



What to do before and after your knee replacement surgery



We know it's not just about replacing a joint – it's about getting your life back.

Thank you for choosing Northwell Health Orthopedics for your joint replacement.

This booklet will help you understand more about this procedure and what you should expect as you go through the knee replacement process. You'll learn how the normal knee works and the causes of knee pain, what to expect from knee replacement and what exercises and activities will help restore your mobility and strength and enable you to return to everyday activities.

When you arrive at the hospital for your procedure, you are under the care of our entire orthopedic team. We will check on you throughout the day, and we encourage you to ask any questions you may have about your treatment.

Your orthopedic team includes:

- Surgeon
- Physician assistant and/or nurse practitioner
- Nurses
- Residents and fellows
- Case management professional
- Social worker
- Anesthesiologists
- Operating room staff
- Recovery room care team
- Surgical unit care team
- Physical therapists/occupational therapists/respiratory therapists
- Nutrition staff
- Pastoral care staff
- Home care team (when you return home)

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Surgical checklist

Surgical checklist

Type of appointment	Date	Time	Check off when scheduled
Medical clearance			<input type="checkbox"/>
Presurgical			<input type="checkbox"/>
Cardiology clearance (if needed)			<input type="checkbox"/>
Vascular clearance (if needed)			<input type="checkbox"/>
Pulmonary screening			<input type="checkbox"/>
Education class			<input type="checkbox"/>
Surgery			<input type="checkbox"/>
Other			<input type="checkbox"/>

Common questions



Common questions

What is total knee replacement?

Knee replacement, also known as arthroplasty, is a surgical procedure to repair a knee damaged by arthritis or a severe injury. Artificial joints made of metals, ceramics or plastics are used to help your knees move and function naturally. Knee replacement is usually done when knee pain cannot be relieved by other treatments.

Why do people have knee replacements?

Knee replacement is done to decrease knee pain — making it easier to walk, exercise and enjoy other activities without soreness or discomfort.

Should I exercise before my total knee replacement?

Definitely. By strengthening the area around your knee, you'll actually decrease the time needed to recover. We can provide instructions on the best exercises for you to start two to three months before your surgery.

What are the risks to having total knee replacement surgery?

Knee replacement surgery places you at risk for infection and for developing blood clots. Your surgeon will talk to you about any possible risks.

- Your surgeon and the operating room staff will take special care to reduce your risk of infection during your surgery. You may be given certain medicine(s) such as antibiotics and blood thinners to decrease your chances of getting an infection or blood clot.

Am I too old for knee replacement surgery?

Age doesn't matter as long as you're in good health and able to have surgery. Your primary care physician will be able to make sure that you're fit to have the procedure.

Will I need a blood transfusion?

Ask your surgeon if you will need a blood transfusion during or after your surgery. Blood is available at the hospital if needed but you may donate your own as well.

Talk with your surgeon about presurgical medicines that may help decrease the need for a blood transfusion.

Will I be put to sleep for surgery?

You will receive general or regional anesthesia during your surgery:

- General anesthesia puts you into a deep sleep.
- Regional anesthesia provides numbness to certain areas of the body and may still be combined with other medicines to help you relax.

Your surgeon will talk with your anesthesiologist or nurse anesthetist to decide which type of anesthesia is best for you.

How long will my surgery last?

The usual time frame for this type of surgery is one to three hours. Your surgeon will determine a more precise time based on your individual needs.

The amount of time often depends on:

- How much time it will take to prepare you
- The type of equipment and anesthesia used

Will I have pain after surgery?

- After your surgery, you will have some pain and feel uncomfortable but the discomfort will decrease over the first two or three days.

To reduce your pain and discomfort, you will:

- Receive medicine(s)
- Participate in physical therapy

How long will I stay in the hospital?

Your surgeon will talk to you about how long you will need to stay in the hospital and what type of rehabilitation is right for you.

When can I get up from my hospital bed?

You should be able to get up on the same day as your surgery. A member of your healthcare team will help you stand the first time after your procedure.

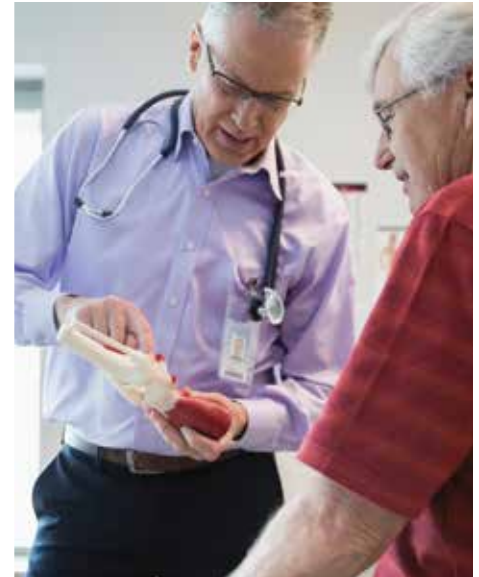
How often will I need to see my surgeon?

You will see your surgeon two weeks after your surgery and will have additional visits after that. The exact number of visits depends on your individual circumstances.

When can I shower?

Your surgeon will tell you when you may shower and if someone should help you, as well as how to protect your surgical site (where you were cut) during your showers.

Ask your surgeon how long you should wait until you can sit in a bathtub.



Will I need physical therapy at home?

Most patients continue physical therapy at home; some continue in a rehabilitation center. Your surgeon and physical therapist will talk to you about the type of rehabilitation that is right for you.

Before choosing therapy, check with your insurance company to find out what type of therapy is covered under your insurance plan.

