Via Christi HEALTH

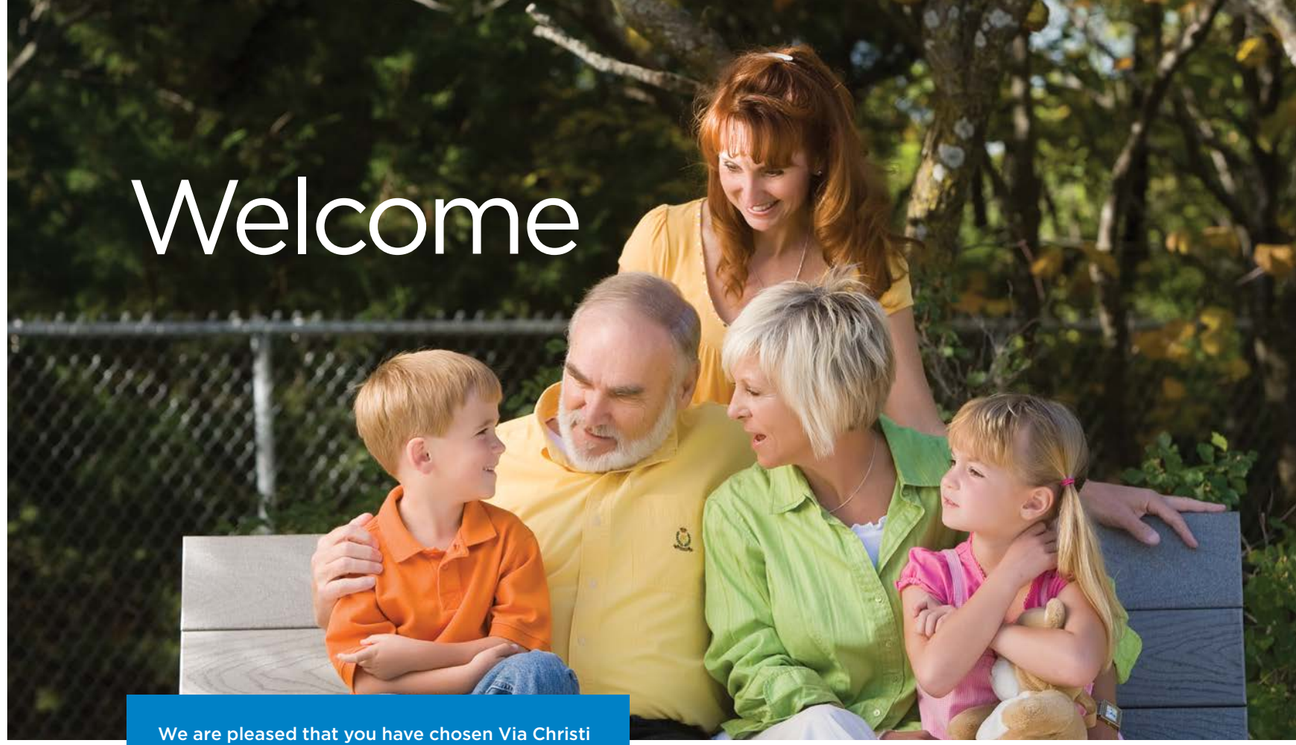
Joint replacement guidebook



Via Christi Joint Replacement Center

- Via Christi Hospital St. Francis
- Via Christi Hospital St. Teresa

...because your life matters



Welcome

We are pleased that you have chosen Via Christi Joint Replacement Center. Your decision to have joint replacement surgery is the first step towards a healthier lifestyle.

Each year, more than 700,000 people make the decision to undergo joint replacement surgery. The surgery aims to relieve your pain, restore your independence and return you to work and other daily activities.

The program is focused on wellness and designed to return you to an active lifestyle as quickly as possible. Most patients will be able to walk the first day after surgery and move towards normal activity in six to 12 weeks.

The Joint Replacement Center has planned a comprehensive course of treatment. We believe that you play a key role in promoting a successful recovery. Our goal is to involve you in your treatment through each step of the program. This guide will give you the necessary information to promote a more successful surgical outcome.

Your team includes physicians, physcian assistants, patient care technicians, nurses, care management, physical therapists and occupational therapists specializing in total joint care. Every detail, from pre-operative teaching to post-operative exercising, is reviewed with you. Our joint program coordinator will be your resource to guide you on your joint journey.

Using the guidebook

Preparation, education, continuity of care and a pre-planned discharge are essential for optimum results in joint surgery. Communication is key to this process. The guidebook is a communication tool for patients, physicians, physical and occupational therapists, nurses and your entire care team. It is designed to ensure that you know:

- What to expect before, during and after surgery
- What you need to do to prepare for surgery and your recovery
- How to care for your new joint

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Overview of the Via Christi Joint Replacement Center

We offer a unique program. Each step is designed to encourage the best results leading to a discharge from the hospital two days after surgery. Features of the program include:

- Dedicated care team trained to work with joint patients
- Casual clothes (no drafty gowns)
- Emphasis on group activities
- Family and friends participating as coaches in the recovery process
- Group lunch with your coach, staff and/or volunteers
- A joint program coordinator, who will be your consistent resource throughout the program
- A comprehensive patient guide for you to follow from four to six weeks before surgery until three months after surgery and beyond
- Reunion luncheons for former patients and coaches
- Newsletters to update you on what to expect each day of your stay
- Ongoing publications and educational seminars about hip/and knee pain as well as overall joint health

(Please note: some aspects of the program are not applicable at all locations)

Your Joint Replacement Team

Orthopedic surgeon — The orthopedic surgeon is the skilled physician who will perform the procedure to repair your damaged joint.

Physician assistant/nurse practitioner (PA/NP) — The physician assistant and/or nurse practitioner will work closely with your surgeon to oversee your care.

Registered nurse (RN) — Much of your care will be provided by a nurse responsible for your daily care. Your nurse will assure orders given by your physician are completed.

Physical therapist (PT) — The physical therapist will guide your return to functional daily activities. They will train you and your coach in safe transfer techniques, provide gait training and teach exercises designed to regain your strength and motion after surgery.

Occupational therapist (OT) — The occupational therapist will guide you on performing daily tasks such as bathing and dressing with your new joint. (They may demonstrate special equipment used in your home after you receive your replacement, such as shower benches, rails and raised toilets.)

Hospitalist — Hospitalist is the term used for doctors who are specialized in the care of patients while in the hospital. Most hospitalists are board-certified internists (internal medicine physicians). Available throughout the day, hospitalists generally have more expertise in caring for complicated hospitalized patients on a daily basis. They are able to meet with family members, follow up on tests, answer nurses' questions and deal with problems that may arise.

Your joint program coordinator

The joint program coordinator will be a resource for your care needs from the surgeon's office to the hospital and home. The joint program coordinator will help connect you with the appropriate members of our joint care team to:

- Assess and plan for your specific care needs such as anesthesia and medical clearance for surgery
- Answer questions and coordinate your hospital care
- Act as your advocate throughout the course of treatment from surgery to discharge
- Coordinate your discharge plan to home or a facility with additional support
- Review what you'll need at home after your surgery, including support (if required)

Please bring your guidebook for joint replacement with you to all of your appointments. Keep track of your preoperative appointments by using the calendar below.

YOUR JOINT REPLACEMENT CALENDAR					
	Monday	Tuesday	Wednesday	Thursday	Friday
Week 6					
Week 5					
Week 4					
Week 3					
Week 2					
Week 1					

Four to six weeks before surgery

Planning for leaving the hospital

Understanding your plan for discharge from the Joint Replacement Center is an important task in the recovery process. Your joint program coordinator will connect you with a care manager and other team members who can develop a plan that meets your particular needs. Many patients should expect to be able to go directly home, as it is usually best to recover in the privacy and comfort of your own surroundings.

After your surgeon's office has scheduled you for joint surgery, you will be contacted by our joint care team to:

- Schedule your pre-operative joint class, Pre-Admissions Testing clinic appointment and verify other appointments for medical testing
- Act as a liaison for coordination of your pre-operative care between the doctor's office, the hospital and the testing facilities, if necessary
- Verify that you have made an appointment, if necessary, with your medical doctor and have obtained the pre-operative tests your doctor has ordered
- Answer questions and direct you to specific resources within the hospital

Obtain medical clearance

When you were scheduled for surgery, your surgeon will give you instructions on any needs regarding medical clearance. These instructions will tell you whether you need to see your primary care physician and/or a specialist.

Please follow the instructions provided. If you need to see your primary care doctor, it will be for pre-operative medical clearance. After reviewing your medical history, additional physician consultations may be required (i.e., cardiology).

Put your health care decisions in writing

It is our policy to place patients' wishes and individual considerations at the forefront of their care and to respect and uphold those wishes.

You may call the joint program coordinator at any time to ask questions or raise concerns about your pending surgery. You will find a business card for the joint program coordinator in the front pocket of the guidebook.

What are advance medical directives?

Advance directives are a means of communicating to all caregivers the patient's wishes regarding health care. If a patient has a living will or has appointed a health care agent and is no longer able to express his or her wishes to the physician, family or hospital staff, the hospital is committed to honoring the wishes of the patient as they are documented at the time the patient was able to make that determination.

There are different types of advance directives and you may wish to consult your attorney concerning the legal implications of each.

- **Living wills** are written instructions that explain your wishes for health care if you have a terminal condition or irreversible coma and are unable to communicate.
- **Appointment of a health care agent** (sometimes called a medical power of attorney) is a document that lets you name a person (your agent) to make medical decisions for you if you become unable to do so.
- **Health care instructions** are your specific choices regarding use of life-sustaining equipment, hydration and nutrition, and use of pain medications.

On admission to the hospital, you will be asked if you have any advance directives. If you do, please bring copies of the documents to the hospital with you so they can become a part of your Medical Record. Advance directives are not a requirement for hospital admission.

Obtain laboratory tests

When you were scheduled for surgery, you should have received information on preoperative laboratory-testing from your surgeon. Follow the instructions provided.

Stop medications that increase bleeding

Discontinue all anti-inflammatory medications such as aspirin, Motrin®, Naproxen, Vitamin E, etc. generally two weeks before surgery, unless otherwise directed by your physician. These medications may cause increased bleeding. If you are taking supplements such as fish oil, this also, generally, should be stopped. If you are taking a blood thinner, you will need special instructions for stopping the medication. Your physician will instruct you about what to do with your other medications.

Stop taking herbal medicine

There are herbal medicines that can interfere with other medicines. Check with your doctor to see if you need to stop taking any of your herbal medicines before surgery.

Examples of herbal medicines include, but are not limited to: Echinacea, ginkgo, ginseng, ginger, licorice, garlic, valerian, St. John's wort, ephedra, goldenseal, feverfew, saw palmetto and kava-kava.

Stop smoking

It is essential to stop smoking before surgery. Smoking impairs oxygen circulation to your healing joint by reducing the size of your blood vessels and decreasing the amount of oxygen circulated in your blood. Smoking can also increase clotting which can cause problems with your heart. Smoking increases your blood pressure and heart rate. If you quit smoking before you have surgery, you will increase your ability to heal. If you need help quitting, discuss options with your physician. To learn about free smoking cessation resources, call Via Christi Health Connection at 316.689.5700 or 866.KAN.STOP.

Tips to aid in quitting

- Decide to quit
- Choose the date
- Cut down the amount you smoke by limiting the area where you can smoke
- Give yourself a reward for each day without cigarettes

When you are ready...

- Throw away all your cigarettes
- Throw away all ashtrays
- Don't smoke in your home
- Don't put yourself in situations where others smoke (e.g. bars and parties)
- Remind yourself that this can be done — be positive
- Take it one day at a time. If you slip, just get right back to your decision to quit
- If you need to consider quitting aids like chewing gum, patches or prescriptions aids, check with your doctor.

Getting ready for surgery

Start pre-operative exercises

Many patients with arthritis favor the painful leg. As a result, the muscles become weaker, making recovery slower and more difficult. For this reason, it is very important to begin an exercise program before surgery. This is the optimal time to learn the exercises and initiate the work toward improving strength and flexibility. This can make recovery faster and easier.

Exercising before surgery

It is important to be as flexible and strong as possible before undergoing a total joint replacement. Always consult your physician before starting a pre-operative exercise plan. Ten basic exercises are listed here that your physician may instruct you to start doing now and continue until your surgery. You should be able to do them in 15-20 minutes and it is typically recommended that you do all of them twice a day. Consider this a minimum amount of “training” prior to your surgery. Remember that you need to strengthen your entire body, not just your legs. It is very important that you strengthen your arms because after surgery you will be relying on your arms to support you when walking with the walker or crutches. You will also rely on your arms to help you get in and out of bed and chairs, as well as on and off the toilet. You should also exercise your heart and lungs by performing light endurance activities — for example, walking for 10-15 minutes each day.

If you feel you need further assistance, ask your physician about a referral for pre-operative physical therapy. You are welcome to choose any clinic that meets your needs.

