Your Guide for Total Knee Replacement Success

AMITAbay.org/Orthopedics
Contact Numbers

**AMITA Health Alexian Brothers Medical Center Elk Grove Village**
Scheduling Pre-surgical Joint Class 1.847.472.1432
Pre-surgical Tests 1.847.640.3870
Central Scheduling 1.877.717.7700
Orthopedic Nurse Resource 1.847.472.1432

**AMITA Health St. Alexius Medical Center Hoffman Estates**
Scheduling Pre-surgical Joint Class 1.847.843.2000 ext. 2472
Pre-surgical Tests 1.847.843.2000 ext. 8668
Central Scheduling 1.877.717.7700
Orthopedic Nurse Resource 1.847.843.2000 ext. 2472

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Dear Patient,

Thank you for choosing AMITA Health Orthopedics Institute for your total knee replacement surgery. At AMITA Health, our healthcare team is focused on ensuring your stay with us is exceptional.

We realize that being in the hospital may be an uneasy experience. Therefore, through our values of God honoring, justice, compassion, integrity, and dignity we strive to make your hospital stay as pleasant and comfortable as possible. These values drive our organization to provide patient-centered care by actively partnering with our patients in their healthcare.

Our mission is to extend the healing ministry of Jesus to the community by providing quality and compassionate healthcare. We are devoted to responding to the needs of our patients and their families. Our staff is committed to providing you safe and efficient care in a professional and courteous manner.

This guidebook holds important instructions and information to help prepare you for your joint replacement, and it clearly outlines the things you need before, during and after your procedure. Please use the guidebook as a reference throughout your medical experience with us, as it includes pre- and post-surgical exercises and planning tools. Once again, thank you for choosing AMITA Health for your orthopedic care.

Sincerely,

Your AMITA Health Orthopedic Institute Care Team

Acknowledgements

Thank you to the AMITA Health Patient and Family Advisory Committee for their contributions in developing this patient-centered educational tool. The committee members are an invaluable resource of actual patients and family members. Their experiences and stories demonstrate both excellence and opportunities for improvement in the way healthcare is delivered at AMITA Health.
INTRODUCTION

What Is Total Knee Replacement?

Total knee replacement is a surgical procedure in which damaged parts of the knee joint are replaced with artificial components made of metal and plastic. It is typically performed on individuals age 55 and over, whose knees have been damaged by arthritis, trauma or other destructive diseases of the joint, which result in severe, limiting knee pain; significant stiffness; instability; and/or deformity of the knee.

During total knee replacement surgery, the damaged cartilage and bone are removed. Structures of the knee joint are then resurfaced with the artificial components. Knee replacement surgery is a highly successful procedure that restores mobility, allowing you to resume and enjoy your normal activities. Additional benefits may be the correction of knee alignment or of knee deformity and pain relief.

Explanation of the Implant

The surgery is done by separating the muscles and ligaments around the knee to expose the inside of the joint. In the majority of total knee replacements, the surgeon places the components of the implant (also called a prosthesis) on the joint surfaces of three bones that make up the knee joint: the thigh bone (femur), the shin bone (tibia) and the knee cap (patella). The patellar component sometimes is not replaced.

During knee replacement surgery, the implant components are usually connected to the bone with cement. The cemented implants are fixed rigidly at the time of surgery. Some implants are “cementless,” meaning the component surfaces resemble a honeycomb. This porous design permits the growth of new bone tissue on the surface of the fixed metal components that becomes fixed over time.

Your Hospital Stay

You will be admitted to the hospital on the day of your surgery and the surgical procedure will last approximately one to two hours. Your care after surgery will include a one to three day comprehensive inpatient rehabilitation program. You will receive physical and occupational therapy to ensure a successful recovery.

Rehabilitation

Exercise strengthens the muscles supporting the knee and maintains knee motion. During your inpatient rehabilitation, members of our physical therapy team will instruct you on walking, moving, sitting, standing and more as well as engage you in an exercise program. A successful recovery requires your active involvement in the rehabilitation phase for six to twelve weeks after you go home, including following precautions after surgery, using assistive equipment correctly and continuing to follow therapy instructions.
Preparing for Surgery

Congratulations! With your decision to have a total knee replacement you have taken the first step toward freedom from pain and discomfort. By following these guidelines and instructions provided by your physician, you will be well prepared for your surgery. If you have additional questions, call an Orthopedic Nurse Resource whose numbers are listed on page 3.

Schedule Your Medical and Dental Appointments

- **Primary Care Physician**: A full physical exam is needed for surgical readiness __________________ (date)
- **Dentist**: An oral check-up to ensure there are no potential sources of infection __________________ (date)
- **Pre-surgical Testing**: To complete necessary bloodwork and tests for a safe surgery __________________ (date)
- **Surgeon’s Office**: Remember to complete any paperwork for time away from work well before your surgery per your employer’s Human Resources Department requirements __________________ (date)
- **Other as directed by physician(s)**: ____________________________________________________________
  ____________________________________________________________
  __________________ (date)

Attend a Pre-surgical Joint Replacement Class

- Day, evening and weekend classes are available. Numbers for scheduling a pre-surgical joint class are listed on page 3.

