

Patient Guide **Total Knee Replacement**

UPMC | WILLIAMSPORT



The Joint Commission's Gold Seal of
Approval® for Advanced Total Hip
and Knee Replacement Certification

Welcome

We want to welcome you to UPMC Williamsport's Joint Center.

We hope your stay is as brief and pleasant as possible. In preparing for your hospitalization, we have written this informational guide to help answer your questions about your total joint replacement and hospital stay. We have included information from all the department staffs that make up our Total Joint Replacement Team.

This patient education book is a resource guide for you and your family as you prepare for your surgery and recovery.

Please bring this guide with you for each of the following:

1. Pre-admission testing
2. Total Joint Class — you may want to review this guide prior to class and write down any questions you may have, which can be addressed at the class. You may also be asked to reference various sections of this guide during your class.
3. Day of Surgery — The nurses and therapists will be referencing this guide during your hospital stay.

Mission Statement

The mission of UPMC Williamsport's Joint Center is to improve the quality of life for our patients by providing a coordinated orthopaedic care program. This is achieved by offering the best in high-quality, cost-effective services that surpass all others in compassion and care.

UPMC Williamsport's orthopaedics team delivers high-quality and efficient care by using advanced technology and the best staff. We are committed to improving the health and well-being of our patients. This patient-focused environment fosters open communication, cooperation, innovation, respect, and trust.











The Joint Center is a patient-centered environment comprised of 24 private rooms designed to accommodate and promote healing and wellness. The Joint Center team sets the expectation that patients and families become fully engaged in their surgery, recovery, and rehabilitation through comprehensive education, group support, practical advice, and enjoyable activities.

The vision is to ensure that our patients enjoy quality clinical outcomes that exceed national benchmarks as well as an outstanding overall experience at UPMC Williamsport.



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Our Joint Replacement Program

Our Joint Replacement Program

We are pleased that you have selected UPMC Williamsport's Joint Center for your surgery.

Overview of the Joint Center

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

- Dedicated nurses and therapists trained to work with joint patients
- Casual clothes (no drafty gowns)
- Private rooms
- Emphasis on group activities
- Family and friends participating as “coaches” in the recovery process

Facts about UPMC Williamsport's Joint Center

- We perform more than 700 joint replacements each year.
- We engage a team approach to surgical care, ensuring a smooth transition from surgery to recovery. You and your team of health care professionals work together toward a common goal — improved quality of life.
- We employ a unique, comprehensive joint replacement program comprised of doctors and health care providers committed to providing you with personalized attention and quality care.
- We provide complete physical and occupational therapy care that is available seven days per week.
- We have over 30 years of experience in providing joint replacements and keeping abreast of the latest procedures and technology.
- We value and strive to achieve complete patient satisfaction.

Welcome to the Team

It's natural to be anxious about surgery, a hospital stay, and the impact of a total knee replacement. We want to alleviate these concerns and assure you that you will not face this alone. You are now a member of an important team that includes your family or coach, doctors, nurses, and other specialized health care professionals. As a team, we have a common goal: improving your quality of life through increased mobility.

This guide is designed to introduce you to the preparation needed before surgery, the fundamentals of the surgical process, and the recovery or training process. Although each member of the team is important, consider yourself the captain. We are here to provide you our support and guidance — your active participation is what will drive the team towards achieving your goal.

Common Causes of Knee Problems

If you're reading this guide, you are probably familiar with knee problems and the need for surgery. Here is a brief overview of the most common causes of joint failure.

Osteoarthritis is the most common form of arthritis. It is most often related to wear and tear on the joints over the years. Its onset usually begins after age 50.

Another common type of inflammatory arthritis is Rheumatoid Arthritis. It is a chronic inflammatory disorder affecting the joints of the body that are lined with a membrane called synovium. These joints include the hip, knee, shoulder, elbow, wrist, hands, and feet. Rheumatoid arthritis occurs when the body produces cells that irritate the synovium in the joints, damaging the cartilage. This form of arthritis occurs in all age groups. Its symptoms include stiffness, joint swelling, laxity of the ligaments, pain, and decreased range of motion.



KNEE JOINT WITH
ARTHRITIC CHANGES

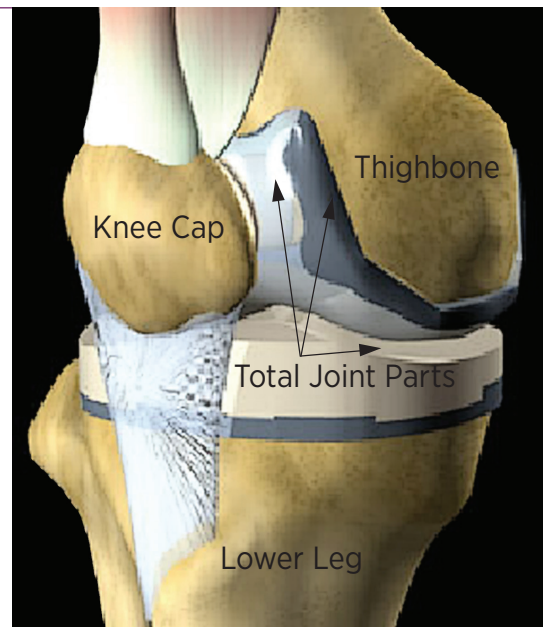
Total Knee Replacement Surgery

The knee joint is composed of three parts:

1. Thighbone (the end of the femur)
2. Shin bone (the top of the tibia)
3. Knee cap (the patella)

In a normal knee, these three bones are covered with a smooth cartilage that cushions the bones and helps them to move easily. In an arthritic knee, the cartilage layers are destroyed, resulting in bone rubbing against bone — causing pain, muscle weakness, and limited range of motion.

Total knee replacement surgery involves the resurfacing of the knee joint. Metal components are attached to the ends of the bones and a plastic liner is inserted between them. The kneecap may also be resurfaced with a plastic liner. When in place, these components move together to allow normal motion of the knee joint.