For a list of all of our Via Christi outpatient therapy locations, visit **viachristi.org/rehab-therapy-centers**

Pre-operative joint exercises: *Please see pages 51 and 57 for more details.*

1. Ankle pumps
2. Quad sets
3. Gluteal sets
4. Hamstring sets
5. Heel prop
6. Abduction and adduction
7. Heel slides
8. Short arc quads
9. Standing heel/toe raises
10. Standing knee flexion

Do NOT do any exercise that is too painful.

Register for pre-operative class

A special class is held for patients scheduled for joint surgery. See our joint class flyer for details on locations and times we offer. We encourage you to schedule this class 2-3 weeks prior to your surgery. You will only need to attend one class. This is a great opportunity to get your questions answered. It is strongly suggested that you bring a family member or friend to act as your "coach." The coach's role will be explained in class. If it is not possible for you to attend, please call and discuss other options with the joint program coordinator. It is important to your physician and our team members that you receive this education and have an opportunity to get your questions answered.

The outline of the class is as follows:

- ☑ Introduction of joint care team
- ☑ Understanding your procedure
- ☑ What to expect before, during and after surgery
- ☑ Physical/occupational therapy
- ☑ Pain management
- ☑ How to care for yourself at home
- ☑ Role of your “coach”
- ☑ Discharge planning

Prepare your home for your return

It is important to have your house ready for your arrival back home. Use this checklist as you complete each task.

- ☑ Put things that you use often (like an iron or coffee pot) on a shelf or surface that is easy to reach
- ☑ Check railings to make sure they are not loose
- ☑ Clean, do the laundry and put it away
- ☑ Put clean linens on the bed
- ☑ Prepare meals and freeze them in single-serving containers
- ☑ Cut the grass, tend to the garden and finish any other yard work
- ☑ Pick up throw rugs and tack down loose carpeting
- ☑ Remove electrical cords and other obstructions from walkways
- ☑ Install night-lights in bathrooms, bedrooms and hallways
- ☑ Install grab bars in the shower/bathtub and by the toilet. Put adhesive slip strips in the tub
- ☑ Arrange to have someone collect your mail and take care of pets

Breathing exercises

To prevent potential problems such as pneumonia, it is important to understand and practice breathing exercises. Techniques such as deep breathing, coughing, and using an incentive spirometer may also help you recover more quickly.

Deep breathing

- To deep breathe, you must use the muscles of your abdomen and chest.
- Breathe in through your nose as deep as you can.
- Hold your breath for 5 to 10 seconds.
- Let your breath out slowly through your mouth. As you breathe out, do it slowly and completely. Breathe out as if you were blowing out a candle (this is called “pursed lip breathing”). When you do this correctly, you should notice your stomach going in. Breathe out for 10-20 seconds.
- Take a break and then repeat the exercise 10 times.

Coughing

To help you cough:

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

What to bring to the hospital

Personal hygiene items (toothbrush, powder, deodorant, razor, etc.)

Watch or wind-up clock

Shorts, tops, athletic pants

Flat shoes or tennis shoes and well-fitted slippers with non-slip soles

For safety reasons, DO NOT bring electrical items. You may bring battery-operated items.

If you have adaptive equipment such as a walker, reachers or any special braces, you may have them brought to you after your surgery.

Your patient guidebook

A copy of your advance directives, as applicable

A list of the medications you currently take (see page 16 “Personal Medication List”, for information we will need). If you are unable to complete this list, please bring all the medications you take with you in a bag.

Your insurance card, driver's license or photo I.D., and any co-payment required by your insurance company

Special instructions

You will be given specific instructions from your surgeon. General recommendations are:

- Do not wear dark nail polish or take the polish off at least one finger
- Do not shave your legs
- Do not put on any lotions or creams

NAME		FAMILY PHYSICIAN		
Medication name/dosage	**Instructions**	**Reason for therapy**	**Duration**	**Medications to stop before surgery**
What is the name of your medication? What is your dosage?	When and how do you take this medication?	Why are you taking this medication?	How long have you been taking this medication?	Discuss with your physician, as some medications generally need to be stopped two weeks before surgery

Please list all medications including prescription, over-the-counter, herbal medications, vitamins and supplements

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Four weeks before surgery

Importance of your coach

The people that you find in your daily life, friends and family, are obviously important to you. In the process of a joint replacement, the involvement of a spouse, family friend or relative acting as your coach is very important. Your coach will be with you from the pre-op process through your stay in the hospital and to your discharge to home. They will attend pre-op class, give support during exercise classes, and keep you focused on healing. They will assure you continue exercising when you return home.

Ten days before surgery

Pre-operative visit to surgeon

You should have an appointment with or receive a phone call from your surgeon's office 7-10 days before surgery. Be sure to review your Personal Medication List and discuss any medications you should stop taking and medications that you are allowed to take the morning of surgery.

Two days before surgery

Shower prep prior to surgery

Your surgeon may require you to shower with a special soap before surgery. If required, your surgeon's office will provide you with any instructions for the type of soap, where the soap can be purchased, and how soon before surgery to shower.

Directions:

1. Pour the special soap on a washcloth.
2. Wash all areas of your body, except face and peri-anal area, with the special soap.
3. Thoroughly wash the area where you are going to have surgery.
4. Rinse as usual. Dress as usual.

Your surgeon recommends this special soap to reduce the amount of germs on your skin prior to surgery.

The day before surgery

Your arrival time at hospital

You will be asked to come to the hospital two hours before the scheduled surgery (unless otherwise directed) to give the nursing staff sufficient time to start IVs, prep and answer questions. It is important that you arrive on time to the hospital as occasionally the surgical time is moved up at the last minute and your surgery could start earlier. If you are late, it may create a significant problem with starting your surgery on time. In some cases, lateness could result in moving your surgery to a much later time.

Night before surgery

Do not eat or drink anything after midnight, even water, unless otherwise instructed to do so.

Hospital care

Day of surgery: what to expect

- Patients are prepared for surgery, including starting an IV and scrubbing your operative site. A joint care team member will escort you to the preoperative area where you will see your surgeon or anesthesiologist.
- Following surgery, you will be taken to a recovery area where you will remain for one to two hours. During this time, pain control is typically established, your vital signs monitored and an x-ray may be taken of your new joint. Depending on the type of anesthesia used, you may experience blurred vision, a dry mouth and chills. The team will work to make you as comfortable as possible.
- You will then be taken to the Joint Replacement Center. Only one or two close family members or friends should visit you on this day. Most of the discomfort occurs the first 12 hours following surgery. During this time, you will be receiving pain medication through your IV as well as oral pain medications. Early mobility is an important part of recovery. Your physical therapy will begin once you have arrived to your room per your doctor's order. It is very important that you begin ankle pumps on this first day. This will help prevent blood clots from forming in your legs. You should also begin using your incentive spirometer and doing the deep breathing exercises that you learned in class. Each day you will receive a newsletter outlining the day's activities.

Understanding pain

Pain is normal and expected after surgery. Some level of pain helps us gauge how you are recovering; your pain should be tolerable so you can participate in therapy. Pain can be chronic (lasting a long time) or intense (breakthrough) and can change through the recovery process. If you need more help with your pain management, talk to your nurse, joint program coordinator or your doctor.

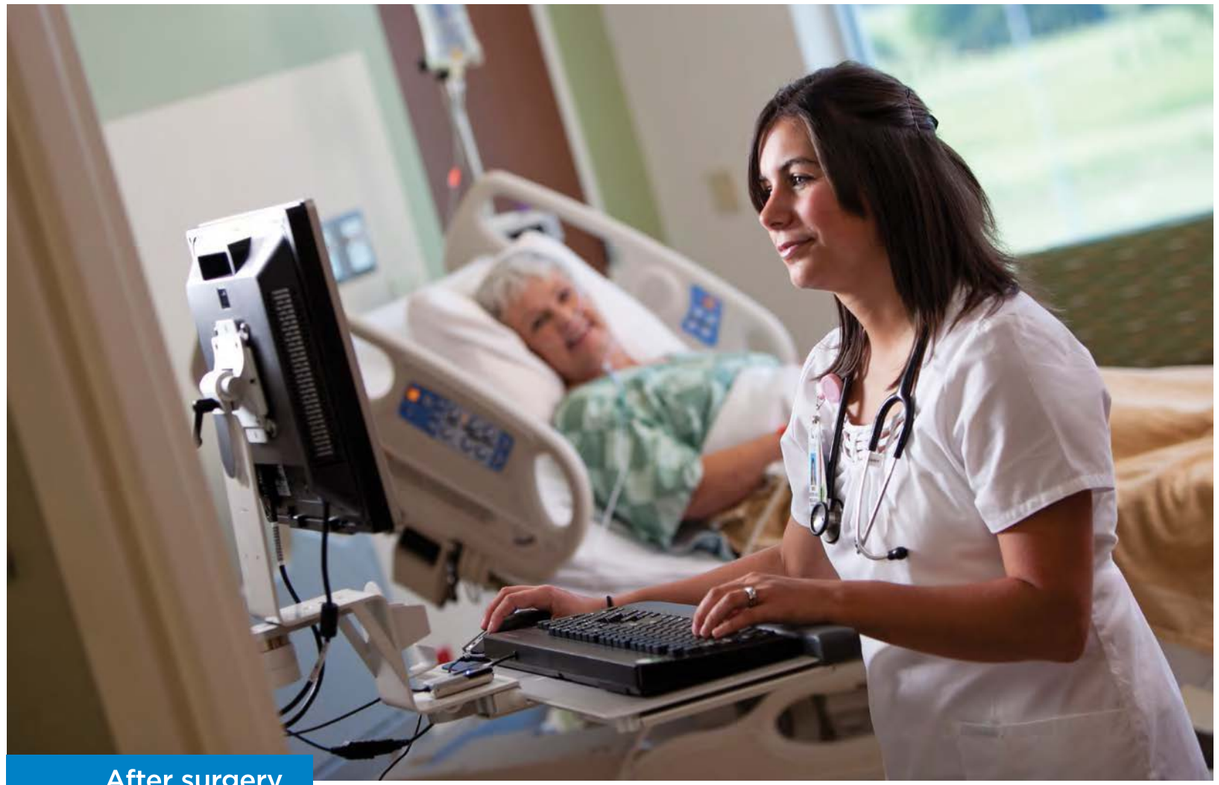
Your role in pain management

Using a pain scale to rate your pain will help the team understand your pain level. If "0" means you have no pain and "10" means you are in the worst pain possible, how would you rate your pain? With good communication about your pain, the team can make adjustments to make you more comfortable. Try to relax. When you are relaxed, medication works better.

PAIN SCALE

Using a number to rate your pain can help the team understand the severity of your pain and help them make the best decision to help manage it.

0 No hurt
2 Hurts little bit
4 Hurts little more
6 Hurts even more
8 Hurts whole lot
10 Hurts worst



After surgery

Day one

You can expect to begin the day by getting a sponge bath, dressed and seated in a recliner in your room. Your surgeon and team (if applicable) will visit today. The physical therapist will assess your progress and get you walking with a walker. IV pain medication will likely be stopped and you may begin oral pain medication. Group therapy typically begins this morning. A time will be assigned after your initial physical therapy evaluation. Occupational therapy may begin, if needed and you are medically ready. Your coach is encouraged to be present as much as possible. Visitors are welcome, preferably late afternoons or evenings.

Day two

On day two after surgery, you will be helped out of bed early and may dress in the loose clothing you brought to the hospital. Shorts and tops are usually best. If you wear long pants, be sure they are loose enough to pull up above your knees. Group therapy may start at approximately 9 or 10:30 a.m. It would be helpful if your coach participates in group therapy. You may have a second group-therapy session at approximately 1:30 or 3 p.m. You may begin walking stairs on this day. Evenings are free for friends to visit. If you are medically stable and have met your therapy goals. you may be cleared to go home today.

Discharge day

For some patients discharge day may be day two. If an additional day is needed, it will be similar to day two. If you have not already practiced, you should walk on stairs. You most likely will be discharged a short time after the morning group therapy.

Going directly home

Please have someone arrange to pick you up. You should receive written discharge instructions concerning medications, physical therapy, activity, etc. We strongly recommend having your appointments for any needed follow-up with physical therapy and/or your physician be made prior to you leaving the hospital. Please let us know if you need assistance. Most patients going home will begin therapy at an outpatient PT facility. If the care manager determines that home health services and/or any additional equipment are needed, the care management team will arrange for this.

Going to a post-acute facility

The decision to go home or to a post-acute facility will be made collectively by you, your surgeon, physical therapist and your insurance company. Every attempt will be made to have this decision finalized in advance but it may be delayed until the day of discharge.

Facilities usually provide transportation. Your transfer papers will be completed by the nursing staff. Either your primary care physician or a physician from the post-acute facility will be caring for you in consultation with your surgeon. The length of stay will depend upon your progress and the type of facility you go to. Upon discharge home, the post-acute facility staff will also give instructions to you. Take this guidebook with you.