Prevent Infections

- DO NOT use a razor to shave the area of surgery for five days before your surgery
  – Razors can cause small tears in the skin that can lead to infection

Safely Manage Medications

**STOP**: Discuss all of your current medications with your prescribing physician(s). Certain medications, like blood thinners may need to be changed for a period of time before surgery. For your reference, some common blood thinning medications are listed below:

- **Anti-Inflammatory**
  – Aspirin
  – Celebrex
  – Ibuprofen (ex: Advil, Motrin)
  – Indocin
  – Naproxen (ex: Aleve)

- **Blood Thinning**
  – Coumadin – Pradaxa
  – Eliquis – Xarelto
  – Plavix – Others

- **Vitamins and Herbals**
  – Stop all prior to surgery

Write Down Notes from Pre-surgical Testing Call

- Stop eating and drinking the day before surgery at (time) __________
- Arrive day of surgery for registration and any additional testing that may be required at (time) __________
- Take the following medications the morning of surgery with ONLY a sip of water:
  ____________________________________________________________
  ____________________________________________________________
  ____________________________________________________________
Practice Good Nutrition

- Increase protein intake 14 days prior to surgery to improve wound healing and muscle strength
  - Good sources of protein include eggs, fish, meat, beans, dairy products, and protein shakes

What You Eat Helps Your Recovery!
Good nutrition before surgery, during your hospital stay and when you go home helps to improve your recovery by:

- Decreasing your risk of infection
- Helping you leave the hospital sooner
- Reducing the need to come back to the hospital once you are home
- Helping you feel stronger

The Rule of 2’s
People who drink TWO of the following per day TWO weeks prior to surgery, during their hospital stay, and TWO weeks after surgery heal better and faster!

- Ensure® Active High Protein shake
- Glucerna® Advance for those living with diabetes to help control blood sugars
- Or equivalent supplement that provides 12-16 grams of protein per serving

Tips for Adding Ensure® Active High Protein Shake or Glucerna® Advance to Your Daily Routine

- Drink half of a bottle with vitamins or medications instead of water or juice two to three times a day
- Serve chilled or freeze into a popsicle
- Enjoy as a morning or afternoon snack
- Pour over cereal instead of milk; use as a creamer for coffee
- Add flavoring extract to change the flavors (for example, add mint to a chocolate shake)
- Visit EnsureHealthyMatters.com for additional recipes and coupons
Arranging for Care After Surgery

Most patients are able to go home after their surgery. This includes patients who live independently. **In most cases, we believe your home is the best and safest location for your recovery.** Many factors will be considered in this decision, including availability of family or friends to assist with daily activities, home environment and safety considerations, post-surgical functional status as evaluated by a physical therapist in the hospital and overall evaluation by your hospital team.

If you are not ready to go home at the time of discharge, you may go to a rehabilitation facility to gain the skills you need to safely return home. You should understand your options and how they are impacted by your insurance carrier. Throughout your recovery, you will work with your care team to make the right choice.

**Home with Home Health Care**
A majority of patients go home after surgery with in-home therapy services. These patients typically have better outcomes.

**Coverage:**
- Medicare: Choice of any agency
- Medicare/Medicaid Replacement Plans/Other Insurance Plans: Insurance determines which home health agencies are approved

**Typical In-home Services:**
- Physical/Occupational Therapy
- Nursing care (incision and medication monitoring)

**Obtaining Home Equipment:**
- Small, personal equipment may be purchased from the hospital or from online vendors
- Lending closets are an alternative to using insurance to purchase equipment. More information about common equipment can be found in the Frequently Asked Questions (FAQs) section at the end of this booklet. See page 31.

**Outpatient Physical/Occupational Therapy Services**
- Facility that offers therapy during business hours
- Just like an in-home therapist, these therapists communicate with your surgeon about your progress

**Skilled-Nursing Facilities**
Skilled nursing facilities provide nursing care and rehabilitation services for a short-term stay to prepare you for transition to home.

**Coverage:**
- Medicare: Choice of any facility
- Medicare/Medicaid Replacement Plans: Insurance approves facility based on patient meeting set criteria

**Acute Rehabilitation/Inpatient Hospital**
Acute Rehabilitation is only for patients with uncontrolled medical conditions that may impact rehabilitation. Joint replacement patients rarely go to this type of facility.

**Coverage:**
- Medicare: Choice of any facility; a physiatrist MUST admit the patient
- Medicare/Medicaid Replacement Plans: Insurance approves facility based on patient meeting specific criteria
Finding a Skilled Nursing Facility That Is In-network With Your Insurance

We recommend you find a skilled nursing facility a few weeks to months before your joint replacement surgery. This will allow you an opportunity to visit the location and feel comfortable with the care team and services.

Contact the Member Services Department for Your Insurance Carrier.
(Phone number is on the back of your insurance card)

- Request the names of 3-4 skilled-nursing facilities in your home zip code area that provide rehabilitation services and that accept your insurance.
- Contact those facilities and check bed availability for the time you are scheduled for surgery. If desired, also arrange for a tour.
Pre-surgery Exercises

Strong leg muscles are key to a successful recovery. The following exercises will help prepare your leg muscles for the surgery. By performing these exercises ahead of time, you will have the "muscle memory" to perform them more successfully during your hospital stay. These exercises may be performed on a bed or on the floor, whichever is more comfortable for you.

1. Ankle Pumps
Bend ankles up and down, alternating feet. Repeat 20 times. Perform at least 4 sessions per day. This exercise can be done sitting or lying down.

2. Quad Sets
Lie with a rolled towel or pillow under heel of surgical knee. Tighten the muscles on the top of the leg/thigh while trying to push knee toward the rolled towel or pillow. Hold for 5 seconds. Relax. Repeat 20 times. Perform 2 sessions per day.