RESURFACING OF THE KNEE JOINT

Preparing for Surgery

Your path to recovery begins with the preoperative steps that take place in the weeks before your surgery.

Physical Exam by Doctor

Before surgery, you must see your doctor for a complete physical. It's important to rule out medical problems that could cause complications during or after surgery. You should also request a copy of your complete medical history.

If your physical exam indicates any possible risk factors, you may need additional testing. You will be contacted if further testing is required.

Selecting a Coach

We encourage you to enlist a coach to assist you with your total joint replacement experience. You will be relying heavily on your coach, so choose someone with whom you are comfortable.

Coach's Responsibilities:

- Attend the Total Joint Class with you.
- Attend physical and occupational therapy with you to learn the exercises you will need to perform before/after surgery and how to assist you in and out of bed.
- Provide you with encouragement and motivation to perform your exercises.
- Assist you with creating a safe home environment.
- Be present for Discharge Class and instructions.
- Help you at home with daily activities such as bathing, cooking, cleaning, opening doors, clearing pathways, providing safety, and more.
- Provide/help with transportation to outpatient therapy sessions and doctor appointments.

Homework

We believe safety is an important part of your healing process. You may view our "Call, Don't Fall" video on the web at UPMCSusquehanna.org/Safety.

Additional information can be found at aaos.com (American Academy of Orthopaedic Surgeons).

Practice the exercises listed in this guide. It will make it easier for you to do after surgery and then at home after discharge. If you are having both knees replaced, the pre-operative exercises (#14 chair push-ups) can be extremely helpful. You will find when having both knees replaced, you will be relying heavily on your arms.

Pre-operative Total Joint Education Class

To prepare for your surgery, you must attend our pre-operative class one to four weeks prior to surgery. This will enable you to participate in your care and gain a better understanding of the post-operative recovery period and exercise program. The class is taught by either a physical or occupational therapist and an orthopaedic nurse.

The Total Joint Class information will be listed on the Total Joint Replacement Event Tracker card you received from your surgeon's office. The class is approximately one hour in length. If you have questions about Total Joint Class, call 570-321-3240.

Total Joint Education Class Topics

- Preparing your home setting to assist in discharge planning
- Your exercise program
- What to expect during your hospitalization
- Use of assistive equipment (crutches, walker, raised toilet seat, etc.) that may be helpful when you go home
- Questions or concerns

Directions to the Total Joint Education Class

1. Enter through the Main Entrance of UPMC Williamsport on 700 High St.
2. Turn right and follow signs to the Main Elevators, straight ahead.
3. Go to the sixth floor.
4. Turn left off of the elevators.
5. At the end of the hallway, turn right and you will see a sign for the multipurpose room on the left. The Total Joint Class will be held in the multipurpose room.

*Wheelchairs are located just inside of the main entrance. If you need assistance, please inform someone at the Information Center, located just inside the Main Entrance.

On the day of your class

- Bring this guide.
- Bring your coach.
- Please do not bring children to the class; you will need to be able to concentrate on the education.
- Please turn off all cell phones and electronic devices.

Pre-Admission Testing

Pre-admission testing is an important part of your care before surgery.

During your pre-admission testing you will have

- An evaluation by a nurse.
- Blood tests.
- Education and instructions about the morning of surgery.
- Urine collection (as needed).
- EKG/chest x-ray (as needed).
- Nasal swab for MRSA screening.

Be sure to bring the following with you to your pre-admission testing

- Insurance card and driver's license.
- All of your medicines in original containers, including anything you take over the counter.
- Medical history and list of previous surgeries.
- A copy of your Living Will/Advance Directive.
- A copy of your Power of Attorney (if applicable).
- This guide.

The pre-admission testing takes approximately 45 to 60 minutes. We request that you arrive 15 minutes before your scheduled appointment.

If you do not have your pre-admission testing done before your surgery, your surgery may be delayed or even cancelled.

Diet and Nutrition

Healthy Eating

Good nutrition is an important part of healing. Eating well and maintaining a healthy weight also helps eliminate stress to your joints and may reduce the risk of heart disease, high blood pressure, diabetes, and cancer.

To achieve good nutrition, we recommend a balanced diet of a variety of foods each day from the USDA-approved MyPlate.

Use the MyPlate as a guide to healthy eating every day

- Choose six or more servings from grains, beans, and starchy vegetables.
- Choose three to five servings of vegetables.
- Choose three to four servings of fruits.
- Choose two to three servings of milk or dairy.
- Choose two to three servings of meat.
- Limit your intake of fats, sweets, and alcohol.

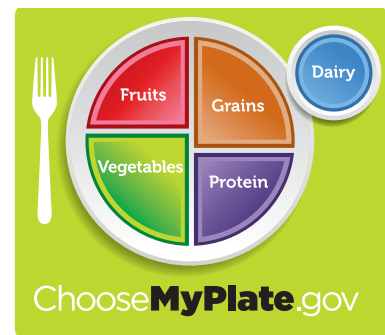
Iron and Vitamins

Iron is an essential mineral that plays an important role in a variety of body functions. It carries oxygen and carbon dioxide to other body tissues. It is necessary for the production of energy and the support of your immune system. We do not recommend taking an iron supplement before surgery, due to the constipation iron can cause.

Appropriate alternatives to an iron supplement:

- Iron-rich foods such as lean meat, poultry, and fish
- Vitamin C-rich foods with each meal such as strawberries, orange juice, cantaloupe, green peppers, tomatoes, potatoes, and broccoli

These foods help the body absorb iron. You may drink coffee and tea between meals but since coffee and tea stop iron absorption, do not drink them with your meals.



Medications

To minimize the risk of blood loss during surgery, your orthopaedic surgeon will ask you to stop taking certain medications.

Two weeks before surgery, **STOP** taking ALL herbal products, multivitamin, and supplements. You can continue Vitamins B, C, and D, calcium, iron, and probiotics.

