

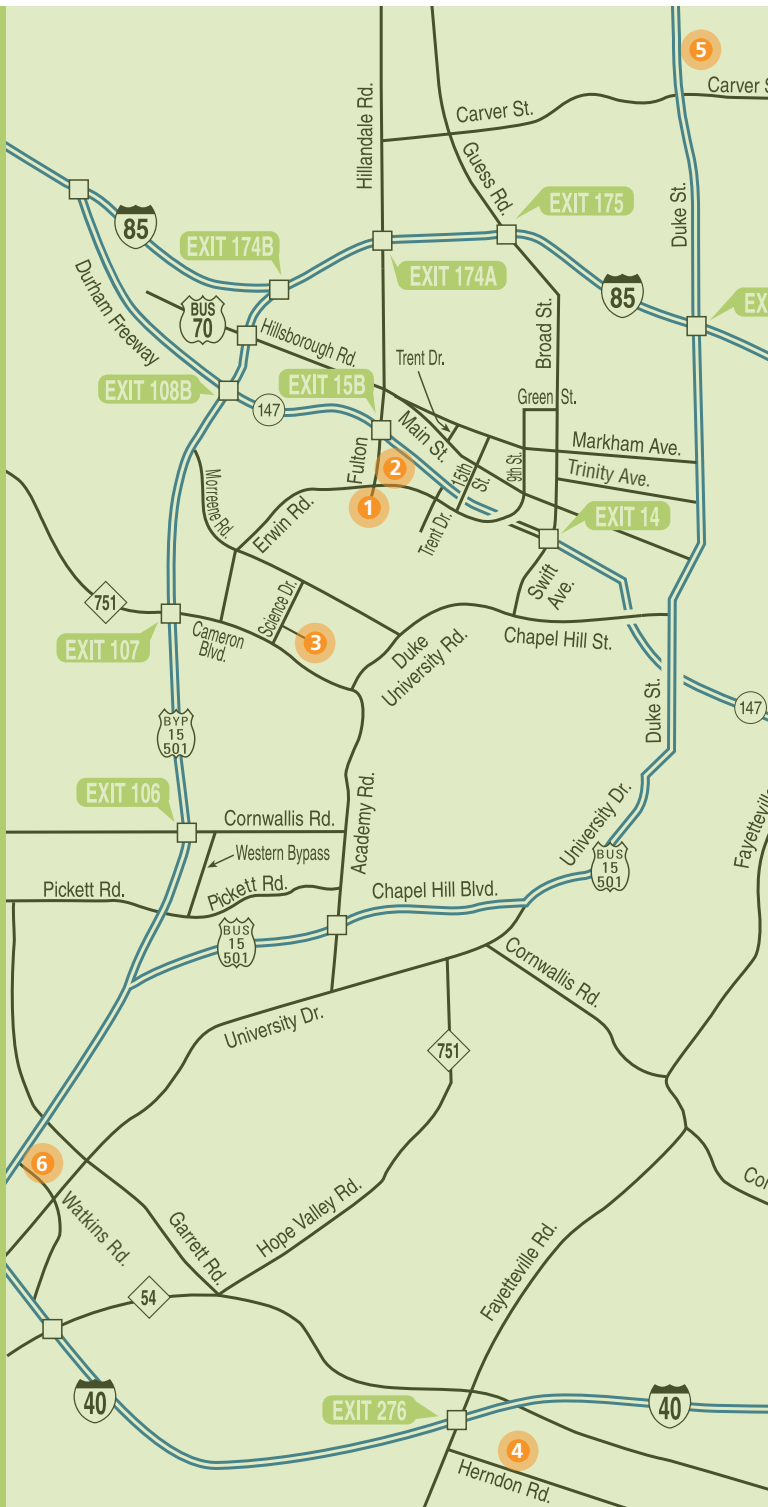


Duke Total Joint Center



Locations

For appointments, call 1-888-ASK-DUKE (1-888-275-3853), unless otherwise noted below.