Will I need special equipment after a total knee replacement?

Your surgeon will let you know what, if any, special equipment is necessary for you. Any equipment needs will be arranged before or during your hospital stay.

Equipment may include:

- Cane or walker
- Elevated toilet seat and commode safety rails
- Bench, chair or grab bars for the shower
- Other assistive equipment

Can I drive after surgery?

Make sure to talk to your surgeon before you begin driving again as the timing depends on which side of your body was operated on. Your therapist will teach you how to comfortably ride in a car after your surgery.

When can I have sex after knee replacement surgery?

Do not have any sexual activity right after you return home because of pain and swelling.

Please talk to your surgeon about when you can resume sexual activity.

When can I return to work?

Depending on the type of work you do:

- You will need four to six weeks off.
- Talk to your surgeon about your work activities and the right time for you to return to work.

When can I play sports again?

Participate in low-impact activities — after your full rehabilitation — including:

- Walking
- Dancing
- Golfing
- Hiking
- Swimming
- Bowling
- Using an exercise bike or elliptical trainer

Do not participate in high-impact such as below before speaking with your physician:

- Running
- Tennis
- Basketball
- Aerobics
- Zumba

Before your surgery



Before your surgery

Here you'll find important information about what you should do to prepare for your procedure.

Medical appointments and pre-existing health issues

You will need a complete physical examination by your primary care doctor or healthcare provider within four to six weeks of your surgery.

- Allows the surgical team enough time to review your medical report before your surgery.
- Gives enough time to find the perfect day and time for your surgery.

Your presurgical testing will be scheduled approximately **two to three weeks** before your surgery. Your doctor's office will tell you the date and time.

Be sure to:

- **Stop smoking** as soon as possible or at least two weeks before your surgery.
- **Stop taking the following medicines seven days before your surgery:**
 - All anti-inflammatory medicines such as:
 - Motrin®
 - Naproxen
 - Aleve®
 - Vitamin E, birth control pills and estrogen replacement products
 - Medicines that **increase bleeding** — it is important that you call your doctor to receive special instructions if you take any of the following medicines:
 - Coumadin®, Plavix® or other blood thinners
 - Aspirin — if you take aspirin every day, ask your doctor if you should continue

Skin care

It's important that you follow the instructions below to help avoid any issues:

- Do not shave near the area where you will have surgery.
- Follow the instructions that you were given on how to properly wash your body before you come to the hospital for your surgery.
- Avoid shaving your face, underarms and genitals (the areas of the penis or vagina).

Dental exams

- You should consider getting treatment for dental diseases, including teeth that need to be removed and periodontal work (work on your gums), **before** you have your joint replacement surgery.
- The bacteria that cause infections in your teeth or gums can easily travel through your bloodstream and go directly to your artificial joint. Your dentist will give you an antibiotic before all dental procedures for the rest of your life.

Do not have manicures or pedicures within two weeks of your surgery.

Preparing your home

It is important to have your house ready for you when you arrive back home. After surgery, you will need some help with certain tasks such as:

- Cooking
- Shopping
- Bathing
- Laundry

A few tips for things to get done before your surgery:

- Put clean linens on the bed.
- Prepare meals and freeze them in single servings.
- Move pots, pans and dishes you use most of the time to an easy-to-reach cupboard. If possible, put them at waist level — not too high. You may have difficulty bending and squatting during the first few weeks after your surgery.

- Cut the grass, do your gardening and all other yard work.
- Pick up throw rugs and tack down loose carpeting.
- Arrange for someone to collect your mail and take care of your pets.

Safety tips:

- Reduce clutter
 - Remove loose wires
 - Anchor rugs to the floor and keep smooth
 - Place nonskid tape or mats at the sink and outside your shower
 - Use a night light in the bathroom
 - Turn on lights when you get up at night
 - Secure rugs and tread on stairs
-

The day of presurgical testing

Please remember to bring your insurance information and a list of all the medicines you take at home with you to presurgical testing.

You can expect to spend a few hours at presurgical testing.

You will:

- Meet with a registration representative to help you complete the necessary paperwork and verify your information
- Have the necessary blood and urine testing, EKG (electrocardiogram) and a chest X-ray
- Be asked to have a stress test or a sleep study before your surgery, if needed
- Be seen by a nurse practitioner, who will ask you about your medical history and perform a physical exam

You may be:

- Asked to see a specialist if you have a particular illness or condition
- Given instructions on which medicine to take on the day of surgery especially if you take medicine for high blood pressure or for your heart
- Seen by an anesthesiologist who will give you medicine to relax and sleep during your surgery
 - The anesthesiologist will review your medical history and discuss the choice of anesthesia and pain medicines you will be receiving.

To reduce your risk of infection:

- You will receive a special soap and instructions on how to properly wash your body before your surgery.
- A cotton swab nasal culture will be placed in your nose to check for the presence of certain types of staphylococcus aureus (staph), which is a germ or bacteria.
- If you have staph in your nose, you will be given Mupirocin® ointment (an ointment to reduce staph) in your nose, twice a day for five days.

Healthcare proxy information:

- Talk to the nurse to learn more about choosing someone to speak on your behalf or about the healthcare proxy form.
- If you already have a healthcare proxy, please bring a copy with you.

The day before your surgery

- **Receive the arrival time for your surgery**
 - You will receive a call the night before your surgery to tell you when you should come to the hospital.
- **Eat a light meal**
 - Examples include: cold cereal, oatmeal, soups, salads, sandwiches.
- **Clean your skin**
 - Shower with special soap (scrub) and follow the instructions provided to you during presurgical testing.