One week before surgery, **STOP** taking anti-inflammatory medication prescriptions and over the counter (ibuprofen, naproxen, meloxicam, etc.). You **CAN** take Celebrex[®] and Tylenol[®] (acetaminophen) regular, extra strength, or arthritis during this time.

A nurse from pre-admission testing will review your list of medicines with you.

Other Medicine Notes

If you take a **blood thinner** (warfarin, Eliquis[®], Plavix[®], aspirin, etc.), check with your medical/cardiac doctor for instruction on taking this medicine before your surgery.

On the morning of your surgery, take only the medicines you have been instructed to take.

Additional Healthy Ways to Prepare for Surgery

Stop Smoking

Smoking increases your risk of lung complications during and after surgery and decreases your ability to heal. It is best to stop smoking at least four weeks before surgery. If you need help, talk to your doctor about medicines that can ease this process. UPMC Williamsport is a tobacco-free environment. No smoking is permitted on hospital property.

Limit Alcohol

Limit your alcohol intake to one cocktail, glass of wine, or beer per day, starting five to seven days before surgery. If you drink alcohol on a daily basis, please be honest with your nurse during pre-admission testing. Also, inform your doctor as well as your orthopaedic surgeon. You may need medicines to prevent withdrawal from the alcohol. Withdrawal from alcohol without medicine can be very dangerous, especially after major surgery and could lead to serious complications. Do not drink any alcohol 24 hours prior to surgery. **Do Not** bring any alcohol to the hospital.

Preparing the Skin for Surgery

Before surgery, it is important that you take an active role in your surgical care to assist in the prevention of surgical site infection. We ask that you follow these instructions to prepare your skin to be as germ free as possible. Because skin is not sterile, we need to be sure that your skin is as clean as possible. Your skin will be prepared with antiseptic before your surgery. Antiseptic will be more effective if your skin is clean prior to application.

To cleanse your skin prior to surgery, your surgeon has asked that you shower with the antibacterial soap agent called chlorhexidine gluconate (CHG). A common name for this soap is Hibiclens, Betasept or Exidine, but any brand with 4% chlorhexidine gluconate is acceptable. You can purchase this at any pharmacy. It does not require a prescription.

Preventing Infections

Infections can enter the body in many ways, but most commonly through the mouth and skin. Avoid shaving around the surgical site several days prior to surgery. Nicks or cuts in your skin can lead to complications in your new joint.

Visiting Your Dentist

Bacteria can easily enter your bloodstream through the mouth during dental procedures, causing widespread infection. To minimize this problem, if you haven't seen a dentist within six months or have a problem, schedule a check-up as soon as possible. Continue to brush and floss your teeth regularly.

After your surgery, we ask that you avoid dental work/cleaning for three months, unless it is an emergency.

Prepare Your Visitors

Recovering from your joint replacement takes effort. Rest is as important as physical therapy. Ask visitors to limit visits to evening hours. You will be in physical therapy or resting during the day.

The day of surgery, please limit visitors to immediate family. Only two visitors will be allowed in the admission area.

If your visitors are ill or have a cold, please ask them not to visit.

Packing for the Hospital

Pack your suitcase for the hospital a day or two before your surgery. You will wear regular clothing starting with your first therapy session.

Items to pack:

- Loose-fitting, comfortable, casual clothing; something that will easily slide up over the knee (shorts, pants with full loose legs, capris, etc.).
- Underwear.
- Pajamas.
- Sweater or sweatshirt.
- Tennis shoes or flat rubber-sole shoes that tie or slip on. Shoes should be comfortable and large enough to allow for swelling. Do not wear clogs, slippers, or high heels. You may bring nonskid slippers to use in your room.
- Personal hygiene items/toiletries.
- Eyeglasses, contact lenses, and denture cases. Please make sure all cases are labeled with your name.
- List of food or medicine allergies.
- A copy of your Living Will/Advanced Medical Directive (if you did not have it with you during pre-admission testing).
- A copy of your Power of Attorney (if you did not have it with you during pre-admission testing).
- This guide.

Do not bring:

- Jewelry, credit cards, or large amounts of cash.

Note: Please make sure jewelry can be removed before the day of surgery.

Preparing for Surgery Check List

Timing	Actions	Date	X
4 weeks before	Schedule a preoperative physical with family doctor for a few days after your Pre-admission Testing.		
	Select a coach.		
	Stop smoking. Your surgeon's office has "Set Yourself Free" booklet available to help you.		
	Begin preoperative exercise program.		
1 to 4 weeks before	Review Patient Guide/Total Knee Replacement.		
	Pre-admission testing appointment.		
	Prepare list of questions for Total Joint Class.		
	Attend Total Joint Class (bring this guide).		
	Begin preparing living space.		
2 weeks before	Stop taking ALL herbal products, multivitamin, and supplements. You can continue the B vitamins, vitamin C, vitamin D, calcium, iron, and probiotics.		
	Call and schedule your first Outpatient Therapy appointment. You do not need an order or pre-authorization at this time.		
1 week before	Stop taking anti-inflammatory medications: prescription and over the counter (example: ibuprofen, Aleve, meloxicam, etc.).		
	Reduce alcohol intake.		
	Avoid shaving around surgical site		
5 days before	Bactroban (Mupirocin) ointment: Twice a day, place a small amount on the tip of a Q-tip and swab the inside of one nostril. Flip it over and repeat in the other nostril. Use a new Q-tip each time. It is OK to use this ointment in your nose.		
3 days before	Shower per the preoperative showering instructions in <i>A Guide to Your Upcoming Surgical Procedure</i> .		
1 to 3 days before	You will receive a phone call between noon and 4 p.m. advising when to arrive on the day of surgery.		
1 day before	Pack for hospital stay.		
	No alcohol 24 hours prior to surgery.		
	Do not eat or drink after midnight. You will be instructed to drink 12 oz. of Gatorade 4 hours prior to your surgery.		
Day of Surgery	Take medicines that you have been instructed to take.		
	Leave valuables at home. Remove all jewelry.		
	Report to hospital as directed.		
	Bring your inhalers and CPAP mask and hose.		
	Do not bring any medicines, but be prepared to tell the nurse about any recent changes.		