- 1 Duke Orthopaedics at Duke University Hospital**
Duke Clinic 1F
Trent Drive and Erwin Road
Durham, NC 27710
- 2 Duke Orthopaedics at Duke Ambulatory Surgery Center**
North Pavilion on Pratt Street
Durham, NC 27710
- 3 Duke Sports Medicine Clinic**
317 Finch Yeager Building
Durham, NC 27710
Main Number: 919-684-5888
Clinic Appointments: 1-888-401-7266 or 919-684-4502
Physical Therapy Appointments: 919-681-1656
- 4 Duke Orthopaedics at Southpoint**
6301 Herndon Road
Durham, NC 27713
- 5 Duke Orthopaedics at North Duke Street**
3116 North Duke Street
Durham, NC 27704
- 6 North Carolina Orthopaedic Clinic**
3609 Watkins Road
Durham, NC 27707
Appointments: 919-471-9622

The Duke Total Joint Center offers a care team that includes doctors, nurses, physical therapists, occupational therapists, resource managers, and many others who are specially trained to take care of conditions affecting the hip, knee, shoulder, elbow, or ankle. We are glad that you have chosen to have your surgery at our hospital.

Uncommon Care for Common Problems

When it comes to surgery of any type, there is no substitute for experience. The Duke Total Joint Center team performs over 1,000 hip and knee surgeries each year. And because of our highly qualified staff and medical facilities, patients come to Duke from around the world for our expert care.

While the hip and knee are the most commonly replaced joints, we also have experience with shoulder, elbow, hand, ankle, and other joints. Whether it is the latest tool, technique, or material, our surgeons have the skill to select the treatment that is right specifically for you.

Patient Needs...Our First Concern

Just as no two patients are alike, no two surgeries are the same. Our care for you will focus on your medical and personal needs. Our goals for you are twofold: a comfortable and speedy recovery, and a safe return home. Our patients experience few complications, good results, and high satisfaction with their care.

The information that follows will give you a better understanding of what to expect after surgery and reduce any fears you may have.

Tell Us What You Think

While you are a patient in the hospital, we want to know how we are doing as your care provider. Your doctors and nurses are ready to help meet your needs and address any questions or concerns you may have. Talk with them at any time.

You may also receive a survey after you leave the hospital. This is another chance to tell us about your experience throughout your hospitalization. Please take a few moments and complete the survey. Your feedback is very important to us.

From the entire staff at Duke University Hospital, we hope your time with us is as pleasant as possible and that you have a complete recovery and improved quality of life.



Physical Therapy

A physical therapist will work with you every day to help you perform exercises, teach you precautions based on the surgical approach used by your surgeon, and get you up and moving! The therapist will also evaluate your equipment needs at home and make recommendations for the discharge plan.

Total Hip Replacement

Positions to avoid for six to eight weeks after surgery

The therapist will tell you which surgical approach your doctor used so you can follow one of these precautions. Not all of these precautions are routinely implemented or mandatory for each individual case. Your surgeon will personalize any set of precautions for you.

A. Posterior approach

1. Do not bend the operated hip past 90 degrees.
2. Do not cross the midline of your body with the operated leg.
3. Do not rotate the operated leg inward. Toes and kneecap should point towards the ceiling when in bed.

B. Anterior approach

1. Do not extend your leg behind you. If backing up, lead with the “good” leg. Do not lie on your stomach.
2. Do not cross your midline with the operated leg.
3. Do not rotate your leg outward.

C. Other positioning concerns

1. Avoid prolonged sitting, i.e. more than one to two hours at a time. Stand up, walk, or lie down instead.
2. Do not put a pillow under your knee while in bed or sitting.
3. You are encouraged to spend some time—about 30 minutes twice a day—lying flat on your back in order to maintain flexibility of the hip muscles. At six weeks after surgery, you may roll onto your stomach.

