

Outpatient Joint Replacement

Patient Education and Resource Guide

NORTH  ATLANTIC
SURGICAL SUITES, LLC



YOUR EDUCATION RESOURCE GUIDE FOR OUTPATIENT JOINT REPLACEMENT

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Welcome

WELCOME TO NORTH ATLANTIC SURGICAL SUITES

The entire Orthopedic Team at North Atlantic Surgical Suites is dedicated to restoring quality of life, one patient at a time, for those who suffer from joint pain.

Quality of life means something different for each individual. For many, it means spending time with family, enjoying a round of golf, a bicycle ride or the pleasure of a simple walk. For everyone, being able to move and walk without pain is an important part of living well. As we age, doing the things we love to do without pain often becomes a challenge.

Arthritis affects about 40 million Americans, or one in eight. Our orthopedic surgeons have seen the ways in which arthritis attacks joints and robs people of mobility and independence. Our dedicated experts have devoted their professional lives to studying how to better combat the effects of arthritis. Through high quality compassionate care, research, and surgical advances, we can help revitalize your quality of life.

Our orthopedic surgeons have worked closely with the medical staff to develop an outpatient joint replacement program that shortens your post-operative stay, improves your quality of orthopedic care, and makes your entire experience more enjoyable. Bringing together our combined expertise, we have created a program that is unparalleled, with your satisfaction as our top priority. With an outpatient focus, we have an infection rate that is markedly less than that reported in large hospital inpatient settings.

Joint replacement surgery is the newest wave of outpatient procedures. Minimally invasive techniques have been developed for partial knee replacement, total knee replacement and total hip replacement. Less invasive techniques for hip replacement include the direct anterior approach, the superior capsular approach, and the direct superior approach. This shift from being a hospital "inpatient" to an "outpatient," where recovery takes place out of the hospital and in your home, has already happened for procedures such as major ligament reconstruction and rotator cuff repair. Refinement of surgical techniques, anesthesia protocols, and patient selection has enabled this transformation. Our outpatient Arthroplasty system is based on the clinical evidence from over 50,000 joint replacements and hundreds of research publications of patient outcomes.

This program can provide a major benefit to you and your family. Your education and participation are essential to ensuring you have an outstanding experience and the best possible outcome... so please read all of the information in this binder. You'll know what to expect, how to prepare, and learn important tips on how to recover well.

Our goal is to treat each person as if he/she was a family member. Our approach to innovation creates real solutions that empower each surgeon to deliver personalized

care to each patient.

With comprehensive patient education and individually tailored care, our program is designed to provide the information, care, and support you need every step of the way to achieve your ideal experience.

Sincerely,

Your North Atlantic Surgical Suites team

Understanding Your Joint Replacement Surgery

INTRODUCING THE NORTH ATLANTIC SURGICAL SUITES TEAM

North Atlantic Surgical Suites has an experienced and highly skilled team who will focus specifically on you. Each one of our team members is specially trained to help ensure a safe and successful recovery. They work together with you and your coach to ensure an excellent experience. Your North Atlantic Surgical Suites team includes:

Orthopedic Surgeon: Your orthopedic surgeon is the physician who will perform your joint replacement operation and will oversee your care throughout your experience at North Atlantic Surgical Suites.

Surgical Assistant: A surgical assistant will assist your orthopedic surgeon in the operating room.

Anesthesiologist: Your anesthesiologist will administer the appropriate medications to keep you comfortable and asleep during surgery. They will also assist in your post-operative pain management.

Pre-Admission Testing: Your primary care physician should be aware of your upcoming surgery and be prepared to help post-operatively. You should be seen by your PCP pre-operatively, within 30 days of your scheduled surgical date, to ensure that you are medically optimized for surgery. If you have a history of *heart disease*, your cardiologist is an integral member of the team as we plan your joint replacement surgery. Your cardiologist should provide surgical clearance as well as assist in managing your cardiac medications before, during, and after your procedure.

Registered Nurse: Throughout your experience, you can expect to meet several nurses who function in various roles. They will help prepare you for surgery and will be in the operating room during your surgery. After surgery, the post-operative team will carry out all orders given by your surgeon while keeping you comfortable and safe.

Physical Therapy Team: Following surgery, your physical therapy team is trained to help you gain strength and motion in your new joint and will ensure that you do your exercises correctly. Your physical therapy team will also teach you how to properly and safely use your walker or crutches after surgery. During your pre-operative phone call, one of our nurses will assist you in setting up post-operative physical therapy home services, and you should plan to transition to outpatient therapy about 2 weeks after surgery.

COMMON CAUSES OF PROBLEMS THAT LEAD TO THE NEED FOR JOINT REPLACEMENT

What Are The Symptoms Of Osteoarthritis?

Symptoms of osteoarthritis can include:

- Joints that are sore and ache, especially after periods of activity
- Pain that develops after overuse, or when joints are inactive for long periods of time
- Joint swelling
- Stiffness
- Loss of range of motion

What Causes Osteoarthritis?

Osteoarthritis is the most common type of arthritis. It is also known as the “garden variety arthritis” and affects nearly 21 million Americans. As we age, the chances of developing osteoarthritis increase, though the severity of the disease is different for everyone. People in early stages of life can also develop some form of osteoarthritis.

Osteoarthritis breaks down the cartilage in joints and can occur in almost any joint in the body, though it occurs most often in the hips, knees and spine. Cartilage is the cushion that covers the ends of bones in normal joints and helps provide protection so those bones don't rub together. It also serves as a shock absorber as wear and tear occurs in the joints after years of use.

There are several factors that increase a person's chances of developing osteoarthritis including family history, obesity, injuries like fractures in the joint, previous surgeries where cartilage was removed from a joint, and overuse. The aging process, with normal wear and tear, is the most frequent reason.

What Is “Compartmental” Knee Osteoarthritis?

The knee joint is divided into three specific areas, called “compartments”. We have found many of our patients with knee arthritis have the disease confined to only one compartment of the knee. This leaves the remaining parts of the knee functional and not in need of surgical intervention.

PARTIAL KNEE REPLACEMENT SURGERY

If the cartilage damage in your knee has occurred in only *one compartment* of your knee, a partial knee replacement procedure may be performed. Partial knee replacement surgery involves resurfacing one portion of the knee joint and using artificial components to replace damaged tissue. At North Atlantic Surgical Suites, your surgeon uses the least invasive techniques available.