Please remember that post-acute stays must be approved by your insurance company prior to payment. A patient's stay in a post-acute facility must be done in accordance with the guidelines established by Medicare. Although you may desire to go to post-acute when you are discharged, your progress will be monitored by your insurance company while you are in the hospital. Upon evaluation of your progress, either you will meet the criteria to benefit from post-acute rehab or your insurance company may recommend that you return home with other care arrangements. Therefore, it is important for you to make alternative plans pre-operatively for care at home.

In the event a post-acute facility is not approved by your insurance company, you can go to a post-acute facility and pay privately. Please keep in mind that the majority of our patients do so well that they do not meet the guidelines to qualify for a post-acute facility. Also, keep in mind that insurance companies do not become involved in social issues, such as lack of a caregiver, animals, etc. These are issues you will have to address before admission.

Caring for yourself at home

When you go home, there are a variety of things you need to know for your safety, your recovery, and your comfort.

Be comfortable

Take your pain medicine at least 30 minutes to one hour before physical therapy.

Gradually wean yourself from prescription medication to a non-prescription pain reliever. As directed by your physician, you may take two Extra-strength Tylenol® analgesic in place of your prescription medication up to four times per day.

Use ice for pain control. Applying ice to your affected joint will decrease discomfort. It is recommended for at least 30 minutes each hour. Use it before and after your exercise program. A bag of frozen peas wrapped in a kitchen towel also works well because the bag will easily mold to the shape of your hip or knee.

Change your position every 45 minutes.

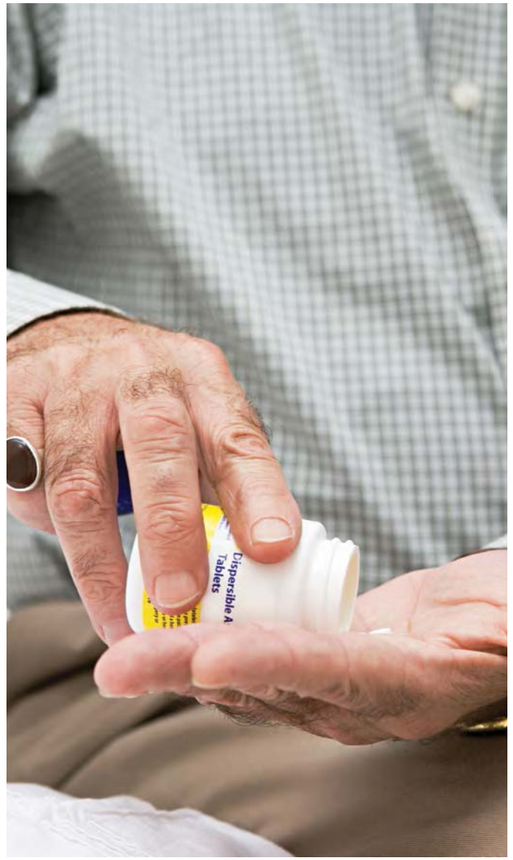
Body changes

You may have difficulty sleeping, which is normal. Do not sleep or nap too much during the day.

Pain medication that contains narcotics promotes constipation. Be sure you are drinking plenty of water and eating foods high in fiber. Use stool softeners, but avoid laxatives unless directed by your physician. Staying active will also help.

Your energy level will be decreased for at least the first month.

Your appetite may be poor. Drink plenty of fluids to keep from getting dehydrated. Your desire for solid food will return.



Blood clots and anticoagulants

You may be given a blood thinner to help avoid blood clots in your legs. If so, you will need to take it for one to six weeks depending on your individual situation. Be sure to take as directed by your surgeon. With some types of blood thinners the amount you take may change depending on how much your blood thins. Therefore, with these medications it will be necessary to do blood tests once or twice weekly to determine this.

Caring for your incision

- Keep your incision dry.
- You may shower seven days after surgery, unless instructed otherwise. If you have an Aquacel dressing, you may shower as long as it is intact.
- Notify your surgeon if there is increased drainage, redness, pain, odor, or heat around the incision.
- Take your temperature if you feel warm or sick. Call your surgeon if it exceeds 100.5 degrees.

Recognizing and preventing potential complications

Signs of infection

- Increased swelling and redness at incision site
- Change in color, amount, odor of drainage
- Increased pain in new joint
- Fever greater than 100.5 degrees

Prevention of infection

- Take proper care of your incision as explained.
- Take prophylactic antibiotics when having dental work or other potentially contaminating procedures.
- Notify your physician and dentist that you have a joint replacement.

Dressing change procedure

1. Wash your hands
2. Open all dressing change materials
3. Remove old dressing
4. Inspect incision for the following:
   a. increased redness
   b. increase in clear drainage
   c. yellow/green drainage
   d. odor
   e. surrounding skin is hot to touch
5. Wash the area around the incision with regular soap and water
6. Apply new dressing as directed by your doctor

NOTE: Most physicians use an Aquacel dressing that stays on for 7-10 days. Afterwards, remove the dressing using steps 1, 3, 4 and 5 above. Leave the incision open to air. If you incision is still draining, steps 1-6 will need to be followed. Notify your surgeon if you have any concerns.

Blood clots in legs

Surgery may cause the blood to slow and coagulate in the veins of your legs, creating a blood clot. Blood clots can form in either leg. This is why you may be requested to 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.

Signs of blood clots in legs

- 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

To help prevent blood clots

- Perform ankle pumps
- Walk several times a day
- Take your blood thinners as directed

Pulmonary embolus

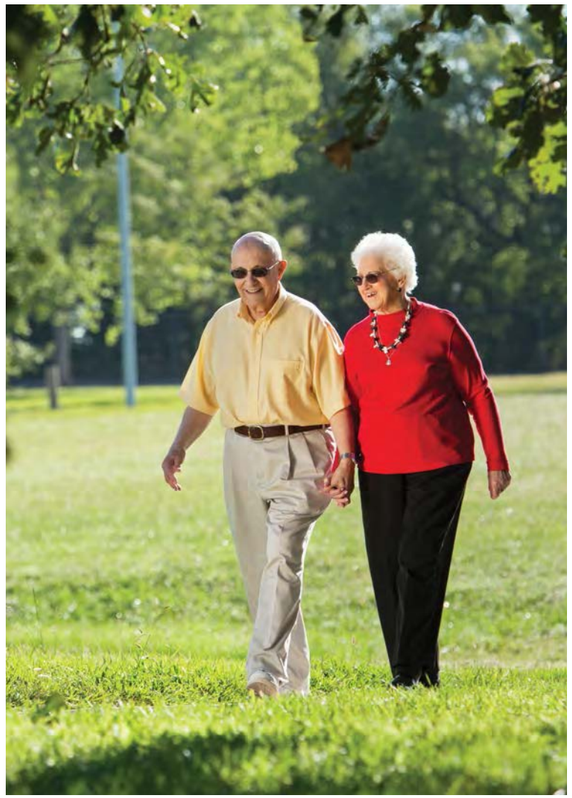
An unrecognized blood clot could break away from the vein and travel to the lungs. This is an emergency and you should **call 911** if suspected.

Signs of a pulmonary embolus

- Sudden chest pain
- Difficult and/or rapid breathing
- Shortness of breath
- Sweating
- Confusion

Prevention of pulmonary embolus

- Prevent blood clot in legs
- Recognize if a blood clot forms in your leg and call your physician promptly



Post-operative exercise plan

It is important to keep moving! Advanced exercises are listed below. Your physical therapist will add these, or other similar exercises, at the appropriate time of your rehabilitation.

All joint replacements:

- Prone hamstring curl/quad stretch with strap
- Bridging
- Wall slides
- Single leg forward, lateral and retro step-ups
- Standing TKE with ball
- Standing marching

Knee replacement:

- Seated hamstring and Gastroc stretch with or without strap
- 3 position SLR (supine with weight, sidelying and prone)
- Mini squats*
- Standing rock over affected leg*
- Standing calf stretch
- Standing knee flexion stretch on stairs (modified lunge position)

Hip replacement:

- Clamshell
- Sidelying hip abduction

*Indicates exercises already initiated post-operatively for hip replacement

Pre- and post-op exercises and goals

Activity guidelines

Exercising is important to obtain the best results from total joint replacement surgery. Always consult your physician before starting a home exercise program. You may receive exercises from a physical therapist at an outpatient facility or at home. In either case, you need to participate in an ongoing home exercise program as well. After each therapy session, ask your therapist to recommend changes to your program that will keep you moving towards the goals listed on the next few pages.

Weeks 1-2

After two days, you should be ready for discharge from the hospital. Most joint patients go directly home, but you may be advised to go to a post-acute facility for 5-7 days. During weeks one and two of your recovery, typical goals are to:

- Continue to progress your ambulation distance with walker unless otherwise instructed
- Walk at least 5-10 minutes daily
- Depending on your home situation, climb and descend a flight of stairs (12-14 steps) with a rail or assistive device once a day
- Independently sponge bath or shower (after staples are removed) and dress
- Gradually resume homemaking tasks
- Do 20 minutes of home exercises twice a day, with or without the therapist, from the program given to you

Weeks 2-4

Weeks 2-4 will see you gain more independence. Even if you are receiving outpatient therapy, you will need to be very faithful to your home exercise program to be able to achieve the best outcome. Your goals for the period are to:

- Achieve one to two week goals
- Move from full support to a cane or single crutch as instructed
- Walk at least 15 minutes daily
- Depending on your home situation, climb and descend a flight of stairs (12-14 steps) with a rail and/or assistive device more than once daily
- Independently shower and dress
- Resume light homemaking tasks
- Do 20 minutes of home exercises twice a day with or without the therapist
- Begin driving once cleared by therapist and surgeon

Weeks 4-6

Weeks 4-6 will see much more recovery to full independence. Your home exercise program will be even more important as you receive less supervised therapy. Your goals are to:

- Achieve one to four week goals
- Walk with a cane or single crutch
- Walk 15-30 minutes daily
- Begin progressing on a stair from one foot at a time to regular stair climbing (foot over foot)
- Begin driving once cleared by therapist and surgeon
- Increase your ability to do homemaking tasks
- Continue with home exercise program twice a day

Weeks 6-12

During weeks 6-12 you should be able to begin resuming all of your activities. Your goals for this time period are to:

- Achieve one to six week goals
- Walk with no cane or crutch and without a limp
- Climb and descend stairs in normal fashion (foot over foot)
- Walk 30 minutes daily
- Improve strength to 80%
- Resume activities you enjoy such as, dancing, bowling, and golf

Activities of daily living

Hip precautions

For patients who have a hip replacement, care must be taken to prevent your new hip from coming out of the socket, or dislocating from the pelvis. Following some simple hip precautions will help keep the risk of a dislocation at a minimum. Your doctor will advise you on how long you may need to follow these precautions. Depending on the approach your surgeon uses (i.e. direct anterior), you may not need to follow these hip precautions. Discuss the type of approach and any precautions with your surgeon as this will be important to know for preparing your home before surgery.

- Do **not** lie on the surgical hip.
- Do **not** cross your legs.
- When lying down, do **not** bend forward to pull the blankets from around your feet.
- Do **not** bend at the waist beyond 90 degrees (some surgeons may limit this to 70 degrees).
- Do **not** lift your knees higher than your hips.
- Do **not** twist over the operated leg — pick your feet up and do step turns.
- Do **not** turn your feet inward or outward — keep your toes pointing forward in line with your nose.
- Avoid low toilets or chairs that would cause you to bend at the waist beyond 90 degrees.
- Do **not** bend over to pick up things on the floor — use your reacher.

Do not cross your legs.

Do not bend past 90 degrees.

Do not twist.

Standing up from chair

Do NOT pull up on the walker to stand!

Sit in a chair with arm rests when possible.

1. Extend your operated leg so the knee is lower than your hips (only if you have hip precautions).
2. Scoot your hips to the edge of the chair
3. Push up with both hands on the armrests. If sitting in a chair without armrest, place one hand on the walker while pushing off the side of the chair with the other.
4. Balance yourself before grabbing for the walker.

Stand to sit:

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

Transfer — bed

When getting into bed:

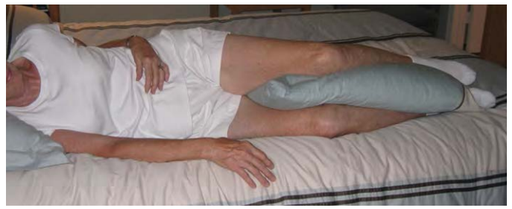
1. Back up to the bed until you feel it on the back of your leg (you need to be midway between the foot and the head of the bed).
2. Reaching back with both hands, sit down on the edge of the bed and then scoot back toward the center of the mattress. (Silk pajama bottoms, satin sheets, or sitting on a plastic bag may make it easier.)
3. Move your walker out of the way, but keep it within reach.
4. Scoot your hips around so that you are facing the foot of the bed.
5. Lift your leg into the bed while scooting around. If this is your surgical leg, you may use a cane, a rolled bed sheet, a belt or your elastic band to assist with lifting that leg into bed (until your leg is strong enough to lift on its own).
6. Keep scooting and lift your other leg into the bed using the assistive device. Do not use your other leg to help as this breaks your hip precautions.
7. Scoot your hips towards the center of the bed.