Walking and steps

- A. Use a walker or crutches until your doctor says you no longer need them (approximately four to six weeks). You will be instructed on how much weight you can put on your leg, usually about 50 percent.
- B. Always go **up** steps with your stronger leg first, followed by the weaker leg, then the assistive device. To go **down**, use the assistive device first, then the weaker leg, then the stronger leg. Remember to use the railing if one is available to you.

Activities of daily living

Follow for the next six to eight weeks

- A. Do not drive until given permission by your doctor.
- B. Riding in a car is permitted as long as you stop every hour or two to walk around for several minutes before resuming your ride. A reclining car seat or reclined position is recommended for comfort and safety.
- C. When sitting, avoid low chairs and sofas. Instead, sit on a higher chair or chair with a firm pillow in it. A recliner might be more comfortable. Avoid crossing your legs.
- D. You may roll to either side when in bed. When rolling to your non-operative side, place two pillows between your legs to help maintain a good hip position.
- E. Avoid gaining excessive weight. Try to maintain ideal weight.
- F. Avoid low/conventional toilet seats. An elevated toilet seat must be used instead. If in public, use handicapped facilities to assure adequate toilet height.
- G. Avoid stooping, squatting, or bending forward. If an item is needed in the lower

cabinets or on the floor, call for assistance or use a reacher.

- H. When sitting or standing, always place the operated leg out in front to prevent excessive pressure on the hip. Studies show a hip receives more pressure during sitting and standing transfers than actual walking.

Exercise

Follow for the next six to eight weeks

- A. Continue the exercise program that your therapist has given you. After four weeks, you can add small, 1- to 3-pound ankle weights.
- B. You may be instructed by your therapist to progress your exercise program after six weeks. You may do this on your own or with a family member's help.
- C. Continue to walk with your walker or crutches to help increase your endurance.
- D. You may ride a stationary bike four weeks after surgery with no resistance on the pedals. Raise the seat a little higher than usual so you don't bend your hip too far.
- E. You may begin swimming after your incision heals (usually two weeks after surgery). Use a ramp or steps with a railing to get in and out of the pool. Do not use the ladder.

After eight weeks

- F. Continue a walking, swimming, or stationary biking program for aerobic conditioning.
- G. You may resume golf or cycling after three months.
- H. Avoid jarring or stop-start activities such as jogging or aerobics—these activities might loosen your prosthesis.

Total Knee Replacement

Walking

- A. Use a walker or crutches until your doctor says you no longer need them. You will be instructed on how much weight you may put on your affected leg.
- B. Steps: Always go **up** with your strong leg and assistive device. To go **down**, use the assistive device first, followed by the operated leg, then the stronger leg.

Positioning

- A. Do not wear the knee immobilizer splint during the day. It is important to practice your bending exercises frequently (every one to two hours) to prevent stiffness.
- B. Do not put a pillow under your knee while in bed or sitting. This position will eventually keep your knee from straightening.

Swelling

You can expect swelling in your knee and leg for a few months after surgery. To help reduce or prevent swelling:

- A. Elevate your ankle and knee above your heart. Do ankle pumps at least every hour.
- B. Put ice packs on the operated knee (to make an ice pack, fill a plastic bag with ice, wrap a towel around your knee, and put ice pack on top of the towel).
- C. Do not use pain-relief creams/patches such as BenGay, Icy Hot, etc.

Activities of daily living

Follow for the next six to eight weeks

- A. Do not drive until given permission by your doctor.
- B. You may shower once the incision is healed.
- C. Avoid high-heeled shoes or slip-on slippers. Instead, wear good walking or tennis shoes.
- D. Avoid scatter/throw rugs. Put them up while walking on crutches/walker.
- E. Avoid gaining excessive weight.

Exercise

- A. Follow exercise instructions given by your physical therapist. Continue working on the exercises until you can straighten your knee completely and bend it to at least 90 degrees.
- B. Swimming may be started as soon as your incision heals. Be sure to get into the pool via ramp or steps. Do not use the up/down ladder or sit on the side of pool.
- C. A stationary bike may be used four weeks after surgery with the resistance set at neutral.