If your surgeon has recommended a partial knee replacement, or “Uni Knee”, this is likely based upon the x-rays and examination. It appears that most of your knee is functioning normally and that your arthritis and pain are coming from only one of the

three areas of the knee. With this in mind, a partial knee replacement has been recommended.

Partial knee replacement has been in existence for several decades—it is not new or experimental. The longevity and success of partial knee replacement has been reported to be as good as or even better than a total knee replacement. The concept with partial knee replacement is to do the least amount of surgery necessary to eliminate or reduce your pain, without removing healthy tissues.

This minimally invasive procedure allows for a faster recovery, less risk of complications, and provides better function, satisfaction, and activity than a total knee replacement. Total knee arthroplasty is a good and proven procedure, but when a smaller, less-invasive, and more conservative surgery can provide the same or better outcome, the surgeons at North Atlantic Surgical Suites favor this procedure.

TOTAL KNEE REPLACEMENT SURGERY

Total knee replacement, while a bigger operation than partial knee, provides better than 90% satisfaction for the patient. Total knee replacement is recommended when more than one compartment is “worn out”, when the deformity is greater, and when ligaments are damaged, not functioning well, or cannot be balanced. The recovery from total knee replacement can be longer and more difficult than partial knee. However, doing the right operation first with the least invasive techniques available to provide long-lasting pain relief is the goal of North Atlantic Surgical Suites.

95% of the time, pre-operative x-rays and examination are accurate in determining if a patient is a good candidate for partial or total knee replacement. However, 5% of the time something seen or observed during the procedure would move the surgeon to change from a partial knee to a total knee replacement.

With the novel, multi-modal pain management and the pre-operative and post-operative protocols developed and practiced at North Atlantic Surgical Suites, total knee replacement can be safely performed in the outpatient environment.

TOTAL HIP REPLACEMENT SURGERY

Total hip replacement is for patients with end-stage hip osteoarthritis or another condition that results in hip joint destruction. The advent of newer, minimally invasive and muscle-sparing surgical approaches has allowed surgeons to perform hip replacements with considerably less pain and debilitation. In combination with modern anesthesia techniques and a multimodal approach to pain control, hip replacements can now be performed safely as an outpatient procedure. Embracing these novel and less invasive techniques in joint replacement allows us at North Atlantic Surgical Suites to provide the same successful surgery with a faster recovery and an improved surgical experience.

THE RISKS OF JOINT REPLACEMENT SURGERY

All surgical procedures have some risks. Despite utilizing specialized pre-operative testing, less invasive techniques, and novel pain and rehabilitation management, every joint replacement is still a major surgery. Although advances in technology and medical care have made the procedure very safe and effective, these risks do exist. These risks should be considered carefully before you decide to have surgery. We encourage you to discuss the potential risks with your orthopedic surgeon, primary care provider, and your family.

Every measure will be taken by our team of experts to minimize the risks and avoid complications. Although complications are rare, they do sometimes occur. We will do our very best to avoid the most common risks which include:

Blood Clots: Blood clots can form in a leg vein and in your lungs after joint replacement surgery and can be dangerous. Blood clots are more common in older patients, patients who are obese, patients with a history of blood clots, and patients with cancer. We believe in evaluating the risk and developing a preventative treatment plan for each patient. Reducing the risk of blood clots is an essential reason why you can expect to get moving very quickly after surgery. Additionally, we recommend the use of portable calf compression devices for as long as your provider specifies. You will receive these devices before leaving the surgical center.

Hematoma: Bleeding into the joint can occur either immediately after surgery or at a later time. This is accompanied by acute pain and swelling and is sometimes confused with infection.

Infection: Infection is very rare in healthy patients having joint replacement. Patients with chronic health conditions, like diabetes or liver disease, or patients who take some forms of corticosteroids, are at higher risk of infection after any surgery. Superficial wound infections are usually treated with antibiotics. Deeper infections inside the joint may require additional surgery.

Nerve, Blood Vessel, and Ligament Injuries: Damage to the nearby nerves, blood vessels and ligaments, are possible but extremely rare. More commonly there is numbness in the area of the incision which usually, but not always, resolves in 6-12 months. Don't be surprised if you have some small residual numbness in one or more areas around your incision.

Wound Healing: Sometimes the surgical incision heals slowly, particularly if you take corticosteroids or have a disease that affects the immune system, such as diabetes. Smoking can cause serious complications, and quitting before undergoing joint replacement surgery is *strongly encouraged*. Talk with your orthopedic team or your family physician if you need help with smoking cessation.

Limited Range of Motion: Within a day of surgery, you will begin exercises to help

improve the flexibility of your knee or hip. Your ability to bend your knee after surgery often depends on how far you could bend it before surgery. The motion before surgery can also affect the motion of your hip following recovery. Even after physical therapy and an extended recovery period, some people are not able to bend their hip or knee far enough to do normal activities such as reaching your feet to put on socks or tie your shoes.

Arthritis Progression (Partial Knee): After surgery, the knee may experience further degeneration in the remaining portions of the knee that were not replaced. This has been documented to be less than 10% at 20 years for partial knee replacement procedures.

Wear: Your new knee/hip replacement is a mechanical device that will wear over time. The rate of wear may depend on your age, weight, and activity level. Specialized plastics (polyethylene) are used that demonstrate reduced wear in hip and knee replacement.

Loosening of the Joint: Over the long term, loosening of the artificial joint is a risk associated with joint replacement. Loosening may occur when tissue grows between the artificial joint and your bone.

WHAT RESULTS ARE TYPICAL

You can expect a successful outcome from your joint replacement surgery. Generally, patients experience less pain and more mobility, and can resume most of the activities they enjoyed before the onset of arthritis. Long-term studies show that over 90% of artificial joints are intact and fully functional after 10-years. Your artificial joint will last longer if you maintain your ideal weight, exercise, and undergo annual routine follow-up examinations.

YOU CAN ALSO HELP REDUCE YOUR RISKS OF MANY OF THESE COMPLICATIONS BY:

- Reducing or eliminating the use of tobacco
- Being compliant with managing your diabetes, if applicable
- Maintaining a healthy diet
- Using good hand washing techniques
- Performing your exercises as directed by physical therapy
- Limiting high impact activities as directed by your surgeon

Preparing for Your Surgery

Your North Atlantic Surgical Suites experience begins long before your actual surgery. These guidelines will prepare you for a rapid and safe recovery in your quest for improved mobility and health.