Back up until you feel the bed on the back of your leg.

For hips: Sit keeping your knee lower than your hip.

Scoot back on the bed, lifting the leg on the bed.

Keep a pillow between your legs when lying on your back. Position your leg such that your toes are pointing to the ceiling — not inward or outward. (A pillow is a good idea for any joint replacement when lying on your side.)



To roll from your back to your side, bend your knees slightly, and place a large pillow (or two) between your legs so that your operated leg does not cross the midline. Roll onto your side.

When getting out of bed:

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

Transfer — tub

Getting into the tub using a bath seat:

1. Select a bath seat that is tall enough to ensure hip precautions can be followed (as applicable)
2. Place the bath seat in the tub facing the faucets.
3. Back up to the tub until you can feel it at the back of your knees. Be sure you are in line with the bath seat.
4. Reach back with one hand for the bath seat. Keep the other hand in the center of the walker.
5. Slowly lower yourself onto the bath seat, keeping the surgical leg out straight.
6. Move the walker out of the way, but keep it within reach.
7. Assist your legs over the edge of the tub, using an assistive device for the surgical leg, if necessary. **Hold onto the shower seat or railing.**

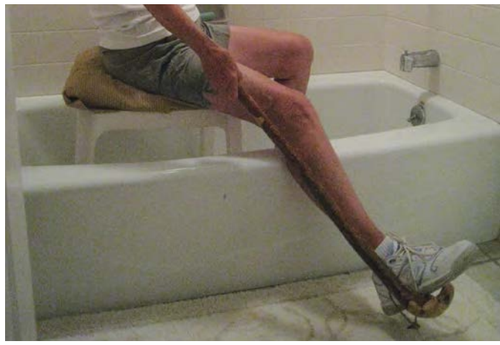
NOTE:

- Use a rubber mat or non-skid adhesive on the bottom of the tub or shower.
- To keep soap within easy reach, make a soap-on-a-rope by placing a bar of soap in the toe of an old pair of pantyhose and attach it to the bath seat.

Getting out of the tub using a bath seat:

1. Assist your legs over the outside of the tub maintaining hip precautions (as applicable).
2. Scoot to the edge of the bath seat.
3. Push up with one hand on the back of the bath seat while holding on to the center of the walker with the other hand.
4. Balance yourself before grabbing the walker.

Not everyone will need this equipment. Your physical or occupational therapist will help recommend equipment as needed for your home. Remember, most insurance companies do not pay for bathroom equipment, so discuss options with your care manager.



Walking

1. Move the walker forward. Be sure all four legs of the walker are on the ground.
2. Step forward placing the foot of the surgical leg in the middle of the walker area.
3. Step forward with the non-surgical leg. DO NOT step past the front wheels of the walker.

NOTE: If using a rolling walker, you can advance from this basic technique to a normal walking pattern. Holding onto the walker, step forward with the surgical leg, pushing the walker as you go; then try to alternate with an equal step forward using the non-operated leg. Continue to push the walker forward as you would a shopping cart. When you first start, this may not be possible, but as you "loosen up" you will find this gets easier. Do not walk forward past the walker center or way behind the walker's rear legs.

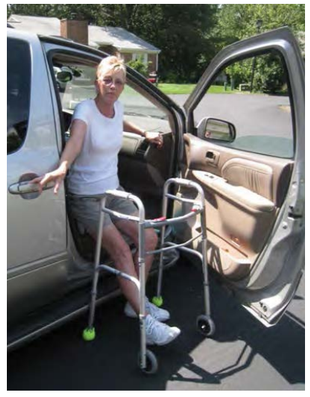
Stair climbing

1. Ascend with non-surgical leg first (up with the good).
2. Descend with the surgical leg first (down with the bad).
3. Always hold onto the railing!
4. If you will not have assistance, discuss with your therapist how to use your assistive device on the stairs to ensure you have it when you get to the top or bottom.

Transfer — car

Getting into the car:

1. Push the car seat all the way back; recline the seat back to allow access in and out, but always have it in the upright position for travel.
2. Place a plastic bag on the seat to help you slide.
3. Back up to the car until you feel it touch the back of your leg.
4. Hold on to an immovable object — car seat, dashboard, etc. — and slide the operated foot out straight. MIND YOUR HEAD as you sit down. Slowly lower yourself to the car seat.
5. Lean back as you lift the operated leg into the car. You may use your cane, leg lifter or other device to assist, as needed. Be sure to maintain hip precautions (as applicable).



Personal care — using a reacher, dressing stick, sock aid or long-handled shoehorn

These personal items are helpful for patients who've had knee replacement and are necessary for patients who've had hip replacement.

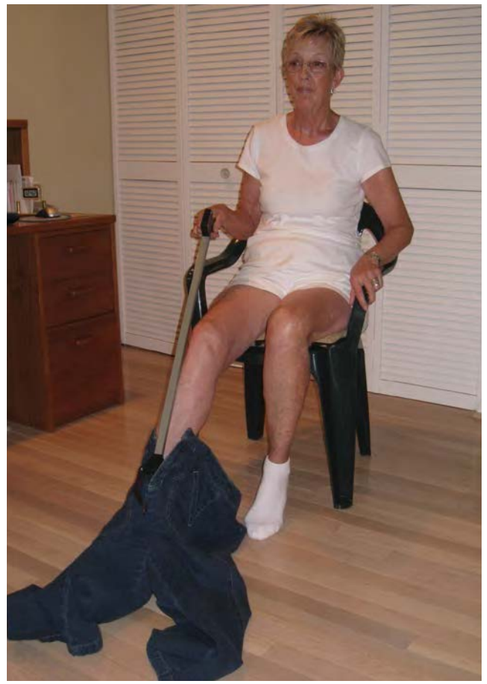
Putting on pants and underwear:

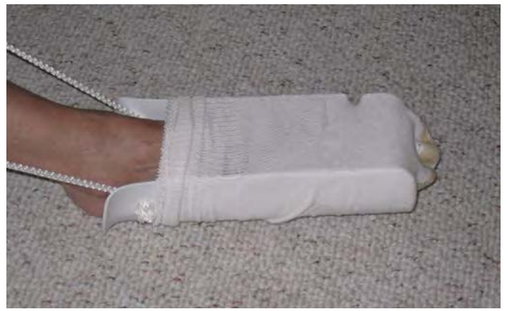
1. Sit down.
2. Put your surgical leg in first and then your non-surgical leg. For hips, or if you have limited flexibility, use a reacher or dressing stick to guide the waistband over your foot.
3. Pull your pants up over your knees, within easy reach.
4. Stand with the walker in front of you to pull your pants up the rest of the way.

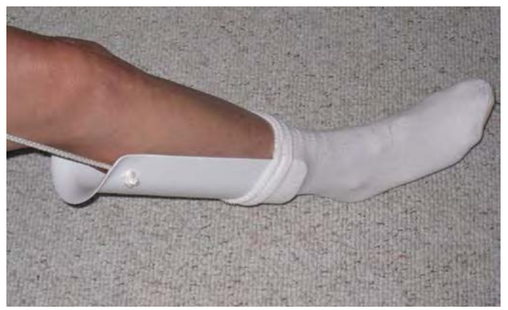
Taking off pants and underwear:

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

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







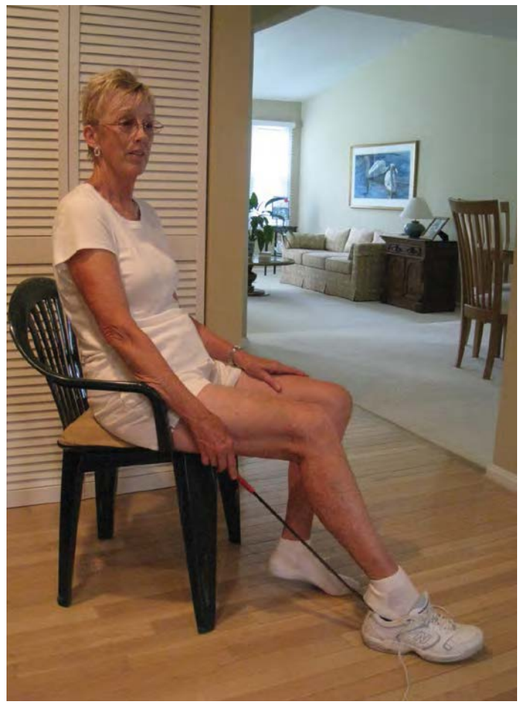
How to use a sock aid:

1. Slide the sock onto the sock aid.
2. Hold the cord and drop the sock aid in front of your foot. It is easier to do this if your knee is bent.
3. Slip your foot into the sock aid.
4. Straighten your knee, point your toe and pull the sock on. Keep pulling until the sock aid pulls out.

If using a long-handled shoehorn:

1. Use your reacher, dressing stick, or long handled shoehorn to slide your shoe in front of your foot.
2. Place the shoehorn inside the shoe against the back of the heel. Have the curve of the shoehorn match the curve of your shoe.
3. Lean back, if necessary, as you lift your leg and place your toes in your shoe.
4. Step down into your shoe, sliding your heel down the shoehorn.

NOTE: This can be performed sitting or standing. Wear sturdy slip-on shoes, or shoes with Velcro closures or elastic shoelaces. Do not wear high-heeled shoes or shoes without backs.



Around the house — saving energy and protecting your joints

Kitchen

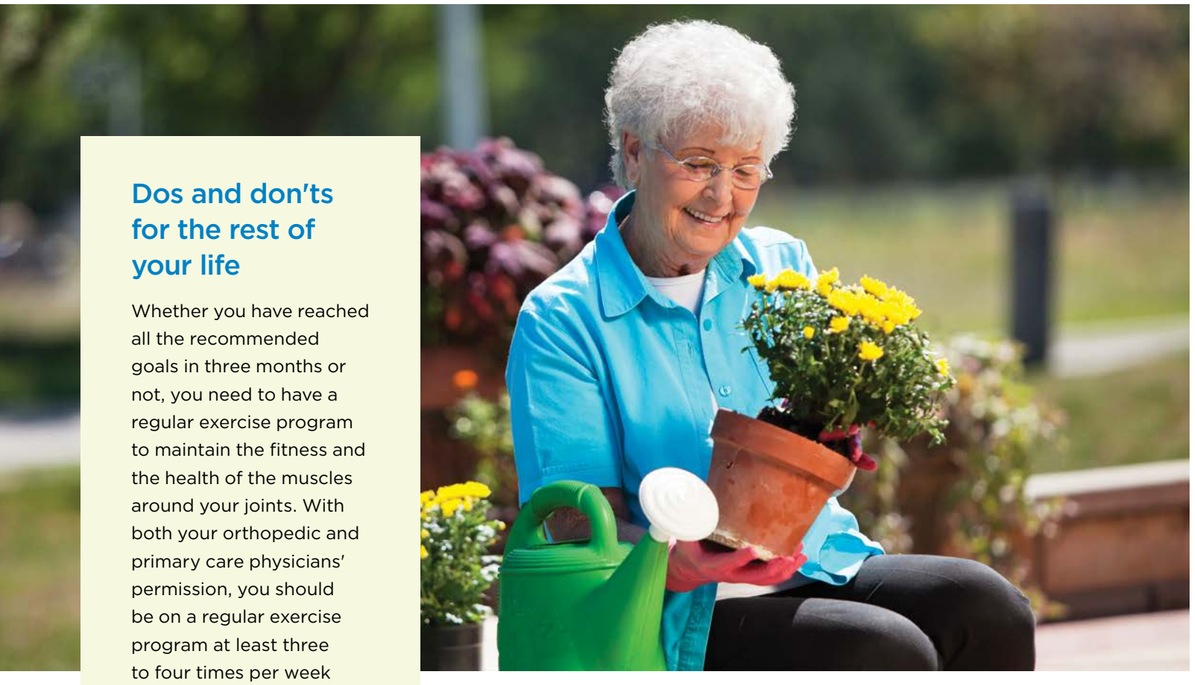
- Do **not** get down on your knees to scrub floors. Use a mop and long-handled brushes.
- Plan ahead! Gather all your cooking supplies at one time. Then, sit, as needed, to prepare your meal.
- Place frequently used cooking supplies and utensils where they can be reached without too much bending or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

Bathroom

- Do **not** get down on your knees to scrub the bathtub.
- Use a mop or other long-handled brushes.

Safety 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 that have non-skid backs.
- Be aware of all floor hazards such as pets, small objects or uneven surfaces.
- Provide good lighting throughout. Install nightlights in the bathrooms, bedrooms and hallways.
- Keep extension cords and telephone cords out of pathways. Do **not** run wires under rugs, as 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. It makes it easier to get up.
- Rise slowly from either a sitting or lying position to avoid getting light-headed.
- Do **not** lift heavy objects for the first three months and then only with your surgeon's permission.