Additional activities

After six to eight weeks

- A. Walking is an excellent exercise to help build strength and general conditioning.
- B. Avoid jogging or any other sport that requires stop-start or jarring movements. These exercises may loosen the prosthesis.
- C. Golf may resume after three months.
- D. Consider swimming for general conditioning and endurance.





Occupational Therapy

Following your knee replacement or hip surgery, you will be seen by an occupational therapist who will instruct you to safely perform activities of daily living, such as bathing, dressing, toileting, and bed mobility.

Hip Surgery

Hip precautions

It may be necessary for you to follow some of the limitations listed below while you are recovering from your hip replacement surgery. Your specific precautions will be determined by your physician based on your individual situation. Not all of the precautions listed below are considered mandatory.

A. Posterior approach

1. While sitting, do not bend forward or lift your knee higher than your operated hip. Maintain a 90-degree angle while taking on and off your pants, shoes, and socks. Use your ADL devices to reach your feet for self-care tasks. For safety, avoid high-heeled shoes or slip-on slippers.
2. Do not cross your legs or allow your legs to turn inward. Sleep on your back with a pillow between your legs. If you must sleep on your side, sleep on the operated side with a pillow between your legs.
3. Do not twist while standing or lying down.
4. Observe your weight-bearing precautions during walking. Consider using an apron with pockets or a utility cart to carry items at home.

5. You are not permitted to sit in a tub to take a bath. You may use a tub transfer bench to take a shower or sponge bath at the sink.
6. Avoid sitting on any low toilet seat, chair, or sofa that will not allow you to maintain a 90-degree or open angle while sitting. A 3-in-1 commode/bedside commode may be used over your toilet.
7. Avoid bending forward to pick up items. Use your reacher or ask for assistance.

B. Anterior approach

1. Do not extend your leg behind you when dressing, bathing, and backing up to the toilet.
2. Do not cross the midline of your body with the operated leg while putting on socks or shoes.
3. Do not rotate your operated leg outward.

During your stay

The occupational therapist will review important information about how to safely perform your activities of daily living. The therapist will discuss how to safely bathe, dress, prepare food and function independently at home after surgery.

Some helpful hints

- A. Plan to use a shower or sponge bath at home after surgery. A walk-in stall shower with a support rail is ideal. A shower seat or 3:1 bedside commode may also be useful if

applicable to your bathroom. If you cannot safely get in and out of the shower, you may sponge bathe at a sink.

- B. A bag can be attached to your walker or crutches to help you carry items.
- C. Modify your cabinets and refrigerator, closets, etc., before the date of your surgery to place frequently used items within easy reach.

Long-handled devices

To help increase your independence with activities of daily living, you may use a reacher for lower-body dressing and to pick items up from the floor, a sock aid to don your socks, a long-handled bath sponge to wash your feet, a long-handled shoehorn to don your shoes, and a leg lifter to help move your operated leg in and out of a bed or car.

If you have difficulties with holding onto the handle of a reacher, you may use the dressing stick instead. Elastic shoelaces may be used to modify tied shoes into slip-on shoes.

Please purchase the reacher, sock aid, long-handled bath sponge, long-handled shoehorn, and leg lifter, and bring them with you to the hospital. During your stay, the occupational therapist will teach you how to use them.

These items can be purchased from a medical supply store or catalog. If you have any questions, please call 919-681-2030, and ask to speak with an occupational therapist. Your insurance may not cover these items.

Do not purchase a walker or commode before coming to the hospital as these items will be obtained for you.