To make sure you and your family are fully prepared for your joint replacement experience, it is important that you carefully and thoroughly review this Patient Education Resource Guide and practice your exercises before surgery. This information will help you better understand your diagnosis, the joint replacement process and what to expect every step of the way as you prepare for your Ideal Patient Experience. You will be introduced to the exercises, tips, and activities that will speed recovery and promote success. Please call us if you have any questions or concerns regarding this information.

HELP FROM YOUR FAMILY AND COACH

Recovering from your replacement is a team effort. Your family's and "coach's" support can make all the difference, not just in the Suites, but also throughout the weeks before and after your surgery. We strongly recommend that you bring your "coach" with you to your preoperative visit. This person should be someone who is willing to support you every step of the way and who can participate fully in activities before surgery and during your recovery.

SCHEDULING YOUR SURGERY

Once it has been determined that surgery is your best option, you may schedule your surgery while in the office. At that time, we will work with you to obtain preauthorization from your insurance company. This may take several days to accomplish.

PRACTICING YOUR EXERCISES

Included in this Patient Education Resource Guide you will find exercises you will need to do before and after surgery. Performing these exercises regularly and properly is perhaps the most important factor in speedy recovery and determining long-term success of your new joint. Keep in mind that the exercises are designed to strengthen muscles around the joint and improve mobility. The exercises are not always easy, but they are an important part of your treatment and recovery process. Some soreness in your joint is normal and will improve over time. If you experience severe pain with any exercise, you should stop immediately.

**If you experience severe pain with any exercise,
you should stop immediately.**

PHYSICAL THERAPY EVALUATION AND EDUCATION

The effects of arthritis on your knee result in loss of strength and difficulty with many functional activities. The goal of the surgery is to restore these to a less painful and more functional level. You may consider a pre-surgical appointment with a physical therapist at your anticipated outpatient physical therapy center. The post-operative exercises will be reviewed. This will help you, your coach, and your family to participate in your recovery through education, practice, and encouragement.

MEDICATIONS YOU MAY TAKE PRIOR TO SURGERY

You may take your prescription medications as directed by your North Atlantic Surgical Suites surgeon. These may include Celebrex® and over the counter medications such as Tylenol®, Claritin® and Benadryl®. We utilize some post-operative pain medications to reduce your pain during the first few days after surgery. During your pre-operative clearance appointment, your PCP should address which of your medications you should take the morning of surgery. Your surgeon may also prescribe additional medications to take the morning of surgery. Take the designated medications with small sips of water.

Medications You Must STOP Taking Prior to Surgery

****YOU MUST GET PERMISSION FROM YOUR PRESCRIBING PROVIDER PRIOR TO STOPPING ANY OF YOUR MEDICATIONS****

Some medications that you currently take may prove harmful during surgery because they thin your blood and increase the risk of bleeding after surgery.

If you take the following medications* you must stop taking them prior to your surgery unless otherwise directed:

- **2 Weeks Prior:** Prescription diet medications (such as Phentermine), herbal supplements (such as St. John's Wort), vitamins, and some rheumatoid arthritis medications.
- **7 Days Prior:** Blood thinners, anticoagulants, and antiplatelet agents (such as Coumadin®, Plavix®, Effient®), Aspirin, compounds containing aspirin, hormone replacement therapy, omega 3 fatty acids, and anti-inflammatory medications (such as Ibuprofen, Motrin®, Advil®, Aleve®, Naproxyn®, Relafin® or Diclofenac). You may continue Celebrex®.

If you are on any of the following medications (Coumadin®, Plavix®, Effient®, Lovenox®, Eliquis®, Pradaxa®) please inform your prescribing provider that you may be receiving a spinal anesthetic. To receive a spinal anesthetic, these medications **MUST** be stopped for a specific duration prior to surgery with **approval from your prescribing provider**. The durations are listed below:

Lovenox®: 24 hours

Coumadin®: 5 days or normal INR

Eliquis®: 72 hours

Plavix®: 5-7 days

Effient®: 7-10 days

Pradaxa®: 5 days

***Again, these are **ONLY** examples. Please discuss all your current medications and supplements with your PCP and surgeon. ***

PREVENTING SURGICAL SITE INFECTION

There are several steps that you can take to help prevent surgical site infections.

Shaving: It is very important that you do not shave your legs or use any hair removal products anywhere near the surgical area for **FIVE** days prior to surgery. Studies show an increased risk of surgical site infection associated with shaving. This is attributed to the microscopic cuts in the skin that allow bacteria to enter.

Clean Hands: Hand hygiene is very important. You will notice your caregivers using alcohol-based hand sanitizer when entering your room. We also strongly encourage your family and friends to utilize this cleanser, and to wash their hands frequently to prevent the spread of infection.

Illness: If you become ill with a fever, cold, sore throat, flu, or any other illness, please contact your surgeon.

Skin Rash: Broken skin or rashes should be reported to your surgeon.

Pre-Surgery Bathing: You will be instructed to shower with a special OTC anti-septic cleanser (such as Hibiclens®) the night before and the morning of your surgery. During your shower use the special cleanser, leaving it on your knee or hip area for 3-5 minutes. Also, do not use any lotions, perfumes or powders. Following your shower, put on clean, fresh pajamas and clean sheets on your bed.

TIPS FOR PREPARING YOUR HOME

You and your family may want to consider these **RECOMMENDATIONS** to help make your home safe and comfortable when you return from your surgery.

- Purchase a non-slip bath mat for inside your tub/shower.
- Purchase a raised toilet seat (can be purchased at your local drug store).
- Check every room for tripping hazards. Remove throw rugs and secure electrical cords out of your way.
- Determine what items from dressers, cabinets and shelves you will need immediately after returning home. Any items you use often should be moved to counter height to avoid excessive bending or reaching.
- Plan on using a cordless phone or plan to use a cell phone. They can be tucked away inside a pocket, carried easily or set within reach.
- Make sure stairs have handrails that are securely fastened to the wall.

