots.



### **HOW LONG DOES THE SURGERY TAKE?**

Total operating time from incision to closure is about one hour to an hour and a half. The time elapsed from entering the operating room to exiting into recovery is two to two and a half hours. This time includes anesthetic induction, positioning and surgical site preparation.

### **HOW PAINFUL IS KNEE REPLACEMENT SURGERY?**

You will have discomfort after your surgery. Often a spinal anesthetic is given along with a general anesthetic to provide a patient with pain control for an extended period of time. The staff is specifically trained for post-operative pain management. Your RN will work closely with you to insure that you are as comfortable as possible. Most patients are able to stop using IV narcotics and take pain pills with breakfast the day after surgery.

It is important to keep in mind that extended use of IV narcotics has proven to slow the body's ability to stabilize blood pressure, pulse and fluid volumes. Narcotic medications slow digestion which increases risk of nausea and poor appetite. Narcotic medications also decrease your ability to participate and make decisions in your care. We often find that many patients experience fewer complications and mobilize with greater safety through use of oral pain medication. There are non-medicinal approaches to pain relief that are also very effective in the total knee replacement patient.

### **HOW LONG WILL MY NEW KNEE LAST?**

A number of factors will affect the longevity of your new knee implant. Thus, there is no guarantee for a specific length of time for your implant to last. Factors that are under the control of the patient that can affect the longevity of a new knee joint include weight, activity level and medical condition stability. It is important to remember that an implant is a medical device subject to wear that could lead to mechanical failure. Your new knee should last 20 years or more.

### **WILL I HAVE A SCAR?**

Yes, you will have a scar from the surgical incision. It will begin just above your knee joint and extend over and just below the bottom of the joint. Do not put anything on your incision other than what your surgeon specifically approved. Doing otherwise could lead to an increased risk of infection in your new joint.

### **WHAT CAN I EXPECT AFTER SURGERY?**

No two patients experience the same recovery or results after knee replacement surgery. The most important component of knee replacement surgery is rehabilitation after the procedure, consisting primarily of exercises to decrease stiffness and soreness.

### **HOW LONG WILL I BE IN BED AFTER SURGERY?**

You will be assisted with standing the evening of your surgery. We have found that the quicker patients get back up on their feet, the quicker the body's hemodynamics (appropriate balance in blood pressure, pulse, hemoglobin level and fluid volume) stabilize. Your first few times out of bed will require the assistance of one or two staff members. We will assist you up from bed for breakfast the morning after your surgery.

Meals are served at tables in your room, not in bed. You will be assisted up and out of bed to a bedside commode or bathroom as needed. Please keep in mind that our staff is specifically trained to help patients with new joint implants get out of bed safely. Listen to the staff and use their tips.

### **HOW LONG WILL I BE IN THE HOSPITAL?**

The average number of days in the hospital for joint replacement surgery is two to three; however, shorter hospital stays are becoming more common.

### **WILL I NEED HELP AT HOME?**

You will need some assistance and supervision with activities of daily living for a short amount of time. This amount of time varies with each patient. Some surgeries require a daily dressing change to your incision, which you will probably need help with. You should not need someone with you full time at home.

Your occupational therapist will teach you how to handle daily activities prior to discharge. Preparing your home before your surgery can reduce the amount of assistance you will need after surgery. Having the laundry done, house cleaned, several meals prepared ahead of time and clean linens on your bed will benefit you once you return home. You may need assistance in placing and removing your CPM.

### **WHAT IF I LIVE ALONE?**

Most joint replacement patients can return home with only a few modifications to their home and a few hours of assistance daily from a family member or friend. As the days pass, you will become more confident with your ability to handle things again and your need for assistance will decrease. After the stitches or staples are removed from your incision, a dressing over it will no longer be needed.

### **WILL I NEED PHYSICAL THERAPY AT HOME?**

Total knee replacement requires consistent exercise and stretching to loosen tight ligaments and prohibit stiffness and swelling. Your surgeon or therapist will discuss the frequency and duration of your home health and outpatient physical therapy.

It is very common to have a home health therapist three times a week for three weeks, followed by outpatient physical therapy for another month after surgery. Unless your health insurance company specifies where you need to go, several therapy providers are available. You will need to have transportation arrangements made for outpatient therapy sessions.