The night before your surgery

Do not eat or drink anything after midnight unless you are told to do so by your doctor or surgeon.

The day of your surgery



The day of your surgery

Do not eat or drink anything on the day of your surgery.

You should bring the following items with you on the day of your surgery:

– **Personal toiletries**

- Please bring personal toiletries, such as cosmetics or shaving products, toothbrush, powder, deodorant, watch or wind-up clock, and a hand-held mirror to use at bedside.

– **Dentures**

- The hospital will provide you with a container for your dentures. Please keep the container on your bedside table or in a drawer. The hospital is not responsible if they are lost.

– **Comfort items**

- You may pack a small bag with items (reading materials, eyeglasses, iPod or music player, etc.) that may help you relax.
- TV and telephone service are available for an additional fee.
- Please be sure to have important phone numbers of people you may want to call and a small amount of money for newspaper or TV.

– **Clothing**

- You will be given a hospital gown to wear the first few days after your surgery.
- Please bring loose, comfortable clothing to the hospital.
- A robe is allowed, if it is knee-length. This will prevent you from tripping while walking.
- Bring a separate bag with shorts, T-shirts, sneakers (or flat, supportive rubber-soled shoes) and pants with elastic waist for your rehabilitation sessions.

– **Ambulatory devices**

- You may bring your cane, crutches or walker on the day of your surgery. Please make sure someone brings them back home for you after your surgery.
- You'll also get any new devices in the hospital and/or in rehabilitation.

– **Medicine(s) list**

- Bring a list of all the medicines you take at home to the hospital. But leave your medicines at home.
- Your doctor will order all the medicine(s) you need to take while you are in the hospital.
- If for some reason you need to bring your own medicine to the hospital:
 - Make sure the medicine is in its original prescription container, so that the nursing staff can verify the medicine with pharmacy.
 - If your doctor allows the hospital to use the medicine you brought from home, the nurse will give it to you as ordered.

Arriving at the same-day admission unit

Be sure to arrive on time.

- Make sure you have all the necessary paperwork, including your insurance information.
- A staff member will register you and then take you to the Ambulatory (Surgical Same-Day Admission) Unit.

Once you are in the same-day admission unit:

- You will be taken to a private area where you will be asked to put on a patient gown. After your surgery, your clothes and personal items will be labeled and sent to your room.
- You will be asked to remove jewelry, dentures, contact lenses, eyeglasses and hearing aids.
- You will be brought to the holding area.
 - Your family is invited to come with you to this area.
 - Once you are brought to the operating room your family will be asked to stay in the surgical waiting room.
- The nurse will take your blood pressure, pulse and temperature, and start an intravenous infusion (IV).

In the operating room

When you arrive in the operating room, you will be greeted by your surgeon, a nurse, an anesthesiologist and a physician assistant. The room is usually cold, but you'll be given blankets to keep you warm.

The anesthesiologist:

- May recommend general, regional or spinal anesthesia depending on your individual needs
- Will closely monitor you during your surgery

After surgery is completed you will be taken to the Post-Anesthesia Care Unit (PACU or Recovery Room).

Post-Anesthesia Care Unit (PACU or Recovery Room)

The surgeon or member of the surgical team will contact your family in the surgical waiting room when the surgery is completed.

- You will be monitored by specially trained nurses in the PACU for two to three hours or longer, if needed.
- When you are fully awake and your blood pressure, temperature, pulse and respiration return to normal, you will be moved to a regular room on the Orthopedic Unit, an area with specially trained staff.
- Every effort will be made to provide your family with the most current information about your condition.
 - Your family will be permitted to visit you for a short period of time depending on how you are feeling.
 - Your family will be told when you are ready to be transferred to the Orthopedic Unit.
- If your family leaves before your surgery is completed, a contact number should be left for the surgeon to call.



After your surgery

Following surgery (once you wake up):

- A dressing (bandage) will cover your knee area.
- A bar (trapeze) will be hanging over the bed. Please use the bar to help lift your body when you change positions.
- You will have an IV (intravenous infusion, a needle attached to a tube that is placed in your vein to give you fluid and medicine) for about 24 hours.
- Your vital signs (including blood pressure, pulse, respiratory rate and temperature) will be taken often.
- You may have a Foley catheter (a tube placed in your bladder that collects your urine in a clear bag).
 - The Foley catheter may be used to check the amount and color of your urine.
 - If a Foley catheter is used, it will be removed one to two days after your surgery.
- You may have a drain placed in your surgical site.
 - A drain is a tube that collects any blood or fluid that has built up under your skin and muscle.
 - It is usually removed the day after surgery.
- If your doctor approves, you may be allowed to drink fluids and eat.
- Your wound closure material (i.e. sutures, staples, tape, etc.) will be removed 10 to 21 days after date of surgery. Ask your doctor when you may take a shower.

Controlling your pain

In order to manage your pain appropriately, your nurse and other healthcare providers will ask you to rate how much pain you're feeling based on a pain scale.

Pain can sometimes be intermittent (it comes and goes) or constant (continuous). It can range from severe (10 on the scale) to moderate (6 on the scale) to mild (0 on the scale). You will be given medicine to help relieve your pain and keep you comfortable.

- Pain medicines are not habit-forming when taken for a short period of time.
- The anesthesiologist will talk to you about the different ways to relieve your pain after surgery.
- Pain management is available 24 hours a day, 7 days a week.