- A chair which has a firm back and arm rests is recommended during your recovery. A chair that sits higher will help you stand more easily. ***Chairs with wheels should not be used under any circumstances.***
- In order to minimize cooking, prepare meals in advance and freeze them. Alternatively, you can purchase prepared meals for convenience.
- Install night lights in bathrooms, bedrooms, and hallways.
- Avoid yard work for 10 days prior to surgery. Make arrangements for outdoor work such as gardening or cutting the grass for at least 2 weeks after surgery.
- Do laundry ahead of time and put clean linens on your bed.
- Arrange for someone to collect your newspaper and mail.
- Your safety is our primary concern. We require that your coach, spouse, family member, or friend stay with you after your surgery until you are able to perform activities of daily living independently and safely. Typically, this occurs within a few days after you return home.

YOUR SURGERY DAY

You may eat as desired until midnight the night before the surgery.

Please restrict alcohol to one serving the night before surgery.

You may be asked many of the same questions more than once; however, it is important to verify information for your safety. Providing the highest quality of care is our priority.

Please give North Atlantic Surgical Suites your cell phone number and your family's cell phone number so that we may contact you.

- Shower from the chin down with the special cleanser the morning of surgery.
- Wear clean, comfortable clothes. Avoid wearing any fragrance, deodorant, cream, lotion, makeup or nail polish.
- Take any medications as instructed by your PCP and/or surgeon with a small sip of water.
- Report to the check-in area on time.

Your Surgery at North Atlantic Surgical Suites

ARRIVING AT North Atlantic Surgical Suites

The day of your surgery will be a busy one. Please remember not to eat or drink anything, including mints or gum, after midnight the evening before your surgery. There may be several hours that pass between the time you check into the Suites and the time that your surgery is completed. Your family should be prepared to wait several hours.

It is important that you arrive at the center with plenty of time to check in and prepare for surgery. You will be instructed on your expected arrival time on the business day prior to your scheduled surgery.

For your convenience, a map and driving directions are provided at the back of this guide.

SURGERY PREPARATION

After you check in at registration, you will be directed to the surgical preparation area. A wristband will be applied at this time. If you have any allergies, an additional wristband will be applied. It is important for you to verify that all information on your identification bracelet is correct.

Once you've determined that your identification bracelet is correct, you will be asked to change into a surgical gown. Your clothes and any items you brought with you will be placed in a bag and put in a locker.

**Remember not to eat anything, including mints or gum, after midnight the evening prior to your surgery.
And No Smoking!**

Just before surgery, a nurse will review your medical records, take your vital signs, perform a brief physical exam, clean the surgical site, and make sure everything is in order.

As surgery approaches, a nurse will start an IV. This allows medication and fluids to flow directly into your bloodstream. We utilize preoperative antibiotics to reduce the risk of infection.

Your orthopedic surgeon and the anesthesiologist will visit you in the pre-op holding area prior to surgery. Among other things, your surgeon, physician assistant, or nurse practitioner will ask you to identify which knee/hip is being operated on and will mark the surgical site with a special marker. Your anesthesiologist will ask you a number of questions to help determine the best anesthesia for you.

FAMILY WAITING

On the morning of surgery, your family member or friend will be able to stay with you until you are ready to be transported to the operating room. At this point, they will be escorted to a family waiting area where they will wait while you have your surgery.

Once your joint replacement is complete, a member of the surgical team will contact your family member or friend. At this point, they will be able to speak with your surgeon to discuss your procedure.

*** COVID-19 precautions may affect visitor policy***

ANESTHESIA

Your anesthesiologist will meet you before surgery. At that time, he/she will examine you, discuss your medical history, and determine the best plan for your anesthetic care. It is important that you discuss any prior problems or difficulties you may have had with anesthesia.

Your anesthesiologist will discuss the risks and benefits associated with the various anesthetic options, as well as the potential side effects that can occur with each. Any time you have surgery and anesthesia there is a chance that you may experience some nausea and vomiting; however, medications are available to treat both and are routinely given ahead of time to try to prevent these symptoms.

THE OPERATING ROOM

Inside the operating room, you will be cared for by a team of physicians, physician assistants, nurses and skilled technicians. The total time required for surgery will be different from patient to patient depending on the complexity of your procedure.

RECOVERY

After surgery, you will be transported to an area called the Post Anesthesia Care Unit (PACU) or recovery room. Your stay in the PACU will depend upon your rate of recovery from the effects of the anesthesia. Following joint replacement, your PACU stay is typically 1½-2hrs, but may vary.

Nurses will check your vital signs; blood pressure, respiratory rate, and heart rate—and monitor your progress. They will also start your ice therapy.

Pain medications will be provided through your IV as needed. Our goal is to use preoperative medications and special medication injections during the surgery that will reduce your pain and therefore decrease the need for post-operative narcotic medications.

Nurses will check your bandages, check drainage from your surgical site, and encourage you to cough and take deep breaths. They will also apply leg compression

devices to help with circulation.

Once you are awake and ready for your first walk, your family member or “coach” will be able to join you and assist our team with your recovery. After your stay in the PACU, you will be discharged home.

Do not try to walk until your nurse determines you are ready.

WHAT TO EXPECT AFTER SURGERY

Once your vital signs are stable and you have regained movement and sensation in your lower extremities, your nurse may assist you to sit at the edge of the bed, stand and walk.

Managing Your Pain

The amount of pain and discomfort you experience depends on multiple factors. You will receive pain medication orally, and/or through your IV after surgery if needed. Your physicians and nurses will do everything possible to relieve your pain and discomfort using medications and other techniques.

Communication is an important part of helping us manage your pain. It is important to share information with your nurses about any pain you experience. Be as specific as possible. For example, where is the pain? How often do you feel pain? What does the pain feel like—Is it sharp, dull, aching, spreading out? On a scale of 1 to 10, where 10 is the worst pain imaginable, how would you rate your pain?

For most patients, the surgical anesthetic wears off over a period of days. When this occurs, you will start taking pain medications by mouth. Arrange to take your pain pills approximately 30 minutes prior to doing your exercises to help control the soreness that often accompanies activity in the first few days after surgery.

Additional Medication

You may receive additional IV antibiotics before you go home and additional medicines as needed. Sometimes, patients may feel nauseous or constipated. Both symptoms can be managed with medication so it is important that you talk with your nurse if you don't feel well.

Early Ambulation

You may walk with the assistance of your nurse when it has been determined that you are stable, and you have regained feeling and movement in your legs.