3. Heel Slides
Bend surgical knee and pull heel toward buttocks. Return slowly to extended position, sliding heel along the bed. Repeat 20 times. Perform 2 sessions per day.
Pre-surgery Exercises

4. Abduction
Slide surgical leg out to the side. Keep leg pointed toward ceiling. Gently bring leg back to midline. Repeat 20 times. Perform 2 sessions per day.

5. Straight Leg Raise
Bend unaffected leg. Raise surgical leg six to eight inches with knee straight. Exhale and tighten thigh muscles while raising leg. Return slowly to bed. Repeat 20 times. Perform 2 sessions per day.
**Medication Options**

**Local Nerve Blocks:** During surgery a local anesthetic is administered to numb the surgery area, therefore be sure to ask for assistance at all times when standing up or walking. The block may last from 12-24 hours. When it starts to wear off you will feel a tingling sensation throughout the area.

**PCA (Patient Control Analgesia):** You control the administration of medication, depending on your needs. When you are in pain, press the GREEN button and you will receive a dose through your IV. To provide a steady level of pain relief, only you should push the button. For your safety, the pump has special features to limit the amount of medication you can receive in an hour.

**IV Push:** If you are experiencing moderate to severe pain between doses, let your care team member know right away so your pain care plan can be adjusted. IV medication provides quick relief versus sustained pain control.

**Oral (by mouth):** Oral pain medications provide the best relief when taken at set times. They will also be prescribed for use at home during recovery. It is important to be sure that your oral pain medication is effective prior to discharge. When your pain is controlled, you will be more active.

Side effects from pain medications can be: nausea, vomiting, itching, dry mouth, drowsiness and/or constipation. Anti-nausea medications along with stool softeners will be ordered for you to help with these side effects. Remember that it is important to increase your fluid and fiber intake even when you are at home.

**Post-surgical Pain Management**

- Throughout your hospitalization, your care team will frequently evaluate your pain level because pain symptoms vary from person to person, and we want to ensure your pain control is tailored to your needs.

- Some level of pain after surgery is to be expected.

- Our goal at AMITA Health is for your pain to be at a functional level so you are able to tolerate activity and participate in your rehabilitation. With less pain you can start walking, perform deep breathing exercises, regain strength more quickly, and minimize potential complications such as pneumonia and blood clots.

- Ice is very important in managing your pain. Ice should only be applied 20 minutes on and 20 minutes off with your surgical leg elevated. Ice packs should be used throughout the day and night along with pain medications.

- Remember it’s easy to stay on top of your pain, but hard to catch up. Keeping a good schedule to control the pain is key.

TIP: You may want to set an alarm for middle of the night medication doses.
Day Before Surgery

Pre-surgery Bathing Instructions
Please follow these instructions for showering the night before surgery. Hibiclens® soap is ordered to decrease bacteria on your skin. The instructions are VERY specific and need to be followed exactly as written. Your leg will be washed again thoroughly with a disinfectant at the hospital the morning of surgery.

Instructions:
• Shower with Hibiclens® (chlorhexidine) soap or, if you are allergic to chlorhexidine, use Dial® liquid antibacterial soap the night before your surgery.
• Do not shave any area of your body.
• Wash your hair as usual with your normal shampoo.
• Rinse your hair and body thoroughly after you shampoo to remove all shampoo residue.
• Apply the Hibiclens® (chlorhexidine) soap to your entire body, ONLY FROM THE NECK DOWN. Do not use this soap near your eyes or ears to avoid permanent injury to those areas.
• Wash thoroughly, paying special attention to the area where your surgery will be performed.
• Turn water off while you wash to prevent rinsing the soap off too soon.
• Wash your body gently for 5 minutes. Do NOT scrub the skin too hard.
• Do not wash with regular soap after Hibiclens® (chlorhexidine) soap is used.
• Turn the water back on and rinse your body thoroughly.
• Pat your body dry with a clean, soft towel.
• Do NOT use lotion, cream or powder.
• Change your bed linens the night before surgery.
• Wear clean clothing to bed.

Packing Your Bag Before Your Hospital Stay
What to bring to the hospital:
• This educational booklet
• Photo identification and insurance card, no valuables
• Three changes of comfortable clothing and walking shoes for therapy
• Your CPAP or BiPAP machine with all necessary accessories
• You will be able to use your cell phone in the hospital
• Power of Attorney and Advanced Directives
• Blood Type wristband
• A list of your current medications

What NOT to Bring to the Hospital:
Do not bring a wallet (just your photo ID and insurance card), money, or any other valuables. Please remove all jewelry (including wedding band and piercings) and leave it at home. You will need money for your discharge medications, but please have a family member bring this to the hospital after your surgery. If you have a walker at home, do not bring it to the hospital. One will be available for your use during your hospital stay.

• Medications
You should NOT bring your medications to the hospital. The only exception is if you use a prescription eye drop or an inhaler. You have provided the hospital with a complete list of your medications, and these will be provided as necessary by the hospital during your stay.
Day Before Surgery

Do Not Eat or Drink Anything After Midnight the Night Before Your Surgery
The night before your surgery, you should not have anything to eat or drink after midnight. If there are medications you are required to take the morning of surgery, please do so with only the smallest amount of water possible. Your stomach should be completely empty before undergoing anesthesia.

- If you are diabetic, check with your primary care physician about how to adjust your diabetes medication.

Day of Surgery

What Happens the Day of Surgery?
When you check in the day of your surgery, you will be asked to put a gown on and your nurses will check your health status.

- If you wear nail polish or artificial nails, these may be removed when you arrive for surgery.
- If you wear contact lenses or dentures, you will be asked to remove them before surgery.