Wong-Baker FACES pain chart

Your pain will get better each day as you heal. The strength and timing of medication can be adjusted to help you recover quickly. When you are switched to oral pain medication (medicine you swallow or drink), be sure to ask the nurse for medication before physical therapy. This will help you participate fully in your physical therapy program.

Here are some ways you can help manage pain after your surgery:

Deep breathing exercises, along with your pain medicine, may help to lessen your pain. Try to imagine you are in a calming and relaxing place.

1. Breathe in slowly and deeply.
2. As you breathe out slowly, feel the tension leaving your body.
3. Now breathe in and out slowly and regularly, at whatever rate is comfortable for you.
4. To help you focus on your breathing, breathe slowly and rhythmically.
5. End with a slow deep breath. As you breathe out, say to yourself "I feel alert and relaxed."

Do steps 1 through 5 only once, or repeat steps 3 and 4 for up to 20 minutes.

Avoiding clots and deep vein thrombosis (DVT)

Clots may form in the veins of the legs as a result of not moving around. This could lead to deep vein thrombosis (DVT) (a blood clot in your vein).

- To prevent DVT, special stockings that massage your calf (lower leg) will help increase your blood flow to prevent clots from forming. The inflatable (filled with air) compression sleeves can help stop blood clots from forming and reduce your chances of getting a DVT when you are in bed.
- Walking right after your surgery is one of the most important ways to prevent DVT.

There are medicines to reduce the risk of forming clots. You may be given blood thinners such as:

- Lovenox®
- Arixtra®
- Aspirin
- Xarelto®
- Coumadin®

Your doctor will decide which one would be best for you.

Warning signs of blood clots in your leg are:

- Increasing pain
- Tenderness
- Swelling or redness in your thigh, calf or ankle
- Calf pain while performing ankle-pump exercises (pointing and flexing your feet)
- Swelling that does not go down when leg is elevated (especially overnight)

Warning signs that a blood clot has traveled to your lungs are:

- Sudden increased shortness of breath
- Difficulty or rapid breathing
- Sudden onset of chest pain
- Sweating
- Localized chest pain with coughing
- Confusion
- Unexplained fever

Call your nurse right away if you develop any of these signs.

Preventing pneumonia

Pneumonia can happen when fluid builds up in your lungs. You are at greater risk of getting pneumonia after your surgery because you are in bed and unable to move around as you normally do.

To help prevent pneumonia after your surgery, you will be given a device called an incentive spirometer and instructions on how to do breathing exercises.

- Your nurse will show you how to use the incentive spirometer.
- You should use the incentive spirometer 10 times in one hour.
- Do not do the exercise too quickly. It may cause dizziness or lightheadedness. If you feel dizzy, stop the exercise and rest.

Please follow these steps to use your incentive spirometer:

1. Take a cleansing (deep) breath.
2. Place lips tightly around the mouthpiece.
3. Inhale slowly to raise the white piston (the tube) in the chamber.
4. Continue to take in a breath to raise the piston to the prescribed level.
5. When the level is reached, try to hold your breath for three to five seconds.
6. When the level is reached remove mouthpiece and exhale.

Physical and occupational therapy



Physical and occupational therapy

The physical therapist (PT) and the occupational therapist (OT) both play critical roles in your recovery.

Physical therapy

The physical therapist is an important member of the rehabilitation team who will help you regain the strength and motion in your new knee by teaching you how to strengthen your muscles.

The PT will also:

- Evaluate and provide treatment for individuals living with pain, health problems, disabilities, injuries, overuse of muscles or tendons, or loss of a body part

The PT will help you with:

- Sitting on the edge of the bed
- Getting into a chair and into the bed
- Using a walker or other devices that will help you walk
- Strengthening exercises
- Understanding instructions before you go home

Nursing staff will help you with sitting in the chair and walking with a walker, as well as your bathroom needs.

Please read the instructions listed below before doing any of the following:

- Sitting after your surgery
 - Do not sit on a chair that is too low.
 - Your hips need to be higher than your knees.
 - You may raise your operated leg to make you feel more comfortable and prevent or decrease swelling.
- Lying in bed
 - Do not put a pillow under your knee.
 - It may cause stiffness in your knee and knee, making it difficult to straighten your leg.
 - If using a pillow, make sure to place it under the calf, foot or ankle.

Exercising after your surgery

It is important that you exercise regularly to restore your knee movement and strength.

Your orthopedic surgeon and physical therapist may recommend that you:

- Exercise 20 to 30 minutes, two or three times a day.
- Walk 30 minutes, two or three times a day during your early recovery.

Doing the below exercises will help speed up your recovery and lessen your pain after surgery.

- You may begin these exercises in the recovery room right after surgery.
- It is normal to feel uncomfortable when you first begin to exercise.
- These exercises should be done as you lie on your back with your legs slightly apart.

Quadriceps sets

1. Tighten your thigh muscle.
2. Try to straighten your knee.
3. Hold for 5 to 10 seconds.

Do this exercise 10 times during a two-minute period.

Rest one minute and repeat. Continue until your thigh feels tired.



Knee straightening exercises

1. Place a small rolled towel just above your heel so that it is not touching the bed.
2. Tighten your thigh.
3. Try to fully straighten your knee and to touch the back of your knee to the bed.
4. Hold your thigh straight for 5 to 10 seconds.
5. Repeat until your thigh feels tired.



Straight leg raises

1. With the opposite knee bent, tighten the thigh muscle with your knee fully straightened on the bed, as with the quad set.
2. Lift the leg on your operated side up to the level of the opposite knee. During this movement keep your operated knee completely straight and toes pointed at you.
3. Hold for 5 to 10 seconds.
4. Slowly lower. Repeat until your thigh feels tired.