Hospitality Inn

For the convenience of our patients and families, we offer onsite, overnight accommodations at UPMC Williamsport. The Hospitality Inn is a smoke-free environment connected to the hospital. Pets are not permitted. The inn provides two floors with affordable guest rooms, a lobby, and lounge.

Third Floor Deluxe Rooms and Suite

The newly remodeled Hospitality Inn third floor features five rooms including three deluxe rooms, one ADA-compliant room, and one family suite. Featuring flat screen TVs, mini refrigerators, and private bathrooms.

Fourth Floor Dormitory-Style Rooms

The fourth floor features 22 dormitory-style rooms with private, fully-furnished rooms and shared bath and shower rooms. Each room contains a TV, clock radio, dorm-size refrigerator, and a phone. A kitchenette with microwave oven, coffee maker, and small refrigerator is available.

To make a reservation, call 570-321-1000. The Hospitality Inn, located at 802 Campbell St., is part of the UPMC Williamsport campus.

Discharge Planning

Outpatient Therapy

Our goal is to allow you to recover at home and attend regular outpatient physical therapy sessions. Your first appointment will be one to two days after discharge. You will be asked to call and set up your first post-operative therapy appointment prior to your scheduled surgery date.

We recommend that you call your insurance company to check benefits, including co-payments and approved locations.

Rehabilitation or Extended Care Facility

Occasionally, a stay in our rehabilitation unit or an extended care facility is helpful for recovery. Eligibility depends on your functional needs and insurance coverage.

Assistive Equipment

It is not necessary to buy a walker, tub bench, or a raised toilet seat before surgery. Your therapist and social worker can help you determine the equipment you need for home.

The hospital supplies items you need to start your therapy if you do not have them. If you already own a walker, please ask your coach, friend, or family member to bring them in. Label all equipment with your name (adhesive address labels are best).

Depending on your needs, you may require additional equipment, such as a raised toilet seat and shower bench.

Please note: Many bilateral knee replacement patients find it extremely helpful to have a raised toilet seat to use at home after being discharged from the hospital.

Transportation Needs

Your coach, friend, or family member must pick you up from the hospital on the day you are discharged.

Preparing Your Home

There are many ways to prepare your home for a safe and comfortable return after surgery.

Meal Planning

- Prepare and freeze or purchase small-portion meals for times you may be alone.
- Stock up on staples that can be frozen for later use, such as bread, vegetables, or fruits.

Accident-Proofing Your Home

- Remove throw rugs.
- Make sure all stairways are secure and have sturdy hand railings.
- Tuck away lengthy phone and lamp cords. Plan to use a hand-held portable phone, if you have one, preferably one that will fit into a clothing pocket and be carried with you.
- Arrange furniture so that you can easily move about your house with a walker.
- Remove shower doors. This may make getting in and out of the shower a little easier.
- If possible, have rails in your tub or shower professionally installed. You may also want to buy or borrow a shower bench or chair, a hand-held shower nozzle, and non-skid tub mats.
- Arrange for care and safety of pets that may run underfoot.
- Having a chair that is easy to get in and out of will benefit you during your recovery. Avoid low seats and chairs without armrests.
- If your bedroom is upstairs, you may want to prepare a sleeping area downstairs for the first week or two after you return home.



Help at Home

We strongly recommend that you have your coach, friend, or family member stay with you for the first few days after you return home.

Notes:

[illegible]

Your Health Care Team

Your Health Care Team

Your orthopaedic team includes you, your coach, your orthopaedic surgeon, an anesthesiologist, a nurse anesthetist, a doctor, orthopaedic nursing staff, occupational and physical therapy and rehabilitation staff, social workers, case managers, nurse navigator, and pastoral care.

Team members provide individualized treatment, relying on their unique expertise coordinated through a daily team meeting.

Because we believe the enthusiastic participation of your caregivers and family members is essential in helping you achieve maximum independence, they are also an important part of the orthopaedic team. This provides additional support and helps ensure a smooth transition from the hospital to home.

Total joint replacement patients begin their orthopaedic rehabilitation when they come for their pre-admission testing and attend the Total Joint Class. The majority of total joint patients are discharged directly home from the hospital. Some require an extended care facility and a limited number will meet inpatient rehabilitation guidelines.

Getting to Know Your Team

We take a team approach when caring for you.

In the weeks before your surgery, at the hospital and when you return home, you will come in contact with many members of our health care team, including:

Orthopaedic Surgeon

The doctor who performs the actual joint replacement surgery and is responsible for your overall health during your hospital stay and after your surgery.

Advanced Practice Provider

A physician assistant or nurse practitioner will assist with your surgery and see you each day you are in the hospital. You may also see them in your surgeon's office.

Anesthesiologist/Nurse Anesthetist

Professionals who administer anesthesia during your surgery and monitor your vital signs during and after surgery. The anesthesiologist may assist with pain management after your surgery by administering a pain block when you are in the recovery room.

Medical Doctor/Hospitalist

The doctor who takes care of your general health; he or she will perform your pre-operative physical. Not all doctors come to the hospital to see patients — if yours does not, a hospitalist may see you. A hospitalist is a doctor who specializes in caring for patients' medical needs in the hospital setting.

Nurse

Before and during your hospital stay, you will meet a number of nurses who perform different jobs. Some nurses attend to your daily health care needs in the hospital; others assist surgeons in the operating room; others work in hospital admissions, and in some cases, visit patients at home.

Occupational Therapist

Trained to teach you how to perform activities of daily living, such as dressing and bathing, before and during your hospital stay.

Physical Therapist

Trained to assist you in regaining strength and motion in your new joint. They will also help you with your function and mobility to prepare you for discharge. A physical therapist will work with you before, during, and after your hospital stay.

Pastoral Care

The pastoral care team provides spiritual and emotional care for patients, families, and employees. A pastor is available 24 hours a day, seven days a week, and can be reached by any member of our staff. Our chapel is located adjacent to the main lobby.