You will talk with an anesthesiologist who will manage your health during the procedure. The anesthesiologist will discuss medications and pain management options with you. You will have an IV started and be given an antibiotic before the surgery.

When you leave for surgery, your family and friends may wait in our waiting room and receive communication from the surgical area about your status.

Although your surgery will take between one and two hours, you will be in the recovery area for at least another hour. We will be checking your vital signs frequently before you go to the orthopedic unit, and the monitoring continues when you get to your room. We will get you up and moving sometime in the afternoon or evening, starting you on your road to recovery.

After your surgery, you will be admitted to the orthopedic unit. Please review today’s goals and expectations for your hospital recovery. Your care team will introduce themselves often and ask you to do the same.
Day of Surgery

Knee Safety and Tips
- Do not use a pillow behind your surgical knee.
- Elevate with a pillow under your calf.
- Do not cross your legs or ankles.
- Keep ice on your knee – 20 minutes on and 20 minutes off.

Day of Surgery Agenda

Meet Your Care Team: Nurse, Patient Care Technician and Physical Therapist
- They will frequently monitor vital signs, pain, surgical dressings and circulation.
- They will assist with personal care, however you are encouraged to be as independent as possible.
- Self-care is part of your daily therapy and one of your recovery goals.

Partner for Mobility (only with assistance)
This promotes blood flow and builds strength.
- Goal 1: Sit at edge of bed within five hours of surgery – for safety, two team members will help you.
- Goal 2: Get out of bed and stand up. Start taking steps with assistance using a rolling walker.
- Goal 3: Transition to bedside chair, spending tolerable amounts of time out of bed.

Partner to Prevent Falls
- ALWAYS ask for help when getting up from bed or the chair – your safety is our main concern.
- Some medications can affect balance.
- Wear a gait belt.
- Wear a knee immobilizer if ordered whenever you are out of bed.
- Follow the Fall Prevention Agreement that was reviewed when you were admitted.
- Bed and chair alarms are used to improve your safety.
- Wear your nonskid socks at all times.

Partner for Pain Management
- Discuss the pain scale with your care team and set tolerable pain expectations.
- The goal of pain management is to focus on a level of pain that allows participation in daily activity.
- Remember! Some pain and discomfort is normal after a total knee replacement.

Start with a Liquid Diet
- Order tomorrow’s breakfast by 6:30 pm today, and request tray delivery no later than 8 am.
- You will advance your meals to solid food when you can tolerate without feeling nauseated.
- Continue taking a protein supplement to help with recovery.

Use your Incentive Spirometer (Breathing Exerciser)
- Practice 10 times every hour while awake.

Try to rest. Today was busy and tomorrow will be busier.

Tomorrow’s Agenda
- Vital signs
- Morning lab work
- Transition to chair by 8 am for breakfast and personal care
- Catheter removed if not already done
- Physical and Occupational Therapy
- Physician and surgeon visits
- Discuss transition from intravenous (IV) to oral pain medication with nurse
- Discuss discharge transition plan with care team
Day After Surgery

Today will be busy. We will introduce new exercises during rehabilitation, but don’t worry. We will go over everything many times. If you have questions, ask us. We want your recovery to be successful.

It is normal to feel a bit more pain and discomfort today. Please inform your care team of your pain level so we can work with you to control the pain with ice and medication as needed.

Knee Safety and Tips
- Do not use a pillow behind your surgical knee.
- Elevate with a pillow under your calf.
- Do not cross your legs or ankles.
- Keep ice on your knee – 20 minutes on and 20 minutes off.

Prepare for Your Day
- Vital signs and labs will be done early so your doctors can review the results before they visit with you.
- Get up, get out of bed and wash up.
- Urinary catheter will be removed today, if not already removed.

Eat Breakfast and Drink Plenty of Fluids
- Your diet will advance to more solid foods as you tolerate without feeling nauseated.
- Intravenous (IV) fluids may be discontinued when you can tolerate food and fluids.
- Continue protein supplement to help with recovery.

Continue Using the Incentive Spirometer — “Breathing Exerciser”
- 10 deep inhales every hour while awake. For more information, please see page 21.

Speak Up and Partner in Pain Management
- Continue or transition to oral pain medication as it provides longer pain relief.

Keep Moving
- Physical and Occupational Therapy.
- Walk as far as you feel you can but ONLY with assistance.

You are the driver in your therapy
- Remember: perform ankle pumps and wear compression sleeves to prevent blood clots from forming.

Tomorrow’s Agenda
- Vital signs
- Morning lab work
- Transition to chair by 8 am for breakfast and personal care
- Physical and Occupational therapy
- Continue oral pain medication
- Physician and Surgeon visits
- Discuss discharge transition plan with care team
Days 2 & 3 After Surgery

Knee Safety and Tips
- Do not use a pillow behind your surgical knee.
- Elevate with a pillow under your calf.
- Do not cross your legs or ankles.
- Keep ice on your knee – 20 minutes on and 20 minutes off.

Prepare for Your Day
- Vital signs and labs will be done early so your doctors can review results before they see you.
- Sit in the chair by 8 am for breakfast and morning routine.

Keep Performing Your Breathing Exercises
- 10 deep inhales every hour while awake. For more information, please see page 21.

Be a Proactive Pain Management Partner
- Continue oral pain medication as needed.

Keep Moving – You’re in the Home Stretch!
- The goal is to sit up in the chair a minimum of three times a day.
- Physical Therapy
- Occupational Therapy (if needed)
- Walk a little farther; push yourself to do extra steps and it will pay off.

Physician & Surgeon Team Visits
- Your surgical dressing will be removed to evaluate the incision site.
- A small dressing will be applied.