You can also do leg raises while sitting:

1. Tighten your whole thigh muscle.
2. Hold your knee fully straightened with your leg unsupported.
3. Repeat as above.
4. Continue these exercises often until full strength returns to your thigh.



Ankle pumps

1. Move your foot up and down steadily and tighten your calf and shin muscles (the front part of your leg).

Do this exercise for two to three minutes, two or three times every hour, while in the recovery room. Continue this exercise until you are fully recovered and all ankle and lower leg swelling is gone.



Bed-supported knee bends

1. Bend your knee as much as possible while sliding your foot on the bed.
2. Hold your knee in your best possible bent position for 5 to 10 seconds.
3. Then straighten your knee.
4. Repeat a few times until your leg feels tired or until you can completely bend your knee.



Advanced exercise and activities

You may get dizzy the first several times you stand so you'll need support. As you regain your strength, you will be able to stand independently. While doing these standing exercises, make sure you are holding on to a firm surface successfully attached to your bed or a wall.

Perform the following exercises 10 times each and repeat three to four times a day.

Standing knee bends

1. Standing straight (with the aid of a chair, walker or crutches), lift your thigh and bend your knee as much as you can.
2. Hold for 5 to 10 seconds.
3. Then straighten your knee, touching the floor with your heel first.
4. Repeat several times until tired.



Assisted knee bends

1. Lie on your back and place a folded towel under the sole of your foot of operated leg.
2. Bend your knee and apply gentle pressure through the towel to increase the bend.
3. Hold for 5 to 10 seconds; repeat several times until tired.



Knee exercises with resistance

- Place light weights around your ankle and repeat any of the above exercises. Resistance exercises can usually begin four to six weeks after surgery.
- Use one-to-two-pound weights at first; gradually increase the weight as your strength returns. (Inexpensive wrap-around ankle weights with Velcro straps can be purchased at most sporting goods stores.)

Cycling

- Cycling is an excellent activity for regaining muscle strength and knee mobility. Adjust the seat height so that the bottom of your foot just touches the pedal with your knee almost straight.
- Peddle backward at first. Peddle forward only after a comfortable backward cycling motion is achieved. As you become stronger (at about four to six weeks) slowly increase the tension on the bike.
- Cycle for 10 to 15 minutes twice a day. Gradually build up to 20 to 30 minutes, three or four times a week.



Pain or swelling after exercise

You may experience pain or swelling after exercise or activity.

- Raising your leg above heart level and applying ice wrapped in a towel will help lessen the pain and swelling.
- Exercise and activity should consistently increase your strength and movement.
- If you have any questions or problems, contact your orthopedic surgeon or physical therapist.

Early activity

Proper walking is the best way to help you recover after knee replacement surgery.

- It is important for you to become active right after your surgery so that your knee can regain its strength and movement.
- Soon after your surgery, you will be encouraged to walk short distances and perform everyday activities.

Please follow these important steps to begin walking with a walker or crutches:

1. Stand comfortably and upright with your weight evenly balanced on your walker or crutches.
 2. Move your walker or crutches forward a short distance.
 3. Step forward with the leg on your operated side.
 4. Keep your knee straight so the heel of your foot touches the floor first.
 5. As you move forward, your knee and ankle will bend and your entire foot will rest evenly on the floor.
 6. As you complete the step, your toe will lift off the floor and your knee and hip will bend so that you can reach forward for your next step.
 7. Remember, touch your heel first, then flatten your foot, and then lift your toes off the floor.
 8. Walk as smoothly and normally as possible.
 9. Adjust the length of your step and speed as necessary to walk with an even pattern.
 10. Don't rush. You may spend more time walking as your muscle strength and endurance improve.
 11. You will slowly put more weight on your leg.
 12. Two to three weeks after your surgery, you may begin using a single crutch or cane if you can walk and stand for more than 10 minutes and your knee is strong enough so that you are not carrying any weight on your walker or crutches.
- Hold your cane or crutch in the hand opposite the side of your surgery.
 - Do not limp or lean away from your operated knee.



Going up and down stairs

- When you get home from the hospital or a rehabilitation facility (rehab), you will need a handrail for support.
- You will be able to go only one step at a time.
- Always go up the stairs with the leg that was not operated on first and down the stairs with the leg on your operated side first.
- Have someone help you until you have regained most of your strength and motion.
- Do not try to climb steps higher than the standard height (7 inches) and always use a handrail for balance.



Occupational therapy

You may receive a visit from an occupational therapist (OT) during your hospitalization.

Your OT will:

- Talk to you about your goals for returning home
- Teach you how to modify your everyday activities such as bathing and dressing
- Show you how to use adaptive equipment to help you manage your daily activities during your recovery

Assistive devices

You may need a little help getting back to your normal routine. Below are some of the devices that your physical and/or occupational therapist may recommend to you.

Walking basket

This wire basket secures easily to the front of any walker and keeps personal things handy.



Transfer bench

The bench has a textured seat and backrest for non-slip safety. The backrest should mount on either side of the bench so that you can enter the tub from the right or the left.



Adjustable cane

This sturdy cane can be adjusted to your own personal height.



3-in-1 commode

This can be used three different ways: as a raised toilet seat with safety rails, a free-standing commode, or a bath and shower seat.



Standard folding walker

Each side of the walker folds separately for easy storage and transport.



Reacher

Reachers are ideal for people with limited range of motion or difficulty bending. Reachers give patients the ability to safely pick up and move objects that are out of reach.