Dos and don'ts for the rest of your life

Whether you have reached all the recommended goals in three months or not, you need to have a regular exercise program to maintain the fitness and the health of the muscles around your joints. With both your orthopedic and primary care physicians' permission, you should be on a regular exercise program at least three to four times per week lasting 20-30 minutes.

Impact activities such as running and singles tennis may put too much load on the joint and are not recommended. High-risk activities such as downhill skiing are likewise discouraged because of the risk of fractures around the prosthesis and damage to the prosthesis itself. Infections are always a potential problem and you may need antibiotics for prevention.

What to do in general

- ✓ Take antibiotics one hour before you have dental work or other invasive procedures.
- ✓ Although the risks are very low for post-operative infections, it is important to realize that the risk remains. A prosthetic joint could possibly attract the bacteria from an infection located in another part of your body. If you should 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 sterile dressing or an 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 the area is painful or reddened.
- ✓ When traveling, stop and change positions hourly to prevent your joint from tightening.
- ✓ See your surgeon yearly unless otherwise recommended.

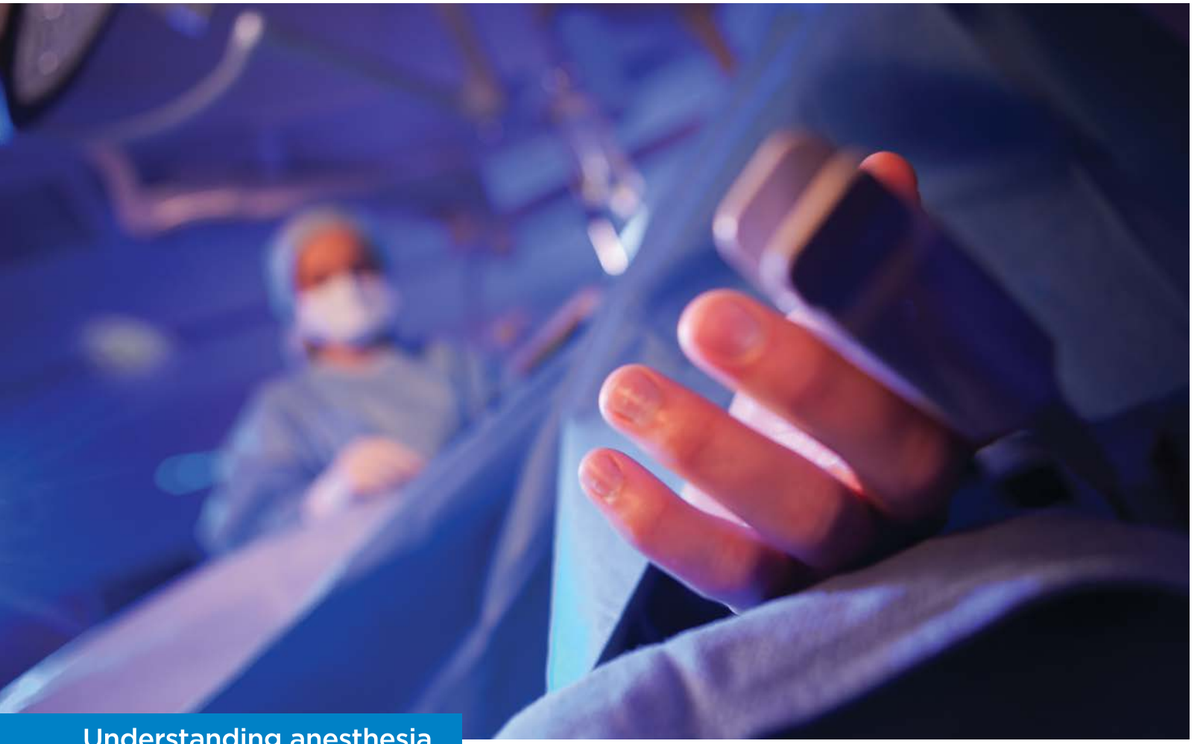
What to do for exercise

Choose a low-impact activity

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

What not to do for exercise

- ✗ 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, etc.
- ✗ Do not take up new sports requiring strength and agility until you discuss it with your surgeon or physical therapist.



Understanding anesthesia

Who are the anesthesiologists?

The Operating Room, Post Anesthesia Care Unit (PACU) and Intensive Care Units at the hospital are staffed by board-certified and board-eligible physician anesthesiologists. Each member of the service is an individual practitioner with privileges to practice at this hospital.

What types of anesthesia are available?

Decisions regarding your anesthesia are tailored to your personal needs. The types available for you are:

- **General anesthesia** — provides loss of consciousness.
- **Regional anesthesia** — involves the injection of a local anesthetic to provide numbness, loss of pain, or loss of sensation to a large region of the body. Regional anesthetic techniques include spinal blocks, epidural blocks and arm or leg blocks. Medications are also given that may make you drowsy and blur your memory.

Will I have any side effects?

Your anesthesiologist will discuss the risks and benefits associated with the different anesthetic options as well as any complications or side effects that can occur with each type of anesthetic. Nausea or vomiting may be related to anesthesia or the type of surgical procedure. Although less of a problem today because of improved anesthetic agents and techniques, these side effects continue to occur for some patients. Medications to treat nausea and vomiting will be given if needed. The amount of discomfort you experience will depend on several factors, especially the type of surgery. Your doctors and nurses will do everything possible to keep your pain at a tolerable level and keep you safe. Do not expect to be totally pain-free at this stage in your recovery. The staff will teach you the pain scale to better assess your pain level.

What will happen before my surgery?

1. In the pre-op area, an IV site will be inserted. IV fluids will be started and pre-operative medications may be given. You will also meet your surgical nurse.
2. You will meet your anesthesiologist immediately before your surgery. Your anesthesiologist will review all information needed to evaluate your general health. This will include your medical history, laboratory test results, allergies and current medications. With this information, the anesthesiologist will determine the type of anesthesia best suited for you. He or she will also answer any further questions you may have.
3. Once in the operating room, monitoring devices will be attached such as a blood pressure cuff, EKG and other devices. At this point, you will be ready for anesthesia.

During surgery, what does my anesthesiologist do?

Your anesthesiologist is responsible for your comfort and well-being before, during and immediately after your surgical procedure. In the operating room, the anesthesiologist will manage vital functions, including heart rate and rhythm, blood pressure, body temperature and breathing. The anesthesiologist is also responsible for fluid and blood replacement when necessary.

What can I expect after the operation?

After surgery, you will be taken to the recovery area (PACU) where specially trained nurses will watch you closely. During this period, you may be given extra oxygen. Your breathing and vital signs will be observed closely. Next, pain control is typically established. Once you are medically stable and your bed is available, you will be transferred to your room in the Joint Replacement Center.

Blood thinners

Monitoring the dosage after discharge from the hospital

Not all blood thinners require lab testing (i.e., aspirin, xarelto). If you are prescribed a blood thinner that requires additional monitoring, here is what to expect:

- **Home** — If you are discharged home with home health services, the home health nurse will come out twice a week to draw the prothrombin time (a lab test that helps determine what dosage you need). These results are called to the surgeon's office who will call you that evening to adjust your dose.

  If you DO NOT utilize home health nursing, then you will have to go to an outpatient medical lab and have the prothrombin time drawn there. These arrangements are coordinated by the surgeon's office who will obtain the results and call you to adjust your blood thinners dose.

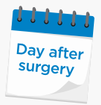
- **Post-acute facility** — If you are transferred, this lab monitoring is usually done two times a week. The physician caring for you at the facility will adjust the blood thinners dose as necessary. When you are discharged from rehab, home health, or outpatient blood monitoring will be arranged by the rehab staff, if necessary.

CAUTION: When taking any blood thinner, it is important to talk with your doctor or pharmacist before starting any new medication.

Physical therapy daily schedule

Please note, times are approximate. The physical therapist will advise patients and family members if the times change.

Expect to walk in the hall at least 100 feet with someone from the care team. Depending on what time you arrive to the Joint Replacement Center, you may meet your physical therapist today.



Your physical therapist will evaluate you in the morning between 8 a.m. and noon (if not already done). Coaches do not need to feel obligated to be at the hospital on this first morning.

The morning group therapy session will be at 9 or 10:30 a.m. and the afternoon session at 1:30 or 3 p.m. Coaches are encouraged to attend as many group therapy sessions as possible. We understand that sometimes coaches cannot be here for all the sessions because of work schedules or other conflicts. If you do not have a coach, we will have one of our volunteers serve as your coach (as available).

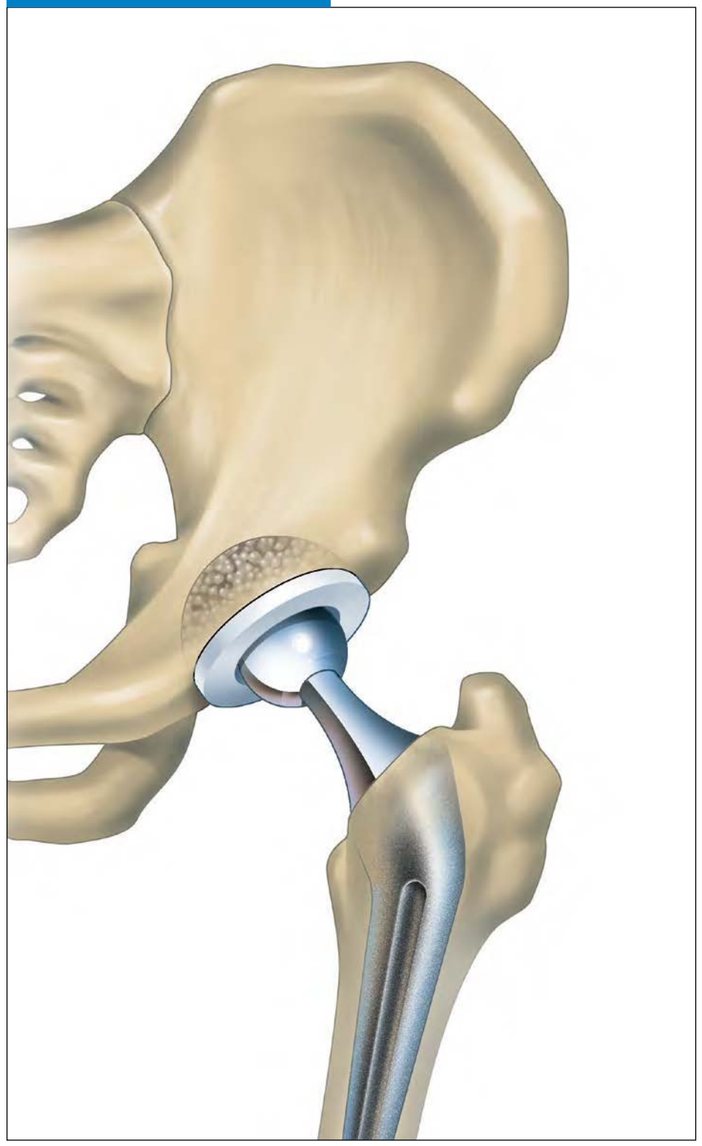
You will have two sessions of group therapy every day until you are ready to go home: one session in the morning and one session in the afternoon. Generally, group times are approximately 9 or 10:30 a.m. and 1:30 or 3 p.m. Coaches are highly encouraged to attend. At times, it may even be necessary for us to add additional class times if we have a lot of patients. Not all locations provide group therapy. It depends on how many patients are in the hospital; however, you will still have two therapy sessions per day.

Some insurance companies will not cover a stay longer than today, unless you have a validated medical reason to be in the hospital. Your safety is our top priority! We have two goals you must meet before we send you home: 1) You must be medically stable 2) You must have met your therapy goals or be cleared by the therapist for discharge. If these goals are not met, discuss your discharge plan with your care manager.