Your North Atlantic Surgical Suites team will help you begin your exercise routine. These exercises are designed to help increase strength and flexibility in the joint. Ultimately, the goal is for you to perform activities of daily living, like walking, climbing stairs, and getting in and out of a bed and up and down from a chair or toilet. Also, for knee replacement surgery, bend your knee at least 90 degrees. In order to ensure maximum success, it is important that you follow physical therapy instructions after you are discharged to home.

YOUR RECOVERY GOALS

Post op: Comfort/Pain Management

Once you are home from your joint replacement the emphasis is on a safe and comfortable recovery. The use of a **cooling device** (such as ice) is your first choice for comfort management. Cooling the extremity should be coordinated with the **Exercises** provided to you. **Elevation** of the extremity will also be effective in controlling swelling and pain. These three modalities in **combination** will satisfy the majority of your pain management needs. **Tylenol®** can also help with pain management.

An anti-inflammatory medication may also be prescribed and/or recommended for post-operative pain. These particular meds are tailored to individual patients and may not be used for all patients.

All patients are asked to purchase an anti-acid medication. These are **over the counter medications**. Examples are Pepcid® and Prilosec®.

These help with the stomach's reaction to medications that help with recovery.

As you can see, the last thing on the list is narcotic pain medication. Examples are oxycodone, Percocet®, Norco®, and Dilaudid®. These meds are strong pain relievers and should only be used after all the above modalities have been tried by you. You as a patient will be surprised how well you do **without** the consistent use of narcotic pain meds.

If the above comfort measures are not adequate, please call your doctor. It is our goal to make your recovery **safe and comfortable**. Remember a completely pain free recovery is not the goal as the medications required to do this may be very harmful to your recovery. As your surgeon, we want you to be safe and the process described above will help you achieve that goal.

DAY OF SURGERY

- Up in chair as tolerated
- Diet as tolerated. Start slow and advance as you feel better.
- Ankle pumps as instructed
- Ice therapy in place
- Manage pain
- Transition home
- Walk with a walker and/or your crutches to help with balance

AT HOME: FIRST POST-OPERATIVE DAY

- Leave bandage in place, unless otherwise instructed
- Continue use of Ice
- Take pain medications as needed
- Elevate ankle above the knee and the knee above the hip to reduce swelling when you are not doing exercises or walking
- Exercises at least 3 times
- May go up and down a flight of stairs once (or as tolerated)

AT HOME: SECOND POST-OPERATIVE DAY

- May shower
- After showering please pat the wound area dry
- Increase your activity as pain and swelling allow.
- Work on bending exercises 3-4 times a day
- Continue use of Ice
- Take pain medications as needed
- Elevate ankle above the knee and the knee above the hip to reduce swelling when not walking or doing your exercises
- Outpatient or Home Physical Therapy may begin to further help improve function, walking, and reduce swelling

Unless otherwise noted, you can bear weight on the affected leg as you can tolerate. You may receive a nerve block and/or local anesthetic, so it is important to use crutches or a walker to prevent falls during this time. Most patients use crutches and/or a walker for 1 to 2 weeks. The amount of pain you experience and the improvement in your limp should be your guide for discontinuing the walker use. Hip replacement patients should transition to a cane in the non-operative side hand.

If you have any questions or problems, please call your surgeons office as someone is available 24 hours a day.

****If you have a fever above 101 degrees, if you notice excessive drainage from your incision or if you have an increase in pain, swelling or redness in either leg, or numbness or tingling in the operative leg, which is not relieved by changing your position, **CALL YOUR SURGEON!** ****

It is an honor and privilege to care for you and we hope to have you back to walking and activities as soon as possible.

Transitioning Home

PREPARING TO RETURN HOME

You'll be ready to go home once you're able to walk safely and perform your exercise program and your surgeon or assistant determines that you are ready for dismissal. You must arrange for someone to stay with you when you go home or you will not be released from the surgery center in a timely manner.

You must arrange for someone to stay with you when you go home or you will not be released from the Suites in a timely manner.

Before you go home, we will make sure that all your discharge needs are met. Your surgeon may order the following based on your individual needs:

- Norco®, Percocet® or other medication for pain
- Celebrex® to decrease inflammation
- Lyrica® or Neurontin® for nerve pain
- Aspirin, Coumadin®, Lovenox®, or Xarelto®, Eliquis® or other medication to thin the blood
- Keflex® or another antibiotic to prevent infection

These prescriptions will be given and/or sent to your pharmacy prior to the day of surgery.

EQUIPMENT WHEN YOU LEAVE THE CENTER

The following is a list of common equipment used after a joint replacement. Your therapists will assist you in evaluating the type of equipment you will need following your surgery. Equipment recommendations are based on the individual needs of each patient.

- Ice or Ice Machine
- Walker/Cane/Crutches
- Raised toilet seat/Bedside commode

THE TRIP HOME

You will need to arrange for your family member or friend to drive you home. To make your ride more comfortable, your driver should bring pillows for you to sit on, slide your seat back, and recline the seat slightly.

Whether traveling by vehicle or plane, it is vital that you do ankle pumps and walk for 10-15 minutes every 1 -2 hours. This will help prevent blood clots and joint stiffness.

RECOVERING AT HOME

MEDICATIONS

Be sure to take your pain medications by mouth with a meal or snack. Avoid drinking alcohol or driving while taking prescribed pain medication. Consider taking pain medication 1/2 hour prior to performing the prescribed physical therapy exercises.

It is normal to experience a deep ache through the bone after surgery.

Some people experience constipation while taking pain medication. You may consider drinking prune juice daily, drinking more water, adding fiber to your diet, or taking an over the counter stool softener to prevent this. Exercise and walking also help prevent constipation.

Resume your home medications as instructed by your physician.

ACTIVITY

Continue your hip and knee exercises as instructed by your physical therapist three times every day. You may bear weight as tolerated on the surgical leg, unless instructed otherwise by your surgeon.

Get up and walk for 10 minutes every hour using your crutches or walker for support and safety. Continue to use your crutches or walker for 1-4 days following surgery or longer as directed by your surgeon and/or physical therapist. In addition, take two 10-15 minute walks each day.

Bend and straighten your knee 10-20 times slowly every hour. Increase the amount you bend your knee with each exercise.

Left leg: You may resume driving when you have regained complete control of your leg (usually within 7-10 days after surgery) and are no longer taking narcotic pain medications. Right leg: as recommended by your surgeon.