Dressing and bathing equipment

Sock aid with foam handles, reacher, dressing stick, contoured handled sponge, a plastic shoehorn and elastic shoe laces.



Using the bathroom

You will need to use a raised toilet seat or place a 3-in-1 bedside commode over your toilet. If you plan on leaving your home or visiting someone, remember to bring your raised toilet seat with you.

Follow these steps when you go to the toilet:

1. Back up to the toilet until you feel the back of your knees touching it.
2. Reach back for the armrests and slowly lower yourself onto the toilet, allowing the leg on your operated side to bend.
3. Push up from the armrests when getting up from the toilet.
4. Keep the leg on your operated side out slightly in front of you.
Be sure you are steady on your feet before reaching for the walker.



Getting into the tub/shower using a transfer bench:

1. Place the transfer bench in the tub/shower. It should face the faucets.
2. Back up until you can feel the transfer bench on the back of your legs. Be sure you are centered against the tub bench.
3. Slide the leg on your affected side out in front of you before sitting down.
4. Keep one hand on the middle of the walker/crutch/cane while reaching back for the transfer bench with the other hand.
5. Slowly lower yourself onto the transfer bench without leaning forward.
6. Move the walker out of your way. Keep it close by.
7. Lift your legs, one at a time, over the edge of the tub or edge of the shower as you scoot yourself around.
8. Slide yourself to the center of the bench.



Getting out of the tub/shower using a transfer bench:

1. Slide yourself around as you lift your legs, one at a time, over the edge of the tub or edge of the shower.
2. Slide yourself to the edge of the transfer bench.
3. Place one hand on the middle of your walker/crutch/cane. Push up with the other hand on the back of the transfer bench.
4. Gain your balance and place your hands on your walker/crutches to steady yourself as you push yourself up.



Using a car

Getting into a car:

1. Back up to the car with your walker.
2. Enter the side that allows the leg on your operated side to be supported by the car seat. For example, if your left knee is the operated knee, enter the car on the driver's side.
3. Lower yourself slowly on to the seat.
4. Back onto the seat in a semi-reclining position.
5. Rotate yourself so that you are facing the front and attach your seat belt.



Getting out of a car:

1. Push the seat all the way back and recline the seat.
2. Slide yourself sideways and lift one leg at a time out of the vehicle and onto the ground. Lean back to perform the movement if necessary.
3. Slide the leg on your operated side out in front of you and place one hand on the dashboard and the other on the back of the seat to push yourself up.
4. Steady yourself by placing your hands on your walker/crutches/cane.



Reaching for objects

- Do not bend down to pick up objects. Use a reacher to reach objects on the floor.
- A walker basket is available to attach to your walker and can be used to carry items.
- When reaching for objects, remove scatter or throw rugs from the floor to avoid tripping over them.



Dressing

Slacks and underwear

1. Sit on the side of the bed or in an armchair.
2. Put on underwear and slacks first. Using the dressing stick, catch the waist of the underwear or slacks with the hook. Always dress your operated side first. Lower the stick to the floor and slip the slack leg over the leg on your operated side first. Then do the same for your non-operated side.
3. Pull the slacks up over your knees. Stand, with the walker in front of you, and pull your slacks up.
4. When undressing, take your slacks and underwear off the leg on your non-operated side first.



Socks and stockings

1. Slide your sock or stocking onto the stocking aid.
 - Make sure the heel is at the back of the plastic and toe is tight against the end.
 - The top of your sock should not come over the top of the plastic piece.
 - Secure your sock in place with garter or notches in the plastic piece.
2. Holding onto the cords, drop the stocking aid out in front of the operated foot.
3. Slip your foot into the sock and pull it on (see picture).
4. Release the garters, or remove the sock from the notches with the dressing stick.
5. You may put the sock on your non-operated foot in your usual manner.



To take socks or stockings off, use the hook on the dressing stick to hook the back of the heel and push the sock off your foot.

Shoes

1. Use a dressing stick to put on your shoes if needed.
2. Wear slip-on shoes or use elastic shoelaces if you have trouble tying your shoes.
3. Use the dressing stick or a long-handled shoehorn to take off your shoes.



Discharge and leaving the hospital



Discharge and leaving the hospital

After you have total knee replacement surgery:

- You may feel some numbness and stiffness around the wound, especially with a lot of bending activities.
- The range of motion of your new knee will depend on the range you had before your total knee replacement.
- Most patients will progress enough to go up and down stairs and to get in and out of a car. Kneeling will usually be uncomfortable.
- Occasionally, you may feel some soft clicking of the metal and the plastic during knee bending or walking.
- Participate in regular light exercise programs to maintain proper strength and mobility of your knee.
- Take special precautions to avoid falls and injuries. Individuals who have their knee replaced and suffer from a fracture may need more surgery.

Your doctor will tell you when you are ready to be discharged from the hospital. Your nurse will go over your discharge instructions. If you do not understand what you need to do when you leave the hospital, please be sure to ask your nurse to go over your discharge instructions again until you fully understand.

Nutritional information

It is important to have a well-balanced diet with enough calories and protein to maintain your nutritional status during your hospital stay. This will help your body replenish proteins you could lose during surgery and will help you heal with fewer risks of complications, such as poor wound healing.

Rehabilitation information

Before leaving the hospital, your surgeon and healthcare team will discuss your rehabilitation options with you and your family. We encourage you to select the rehabilitation option that best meets your needs for a successful recovery.