Case Manager

A registered nurse who can assist in identifying any extra clinical needs that may occur during your hospital stay.

Social Worker

Assists with any discharge concerns you may have including obtaining medical equipment, home needs, setting up your outpatient appointments, assisting with placement in an extended care facility, and providing emotional support for you and your coach. Your social worker can assist you before your surgery if you have special concerns.

Nurse Navigators

Orthopaedic nurse navigators are registered nurses (RN) who coordinate your entire continuum of care.

Outpatient nurse navigator is located in the orthopaedic surgeon's office and will meet with you after you schedule your surgery, before your hospital stay, and after you go home.

Inpatient nurse navigator will see you at the Total Joint Class and daily when you are in the hospital for your surgery.

They are available to you and your family to answer any questions and ensure that your hospital stay is exceptional.

Volunteers

Volunteers service both patient and nonpatient care areas, and play a major role in our commitment to provide high-quality, compassionate, cost-effective, and accessible health care to our patients and the community.



Notes:

[illegible]

Your Surgery

Your Surgery

Before Leaving Home For the Hospital

- Brush your teeth.
- Take medicines as instructed.
- Wear proper clothing. Wear clothes that are loose fitting and can be easily removed (avoid back zippers and pantyhose).
- Remove and leave all jewelry at home, including wedding bands.
- Avoid using perfume, deodorant, powder, hairspray, shaving cream, or any scented lotion.
- Do not wear makeup or nail polish on your fingernails and toenails.
- Bring a case with your name on it to hold your eyeglasses, contact lenses, hearing aids, and dentures.
- Bring your CPAP mask and hose (not the equipment).
- Bring your inhalers.
- Bring a list of any changes to your medications since your pre-admission appointment.
- Have your coach, friend, or family member come with you. There is a waiting room for them to wait in during your surgery. Please designate one person as a contact when your surgery is done.

Admissions Department

You will check-in two hours before your surgery is scheduled at the Surgery Center located on the fourth floor (enter at the main entrance on High Street and take the main elevators to the fourth floor). The registration clerks will ask for your insurance card and a form of identification. You will then be given your identification bracelet, some papers and a beeper. You and your coach, friend, or family member will wait in the waiting room until a nurse calls you to be prepared for surgery.

When a nurse calls you, you may bring one person; a coach, friend, or family member back with you. If you are female, you may be asked to provide a urine specimen at that time. In final preparation for surgery, an admitting nurse will re-check your medical records, conduct a brief physical examination that includes taking your vital signs (pulse, blood pressure, etc.), and start an IV.

You will meet with your surgeon and he/she will ask you to identify the correct leg that will be operated on. The surgeon will mark the leg with a purple marker.

If you wear dentures, contact lenses, or eyeglasses, they will need to be removed prior to your surgery or any sedation. All piercings must be removed as well.

Family/Coach Waiting Area

Once you leave for your surgery, your contact person will be asked to return to the waiting room. They will have their beeper with them, which will be utilized to contact them at any time necessary. They may leave the waiting room while you are having surgery, but must notify the registration clerks that they are stepping out. The beeper will sound when your surgery is finished and the surgeon is requesting to speak with your coach or family. When the beeper sounds, your family/coach should report to the reception desk and the clerk will show them to a consult room. You may also give the registration clerks a cell phone number, as your preferred means of communication.

The Recovery Room nurse will notify the receptionist or concierge when the contact person can be reunited with you. It may be up to 90 minutes until you are ready for a visitor. This is restricted to one person at a time.

When finished in the Recovery Room, the contact person will be given a room number in the Total Joint Unit located on the 6th floor. Please check in at the nurses' station across from room 602 in the Total Joint Unit for further instructions.

Risks of Total Knee Replacement Surgery

Total knee replacement is considered to be major surgery. It is important that you know the potential risks and complications.

These may include

- Infection
- Surgical bleeding
- Blood clots
- Damage to nerves or blood vessels
- Problems from anesthesia
- Very rarely, death

Although these complications are rare, they are possible. Every precaution is taken by your doctor and health care team to avoid these.

Anesthesia

- Your anesthesiologist will meet with you before surgery.
- Tell the anesthesiologist if you have ever had any problems with anesthesia or medications.
- After examining you and discussing your medical history and needs, the best anesthetic plan will be determined for you.
- Many joint replacements are done with spinal anesthesia with some using general anesthesia.

Types of Anesthesia

Spinal Anesthesia

- An anesthetic is injected into your spinal canal below the spinal cord to make you completely pain-free for your procedure.
- Depending on your procedure and what medicine is used, the effects may last from one to six hours.
- You will also receive sedation through an IV to keep you comfortable during the procedure.

General Anesthesia

- You will be in a deep, relaxed sleep, unaware, and pain-free.
- You first receive medicine through the IV, then breathe gas through a tube placed in your windpipe to keep you asleep throughout the procedure.
- You will breathe oxygen and receive other medicine to help you wake.

Risks from Anesthesia

Our staff is trained to provide you with the safest experience possible, however some risks include:

- A reaction to any of the medicines used.
- Your muscles and joints may feel stiff for one to two days from being positioned during your procedure.
- Any anesthetic can affect your heart, blood pressure, or breathing. They are constantly monitored during surgery to help prevent any problems.
- Nerve damage from a spinal or local injection.
- Chipped tooth from the breathing tube for general anesthesia. Please tell your anesthesia provider of any dental issues including chipped, broken, or capped teeth or dentures.
- With general anesthesia, there is also the possibility of a sore throat, nausea, or vomiting.

Going Into Surgery

When you leave admissions, you are taken into the holding area, where a nurse will be waiting for you. The nurse will verify your name, date of birth, orthopaedic surgeon, surgical procedure, and any allergies. You will be given an antibiotic, and the anesthesiologist will greet you and review the anesthesia to be used during your surgery.