Prepare for Discharge
- Follow-up with your care team for discharge transition plan and home equipment needs.
- You may be discharged today or tomorrow.

Day of Discharge
- Our goal is to have you discharged from the hospital by noon.
- Review your discharge instructions and follow-up guidelines to learn:
  - When to follow up with surgeon
  - Incision site care and signs to watch for
- Ensure home equipment is ordered See list of equipment on page 31.
- Review prescriptions and medication side effects.

Daily Tasks When You Get Home
- Take pain medications as needed and as directed.
- Keep exercising.
- Rest, ice and change position frequently.
- Continue protein supplements for recovery.
- No driving while taking pain medications.
## The Zones of Total Knee Replacement

<table>
<thead>
<tr>
<th>Green Zone</th>
<th>You Should Be Feeling/Experiencing:</th>
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<tbody>
<tr>
<td></td>
<td>• No increased redness, warmness, swelling, drainage or odor at the incision site</td>
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<td></td>
<td>• Dressing is clean and dry</td>
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<td></td>
<td>• Pain is under control</td>
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<td></td>
<td>• Eating well and drinking adequate amount of water and continuing to take protein supplement</td>
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<td></td>
<td>• Restful night sleep</td>
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<td>• Therapy and exercises are done daily</td>
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<th>You Are On the Right Track if You:</th>
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<tr>
<th>Yellow Zone</th>
<th>If You're Feeling/Experiencing:</th>
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<tbody>
<tr>
<td></td>
<td>• Fever higher than 100.5</td>
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<td></td>
<td>• Progressively worsening knee pain</td>
</tr>
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<td></td>
<td>• Increasing redness, warmth or drainage from your incision; opening at incision site</td>
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<tr>
<td></td>
<td>• Presence of calf pain, redness, warmth or swelling</td>
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<tr>
<td></td>
<td>• Have missed a dose of your blood thinning medication</td>
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<td></td>
<td>• Shortness of breath</td>
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<table>
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<th>Warning</th>
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<tr>
<th>Red Zone</th>
<th>You Should Not Be Feeling/Experiencing:</th>
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<tr>
<td></td>
<td>• Sudden weakness or numbness of the face, arm or leg, especially on one side of the body</td>
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<td></td>
<td>• Difficulty speaking or blurred vision</td>
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<td></td>
<td>• Unable to think clearly</td>
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<td></td>
<td>• Chest pain or difficulty breathing</td>
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<th>Dangerous</th>
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### Preventing Post-surgical Complications

<table>
<thead>
<tr>
<th>Complication</th>
<th>Symptoms</th>
<th>Prevention Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Deep Vein Thrombosis (DVT)</strong></td>
<td>• Pain</td>
<td><strong>Decreasing Your Risk of Blood Clot</strong></td>
</tr>
<tr>
<td>A blood clot in a lower extremity</td>
<td>• Swelling</td>
<td>• Walk as early as possible after surgery</td>
</tr>
<tr>
<td>(calf/leg)</td>
<td>• Redness or discoloration</td>
<td>• Perform ankle pumps when in bed and in chair to promote circulation</td>
</tr>
<tr>
<td></td>
<td>• Muscle cramps in lower leg/calf</td>
<td>• ALWAYS take the blood thinning medication as ordered by your physician</td>
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<td></td>
<td></td>
<td>• Use of lower leg compression machine (Sequential Compression Devices/SCD) and AV Impulse Boots in bed and when in chair for up to 18 hours per day</td>
</tr>
<tr>
<td><strong>Pulmonary Embolism</strong></td>
<td>• Chest pain</td>
<td><strong>THIS IS A LIFE THREATENING EMERGENCY. IF YOU ARE NOT AT THE HOSPITAL PLEASE CALL 911</strong></td>
</tr>
<tr>
<td>A blood clot in the heart or lung</td>
<td>• Shortness of breath</td>
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<td></td>
<td>• Rapid pulse</td>
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<td></td>
<td>• Coughing up blood</td>
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<td></td>
<td>• Dizziness</td>
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<td></td>
<td>• Fainting</td>
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<td></td>
<td>• Excessive sweating</td>
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<tr>
<td><strong>Incision Infection</strong></td>
<td>• Fever above 100.5 F</td>
<td><strong>Decreasing Your Risk of an Infection</strong></td>
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<tr>
<td>Handwashing is key in preventing</td>
<td>• Increased redness</td>
<td>• Antibiotics are prescribed in the hospital right after surgery to help prevent infections</td>
</tr>
<tr>
<td>infections</td>
<td>• Green/yellow drainage</td>
<td>• Make sure whoever changes your dressing washes their hands before and after each dressing change</td>
</tr>
<tr>
<td></td>
<td>• Foul odor</td>
<td>• Call your surgeon if any of these symptoms begin after you leave the hospital</td>
</tr>
<tr>
<td><strong>Pneumonia</strong></td>
<td>• Fever above 100.5 F</td>
<td><strong>Decreasing Your Risk of Pneumonia</strong></td>
</tr>
<tr>
<td>An infection in one or more of the</td>
<td>• Persistent cough</td>
<td>• Use Incentive Spirometer by inhaling deeply 10 times per hour when awake <strong>For more information, please see page 21.</strong></td>
</tr>
<tr>
<td>lungs</td>
<td>• Shortness of breath associated with pain</td>
<td>• Handwashing is key in preventing infections</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>NOTIFY YOUR PHYSICIAN AND/OR CALL 911 IF YOUR SYMPTOMS ARE SEVERE</strong></td>
</tr>
</tbody>
</table>
Daily practice in the hospital and at home will help you prevent post-surgical pneumonia.