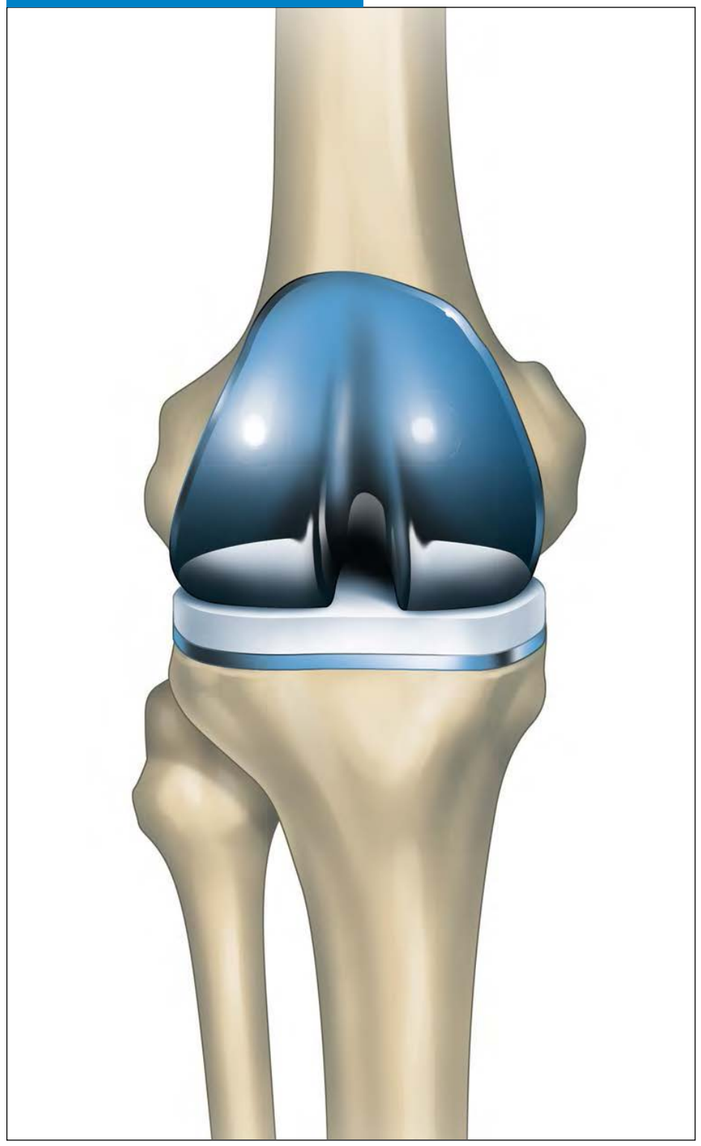
If you need to stay in the hospital beyond day two, additional days will be the same as today.

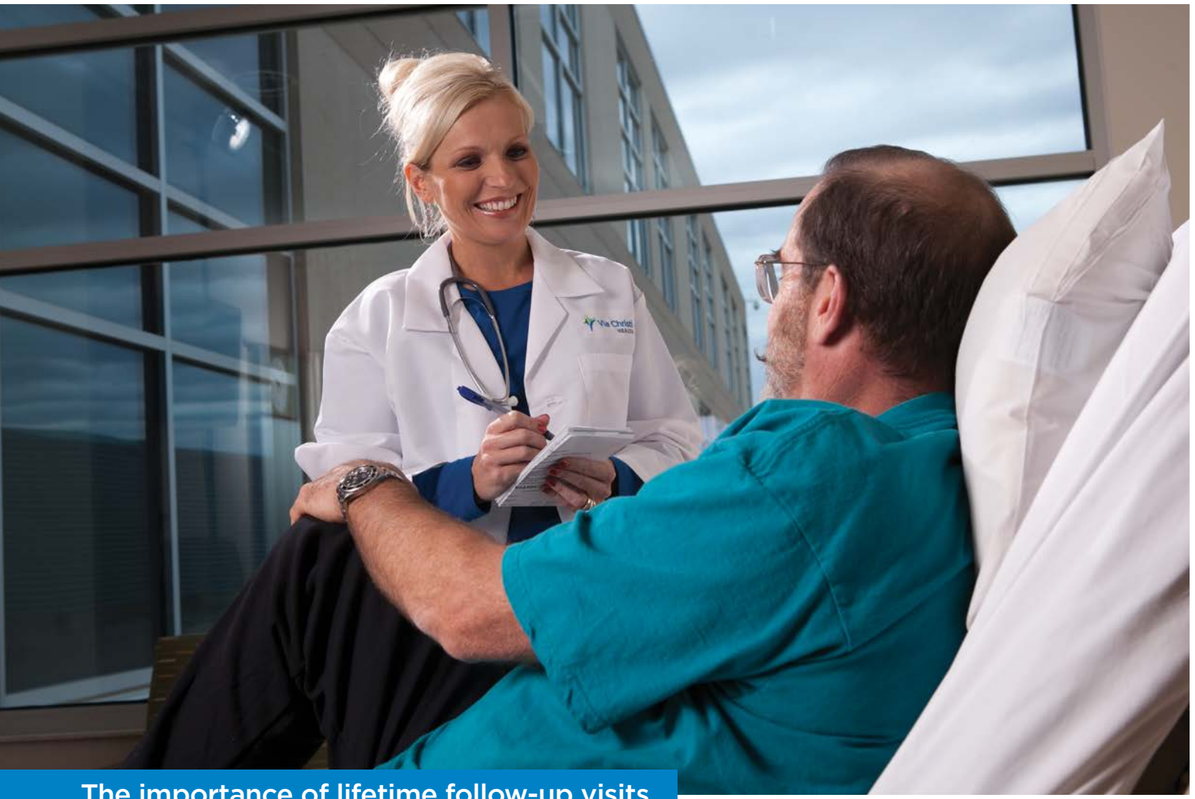
You will have your morning group therapy at either 9 or 10:30 a.m., which your coach should attend. If you have not already done so, today is the day you will practice stairs if you have them at home. If you have met your therapy goals and are medically stable, you will be cleared by discharge.

View of your new hip



View of your new knee





The importance of lifetime follow-up visits

Over the past several years, orthopedic surgeons have discovered that many people are not following up with their surgeons on a regular basis. The reason for this may be that they do not realize they are supposed to, or they do not understand why it is important.

So, when should you follow up with your surgeon?

These are some general rules:

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

There are two good reasons for routine follow-up visits with your orthopedic surgeon:

If you have a cemented joint replacement, we need to evaluate the integrity of the cement. With time and stress, cement may crack. You probably would be unaware of this happening because it usually happens slowly over time. Seeing a crack in cement does not necessarily mean you need another surgery, but it does mean we need to follow things more closely.

Why?

1. **Your joint 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. In both cases, you might not know this for years. Orthopedists are continually learning more about how to deal with both of these problems. The sooner we know about potential problems, the better chance we have of avoiding problems that are more serious.

2. **The bearing surfaces in your joint prosthesis 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. Replacing a worn liner early and grafting the bone can keep this from worsening.

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

We are happy that most patients do so well that they do not think of us often. However, we enjoy seeing you and want to continue to provide you with the best care and advice. If you are unsure how long it has been or when your next visit should be scheduled, call your doctor.
We will be delighted to hear from you.

Glossary

Abdomen: the part of the body commonly thought of as the stomach; it is situated between the hips and the ribs.

Ambulating: walking

Assistive devices: walker, crutches, cane or other device to help you move

Dorsiflexion: bending back the foot or the toes

Dressings: bandages

Embolus: blood clot that becomes lodged in a blood vessel and blocks it

Incentive spirometer: breathing tool to help you exercise your lungs

Incision: wound from your surgery

Osteolysis: a condition in which bone thins and breaks down

OT: occupational therapy

Prothrombin: a protein component in the blood that changes during the clotting process

PT: physical therapy

Vital signs: blood pressure, heart rate, breathing, temperature, pain

Total knee replacement exercise program

All exercises performed 30 repetitions — SLOWLY

Phase 1: The warm up ... circulatory exercises

☐ 1. Ankle pumps

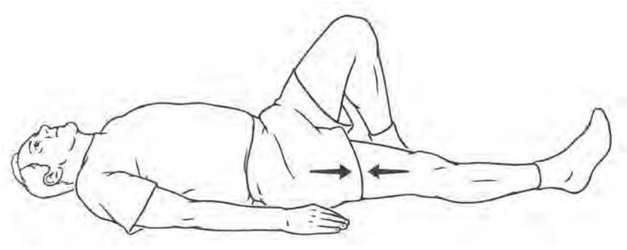
Gently point toes up towards your nose and down towards the surface. Do both ankles at the same time or alternating feet. Perform slowly.

Coach's note: Perform throughout the day — 10/hr. while awake.

☐ 2. Quad sets

Slowly tighten thigh muscles of legs, pushing knees down into the surface. Hold for 10 count.

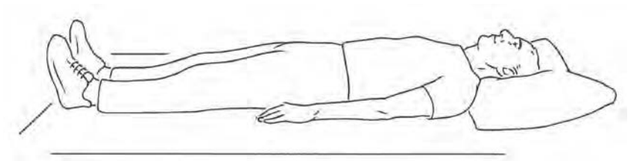
Coach's note: Look and feel for the muscle above the knee to contract. As strength improves, the heel should come slightly off the surface.



3. Gluteal sets

Squeeze the buttocks together as tightly as possible. Hold for 10 count.

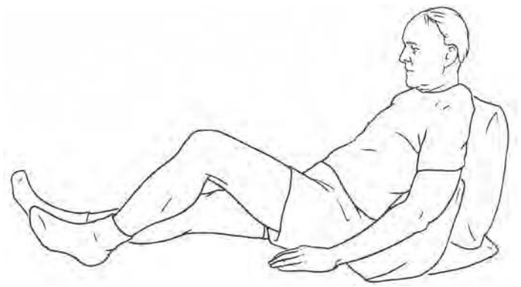
Coach's note: Patient can place hands on right and left gluteal (buttocks) area and feel for equal muscle contractions.



4. Hamstring sets

With knee of operative leg bent slightly, push heel into bed without bending knee further. Hold 5 seconds.

Coach's note: Look and feel for the muscle on the back of the thigh to contract. Ensure hip precautions are maintained!



5. Heel prop

Prop the heel of operative leg on a large roll for 5-10 minutes while using your cold pack. This can be done in bed or in your recliner chair.

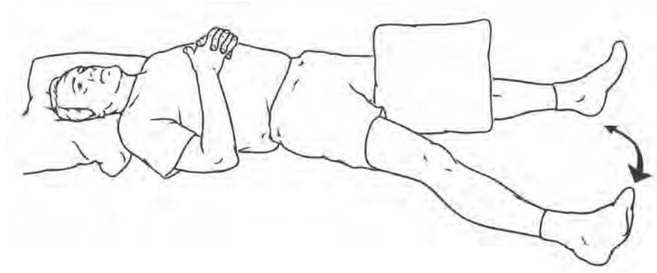
Coach's note: Perform throughout the day with a maximum of a 30-minute break each hour.

Phase 2: Moving down the field ... building strength and flexibility

1. Abduction and adduction

Slide leg out to the side. Keep kneecap and toes pointing toward ceiling. Gently bring leg back to pillow. Keep leg in contact with surface.

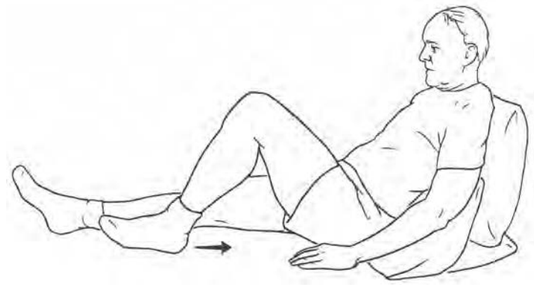
Coach's note: Assist by holding leg under knee and heel. A plastic bag can be used initially under the leg to decrease the friction, making the exercise easier.



2. Heel slides

Bend knee and pull heel toward buttocks. Assist with gaitbelt for increased knee bend.

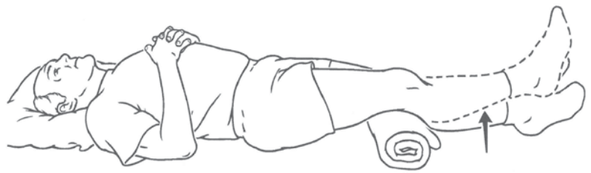
Coach's note: Patient should actively pull the heel up. Upon reaching maximum bend, additional stretch can be achieved by pulling foot with gaitbelt.



3. Short arc quads

Place a large can or rolled towel (about 8" diameter) under the leg. Straighten knee and leg. Hold straight for 5 count.

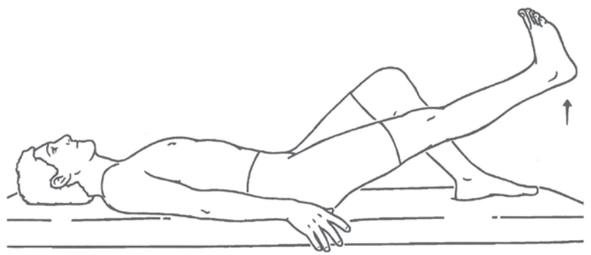
Coach's note: Work for full extension (straightening) of the knee. Assist with hand under heel, encouraging lifting the foot from the hand.



4. Straight leg raises

Bend good knee, securing heel on surface. Keep affected leg as straight as possible and tighten muscles on top of thigh. Slowly lift straight leg 10 inches from the surface and hold for 2 count. Lower it slowly, keeping muscle tight.

Coach's note: Make sure the straight leg is maintained and the knee does not bend with the lift. Go slowly. If needed, put hand under foot to assist.