You may be given some medicines to help you relax. You then go into the operating room where your joint will be prepared for surgery. The average length of time for the surgery is about one to two hours. At the completion of your surgery, your coach, friend, or family member is notified.

The Recovery Area

After your surgery is complete, you are transported to the recovery area where you stay for approximately one to two hours.

- Nurses will check your blood pressure, pulse, and breathing.
- You will receive pain medicine as needed.
- Nurses will check your dressings, encourage you to take deep breaths, and to move your ankles and feet.
- The anesthesiologist may give an additional pain block to help with the intensity of your initial post-operative pain. This pain block usually helps for about 24 to 36 hours.

Once awake, you are transported to your hospital room in the Joint Center. From this step forward, you begin your post-operative recovery.

Your Hospital Stay

The average length of stay in the hospital after a knee replacement is one to two days. During your hospital stay, you will receive care from your health care team in the Joint Center. This team prepares you for your discharge home or to a rehabilitation or extended care facility.

Post-operative Care

Once you are in your room, you may feel groggy. You will also see the surgical dressings and tubes that were put in place during surgery. They are a normal part of post-surgical care.

Intravenous Fluids, Antibiotics

You are given fluids through an IV. It is removed on the first day following surgery, once you are drinking fluids. Antibiotics are also given through the IV to prevent infection.

Dressings

You will have a compressive wrap from your upper thigh to your ankle after surgery. This compressive wrap is removed the first day after surgery. Some dressings are left intact when you are discharged. You will receive instructions from your nurse on your dressing and incision care.

Drainage Tubes

A drainage tube may be inserted into your knee during surgery. This tube collects bloody drainage after surgery. Your drain will be removed on the first day following surgery.

Sometimes patients have difficulty urinating after surgery. If this happens, the nurse will insert a catheter to drain your bladder.

Safety Measures

Medication management is done in part with our computer system. Your name band will have a barcode on it that is unique to only you. The computer has a barcode scanner to verify that the correct medications are given to the correct patient. You will be asked to state your name and date of birth each time you receive medications. This is another important patient safety measure.

Elastic Support Stockings (Compression Stockings)

Elastic stockings will be placed on your nonoperative leg. After the compression wrap is removed, a stocking will be placed on the operated leg. You will continue to wear your stockings for about four to six weeks after surgery.

Oxygen

Due to the effects of anesthesia, you may receive oxygen through a tube in your nose. Periodically, a monitor will be placed on your finger to measure the amount of oxygen in your blood.

Blood Thinners

You will take a blood thinner to help prevent blood clots for a month after surgery.

Medicines

All medicines must be ordered by your orthopaedic surgeon after surgery and given to you by your nurse. Do not take your own medicines, as this can cause bad side effects.

Pain Management

Significant post-operative pain is common, thus should be expected following knee surgery. You are going to have pain after surgery, but you must move and participate in therapy.

Managing your pain is one of the most important factors influencing your recovery. You will not be able to perform required activities effectively if you are in too much pain. Starting in the recovery area and throughout your hospital stay, nurses, doctors, and therapists are going to ask you what your pain level is on a scale of zero to ten.

While you are in the hospital, you will be asked to rate the intensity of pain you are experiencing through the use of a pain scale. A pain scale is a line numbered from zero to ten, with each number representing a degree of pain. A sample of a pain scale is shown here.



Pain management is achieved by a variety of medications, as ordered by your orthopaedic surgeon. Medicines can be given to you intravenously, as an injection in your muscle, or as a pill. These medications are given on an as-needed basis.

It is unrealistic to tell you that we can take away all of your pain, but a pain level at a “four” or “five” is tolerable for most people. Be proactive in your pain management. You are the only one who can feel your pain so you are a very important part of your pain management. Tell your nurse when your pain first starts to go up. Tell the nurse how the medicine is working. Are the pills lasting for four hours or are you having some pain after three hours? The orthopaedic surgeon can change your pain medicine routine and make it right for you, but you need to tell your care team how it is working.

It is important to receive your pain medication about an hour before therapy. Discuss pain management with your nurse throughout your hospital stay.

Post-operative Exercises and Activities

Coughing and Deep Breathing Exercises

Coughing and deep breathing help prevent lung congestion after surgery.

- To cough, take a deep breath in and cough forcefully from your abdomen.
- To deep breathe, inhale as deeply as you can and hold while counting to ten. Now exhale all the air. Repeat this exercise five times.

Breathing exercises involve the use of a small plastic device called an incentive spirometer. The spirometer helps you fully expand your lungs. You will be instructed by your nurse on how to use your spirometer. You will need to use this ten times every hour that you are awake.

Physical and Occupational Therapy

Participating in physical and occupational therapy greatly helps your recovery. While you are in the hospital, you will receive physical and occupational therapies two times a day.

- The day of surgery, the nursing and/or physical therapy staff will help you sit on the edge of the bed, stand at the bedside, take a short walk, then sit in the chair for a short time. Research shows that early mobility helps reduce stiffness/pain and can significantly decrease the risk of complications after surgery.
- The exercises you learned in the weeks before your surgery will be resumed by physical therapy the morning after surgery. In the following days, you will progress to more advanced exercises.

Walking

You begin walking with the assistance of a walker the day of or morning after surgery. Your therapists will show you how to walk safely. You can usually bear full weight on your leg immediately after surgery.

Daily Schedule

You will wake up early in the morning to sit in a recliner. If you wish to get back into bed, please call your nurse, as you may experience some stiffness. Group therapy sessions will be held in the gym area twice daily. You will receive a daily newsletter each morning outlining your care for that day.

Activities for Knee Replacement Patients

Ankle Pumps

Immediately after surgery, you are encouraged to do ankle pump exercises every hour. This is done by moving your ankles up and down and wiggling your toes. Ankle pumps help increase circulation in your lower legs, which helps to prevent blood clots.

Positioning

Turning in bed helps prevent bedsores, lung congestion and blood clots from forming. A pillow is placed under your lower legs to decrease pressure on your heels. Nurses will assist you in turning on your side and position you with pillows. When in bed, you need to keep your knee as straight as possible.