1. Empty your lungs by blowing out all the air in your lungs, like you are blowing out candles.
2. Place the mouthpiece in your mouth making a tight seal with your lips.
3. Breathe in through the mouthpiece slowly and deeply like you are sucking on a straw. Notice the blue disc on the right side. Work on keeping this disc in the “BEST” range as you breathe in slowly.
4. When you reach your “Goal Marker,” hold for a second, then breathe out normally.
5. When the piston returns to the bottom, start again.
6. Repeat at least 10 times per hour.
Exercises After Surgery

Strong leg muscles are key to a successful recovery. By performing the following exercises, you will strengthen your leg muscles and improve your range of motion. Being dedicated and adopting a positive attitude will help you regain a more active lifestyle in a shorter period of time.

1. Ankle Pumps
Bend ankles up and down, alternating feet. Repeat 20 times. Perform at least 4 sessions per day. This exercise can be done sitting or lying down.

2. Quad Sets
Lie with a rolled towel or pillow under heel of surgical knee. Tighten the muscles on the top of the leg/thigh while trying to push knee toward the rolled towel or pillow. Hold for 5 seconds. Relax. Repeat 20 times. Perform 2 sessions per day.

3. Straight Leg Raise
Bend unaffected leg. Raise surgical leg six to eight inches with knee straight. Exhale and tighten thigh muscles while raising leg. Return slowly to bed. Repeat 20 times. Perform 2 sessions per day.
Exercises After Surgery

4. Heel Slides
Bend surgical knee and pull heel toward buttocks. Return slowly to extended position, sliding heel along the bed. Repeat 20 times. Perform 2 sessions per day.

5. Gluteal Squeezes
Squeeze buttocks muscles as tightly as possible while counting out loud to 5. Repeat 20 times. Perform 2 sessions per day.

6. Abduction
Slide surgical leg out to the side. Keep kneecap pointed toward ceiling. Gently bring leg back to midline. Repeat 20 times. Perform 2 sessions per day.
Exercises After Surgery

7. Long Arc Quads
Straighten surgical leg, hold 5 seconds. Slowly return foot to the floor. Repeat 20 times. Perform 2 sessions per day.

8. Knee Flexion
Scoot forward in the chair. Place foot of surgical leg on smooth surface. Slowly slide foot back as far as possible, keeping foot flat on the floor. Hold 5 seconds then relax. Repeat 20 times. Perform 2 sessions per day.
Exercises After Surgery

9. Hip Abduction/Adduction
Sitting straight, move surgical leg out to the side and then back in. Repeat 20 times. Perform 2 sessions per day.

10. Mini Marches in Chair
Lift your knees up, alternating. Repeat 20 times. Perform 2 sessions per day.
Advanced Exercises After Surgery

STOP: Perform these exercises only if instructed to do so by your therapy team. Based upon your individual progress plan, your therapy team will let you know if the following exercises are appropriate for you.

- **Up on Toes Calf Raises**
  While holding onto a steady surface such as a clean and dry countertop, go up and down on toes. Repeat 20 times. Do 2 sessions per day.

- **Hip Abduction**
  While holding onto a steady surface such as a clean and dry countertop, keep legs shoulder width apart and toes pointed forward. Swing your surgical leg out to side, keeping knee straight. Do not lean. Repeat 20 times. Do 2 sessions per day.

- **Hamstring Curls**
  While holding onto a steady surface such as a clean and dry countertop, bend surgical knee as far as possible. Repeat 20 times. Do 2 sessions per day.

- **Mini Marches**
  While holding onto a steady surface such as a clean and dry countertop, march in place; alternating if able. Repeat 20 times. Do 2 sessions per day.

- **Mini Squats**
  While holding onto a steady surface such as a clean and dry countertop, slightly bend knees and slowly straighten. Repeat 20 times. Do 2 sessions per day.

- **Hip Flexion**
  While holding onto a steady surface such as a clean and dry countertop, bring your surgical leg forward, keeping knee straight. Repeat 20 times. Do 2 sessions per day.
Activities of Daily Living

To Go Down One Step Forward:
1. Walk with your walker up to the edge of the step.
2. Place all four legs of the walker on the floor in front of the step.
3. Walk your feet up to the edge of the step.
4. Push down on the walker with your arms and step down with your surgical leg, and then step down with your nonsurgical leg.

To Go Up One Step Backward:
1. Back yourself up to the step with your walker. Be sure your walker and your heels are touching the step.
2. Push down on the walker with your arms and step up on the step with your nonsurgical leg. Bring your surgical leg up on the step, then bring your walker up on the step. Walk backwards with the walker a few steps and then turn around with the walker.
Activities of Daily Living

To Go Up Consecutive Steps:
1. Get feet close to the step.
2. Use assistive devices, if available, as instructed by your therapist, such as handrails, crutch(es), cane, hand-held assist, gait belt, etc.
3. Go up one step at a time leading with your nonsurgical leg first, then bring up the surgical leg to the same step.
4. Proceed with remaining steps in the same fashion.
5. Use a bannister where available.

To Go Down Consecutive Steps:
1. Get feet close to edge of step.
2. Use assistive devices, if available, as instructed by your therapist, such as handrails, crutch(es), cane, hand-held assist, gait belt, etc.
3. Go down one step at a time leading with your surgical leg first, then bring down the nonsurgical leg to the same step.
4. Proceed with remaining steps in the same fashion.
5. Use a bannister where available.