Home health care and rehabilitation



Your own rehabilitation plan in the comfort of home

Our joint replacement home care program offers a full spectrum of rehabilitation services — and we bring everything to you. The Northwell Health At Home rehabilitation team works with you to design a custom-fit treatment program and set goals that meet your needs. We want to help you regain the quality of life you had before you needed joint replacement.

Our program services include:

- Physical therapy and registered nurse in-home visits within 24 hours of discharge
- Occupational therapy if needed
- Certified home health aide if you need personal care
- Pain management guidance
- Medication use education
- Home safety assessment and recommendations

Your goals:

- Learning post-joint replacement safeguards
- Becoming competent in the use and care of your medical equipment
- Controlling your pain
- Achieving maximum functionality around the house and returning to activities
- Being able to do your exercises at home — without help

Let's do this together! Your active participation in your recovery and rehab goals will help you regain independence and get back to your old self.

For questions or more information contact Northwell Health At Home at **(866) 651-4200**.

Home care questions

When do home care services begin?

Our convenient in-home services begin the day after you leave the hospital.

Who will come to my home?

A physical therapist and registered nurse will visit first. The physical therapist will decide whether you need occupational therapy.

How often will the therapist and nurse see me at home?

Your treatment plan includes repeat physical therapy visits until you reach your rehabilitative goals. These goals are based on your progress and ability to travel to outpatient therapy, if necessary. Many patients need only a few nursing visits.

Will the home care staff talk with my doctor?

Yes. Your nurse and physical therapist communicate regularly with your doctor about your plan and goals.

What is special about home therapy rehabilitation?

With home care services, you get to recover in familiar surroundings — home. Your therapist focuses treatment on your specific needs and personal activities such as stair climbing, safely entering/exiting your home and car, shower transfers and dressing skills.

Which home care company should I choose?

As part of Northwell Health, your hospital has its own home care service program. The Northwell Health Home Care Network will work directly with your doctor in developing your personalized care plan.

Outpatient rehabilitation

You and your doctor may decide that you don't need an inpatient rehabilitation program and would best be served starting your rehabilitation after your surgery at an outpatient rehabilitation program in or near your community. You may also choose to continue your rehabilitation at an outpatient program after your inpatient stay or homecare.

Northwell Health provides outpatient sites that offer total joint rehabilitation programs, including:

Nassau County

STARS Rehabilitation
Eisenhower Park
Northwell Health Ice Center
200 Merrick Avenue
East Meadow, NY 11554
(516) 266-5700

STARS Rehabilitation
801 Merrick Avenue
East Meadow, NY 11554
(516) 393-8900

STARS Rehabilitation
925 Hempstead Turnpike, Suite 310
Franklin Square, NY 11010
(516) 354-3980

STARS Rehabilitation
833 Northern Boulevard, Suite 235
Great Neck, NY 11021
(516) 288-3400

STARS Rehabilitation
1554 Northern Boulevard
Manhasset, NY 11030
(516) 627-8470
*A division of Long Island Jewish Medical Center

STARS Rehabilitation
200 Boundary Avenue, Suite 300
North Massapequa, NY 11758
(516) 249-3760

STARS Rehabilitation
66 Powerhouse Road, Suite 304
Roslyn Heights, NY 11577
(516) 621-1170

STARS Rehabilitation
415 Crossways Park Drive, Suite E
Woodbury, NY 11797
(516) 838-8400

Transitions of Long Island®
1554 Northern Boulevard, 3rd Floor
Manhasset, NY 11030
(516) 719-3700

*A division of Long Island Jewish Medical Center

Glen Cove Hospital
101 St. Andrews Lane
Glen Cove, NY 11542
(516) 674-7505

Suffolk County
STARS Rehabilitation
1160 East Jericho Turnpike,
Suite 123
Huntington, NY 11743
(631) 547-3400

Southside Hospital
301 East Main Street
Bay Shore, NY 11706
(631) 968-3400

**Peconic Bay Outpatient Therapy
and Rehabilitation Center**
64 Commerce Drive
Riverhead, NY 11901
(631) 727-9654

Staten Island
**Staten Island University Hospital –
North Campus**
475 Seaview Avenue
Staten Island, NY 10305
(718) 226-6362

**Staten Island University Hospital –
South Campus**
375 Seguine Avenue
Staten Island, NY 10305
(718) 226-2520

Queens

STARS Rehabilitation
Queens Tower Entrance
95-25 Queens Boulevard,
Third Floor, Suite D
Rego Park, NY 11374
(718) 925-6212

STARS Rehabilitation
36-29 Bell Boulevard
Lower Level
Bayside, NY 11361
(929) 220-8300

Manhattan

**Nicholas Institute of Sports Medicine
and Athletic Trauma (NISMAT)**
210 East 64th Street, 5th floor
New York, NY 10065
(212) 434-2700

Westchester

STARS Rehabilitation
480 Bedford Road
Chappaqua, NY 10514
(914) 458-8700

*A division of Northern Westchester Hospital

Phelps Memorial Hospital Center
701 North Broadway, Building 755
Sleepy Hollow, NY 10591
(914) 366-3700

Phelps Memorial Hospital Center
701 North Broadway, Building 777
Sleepy Hollow, NY 10591
(914) 366-3010

Our network is continually growing. If you do not see a convenient location on this list, please call **(888) REHAB-03 (734-2203)** or visit **Northwell.edu/rehab.**

Subacute rehabilitation

Subacute rehabilitation is for patients who require an inpatient setting to manage their medical and rehabilitation needs. This type of inpatient rehabilitation is provided at one of our Centers for Medicare & Medicaid Services (CMS) five-star quality rated subacute/skilled nursing facilities (for more detailed information visit [Medicare.gov/nursinghomecompare](https://www.medicare.gov/nursinghomecompare)). You will receive care guided by a doctor, daily nursing care, and physical or occupational therapy to maximize your mobility for activities of daily living (e.g., dressing, bathing and tying your shoes). Your length of stay will depend on how well you progress in your recovery. Updates regarding your progress will be given to your doctor throughout your stay with us. Subacute rehabilitation is often followed by home care or outpatient rehabilitation.