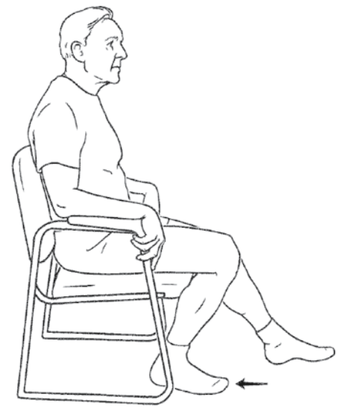


Phase 3: The road to success

1. Sitting knee flexion

Keeping feet on floor, slide foot of operated leg backward, bending knee. Hold for 10 count.

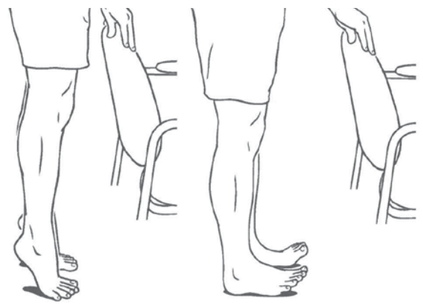
Coach's note: Each time bend to the point of pain and then a little more. Slide feet underneath chair, keeping hips on chair. With foot planted, move bottom forward for final stretch. Hold for 10 count.



2. Standing heel/toe raises

Hold on to an immovable surface. Rise up on toes slowly for 5 count. Come back to foot flat and lift toes from floor.

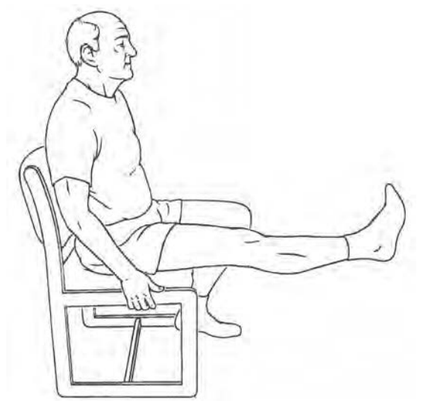
Coach's note: When lifting up, do not lean backward



3. Long arc quad

Slowly straighten operated leg and try to hold it for a 5 count. Bend knee, taking foot under the chair.

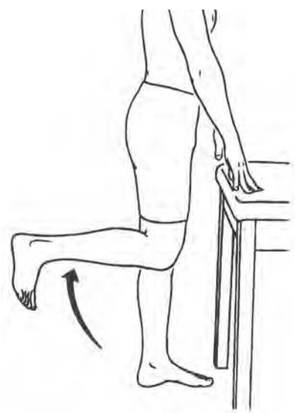
Coach's note: Encourage patient to completely straighten knee.



4. Standing knee flexion

Holding on to an immovable surface, bend the involved leg up behind you. Straighten to a full stand, with weight on both legs.

Coach's note: The tendency is for the hip to come forward as the knee is bent. Encourage a straight line from the shoulder to knee.



Stair/step training:

1. The "good" (non-operated) leg goes UP first.
2. The "bad" (operated) leg goes DOWN first.
3. The cane stays on the level of the operated leg.

Resting positions:

1. No pillows under knees.
2. Lie flat on your back in bed.
3. Do not sit with your knee bent for prolonged periods.

Total hip replacement exercise program

All exercises performed 30 repetitions — SLOWLY

Phase 1: The warm up ... circulatory exercises

1. Ankle pumps

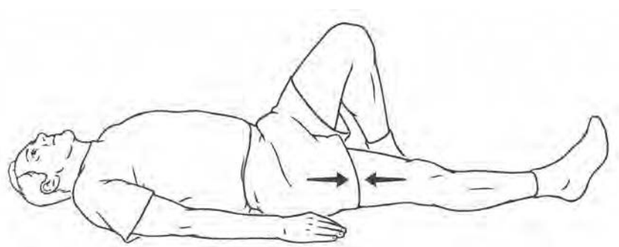
Gently point toes up towards your nose and down towards the surface. Do both ankles at the same time or alternating feet. Perform slowly.

Coach's note: Perform throughout the day — 10/hr. while awake.

2. Quad sets

Slowly tighten thigh muscles of legs, pushing knees down into the surface. Hold for 10 count.

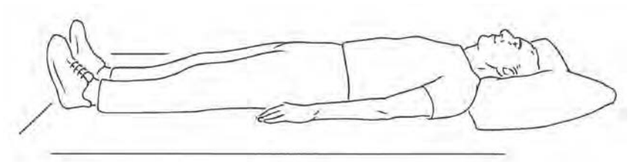
Coach's note: Look and feel for the muscle above the knee to contract. As strength improves, the heel should come slightly off the surface.



3. Gluteal sets

Squeeze the buttocks together as tightly as possible. Hold for 10 count.

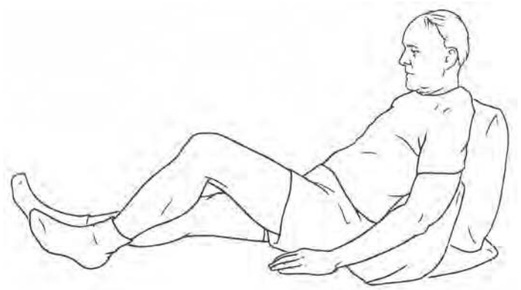
Coach's note: Patient can place hands on right and left gluteal (buttocks) area and feel for equal muscle contractions.



4. Hamstring sets

With knee of operative leg bent slightly, push heel into bed without bending knee further. Hold 5 seconds.

Coach's note: Look and feel for the muscle on the back of the thigh to contract. Ensure hip precautions are maintained!

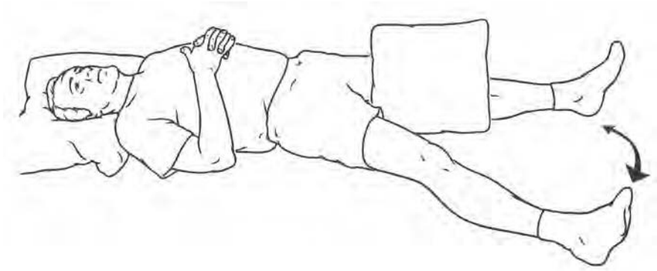


Phase 2: Moving down the field ... building strength and flexibility

1. Abduction and adduction

Slide leg out to the side. Keep kneecap and toes pointing toward ceiling. Gently bring leg back to pillow. Keep leg in contact with surface.

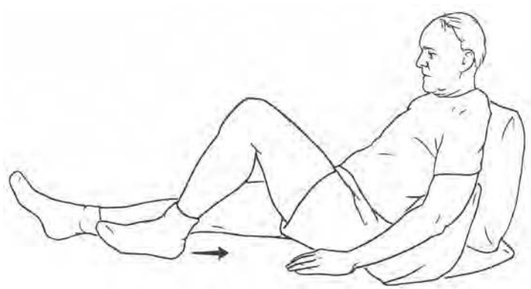
Coach's note: Assist by holding leg under knee and heel. A plastic bag can be used initially under the leg to decrease the friction, making the exercise easier.



2. Heel slides

Bend knee and pull heel toward buttocks. Assist with gaitbelt for increased knee bend.

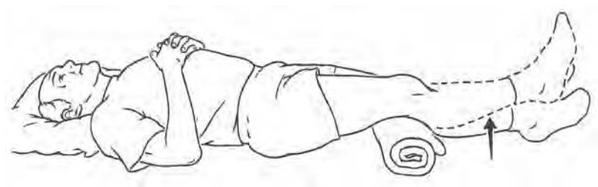
Coach's note: Patient should actively pull the heel up. Ensure hip precautions are maintained!



3. Short arc quads

Place a large can or rolled towel (about 8" diameter) under the leg. Straighten knee and leg. Hold straight for 5 count.

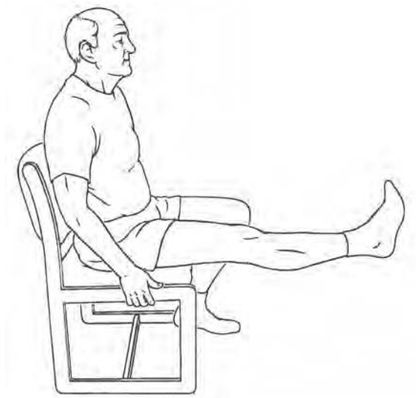
Coach's note: Work for full extension (straightening) of the knee. Assist with hand under heel, encouraging lifting the foot from the hand.



4. Knee extension — long arc quads

Slowly straighten operated leg and try to hold it for 5 count. Bend knee, taking foot under the chair.

Coach's note: Encourage patient to completely straighten knee.

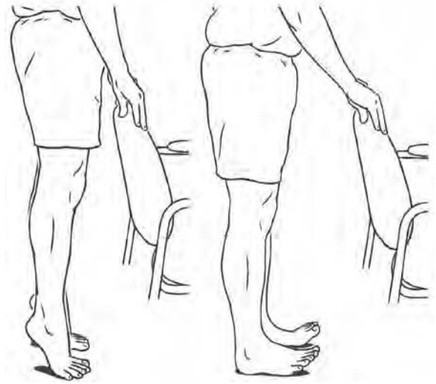


Phase 3: The road to success

1. Standing heel/toe raises

Hold on to an immovable surface. Rise up on toes slowly for 5 count. Come back to foot flat and lift toes from floor.

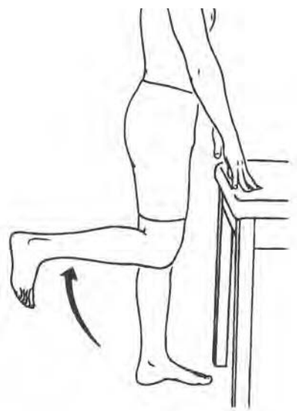
Coach's note: When lifting up, do not lean backward.



2. Standing knee flexion

Holding on to an immovable surface, bend the involved leg up behind you. Straighten to a full stand, with weight on both legs.

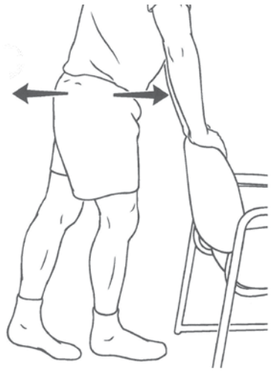
Coach's note: The tendency is for the hip to come forward as the knee is bent. Encourage a straight line from the shoulder to knee.



3. Standing rocks

Holding onto an immovable surface, step non-affected leg forward. Rock weight back and forth over the affected leg keeping the knee straight.

Coach's note: The tendency is for the affected knee to bend. Encourage a straight knee on the affected leg and equal weight bearing through both legs.



4. Standing partial squats

Holding onto an immovable surface, slowly bend knees. Keep both feet flat on the floor.

Coach's note: Encourage erect posture with eyes forward. Do not bend at the waist. Ensure hip precautions are maintained!

Hip precautions

1. Do not bend your hip greater than 90 degrees.
2. Do not cross your legs.
3. Do not twist/pivot on your new hip.

Stair/step training:

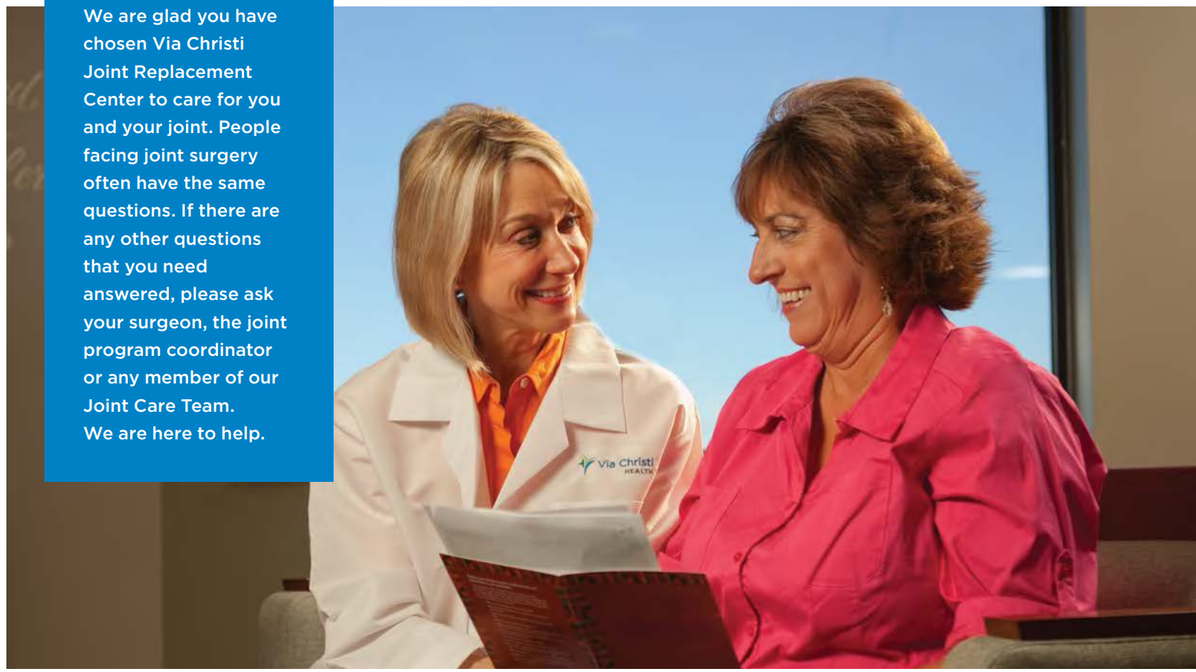
4. The "good" (non-operated) leg goes UP first.
5. The "bad" (operated) leg goes DOWN first.
6. The cane stays on the level of the operated leg.