Avoid resistance training or swimming until cleared by your surgeon.

MANAGING SWELLING

It is normal to have bruising around your thigh or knee and down to your foot as well as up the inner thigh to the groin area. You may also experience swelling of the upper and lower leg down to the foot and ankle. Swelling usually peaks around 7 days after surgery.

Ice should not be placed directly on the skin.

Elevate your leg 10" above the level of your heart and apply the ice if you have excessive swelling. You may place a pillow under your heel but do not place one under your knee.

INCISION CARE

Follow your surgeon's instructions regarding removing/changing your bandage and showering. This information will be provided in your discharge paperwork.

Use regular soap but do NOT use creams or lotions on your incision for four weeks after surgery or until cleared by your surgeon.

Avoid soaking your incision in a tub bath, hot tub or participating in any water activities until the incision is completely healed, closed, and no longer draining. This typically occurs two to four weeks after surgery.

DIET AND REST

Eat a healthy diet to promote healing. You may experience a decreased appetite after surgery. This is normal and should gradually resolve itself.

Take rest breaks as needed during the day and get a good night's sleep to support the healing process. However, it is common to have difficulty sleeping after surgery. This will gradually improve but is typically worse around 4-6 weeks after joint replacement.

You may sleep on your back or on your side with a pillow between your legs for comfort.

WHEN TO CALL YOUR SURGEON

A moderate amount of bruising, swelling, and redness can be expected after joint replacement surgery. If you experience any of the following, you should contact your surgeon's office.

- A fall
- Numbness, tingling, or burning that persist even after elevating your leg and applying ice
- Pain not relieved by medication or pain that is getting worse
- Thick yellow drainage or bleeding from the incision site
- Inability to do your exercises
- Excessive swelling that persists
- Toes that are very cold and do not get warm when you cover them
- Increased redness around your incision
- A temperature over 101 degrees F (38.3 degrees C)
- Any unexpected problems, concerns, or questions

If you need a refill of your pain medication, please call your surgeons office, 8:00 a.m. to 3:00 p.m. Monday through Friday, as most pharmacies are also open during these hours and will be able to fill your prescription in a timely manner. **Please call 1-2 days before you run out.**

It is unlikely, but if you experience chest pain, palpitations or difficult breathing, please call 911.

LIFE AFTER JOINT REPLACEMENT SURGERY

Traveling

When traveling long distances, you should attempt to change position or try to stand every hour. Some of the exercises, like ankle pumps, can also be performed should you need to sit for long periods of time. If traveling within 2 weeks of your surgery, you should wear your calf compression pumps.

Because your new artificial joint contains metal components, you will likely set off the security systems at airports or shopping malls. This is normal and should not cause concern.

Exercises and Activity

Exercise and maintaining an active lifestyle are important parts of health. Most patients

with artificial joints are able to enjoy many activities, though some should be avoided. In general, high impact exercises, like running, jumping, heavy weight lifting, or contact sports, are not recommended. Participating in these activities, or activities like them, may damage your joint or cause it to wear down much more quickly. Low impact activities like swimming, walking, gardening, and golf are encouraged. You may kneel on your new knee without damaging it; however, it will likely feel uncomfortable.

Dental Care

Following your joint replacement surgery, it is important to notify your dentist that you have a joint implant. It is essential that you obtain a prescription from your dentist, PCP or surgeon, for a prophylactic antibiotic to be taken PRIOR to any dental cleaning or procedure, for as long as your orthopedic surgeon recommends. You will need to remind your dentist before every scheduled appointment in the future of this requirement in order to reduce the risk of developing an infection in your joint.

Reducing Risks of Infection in Your New Joint

To reduce your risk of infection, antibiotics may need to be administered prior to any invasive test, procedure or surgery. The physician or surgeon performing the test, procedure, or surgery should prescribe antibiotics if indicated.

Follow-up Care

You will see your surgeon or physician assistant for a follow-up appointment at regular intervals. Joint replacements are monitored thereafter every 3 to 5 years for life. We may include phone surveys for research purposes.

Exercises and Mobility

The following pages contain a list of basic exercises and activities that you will be performing following your knee surgery. These activities are vital in helping you return to your normal activities and are designed to help increase leg strength, flexibility and function. Practicing the exercises at home prior to your surgery will make the exercises easier for you after surgery.

As a general rule, exercises should be performed three times a day. Do not add weights or other resistance to these exercises for at least six weeks after surgery.

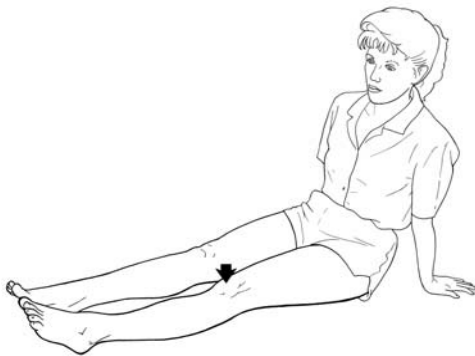
EXERCISE DESCRIPTIONS

Phase I: Begin these exercises the first day after surgery.

Propped Knee Extension: To fully straighten your knee, prop your surgical leg on a small towel or pillow under your heel, not under the knee. Maintain this position for 5 minutes, slowly increasing your tolerance to 30 minutes at one time. Perform 1 repetition.



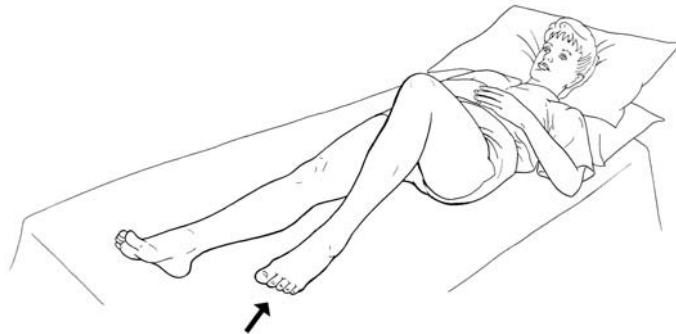
Quad Sets: To achieve a fully straight knee and to improve quadriceps strength, lie with your leg straight and toes pointed toward the ceiling. Tighten the muscle on the top of your thigh, keeping your thigh on the bed while attempting to raise your heel slightly off the bed. Hold your muscles tight for ten seconds. Perform 2 sets of 10 repetitions.