Reacher



Sock Aid



Leg Lifter



Long-handled
Sponge



Long-handled
Shoehorn



Dressing Stick



Elastic Shoelaces





Pre-admission and Nursing

Bring to the hospital

1. Personal items such as toothbrush, toothpaste, dentures, lotion, powder, deodorant, comb/hairbrush, eyeglasses, contact lenses, and hearing aids
2. Robe and nonskid slippers
3. Personal equipment such as walker, crutches, canes, braces, or other items for your particular care needs
4. Up-to-date list of medications you currently take. Include the dose and how often you take the medication. Please do not bring the medication, as it will be provided for you at the hospital.
5. Loose-fitting clothes for when you go home. Button-down tops may work better than a pullover.
6. A telephone calling card that will allow you to call outside of the Triangle area (optional)
7. A copy of a North Carolina living will, durable power of attorney, or health care power of attorney. If you do not have one of these documents, ask for information in the pre-operative screening clinic.

All personal items brought to the hospital are your responsibility. The hospital cannot be responsible for the loss or damage of personal items.

Leave at home

1. Large amounts of cash
2. Valuables of any kind
3. Medications
4. Cigarettes, pipes, and cigars. Duke University Hospital is a non-smoking and tobacco-free facility. Smoking in the room is not permitted.
5. Alcohol or illegal drugs
6. Food that needs refrigeration
7. Large items or suitcases that need storage

Preoperative concerns

1. Ask your physician about blood donation. Currently most doctors are not recommending that you give blood ahead of time, except for bilateral surgery or revisions, but there may be other reasons why donation may be necessary.
2. Ask your doctor about when to stop specific medications if you have not been instructed. This step is usually taken during your pre-operative visit for surgery.
3. A few days before surgery, eat light meals so that you will not have post-operative constipation.

Visitors' information

1. Visitors are welcome, but please limit the number of visitors to two at a time.
2. Children under 12 years of age are allowed only in special circumstances. Please check with your nurse.
3. One person may stay with the patient overnight to assist them. This visitor will be permitted to sleep in the recliner. Overnight visitation requires a visitor pass after 9 p.m. The pass can be obtained from the unit secretary nightly.
4. Cell phones are not to be used in patient rooms, but may be used in the hall outside of the unit.
5. Please be respectful of other patients' privacy, and keep the noise level low in your room.
6. If you want to speak with the care nurse or doctor, use the call button located on the side rail of the bed to request their attention.

Length of stay

The expected length of stay is three nights with discharge the next morning by 11 a.m. For some patients, the medical condition may require a longer stay. Your doctor will let you know if this happens.

Please make arrangements with family or friends to arrive by 9 a.m. on the morning of discharge.

Everyone who is being discharged directly home will have a final physical therapy treatment session and instruction the morning of discharge. Written instructions will be provided by your nurse before you leave. It is helpful to have a family member or friend also present to discuss this information.

Care expectations

1. You will have a team of professionals to take care of you. Your team will consist of:
 - a. **Attending physician, residents, and physician assistants.** There is always a resident available to evaluate you, write orders, or answer your questions.
 - b. **Care nurse and nursing assistants.** They will provide round-the-clock monitoring of your condition and will give you medications, treatments, and personal care. As a part of your therapy, you will be encouraged to attend to as much of your own hygiene as you are able.
 - c. **Physical therapist.** Your therapist will work with you on mobility and precautions resulting from your surgery and provide discharge information as well.
 - d. **Occupational therapist.** Your therapist will provide you with information and education about taking care of yourself after discharge.
 - e. **Patient resource manager (PRM).** Your PRM will assist you in making discharge arrangements and contact your insurance company if necessary.

There are many other departments, including the Operating Room, Food Services, Radiology, and Laboratory Services which will also be providing care to you as needed.

2. It is important that you participate in your care as much as possible. You will be seen by therapists every day, and you need to be available to them when they come to your room.
3. Three meals a day are served by Food Services. Your nurse can contact them so they know of your food preferences or special needs.
4. Each bed is equipped with a nurse call system to request help. When your call is answered, please let them know what is needed so they may contact the appropriate person.