You need to keep your knee stretched out straight as much as possible to prevent a contracture in your knee joint. Developing a contracture in your knee will prevent you from standing up straight and affect your walking pattern. This may be uncomfortable, but it is very important.

Post-operative Diet

During your hospital stay, your diet changes many times.

For example

- The day of surgery you will be NPO: this means “nothing by mouth” before going to surgery.
- Immediately after surgery, you are on a liquid diet consisting of broth, gelatin, clear juices, soda, and tea.
- Your diet will include more solid foods as you are able to tolerate them.

Please be aware that it is not unusual to lose your appetite for a few days after surgery, and some medicines may change how food tastes to you.

A complete room service program is provided with a restaurant-style menu including a wide range of hot and cold breakfast items, as well as lunch and dinner selections. Simply place a call to the number below, and your meal will be delivered in 45 minutes or less.

Room Service Hours

- Breakfast: 6:30 a.m. to 6:30 p.m.
- Lunch and dinner: 10:30 a.m. to 6:30 p.m.

To place your food order, dial extension 23500. If you are unable to order your own meal, a food services representative will be happy to take your food order for you. Please order breakfast the night before by 6:30 p.m.

Notes:

[illegible]

Discharge from the Hospital

Discharge from the Hospital

When your doctor feels you are ready and are walking safely with a walker, you will be ready to return home, or in some cases, transfer to another facility, such as inpatient rehabilitation or an extended care facility.

When you are discharged, you should be able to

- Take care of your own personal needs, including dressing (except for the elastic support stockings) and using the bathroom with some help.
- Walk with a walker in your home with supervision. If you have stairs, you will need a standard single point cane, depending on your railings. You may require some help with stairs.

Prior to going home you will be given

- A prescription for pain medicine.
- A prescription for blood thinners (if ordered by your orthopaedic surgeon).
- Written instructions from your orthopaedic surgeon.
- A prescription for outpatient physical therapy.
- An appointment with your orthopaedic surgeon.
- Your ice pack used during your hospital stay.

UPMC Williamsport has its own retail pharmacy. You can use this pharmacy to fill your prescription before you leave. If you choose to use this pharmacy, the nursing and/or social services staff can assist you and make sure your prescriptions are given to you before you leave the hospital. The pharmacy can be reached directly from your room by dialing extension 22818, or from an outside phone by dialing 570-321-2818.

The Drive Home

Please have your driver in your room at least 30 minutes prior to your planned discharge time.

When getting into the car:

- Make sure the front passenger seat is as far back as possible.
- Slightly recline the seat.
- If your trip home exceeds 45 minutes, stop to stand and stretch every 45 minutes to an hour.
- If at all possible, avoid getting in and out of compact cars, sports cars, trucks, or vehicles with raised suspension.

Notes:

[illegible]

Your Recovery

Your Recovery

Your home recovery period will take six to 12 weeks, depending on the complexity of your surgery. Each day you will be able to do more and more activities. Keep in mind, however, that recovery takes time and everyone recovers at their own pace.

Eat a well-balanced diet when you go home from the hospital. A healthy diet gives you proper nutrition and helps restore strength.

Do not attempt any weight-loss program at this time.

If you find that your appetite has decreased during the first week or two following surgery, try eating five or six small meals spaced throughout the day. It is also important to drink plenty of fluids throughout the day.

Laxatives and Stool Softeners

It is important that your bowels move at least every two to three days. Pain medications frequently cause constipation. Plan to take a stool softener or Miralax® as directed until your bowel habits return to normal.

Sleep

It is not uncommon to have difficulty sleeping for several weeks after your surgery. You may alternate between a recliner and bed. When in bed, you may lay on your side with a pillow between your legs and propped comfortably. The knee must remain as straight as possible regardless of sleeping position.

Typical Appearance

Your knee will be swollen; bigger than your other knee. You will have redness and warmth as you begin to heal. There may be bruising in the thigh and the knee.

Do NOT take antibiotics for your knee without checking with your orthopaedic surgeon.

Clicking

You may hear a “clicking” in your knee as there is a small piece of plastic on the back of your knee cap that taps against the femoral prosthesis with movement. This is normal. It may decrease as time passes.



Possible Complications

Infections

If you develop any joint pain and/or an unexplained fever at anytime during the life of your joint replacement, call your orthopaedic surgeon.

Antibiotics may be prescribed by your doctor if you are undergoing ANY type of surgery after your knee replacement surgery. **Always** tell your doctors/dentists that you have had a joint replacement prior to any procedure.

Call your orthopaedic surgeon immediately if you experience any of the following:

- Persistent fever (oral temperature of 101.5 degrees or higher).
- Shaking or chills.
- Increased redness, tenderness, swelling not relieved with elevation, or drainage from incision site.
- Pain that is not relieved with medication, ice, and rest.
- Yellow or green fluid drainage from your incision.
- Foul odor from the incision.

Blood Clots

Blood clots can sometimes occur after joint replacement surgery. Taking blood thinners as prescribed by your orthopaedic surgeon, frequent walks (one an hour), and wearing your elastic stockings (compression stockings) are important ways to decrease the possibility of clot formation. However, as a precautionary measure, it is important to recognize the signs of blood clots.

Your physician will prescribe a medication to prevent blood clots. Please refer to your specific discharge medication education that will be provided by your nurse.

Warning signs of blood clots in the leg

- Increased pain in the calf of your leg.
- Tenderness or redness.
- Increased swelling of the thigh, calf, ankle, or foot unrelieved with elevation and rest.

If you are experiencing any of these symptoms, call your orthopaedic surgeon.

Warning signs of blood clots in the lung

- Sudden increased shortness of breath.
- Sudden onset of chest pain.
- Localized chest pain with coughing or when taking a deep breath.

This is an emergency and you need to seek medical treatment immediately. Call 911.

Precautions When Using Blood Thinners

You may bleed more easily while on blood thinners.