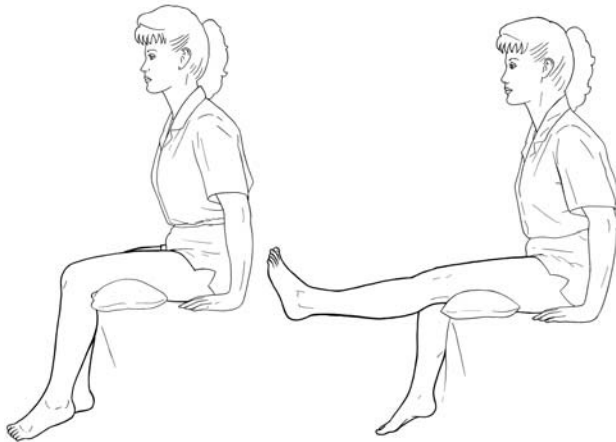
Ankle Pumps: To promote circulation and to decrease swelling post-operatively, in bed or sitting in a chair, point your toes up, down, left and right. Perform 2 sets of 10 repetitions.



Heel Slides: To promote active bending, lie on your back with your legs straight and your toes pointed toward the ceiling. Slowly pull your heel towards your buttocks as far as you can, attempting to achieve greater motion with each repetition. Perform 2 sets of 10 repetitions.



Seated Knee Extension: To promote quadriceps strength, sit with your knees bent at 90 degrees. Straighten your leg at the knee while keeping your back upright. Slowly lower your leg to the starting position. Perform 2 sets of 10 repetitions.



Seated Knee Flexion: To promote knee bending, sit in a chair with your knee bent to 90 degrees. Keeping your foot flat and fixed to the floor, gently move your buttocks forward in the chair. Relax in the new position for 20 seconds. Perform 1 set of 5 repetitions.

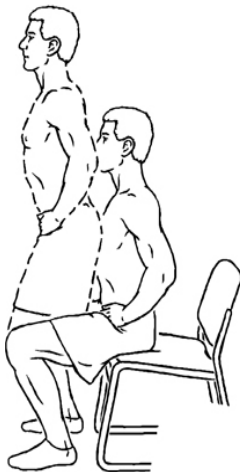


Phase II: Begin these exercises 7 days after surgery. Continue daily for 6 weeks.

Straight Leg Raises: To promote quadriceps strength, lie on your back and bend your uninvolved knee to a comfortable position. Tighten your thigh muscle to straighten your operated knee and raise your leg until your thighs are parallel, hold 3 seconds. Slowly lower your leg. Only perform this exercise if you are able to keep your knee completely straight when lifting your leg. Perform 2 sets of 10 repetitions.

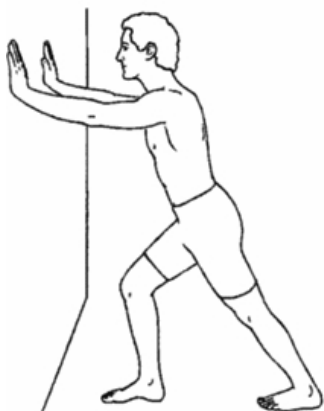


Sit to Stands: To promote quadriceps strength, start by sitting in a chair with armrests and rise to a standing position, pushing with your arms to assist if needed. Slowly lower yourself back to sitting. Progress to sitting and standing without the use of your arms. Perform 2 sets of 10 repetitions.



Calf Stretch: To achieve full knee straightening and to stretch out your calf muscles, stand with your hands on a wall and step forward with the foot of your uninvolved leg. Gently lean your hips toward the wall while keeping your surgical knee straight, your

heel on the floor and your toes pointed straight ahead. Hold this position for twenty seconds and repeat with the other leg. Perform 2 sets of 5 repetitions.



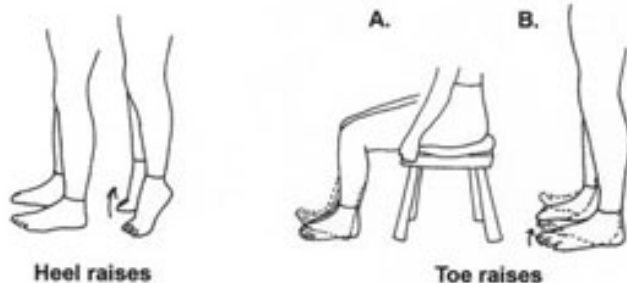
Standing Knee Extension: To strengthen your quadriceps muscle and straighten your knee, stand with your back against the wall and your uninvolved leg slightly forward for balance. While keeping your foot on the floor, press the back of your surgical knee toward the wall to straighten and hold for 10 seconds. Perform 2 sets of 10 repetitions.

Standing Knee Bends: To promote hamstring strength, hold onto a table or counter for balance and bend your surgical knee, moving your foot toward your buttocks and keeping your thighs parallel. Slowly return to starting position. Switch legs after 10 repetitions. Perform 2 sets of 10 repetitions.

Standing Marching: To promote knee motion and strength, hold onto a table or counter and lift your knee up to the level of your hip, keeping your body erect, and lower slowly. Alternate legs with each repetition. Perform 2 sets of 10 repetitions.



Standing Toe and Heel Raises: To improve your standing balance, stand with feet shoulder distance apart and hold onto table or counter. Rise up onto the balls of your feet, lower slowly and rock back onto your heels, lifting your toes off the floor while keeping your knees straight. Perform 2 sets of 10 repetitions.



Standing Hip Abduction: To strengthen your hip muscles, stand on non-surgical leg while holding onto a counter. Keeping your trunk upright, knee straight and toes pointed forward, move your surgical leg out to your side and slightly back. Lower leg slowly to starting position. Switch legs after 10 repetitions. Perform 2 sets of 10 repetitions.



Mobility

Walking With an Assistive Device (reviewed at your preoperative physical therapy evaluation)

1. Move your walker or crutches first, then your surgical leg, followed by your other leg.
2. Heel to Toe gait: When walking with a walker or crutches, stand tall and look ahead (not at the floor), bend your knee to take a step while keeping your toes pointed straight ahead, then set your heel on the floor first.
3. For better balance, stay in the middle of your walker. Do not step beyond the front of your walker.
4. Use your walker until you are able to walk confidently without a limp. If you find yourself holding onto the wall or other objects while walking, you need to continue to use your walker. You may transition to a cane when you are able to stand on your surgical leg without support.