### **WILL I HAVE TO USE A WALKER AFTER SURGERY?**

You will need a walker for stability when you walk after surgery. At your follow-up appointments, your surgeon will evaluate how long you will need to use a walker after your surgery. Do not discontinue the use of your walker without checking with your surgeon or physical therapist.

### **HOW SOON WILL I SEE THE SURGEON AFTER DISCHARGE?**

You will have an office appointment scheduled before you are discharged. Your first appointment will be within two to three weeks of your surgery. You will see your surgeon at intervals determined by your progress.

### **WILL THIS NEW KNEE JOINT FEEL DIFFERENT TO ME?**

It is very common to have a small area of numbness outside of your scar line. This could last a year or more. You may also hear or feel a clicking noise when you move your new knee. This is merely artificial surfaces moving over each other and nothing to be alarmed about. Swelling of the knee may also occur for several months following surgery.

### **WHAT CAUSES LOOSENING OF A NEW IMPLANT?**

One reason that artificial joints eventually fail is the loosening of the joint where the implant meets the bone. There have been great advancements in extending the life of an artificial joint. On average, you can expect 20 years of service from an artificial knee.

### **WHAT IS A CONTINUOUS PASSIVE MOTION DEVICE?**

Continuous Passive Motion (CPM) is a postoperative treatment method that is designed to aid recovery after joint replacement surgery. For some patients, joint motion following surgery causes measurable pain and as a result, patients fail to move the joint. This allows the tissue around the joint to become stiff and for scar tissue to form resulting in a limited range of motion.

Passive range of motion means that the joint is moved without the patient's muscles being used. By using a motorized device to very gradually move the joint, it is possible to significantly accelerate recovery time. Your case manager will assist you in making the necessary arrangements for a CPM device. You may need assistance placing and removing the CPM.

### **HOW LONG UNTIL I CAN DRIVE AGAIN?**

Your surgeon will instruct you on this prior to discharge. It is important to have discontinued use of pain medications and feel confident that you can use your leg normally.

### **WHEN CAN I RETURN TO WORK?**

Overall the recommendation is not to return to work for one month. There may be exceptions to this, largely dependent on what you do for a living. If you have specific questions about how to perform your job tasks once you can return to work, please ask our physical therapist during your evaluation and treatment while in the hospital.

### **WHAT ACTIVITIES ARE ENCOURAGED / PERMITTED?**

Initially, the only recommended activities are the exercises provided by your physical therapist and progressive ambulation. As you progress in your recovery, cycling, walking, dancing, golfing, swimming, bowling and gardening are all activities that can be performed moderately without the risk of high impact force on a new joint replacement. If you wonder about further specific activities, please discuss with any member of the Spine & Orthopedic Care team.

The benefits of exercise have been well documented in the medical field. It is to your advantage to exercise prior to having total joint replacement surgery. Exercise will accelerate your road to recovery. Listed below are exercises that should be initiated now and performed twice a day until your surgery.

If you have a medical condition or illness that causes a conflict with these exercises, please discuss with your physician before beginning them.

## **PRE-SURGERY KNEE EXERCISES**

Start with 10 repetitions (reps) of each exercise and increase to 20 as you progress (except Seated Hamstring Stretch). Repeat this routine twice a day. Exercises performed lying down should be done on a bed, mat or couch, not on the floor.

- Ankle Pumps (page 13)
- Abduction/Adduction (page 14)
- Quad Sets (page 14)
- Glut Sets (page 14)
- Heel Slides (page 14)
- Short Arc Quads (page 15)
- Straight Leg Raises (page 15)
- Long Arc Quads (page 16)
- Seated Hamstring Stretch (page 16)

### **ANKLE PUMPS - 10 TO 20 REPS - TWO TIMES A DAY**

Pump your foot up and down, like you were pushing on the gas pedal of your car. Make sure to pull your foot up as far as you can and push down as far as you can. Hold for three seconds in each direction and relax.





## HEEL SLIDES - 10 TO 20 REPS - TWO TIMES A DAY

Lie on your back with your legs straight.

Bend your non-operated leg with your foot flat on the mat to prevent lower-back strain.

Slide your heel towards your buttocks by bending your knee.

Keep your heel on the bed and return to the starting position.



## ABDUCTION/ADDUCTION - 10 TO 20 REPS - TWO TIMES A DAY

Lie on your back with legs straight and toes pointed to the ceiling.