**REMEMBER! Up with the good, down with the bad.**
Getting Into and Out of a Chair

Getting into a Chair
1. Back up to the chair.
2. Make sure you can feel the chair behind you.
3. Reach for the armrests of the chair one hand at a time.
4. Slide the surgical leg out in front of you while gradually lowering yourself down to the chair.

Getting Out of a Chair
1. Scoot forward to the edge of the chair.
2. Slide your surgical foot forward.
3. Using both hands, push up from the armrests of the chair.
4. Place hands on the walker, one hand at a time while sliding surgical foot back so it is even with your other leg when standing.
Car Transfers

Front Seat
1. Be sure to move the seat back as far as it will go. You may also recline the seat back to give you more room.
2. The car should be parked several feet away from the curb. Open the door and stand on the street as close as you can get to the car.
3. Turn until your back is facing the seat and back up until you feel the car seat on the back of your legs.
4. You can place one hand on the back of the car seat or headrest and the other hand on the dashboard or car seat. Do not use the car door for support as it could move.
5. Carefully lower yourself to the seat. Keeping your surgical leg slightly out in front.
6. Slide back until your knees are on the seat then bring your legs around into the car one at a time. You can use your hands to help lift your legs if needed.

TIP: You may want to use a large plastic bag to sit on for ease of turning/adjusting your position while seated in a car.

Tub/Shower Transfers

Your physician will advise you on when you can bathe. It is important that you keep your surgical site dry. To increase your safety, you should have a shower chair or bath bench.

Getting into the Tub/Shower
1. Back up to the bench or shower chair.
2. Put surgical leg forward and reach back for the seat.
3. Utilize a hand held shower or long handled sponge to wash.
4. It is recommended that you have someone present to help if needed.

Getting out of the Tub/Shower
1. Move to the outside edge.
2. Lift surgical leg over the edge of the tub first.
3. Put the surgical leg forward and push off from the edge of the bench or chair to rise.
Frequently Asked Questions

What Equipment Might I Need at Home?
Please discuss this with your care team before leaving the hospital.

Walking
- Cane
- Walker
- Crutches

Bathroom
- 3-in-1 commode
- Elevated toilet seat or toilet riser
- Grab bars
- Handheld shower attachment
- Long-handled shower sponge

Other
- Elastic shoelaces
- Reacher
- Long-handled shoe horn
- Sock aid

How Long Will I Be in the Hospital?
The average length of stay after joint replacement surgery is two to three days. Length of stay is determined by activity progress, medical progress and wound condition.

What is the Recovery Time?
Patients recover from surgery at a different pace. In most cases you will be advised to use a rolling walker. Your therapist will advance you to a cane when appropriate. You will gradually return to normal function without any assistive device. This usually takes approximately three months but may take longer.

Will I Go Home After Surgery or to a Rehabilitation Facility?
Most patients are able to go home after their surgery. This includes patients who live independently. In most cases, we believe your home is the best and safest location for your recovery. However, if you are not ready to go home at the time of discharge, you may go to a rehabilitation facility to gain the skills you need to safely return home. Many factors will be considered in this decision, including availability of family or friends to assist with daily activities, home environment and safety considerations, post-surgical functional status as evaluated by a physical therapist in the hospital, and overall evaluation by your hospital team.

For more information, please see page 9.

How Do I Care for My Incision?
If your incision is closed with staples, they are usually removed within 10-14 days at your follow-up appointment with the surgeon.

Change your dressing daily
1. Collect items for dressing change
   - Gauze pads, tape, plastic bag and scissors
2. Wash your hands
3. Remove old dressing (throw away in a plastic bag)
4. Look at your incision to check on healing
   - Normal: Some swelling, especially after exercising
   - Infected: Increased redness, warmness, drainage, open wound edges or odor at incision site – **If these changes are noted, call your surgeon**
5. Do not touch incision or apply ointments, creams or lotions
6. Cut strips of tape needed for new dressing and open a new gauze pad
   - Do not touch the side of the gauze that will be applied to your incision area
7. Apply the new gauze pad to incision and secure it with tape
Frequently Asked Questions

Are There Any Medication Follow-Up Needs?

**Anticoagulant**: Helps prevent blood clots from forming and is usually taken for three to six weeks after surgery. It is extremely important you take this medication as directed.
- Contact your surgeon if you experience excessive bruising, nosebleeds or blood in your urine.

**Pain Medication**: It is important to take your pain medication as prescribed by your surgeon. Do not wait until the pain gets too uncomfortable, most pain medications take about 30 minutes to work.
- Pre-plan: Take pain medication 30 min prior to therapy, activity or exercise. Take with food to reduce nausea
- Gradually reduce: As your comfort improves, increase the time between doses

What Changes Can I Expect, and What Can I Do?

**Loss of Appetite**
- Can be a medication side effect
- Be sure to drink plenty of fluids to stay well hydrated
- Continue to take your protein supplement
- Constipation
- Increase your fluid and fiber intake, and consider a stool softener

**Loss of Energy**
- Your body is healing and needs rest, however keep exercising per your therapist’s recommendation
- Your strength will increase over time

**Swelling**
- Expected for several months after surgery, especially after activity
- Common areas of swelling are foot, ankles, knee and thigh
- Ice and elevation helps reduce swelling

**Joint Stiffness**
- Can occur after long periods of sitting or lying
- Reposition frequently, stand up and/or take short walks around the room with assistance as needed

**Depression**
- May be caused by limited mobility, discomfort, medication side effects or increased dependency on others
- Symptoms typically lessen as you return to normal activities
- Talk with your doctor if this continues to be a problem

**Insomnia**
- This is a common side effect
- Nonprescription remedies may be effective
- Talk with your doctor if this continues to be a problem

What About General Work & Lifestyle?