Stairs

"Up with the good. Down with the bad."

1. Hold onto the railing during stair negotiation.
2. Step up with the "good leg" (non-surgical leg) first, then the surgical leg.
3. Step down with the "bad leg" (surgical leg) first, then the non-surgical leg.

Bed Mobility

Getting Out of Bed

1. Scoot your bottom and hips to the edge of the bed.
2. Slide your legs off the edge of the bed while using your arms to help sit up.

Getting Into Bed

1. Slide your surgical leg forward for comfort and sit on the edge of the bed.
2. Scoot your bottom and hips back, bring your legs onto the bed.
3. Scoot up in bed using your arms and non-surgical leg.

Standing

1. Scoot to the edge of the seat, keeping your surgical leg forward for comfort.
2. Push from armrests or toilet to stand.

Sitting

1. Back up (using a walker or crutches) until both legs touch the chair or toilet.
2. Slide your surgical leg forward for comfort, reach back for the armrest, handle or toilet and then sit slowly.

Tub / Shower Transfers

Use adaptive equipment if needed. For a step-in shower:

1. Place shower chair into the shower.
2. Stand near the shower lip.
3. Step over the shower lip with your non-surgical leg first and then your surgical leg.
4. Back up to the shower bench or seat.
5. Slide your surgical leg forward for comfort, reach back for the chair or bench and sit slowly. If available, use hand-held shower and/or long-handled sponge to avoid excessive bending.

Car Transfers

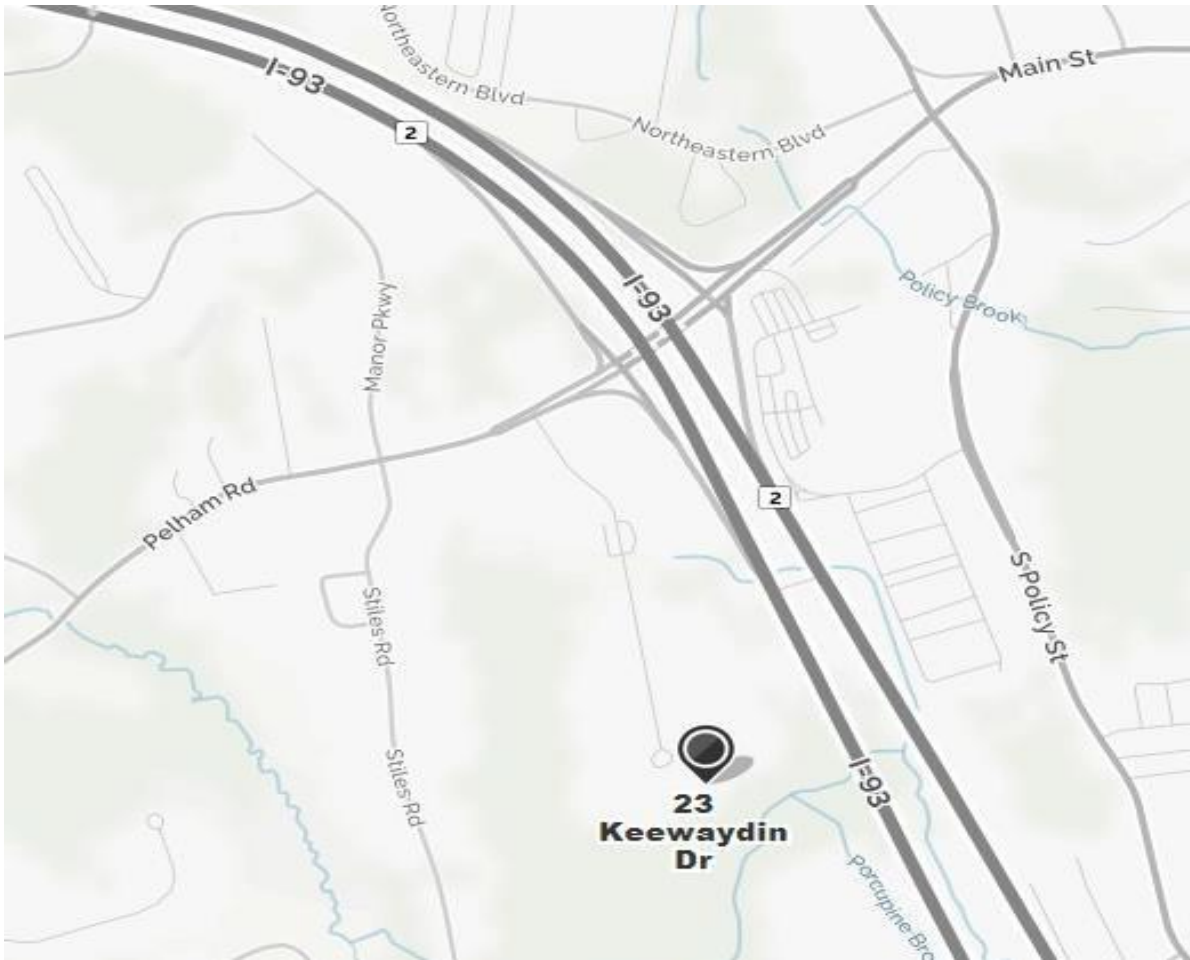
Slide the seat of your car as far back as possible and if able, recline the seat. If needed, place a pillow on the seat to make it level. Two-door cars work best for access, but sedans are fine for car transfers. SUVs and trucks should be avoided for transfers due to the difficulty of getting in and out of the vehicle.

1. Back up to the car using your walker (or crutches). Reach back to the car seat or dashboard for support.
2. Slide your surgical leg forward as you sit down on the edge of the seat.
3. Scoot back on the seat as far as possible and lean back as you swing your legs into the car.
4. To get out of the car, reverse the above procedure.

Additional Information

NOTES:

LOCATION MAP



23 Keewaydin Drive, Suite 100
Salem, NH 03079
603-386-0272

Thank you for choosing North Atlantic Surgical Suites. Our team wishes you a safe and wonderful recovery.

Nearby Hotels

Holiday Inn: 1 Keewaydin Dr. Salem, NH 03079 (603-893-5511)

La Quinta : 8 Keewaydin Dr. Salem, NH 03079 (603-893-4722)