Subacute rehabilitation locations:

Northwell Health Stern Family Center for Rehabilitation

330 Community Drive
Manhasset, NY 11030
(516) 562-8065

Northwell Health Orzac Center for Rehabilitation

900 Franklin Avenue
Valley Stream, NY 11580
(516) 256-6710

Peconic Bay Skilled Nursing and Rehabilitation Center

1300 Roanoke Avenue
Riverhead, NY 11901
(631) 548-6078

Acute rehabilitation

Acute rehabilitation is designed for those who need frequent medical monitoring, 24-hour nursing and intensive physical, occupational and/or speech therapy to maximize recovery. The length of stay is based on your diagnosis, needs and progress during rehabilitation.

Northwell Health's acute inpatient rehabilitation programs are within a hospital setting and are located at:

Glen Cove Hospital
101 St. Andrews Lane
Glen Cove, NY 11542
(516) 674-7692

**Staten Island University Hospital
North Campus**
475 Seaview Avenue
Staten Island, NY 10305
(718) 226-6362

Phelps Hospital
701 North Broadway
Sleepy Hollow, NY 10591
(914) 366-3702

You are not required to visit any of these facilities. You may choose where you want to go for rehabilitation. If you want more information about other rehabilitation options, please ask the discharge planner.



Transportation to a rehabilitation facility

Transportation to and from a rehabilitation facility is available.

- A member of your orthopedic team will arrange for your transportation by ambulette (a small van or ambulance) to an inpatient rehabilitation facility.
- Most insurance companies do not pay for transportation.
- You will be asked to pay for the cost of transportation directly.
- You will be sitting in a wheelchair when you are in the ambulette.

General rehabilitation questions

Why are there so many types of possible rehabilitation programs after my surgery?

Each person recovers from joint surgery differently and at a different rate. However, the majority of patients are discharged home with follow-up home care services. If a patient's medical and physical conditions warrant an inpatient rehabilitation stay, Northwell Health wants to ensure there is a type of rehabilitation that matches each person's need.

Does my insurance pay for rehabilitation?

Most insurance covers rehabilitation but each policy differs. We recommend you contact your insurance company before your surgery to see what coverage you have.

How long will I need rehabilitation after surgery?

How long you need rehabilitation will be determined by your progress. Most formal rehabilitation stops when you can walk with a walker or cane and can take care of daily needs such as dressing and grooming. However, continuing to exercise and stay mobile are vital parts of your recovery.

How often will therapists see me?

It depends on your specific needs and progress, but as a rule of thumb you will be seen five to seven days a week on an inpatient basis and three to five times a week as an outpatient.

How much time is each therapy session?

Time of therapy is determined individually, however, therapy time can range from one and a half hours to three hours. As your function improves and you can do more on your own, the session time may decrease.

How do I contact my rehabilitation provider?

Before you leave the hospital, the discharge planner can give you contact information. For Northwell Health programs, you can call **(888) REHAB-03** and we will be happy to assist you.

For more information,
call **(888) REHAB-03**
(734-2203).

Avoiding problems after surgery



Avoiding problems after surgery

Avoiding falls

If you fall during the first few weeks after surgery you can damage your new knee, which may cause you to have more surgery.

- After your surgery, always ask for help before getting out of bed.
- You should use assistive aids — such as a cane, crutches or walker, and handrails — or have someone help you until your balance, flexibility and strength have improved.
- Your surgeon and physical therapist will help you decide what assistive aids are right for you and how long they should be used.

Dental work precautions

For people with artificial joints, a visit to the dentist needs to be carefully managed.

- The bacteria that causes infections in teeth or gums can easily travel through your bloodstream and go directly to the artificial joint, which will cause an infection.
- To prevent an infection in your artificial joint, your dentist will give you antibiotics to take before all dental surgery for the rest of your life.
- It is important for you to let your dentist know that you had a joint replacement surgery so that you receive the proper treatment.
- Do not have your teeth cleaned by a dentist or hygienist for at least three months after surgery.

Living with your new knee joint

- Position your knee comfortably as you go about your daily activities.
- Walk and perform range of motion exercises every day.
- Use an ice pack if you experience swelling.
- Avoid long periods of sitting or inactivity to prevent your new joint from tightening.
- At home, you can use a grab bar or shower chair for added safety, comfort, support and stability.

Follow-up care after your new knee joint replacement

After your joint replacement, it is important to follow up with your orthopedic surgeon. There are several safety measures to remember:

- Stop and change position hourly when traveling to prevent your knee joint from tightening.
- Your new prosthetic device may activate metal detectors in airports and some buildings. You will be given a manufacturer's card indicating that you had a total joint replacement.
- A prosthetic joint may become infected from a problem located in another part of your body such as a urinary tract infection, or teeth or skin infections.
- Follow up with your surgeon every year, unless your doctor tells you differently.
- Contact your surgeon whenever you have mild pain for more than a week or pain that requires you to take medicine.
- If you are not sure how long it has been or when your next visit should be scheduled, call your doctor's office.

Please make sure to call your doctor's office if you have any questions or issues.

We're here to help you get moving and back to your life.