**Driving**: Most patients return to driving in four to six weeks depending on the surgical side and pain medication use. Your surgeon will let you know when it is safe for you to drive. Do not drive while you are taking prescription pain medications.

**Return to work**: Most people can return to work in four to six weeks; your surgeon will confirm a date at your follow up appointment.
- Remember to request your return to work notice, if needed.
Frequently Asked Questions

Flying: Your new artificial joint will likely set off metal detectors.
- Alert security of your total joint replacement before going through the scanner; they may use a hand wand over the area if needed.
- You may also want to wear loose fitting pants to expose your knee, if needed.

Drinking alcoholic beverages: If you are taking a blood thinner, you should avoid alcoholic beverages because it changes the effect of the medication. You should also avoid alcohol if you are taking any narcotics, such as pain medicine.

Intimacy: Your surgeon will inform you when it is safe to resume sexual activity.
- Sexual activity is not recommended right after surgery due to pain and swelling.

Exercise: Physical therapy is important for your recovery. Continue with the home exercise regimen provided by your physical therapist and progress at your own pace. Activity helps with the recovery process. Remember, take pain medication 30 minutes prior to exercise.

What Are Good and Bad Positions for My Knee During Recovery?
You should spend some time each day working on both flexion (bending) and extension (straightening) of your knee. Work on extension of your leg while lying down, and work on flexion when you are up in a chair. It is a good idea to change positions every 15-30 minutes. Avoid placing a pillow or roll under your knee. To improve extension and prevent a permanent contracture (bend in knee) place a rolled towel or pillow under your ankle. This improves extension.

Can I Go Up and Down Stairs?
A physical therapist will teach you how to go up and down stairs after surgery. Initially, you will start with your nonsurgical leg when going up stairs, and lead with your surgical leg when coming down. As your muscles get stronger and your motion improves, you will be able to do stairs in a more normal fashion.

Can I Kneel?
After several months you may be able to kneel once your surgeon approves.

What About Range of Motion?
- The average patient achieves approximately 120-135 degrees of flexion.

How long will my total knee replacement last?
How long a knee replacement lasts is different for each patient. For each year following your surgery, you have a 1 percent chance of requiring additional surgery. At ten years after surgery, 90 percent of patients have not needed further surgery.

Other Important Information
Many things occur after total joint surgery that may be alarming to you unless you are sure that the symptoms are within normal limits. Some of the normal symptoms you may experience include:
- An intermittent clicking sensation inside the knee
- An area of skin numbness on the outside part of the knee
- Swelling after exercise and at the end of the day
- Warmth around the knee
- Sutures under the skin may become more visible as swelling goes down. This will decrease over time.
Frequently Asked Questions

Regular follow-up appointments with your surgeon will confirm continued success with your joint replacement.

For additional questions, please contact the Orthopedic Nurse Resource listed on page 3.

About the Patient and Family Advisory Committee:
The Patient and Family Advisory Committee (PFAC) partners patients and families with members of the healthcare team to provide guidance on how to improve the patient and family experience. As part of this PFAC process, patients and families serve on hospital committees to ensure that the consumer’s point of view, perspective, and experience are not only heard, but also integrated into the patient centered care delivered at AMITA Health. Through their unique perspectives, they give input on issues that impact care, ensuring that the next patient or family member’s journey is even better.

If you would like to be part of a dynamic committee and share your perspective, please contact Michelle Johnston at 1.847.755.3219 or by email at: michelle.johnston@amitahealth.org.

How do I identify hospital staff members throughout my stay?
AMITA Health Alexian Brothers Medical Center Elk Grove Village and AMITA Health St. Alexius Medical Center Hoffman Estates follow a standardized color-coordinated uniform strategy.

This will allow our patients and visitors to quickly identify the associates in their care by uniform color.

- **Diagnostic Technologists**: CARIBBEAN BLUE
- **Nurses**: PEWTER
- **Rehabilitation Therapists**: ROYAL BLUE
- **Respiratory Therapists**: BLACK
- **Unit Secretaries**: TEAL BLUE
- **Patient Care Technicians**: NAVY BLUE
- **Laboratory Associates**: WINE
AMITA Health’s Evidence-based Orthopedics Practice is Supported by the Following Clinical Practice Guidelines:


For All of Your Orthopedic Needs, Trust AMITA Health

AMITA Health Adventist Medical Center Bolingbrook
500 Remington Blvd., Bolingbrook, IL 60440
1.630.312.5000

AMITA Health Adventist Medical Center GlenOaks
701 Winthrop Ave., Glendale Heights, IL 60139
1.630.545.8000

AMITA Health Adventist Medical Center Hinsdale
120 N Oak St., Hinsdale, IL 60521
1.630.856.9000

AMITA Health Adventist Medical Center La Grange
5101 S. Willow Springs Rd., La Grange, IL 60525
1.708.245.9000

AMITA Health Alexian Brothers Medical Center Elk Grove Village
800 Biesterfield Rd, Elk Grove Village, IL 60007
1.847.437.5500

AMITA Health St. Alexius Medical Center Hoffman Estates
1555 Barrington Rd. Hoffman Estates, IL 60169
1.847.843.2000

AMITA Health Alexian Brothers Rehabilitation Hospital Elk Grove Village
935 Beisner Rd. Elk Grove Village, IL 60007
1.847.640.5600

AMITAhealth.org/Orthopedics