Resting positions:

To stretch your hip to a neutral position:

1. Lie/sleep flat on your back in bed.
2. Do NOT use pillows under the knees.

We are glad you have chosen Via Christi Joint Replacement Center to care for you and your joint. People facing joint surgery often have the same questions. If there are any other questions that you need answered, please ask your surgeon, the joint program coordinator or any member of our Joint Care Team. We are here to help.



What is osteoarthritis and why does my joint hurt?

A: Joint cartilage is a tough, smooth tissue that covers the ends of bones where joints are located. It helps cushion the bones during movement, and because it is smooth and slippery, it allows for motion with minimal friction. Osteoarthritis, the most common form of arthritis, is a wear and tear condition that destroys joint cartilage. Sometimes, as the result of 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, along with swelling and loss of motion. Osteoarthritis usually occurs later in life and may affect only one joint or many joints.

What is total hip replacement?

A: The term total hip replacement is somewhat misleading. The hip itself is not replaced, as is commonly thought, but rather an implant is used to re-cap the worn bone ends. The head of the femur is removed. A metal stem is then inserted into the femur shaft and topped with a metal or ceramic ball. The worn socket (acetabulum) is smoothed and lined with a metal cup and either a plastic, metal, or ceramic liner. No longer does bone rub on bone, causing pain and stiffness.

What is total knee replacement?

A: The term total knee replacement is misleading. The knee itself if not replaced, as is commonly thought, but rather an implant is used to re-cap the worn bone ends. 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 joint last and can a second replacement be done?

A: All implants have a limited life expectancy depending on an individual's age, weight, activity level and medical condition(s). A total joint implant's longevity will vary in every patient. It is important to remember that an implant is a medical device subject to wear that may lead to mechanical failure. While it is important to follow all of your surgeon's recommendations after surgery, there is no guarantee that your particular implant will last for any specified length of time.

What are the major risks?

A: Most surgeries go well, without any complications. Infection and blood clots are two serious complications. To avoid these complications, your surgeon may use antibiotics and blood thinners. Surgeons also take special precautions in the operating room to reduce the risk of infection.

How long will I be in the hospital?

A: Most patients who have joint replacement will be hospitalized for two days after surgery. There are several goals that must be achieved before discharge.

What if I live alone?

A: Three options are available to you. You may return home and receive help from a relative or friend. You can have a home health nurse and physical therapist visit you at home for two or three weeks. You may also stay in a post-acute facility following your hospital stay if approved by your insurance.

How do I prepare for surgery?

A: Once your surgery has been scheduled, your surgeon's office will provide you with information about your surgery, any pre-operative labs or medical clearance needed and other special instructions. You will also be provided with information about our free pre-operative class "Beginning Your Joint Journey: Preparing for Hip and Knee Replacement Surgery". Our joint program coordinator's role is described in the Guidebook and a telephone number is also provided. Our goal is to ensure you are as prepared as possible for surgery.

What happens during the surgery?

A: Typically, the hospital reserves approximately one to two hours for surgery. Some of this time will be taken by the operating room staff to prepare for surgery. You may have a general anesthetic, which most people call "being put to sleep." Some patients prefer to have a spinal or epidural anesthetic, which numbs the legs and does not require you to be asleep. The choice is between you, your surgeon and the anesthesiologists. For more information, read "Understanding Anesthesia" in this Guidebook.

Will the surgery be painful?

A: You will have discomfort following the surgery, but we will try to keep your pain at a tolerable level with the appropriate medication. Your care team will work together with you to reach this goal.

How long and where will my scar be?

A: There are a number of different techniques used for joint replacement surgery. The type of technique will determine the exact location and length of the scar. Your surgeon will discuss which type of approach is best for you. Please note that there may be some numbness around the scar after it is healed. This is perfectly normal and should not cause any concern. The numbness usually disappears with time.

Will I need a walker, crutches or a cane?

A: Patients progress at their own rate. Normally we recommend that you use a walker to begin with, progressing to crutches or a cane at about four to six weeks. The care management team can arrange for them if necessary.

Where will I go after discharge from the hospital?

A: Most patients are able to go home directly after discharge. Some patients may transfer to a post-acute facility, where they will stay depending upon progress. The care manager, along with recommendations from other members of our joint care team will help you with this decision and make the necessary arrangements. You should check with your insurance company to see if you have post-acute rehab benefits and discuss any requirements to qualify.

Will I need help at home?

A: Yes. 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 care management team will arrange for any potential home needs. Family or friends need to be available to help if possible. Preparing ahead of time, before your surgery, can minimize the amount of help needed. Having the laundry done, house cleaned, yard work completed, clean linens put on the bed, and single-portion frozen meals will help reduce the need for extra help.

Will I need physical therapy when I go home?

A: Yes, you will have either outpatient or in-home physical therapy as directed by your physician. Patients are encouraged to utilize outpatient physical therapy. We encourage you to make your appointments before you have surgery or at minimum, before you are discharged from the hospital. One of our joint care team members can assist you as needed. If you meet requirements and need home physical therapy, we will arrange for a physical therapist to provide therapy in your home. Following this, you may go to an outpatient facility two to three times a week to assist in your rehabilitation. The length of time for this type of therapy varies with each patient.

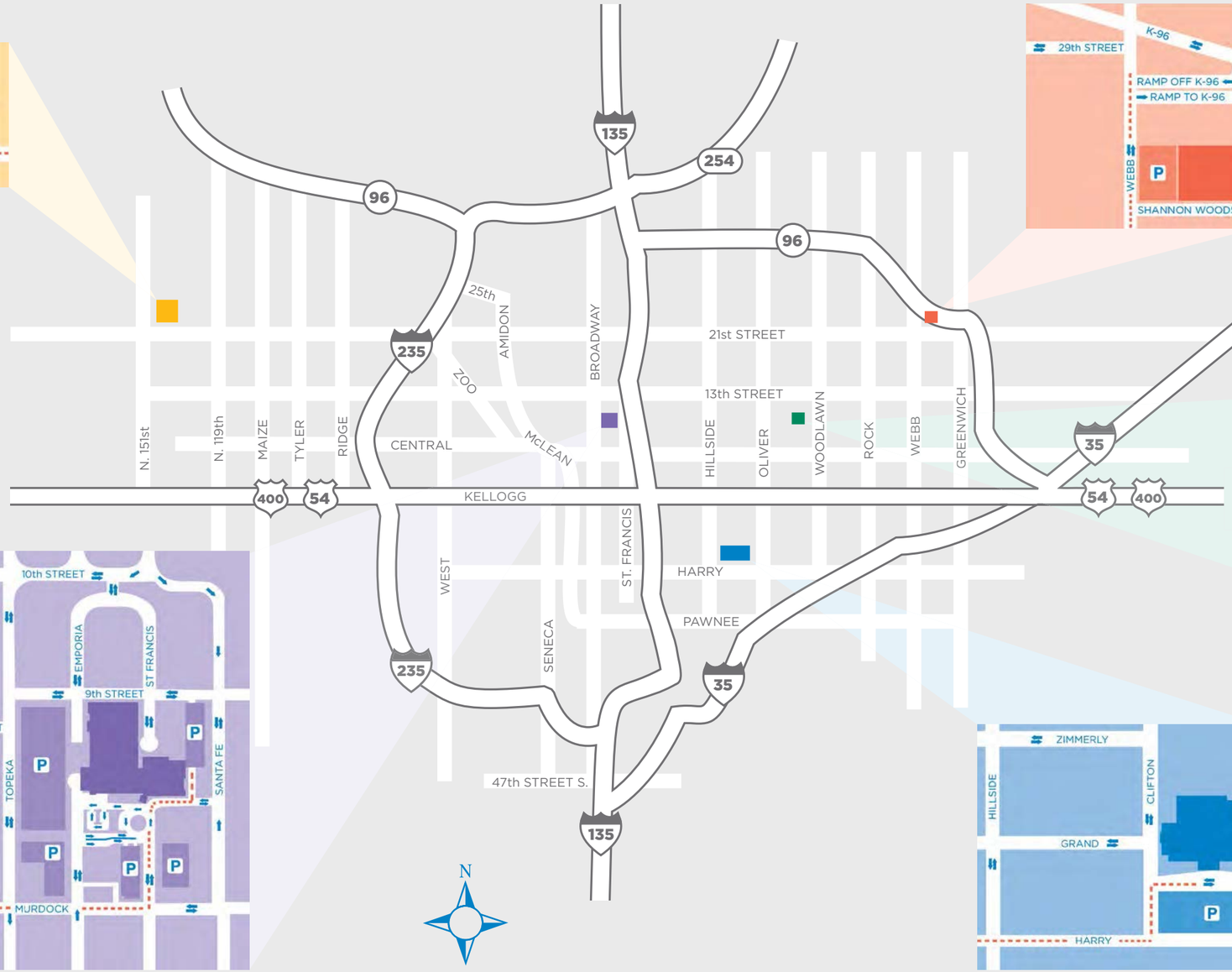
Will my new joint set off security sensors when traveling?

A: Your joint replacement is made of a metal alloy which 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 the security screening procedure. You can consider carrying a medic alert card indicating that you have an artificial joint. Check with your surgeon on how to obtain one if needed.

Via Christi Hospital St. Teresa
14800 W. St. Teresa • 316.268.5000

Directions from Kellogg/US-400/US-54
- Follow Kellogg/US-400/US-54 to the 119th St. W. exit, and turn north
- Turn west on W. 21st N.
- Turn north on St. Teresa St.

Directions from KS-96:
- Follow KS-96 to Ridge Rd. exit
- Go south on Ridge Rd.
- Turn west on W. 21st St. N.
- Turn north on St. Teresa St.



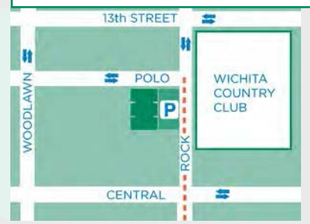
Kansas Surgery and Recovery Center
2770 N. Webb Rd. • 316.634.0090

Directions from Kellogg/US-400/US-54
- Follow Kellogg/US-400/US-54
- Turn north on Webb Rd.
- Hospital is on your left

Directions from KS-96:
- Follow KS-96 to Webb Rd. exit
- Go south on Webb Rd.
- Hospital is on your left

Via Christi Rehabilitation Hospital
1151 N. Rock Rd. • 316.634.3400

Directions from Kellogg/US-400/US-54
- Follow Kellogg/US-400/US-54
- Turn north on Rock Rd.
- Hospital is on your left



Via Christi Hospital St. Francis
929 N. St. Francis • 316.268.5000

Directions from Interstate Highway 135
- Follow I-135 to the 8th/9th St. Exit
- Head west on 8th St.
  Note: 8th St. will become Murdock
- Turn north on St. Francis Street to enter the hospital campus

Directions from Kellogg/US-400/US-54
- Follow Kellogg/US-400/US-54 to the Central Business District exit
- Continue straight to Broadway
- Turn north on Broadway
- Turn east on Murdock
- Turn north on St. Francis St. to enter the hospital campus

Additional details
- Patients may be dropped off at the main entrance
- Cars may be parked in the hospital parking garage
- The patient registration area is located in the main lobby on level 1

Via Christi Hospital St. Joseph
3600 E. Harry • 316.268.5000

Directions from Interstate Highway 135
- Follow I-135 to the Harry St. exit
- Head east on Harry St.
- Turn north on Clifton St.
- Hospital is on your right

Directions from Kellogg/US-400/US-54
- Kellogg/US-400/US-54 to Hillside exit
- Head south on Hillside St.
- Turn east on Harry St.
- Turn north on Clifton St.
- Hospital is on your right

Additional details
- Patients may be dropped off at the main entrance
- Cars may be parked in the parking lot in front of the hospital

Kansas Surgery & Recovery Center

2770 N Webb Road
Wichita, KS 67226

PH 316.634.0090

Via Christi
Joint Replacement Center

929 N. St. Francis
14800 W. St. Teresa

PH 316.268.8274

viachristi.org/jointcenter

Via Christi offers a continuum of care from the birth of a child to enhancing the lives of older adults. This program or service is part of Via Christi Hospitals Wichita, Inc.

Via Christi is an Equal Opportunity (EOE) and Affirmative Action Employer. We support diversity in the workplace.