Immediately after surgery

There are several things that you need to concentrate on and know about during your recovery:

1. The nurses will check on you frequently and assist you to turn. You may lie on either side but will need help and support with pillows. Please ask for assistance.
2. The nursing assistant will provide you with a basin of water for washing and will help you with areas you cannot or should not reach. Remember, you must not bend more than 90 degrees forward. Please do as much for yourself as possible.
3. You will be given an incentive spirometer to use hourly while awake to prevent breathing difficulties. Your nurse will show you how to use the equipment.
4. Remember that opioids (narcotics) can cause constipation. Ask for a laxative if the stool softener given to you routinely is not enough.

Blood clot prevention

You will be started on medication to prevent blood clots. Your surgeon will specify the blood clot medication based on your needs. One drug that is sometimes ordered is Lovenox, a medication that is given by injection through a tiny needle into the fatty tissue of the abdomen. This medication will need to be continued after you leave the hospital. If this is ordered, your nurse will teach you and another person of your choice on how to give this shot. It is simple and easy to learn.

The usual dose of Lovenox is 40 milligrams (mgm), once a day for 10 to 14 days. If you live in a small town, please check with your pharmacy to see if Lovenox is available. If it is not, please ask your local pharmacist to order it so you can obtain it when you get home.

Please ask questions

Although we do our best to answer commonly asked questions, you may need more information. Please call the clinical nurse specialist at 919-668-2978, or the nurse manager at 919-681-6142, with additional questions.





Pain Management

You may be living with pain now and thinking about your upcoming surgery. At the Duke Total Joint Center, pain management is an integral part of your overall treatment plan. You will be asked often if you are having pain. Your answers should convey:

- **What type of pain you are having.** Words you may find helpful to describe your pain include: sharp, dull, stabbing, shooting, burning, crushing, or pins and needles.
- **How much pain you are having.** You can describe the intensity of pain on a scale of zero to 10. On this scale, zero is no pain, and 10 would be the worst pain you can imagine. Other scales are available. The staff will work with you to find a scale that you find easiest to use.
- **Where the pain is located.** Is it at the surgical site or somewhere else? Does the pain stay in one place or does it move?

Pain management after surgery

There are four possible ways to manage your pain after surgery. Your doctor will discuss with you the recommended method of pain management. Feel free to ask any questions you have about the information you are given.

For the first three options, the patient has control over the level of pain control, and **only the patient may push a button for more doses.**

- **Epidural catheter.** This involves a tiny flexible tube inserted into your back through which pain medication is given.
- **Regional catheter (nerve block).** This involves a tiny flexible tube inserted next to a

large nerve through which pain medication is given.

- **Patient-controlled analgesia (PCA).** Medication is given through the IV when the patient pushes the button.
- **Oral medications.** Pain medications may be given by mouth after the first or second day. The medications may be scheduled so that you get them at specific times each day or just when you ask for them. Your nurse will let you know what types of medications are available for your use.

At Duke we place priority on managing your pain, but we need your help. With your assistance and cooperation in communicating your pain, we will work with you to establish a realistic pain relief goal and ways to achieve this goal.

Opioid side effects

Opioids (narcotics) are one type of medication that may be used to control your pain after surgery. Examples of opioids include morphine, hydromorphone, fentanyl, oxycodone, and Oxy-Contin. Every medication has side effects. Listed below you will find some of the most common side effects of opioids and how we manage them.

- **Nausea and vomiting.** Medications are available to help with nausea and vomiting, so let your nurse know if you are having these side effects. Other ways to manage nausea and vomiting include eating small amounts of bland foods and taking sips of clear liquids.
- **Itching.** Let your nurse know if the itching is bothersome, as medication is available to relieve the problem. Some patients are sensitive to the detergents used to launder the linens or may itch from other medications. Medication will be given to you based on the reason for the itching.
- **Sleepiness.** The nursing staff will check on you every two hours for the first 24 to 48 hours to make sure you are not too sleepy. For your safety, this includes waking you up if you are asleep. If you become too sleepy, you may not breathe well and have problems as a result. You will have a painless probe placed on your finger to monitor your oxygen intake. You will need to wear the probe until told otherwise by your nurse.