Keeping your knee straight, slide your leg out to the side and back into the starting position.



## GLUT SETS - 10 TO 20 REPS - TWO TIMES A DAY

Lie on your back with your legs straight.

Squeeze your buttocks together.

Hold for five seconds and then relax.



## QUAD SETS - 10 TO 20 REPS - TWO TIMES A DAY

Lie on your back (or sit as pictured) with legs straight.

Tighten the muscles on front of thigh and push the back of your knee into the bed.

Hold for five seconds and then relax.



## SHORT ARC QUADS - 10 TO 20 REPS - TWO TIMES A DAY

Lie on your back with a rolled towel placed under your knee.

Raise your foot off the bed until your knee is straight, without lifting your knee off the rolled towel.

Hold 3 to 5 seconds, then relax.



## STRAIGHT LEG RAISES - 10 TO 20 REPS - TWO TIMES A DAY

Lie on your back with one knee bent and foot flat on the bed.

Lift your opposite leg off the bed, keeping your knee straight. Do not lift any higher than your bent knee.

Relax and lower your leg back down to the bed.



## LONG ARC QUADS - 10 TO 20 REPS - TWO TIMES A DAY

Sit all the way back in a chair with your feet flat on the floor.

Raise your foot up off the floor until your knee is straight.

Hold for 3 to 5 seconds.



## SEATED HAMSTRING STRETCH - 5 REPS - TWO TIMES A DAY

Sit on the edge of the bed or couch with one leg straight out and the foot of your other leg on the floor.

Lean forward, keeping your back straight and reach towards the toes of your straight leg. You should feel a stretch in the back of your thigh.

Hold for 10 seconds and then relax.



### **WELL LEG ASSISTED FLEX - 10 REPS FOUR TO FIVE TIMES A DAY**

Sit in a chair with your feet flat on the floor.

Bend your operated knee back as far as you can.

Cross your unaffected leg over the operated side, at the ankle.

Gently push your operated leg back, bending your operated knee.

Hold stretch 10 seconds and then relax, allowing your operated leg to come forward.



### **KNEE EXTENSION STRETCH - 5 MINUTES - FOUR TO FIVE TIMES A DAY**

Lie on your back with a rolled towel placed behind your heel so your heel is slightly off the bed.

Lie in this position for five minutes and try to relax. You should feel a stretch behind your knee.

Remove towel from behind your heel.





### POST-OPERATIVE KNEE EXERCISES

You will perform the same set of exercises after your surgery as you did prior to surgery, as well as the addition of the Well Leg Assisted Flex and Knee Extension Stretch on page 17. The same repetitions and instructions apply. Refer to pages 13-17 for exercise descriptions.

The muscles and ligaments of the knee will need strengthening after your surgery. Regular knee exercises will help to get your knee in shape and ready to get back to your daily routine.



We want you to be familiar with a typical plan of care for surgery, recovery and eventual hospital discharge to home. No two care plans are exactly alike; the following is an overview of a typical plan.

### **DAY OF SURGERY**

Before reporting to the hospital for surgery and unless told otherwise, do not eat or drink anything after midnight before your surgery (including coffee, water, candy, gum, or mints). You may brush your teeth, but do not swallow.

Take only the medications that the pre-registration nurse or your medical doctor has told you to take with a sip of water. Do not take insulin if you are a diabetic. We will monitor your blood sugars and treat them accordingly throughout the day.

Report to the Registration/Admitting Office at the time indicated by your surgeon's office. During the registration process you will meet with a registration representative to sign consents and provide any outstanding information not currently on file.

A nurse will finalize your paperwork and finish the orders your surgeon has written. The nurse will start one intravenous needle (IV) line. You may have some additional lab work, if ordered by your surgeon. The anesthesiologist will also visit with you and may administer spinal anesthesia. This is medication to lessen your post-operative pain. You will be asleep during the surgery.

If you have dentures, glasses, contact lenses, hearing aids or any jewelry, please remove these items unless arrangements have been made to keep them with you.

The surgical suite / operating room is bright, noisy and cold, you will be given a warm blanket. The operating room nurse will be with you until your surgery is finished. An anesthesiologist, scrub nurse or technician will also be in the room with you. The nurse will introduce you to the team and ask you to verify the procedure you are having and location of operation.

You may not remember the surgical suite, but be assured that during your surgery, the entire surgical team is focused on you.