- **Constipation.** Stool softeners are often given to help prevent constipation. Talk to your nurse if you have not had a bowel movement by the second day after surgery, as you may need a laxative. Increasing the fiber in your diet will help your bowels to move, and fresh fruits and vegetables are natural ways to increase fiber in your diet. Keep this in mind when planning your menu. You may also want to eat light for one to two days before your surgery.

Other ways to relieve pain

- **Repositioning.** Just as you move around in bed at home when in pain, after surgery the nurse will help you to move and turn to get more comfortable. Ask for assistance if you need it.
- **Cold or ice treatment.** This will reduce pain and swelling and is applied usually to the knees. The physical therapist will place it for you if it may be of benefit to you.
- **Relaxation techniques.** Pain and anxiety feed off each other, so being relaxed and calm can affect your level of pain. If you are used to taking anti-anxiety medications, it will be given to you after surgery. If you know relaxation or meditation techniques, use them to help with pain management.
- **Distraction.** Television, music, or visitors can help take your mind off mild pain. Each room has a TV with a radio for your use. If you have something else that helps you relax, bring it to the hospital.

Our goal for pain management is to keep you comfortable, but also safe.



Hospital Discharge Planning

Evaluation points

1. **Do you have someone to stay with you for the first few days following discharge?** You may need assistance as you move from location to location and settle into a modified routine.
2. **Do you have transportation home?** Remember that trucks, vans, and SUVs are recommended for taller people, as these vehicles are easier to enter and exit while still maintaining hip precautions. A physical therapist will help you practice getting in and out of a car seat position before your discharge.
3. If your bedroom is on an upper level of your home, **can you stay on the first floor** for the first few weeks as needed?
4. **Have you planned for suture removal?** Sutures will need to be removed seven to 14 days after the day of surgery. You may return to Duke Clinics to have your sutures removed by a staff member. Alternately, your primary care doctor can remove the sutures, but arrangements must be made with your doctor's office prior to surgery.
5. **When will you visit your orthopaedic doctor?** Most follow-up appointments will take place four to six weeks after discharge and will be scheduled for you at the time of discharge.
6. **Will you need any other medications?** Most patients are discharged with the injectable medication Lovenox to prevent blood clots, and it will need to be taken for 10 to 14 days after discharge.

After surgery

Once you have had your surgery, your doctor, physical and occupational therapists, and patient resource manager will help determine what services you will need at discharge.

Your anticipated hospital stay will be three nights. If short-term placement is needed and you have a facility preference, please contact the staff prior to surgery. You can arrange a tour and complete the necessary paperwork prior to post-operative admission. If there are no beds at your chosen facility, other options are available in the area and can be arranged for you.

Available discharge options

1. You may be discharged with services including home health nursing visits, physical therapy and occupational therapy, and personal care aides if deemed medically necessary. If you need additional support or equipment, these arrangements will be made for you at the hospital. **Do not** purchase them in advance. **Do** bring walkers, crutches, and occupational therapy equipment that you already have for evaluation.
2. If you need more intensive therapies, a short stay at an acute rehabilitation center may be recommended. To qualify for acute rehab, you must be able to tolerate three hours of therapy a day and have a need for two of the following therapies: physical, occupational, or speech. This evaluation will be conducted during your hospitalization.
3. Some patients need to approach therapy at a slower pace and will best be served at a skilled nursing facility (SNF). You have the option of choosing an SNF near your home or staying in the area close to the hospital. This option is ideal for patients who do not have someone to assist them at home or need daily therapy.

Prior to your surgery, our patient resource managers (PRM) can assist you as necessary with your discharge plans and coordinate the benefits available to you under your insurance coverage. However, you should discuss your anticipated needs with your family or caregivers to help make your discharge a smooth transition.

You will have the chance to meet with the PRM in the hospital the day after surgery.





DukeMedicine