You may or may not have a drain inserted next to your incision. This drain tube will stay in with a vacuum type chamber attached to it until your surgeon approves removal. All drains are removed prior to hospital discharge.

After surgery is complete, you are moved to the recovery room. The staff monitors your condition and pain level until you are stable and ready to go to your room. Once you have arrived in your room you will meet your nursing care team. This team consists of an RN and a nursing technician. Your nurse will be responsible for your pain management needs. You can advance your diet slowly over the first several hours, starting with ice chips and sips of liquids. Depending upon the time of your surgery, you may get soft food the same day if you have no problems with nausea.

You will have IV fluids until the next morning to ensure that you get enough fluid during this critical phase. You will be instructed to use your incentive spirometer right away to help keep your lungs clear.

Your pain medication and blood thinner prescriptions will be provided with your discharge instructions. Any post discharge physical therapy will be arranged prior to leaving the hospital. Any follow-up appointments with your surgeon will also be arranged and noted on your discharge instructions. Please have someone available to drive you home. Take your patient handbook home with you.



### ACTIVITY

Walking and range of motion exercises are vital for successful rehabilitation following total knee replacement surgery. Increase your activity by walking more each day, continue to do your exercises as instructed by your physical therapist, and stretch your knee as often as possible. Continue to follow the knee precautions listed below.

- Do not apply heat directly to your knee; continue to use cold packs after exercise
- Do not place a pillow under your knee for any length of time, particularly when lying on your back during sleep or rest periods
- Keep items you use often within easy reach
- Remove all throw rugs, move electrical cords out of the way and clear pathways for your rolling walker
- Walk cautiously; avoid falling and losing your balance suddenly
- Gradually increase the speed and distance of your walking
- Do not rotate your knee in or out when walking or doing your exercises. Try to keep your knee pointed straight ahead
- Do not walk on uneven or rough surfaces (gravel, open fields, etc.)
- Do not kneel on your operated knee
- Do not pivot on your operated knee. Instead take small steps to turn





### **BLOOD CLOTS IN LEGS**

Surgery may cause the blood to slow and coagulate in the veins of your legs, creating a blood clot. This is why you take blood thinners after surgery. If a clot occurs despite these measures, you may need to be admitted to the hospital to receive intravenous blood thinners. Prompt treatment usually prevents the more serious complication of a blood clot moving to your lungs.

#### **SIGNS OF BLOOD CLOTS IN LEGS**

- Swelling in thigh, calf or ankle that does not go down with elevation and use of ice
- Pain, heat and tenderness in calf, back of knee or groin area (NOTE: Blood clots can form in either leg.)

#### **PREVENTION OF BLOOD CLOTS IN LEGS**

- Foot and ankle pump exercises
- Walking
- Blood thinners
- Adequate fluid intake

### **BLOOD CLOTS IN LUNGS**

A blood clot could break away from the vein and travel to the lungs. This is an emergency and you should CALL 911 if it is suspected.

#### **SIGNS OF BLOOD CLOTS IN LUNGS**

- Sudden chest pain
- Difficult and/or rapid breathing
- Severe shortness of breath not relieved by resting
- Sweating
- Confusion

#### **PREVENTION OF BLOOD CLOTS IN LUNGS**

- Prevent blood clots in legs
- Activity
- Proper fluid intake

### **BLOOD THINNING**

Your physician will prescribe some form of blood thinning medication to assist in the prevention of blood clots. This medication will not provide any pain relief. If you are currently taking Aspirin daily, discontinue use while taking the blood thinner prescribed by your surgeon.

### **DENTAL PROCEDURES**

It may be recommended that you be pre-treated with antibiotics prior to any dental appointment. Please inform your dental care provider that you have had a total joint replacement. Your dental care provider will prescribe the appropriate antibiotics.



### **PAIN MANAGEMENT**

Take your prescribed pain medications. Once you are no longer taking blood thinning medications, you may take an anti-inflammatory type of medication (Aleve, Ibuprofen, Advil) if you do not have a history of gastric problems.

### **SWELLING**

You are encouraged to continue using ice at 20 minute intervals on your surgical site following your discharge from the hospital. This is the most effective following exercise to decrease swelling and pain. Also, elevation of your operative extremity will help if swelling is persistent. Elevate your operative knee above your heart by using bed pillows in a lengthwise manner. Do not place anything directly under your operative knee that will keep your knee in a bent position for an extended period of time.

## Total Knee Replacement Patient Pathway Guidelines

	BEFORE SURGERY	DAY OF SURGERY	POST-OP DAY #1	POST-OP DAY #2 DISCHARGE DAY
<b>Education</b>	<p>Attend class prior to surgery.</p> <p>Pre-registration appointment prior to surgery. Includes lab work, chest x-ray, EKG, health history and information.</p>	<p>Meet with Anesthesiologist before surgery.</p>	<p>Physical Therapy/ Occupational Therapy (PT/OT) Education and Training.</p>	<p>Continue PT/OT Training.</p> <p>Nursing provides discharge instructions.</p>
<b>Nutrition</b>	<p>No food or drink as instructed before surgery.</p>	<p>Diet as tolerated after surgery.</p>	<p>Diet as tolerated.</p>	<p>Diet as tolerated.</p>
<b>Activity &amp; Rehab Therapy</b>	<p>Education and exercise practice during class.</p> <p>Expectations regarding daily progress discussed in class.</p> <p>Bring comfortable clothes for PT (velcro or snap pants preferred).</p>	<p>Ankle pumps. (DVT prevention)</p> <p>Use Incentive Spirometer.</p> <p>Foley catheter to drain bladder.</p> <p>Physical Therapy evaluation after surgery.</p> <p>Sit on side of bed or stand with help.</p> <p>Begin use of CPM.</p>	<p><b>“Call, don’t fall!”</b> Up in chair for meals.</p> <p>Use Incentive Spirometer.</p> <p>Up to bathroom with staff assistance and walker. Continue CPM.</p> <p>PT evaluation if not completed.</p> <p>AM: Walk with PT and walker. Practice exercises 1:1 in room.</p> <p>PM: Walk with PT and walker. Progress with exercises and mobility. Continue use of CPM.</p>	<p><b>“Call, don’t fall!”</b> Up with help as needed and walker.</p> <p>Use Incentive Spirometer.</p> <p>Walk with PT and walker, exercises and activities.</p> <p>Practice stairs.</p> <p>Continue CPM.</p> <p>Range of Motion goal is 0-90 degrees by discharge.</p>
<b>Pain Control</b>	<p>Education on pain management and pain rating scale provided in class.</p>	<p>General anesthesia and spinal or nerve block. Cold therapy.</p>	<p>Pain medication by mouth. IV pain medication if needed. Cold therapy.</p>	<p>Pain medication by mouth. Cold therapy. Prescription for discharge.</p>

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<b>Routine Meds</b>	<p>Bring list of home medications to pre-registration appointment.</p> <p>Stop taking Aspirin products, anticoagulants, vitamins, herbal products and diet pills per office instruction.</p>	<p>Take morning medications prior to surgery as directed during pre-registration appointment.</p> <p>Bring list of home medications. Leave all medications at home, except eye drops and inhalers.</p> <p>IV antibiotics every 8 hours. Home medication per orders.</p>	<p>Home medications per orders.</p>	<p>Prescriptions at discharge if needed.</p>
<b>Discharge Plan</b>	<p>Begin discharge planning as discussed in class: meal preparation, identify caregiver, furniture arrangement, removal of fall hazards and transportation.</p>	<p>Referral made to Discharge Planners.</p>	<p>Case Manager/Social Worker meet with patient/caregiver and determines needs. Arranges for equipment and services at discharge. Initiates evaluation for inpatient rehabilitation needed.</p>	<p>Patient/caregiver provided with written discharge instructions and discharge prescriptions. Walker and CPM for home use delivered to room. Usual discharge to home with Home Health services for three weeks.</p>
<b>Other Care</b>	<p>Purchase toilet seat elevator and shower seat if needed.</p>	<p>Oxygen, pulse oximeter, possible drains.</p> <p>Bladder catheter.</p> <p>SCD (sequential compression device)</p>	<p>Rounds by surgeon or assistant.</p> <p>Foley catheter removed.</p> <p>Discontinue IV fluids and cap IV site.</p> <p>SCDs on when in bed.</p>	<p>Rounds by surgeon or assistant.</p> <p>IV removed.</p> <p>Drains removed if still in place.</p>











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8801 S. 101st E. Ave., Tulsa, Oklahoma 74133  
918.294.4000  
HillcrestSouth.com