- Avoid situations where you can be bruised, cut, or injured.
- Brush and floss your teeth gently.
- Be careful when using sharp objects like razors and nail clippers (use an electric razor).
- When blowing your nose, blow it gently.
- Let emergency caregivers know that you are using a blood thinner.
- Make sure any doctor or dentist who treats you knows that you are using this medicine.
- You may need to stop using this medicine several days before having surgery or medical tests and procedures.
- Do not take any herbal products until you finish your blood thinner.
- Do not take aspirin or anti-inflammatory medications such as ibuprofen, meloxicam, or Aleve® (unless directed by your physician). Be sure your doctor knows about ALL other medicines you take.

Additional Instructions

For safety, follow these instructions — particularly during the four weeks after surgery:

- DO elevate your feet above the level of your heart for one hour twice a day early after discharge and when there is an increase in swelling.
- DO work to gain maximum motion of your knee during the first six to eight weeks after surgery. Regaining your motion is painful and unpleasant following knee surgery. Every effort you make now helps you achieve your goal for improved movement. Home exercises are a big part of the success of your surgery.
- DO stay active — when your therapist says you are ready, you should take daily walks and increase your distance as your strength improves.
- DO sit in a chair with arms that provides support for sitting or standing.
- DO NOT kneel until approved by your orthopaedic surgeon.

Physical Therapy

You will have an exercise program to complete at home, in addition to outpatient physical therapy three days per week. Your physical therapy appointment will be confirmed before you are discharged. Your physical therapist will instruct you on proper exercises and will add exercises as needed. For your first physical therapy visit, remember to bring your outpatient physical therapy prescription, as well as your insurance card(s).

We recommend that you check with your insurance for any applicable co-payments and approved locations.

Activity

Bathing

You will be able to shower immediately after surgery. If you have a tub shower, you may want to use a shower bench or chair. Avoid tub baths, hot tubs, or pools until the incision has had adequate time to heal.

Pain Medicines

Take pain medicine 30 minutes before activities and therapy. This will help you to perform your exercises with minimal pain. After exercising, apply ice over and under your knee for about 20 minutes to decrease swelling.

Caring For Your Incision

Your nurse will go over wound care instructions. Do not use any creams, lotions, or powders on the incision site unless your orthopaedic surgeon advises you to do so.

Swelling

Swelling of the knee is normal for several months after surgery. Use ice frequently (at least five times a day for the first couple weeks). Ice is your best friend!

Please plan to take frequent rest periods throughout the day, elevating your legs on pillows/ cushions to place it above your heart with ice/cold pack in place.

Homemade Ice Packs

You will need:

2 one-gallon Ziploc® Freezer bags

3 cups of water

1 cup of rubbing alcohol

- Put one Ziploc® bag inside of the other
- Fill doubled bag with 3 cups of water and 1 cup rubbing alcohol.
- Place in freezer until frozen.

****Note:** Be sure Ziploc® bags are sealed to prevent leaking.

Another form of an ice pack is a bag of frozen peas/corn wrapped in a towel.

Post-operative Check-Up

Your first post-operative visit will be scheduled 10 to 14 days after surgery. The date and time is included in your discharge instructions.

Additional follow-up appointments with your orthopaedic surgeon are scheduled by your surgeon's office.

In addition to a full check-up, you will receive a new set of instructions and a list of appropriate activities. Your next visit is determined by your orthopaedic surgeon and the progress you make in physical therapy.

As your recovery continues, you may begin to participate in many of the activities that you enjoyed before surgery.

Living With Your Knee Replacement

By having a knee replacement, you join an average 600,000 Americans who have this surgery every year. More than 95 percent of these people experience a dramatic reduction in pain and a renewed ability to participate in and enjoy physical activity. Still, a replacement joint is not a normal joint.

ShortTerm Results

You will:

- Be able to take care of your own personal needs including dressing (except for elastic stockings).
- Use the bathroom independently or with little help.
- Walk with a walker with help or on your own. If you have stairs, you need a cane, depending on your railings. You may require some help with stairs.

Recommended

- **Walking:** Take short walks daily, gradually increasing your distance without increasing pain and swelling. Use your walker or cane as directed and avoid over-exertion. Take special care when walking on uneven surfaces like lawns or gravel.
- **Sitting:** Use chairs that have armrests, backs, and firm seats. You need the armrests to help lift yourself out of the chair. To maintain good circulation, pump your legs up and down after sitting in one spot for more than 30 minutes
- **Reaching:** Use your reacher tool to put on your shoes and pick-up objects from the floor.

Restricted Activities

Until your orthopaedic surgeon allows you, DO NOT do any of the following:

- Return to work
- Drive a car
- Participate in sports
- Take a tub bath, swim, or use a hot tub

Lifetime Activities

After about three to six months, you are usually able to enjoy most activities that you did before.

Still, there are some activities that your orthopaedic surgeon prefers over others, and some that your surgeon will want you to avoid entirely.

Long-term Results

- Life span of a total knee replacement varies from 15 to 25 years, depending on age, weight, and activity level
- Pain is relieved
- Knee deformity is corrected

Your surgeon will allow you to perform the following activities:

- Swimming
- Biking
- Walking
- Golf
- Tennis (social doubles on a clay surface)
- Low impact and water aerobics
- Dancing
- Bowling
- Fishing
- Gardening
- Elliptical machine
- Cross-country and downhill skiing on groomed trails

Medical Follow-Up

After the first year following surgery, your joint may be evaluated every one to two years for the rest of your life. Although over 90 percent of replacements last for more than 10 years, the implant may wear with years of use. For this reason, your surgeon may take an x-ray at every visit to determine the condition of your replacement.

Metal Detectors

Your new joint may activate metal detectors in airports and some buildings. Tell security personnel about your joint replacement. They may use a metal detecting wand over your joint. Ask at one of your office visits for a wallet-size card that identifies you as having an artificial knee, to carry if you think you would need this.

Do You Have Questions?

Remember, your health care team is here to help you before, during, and after your surgery. If you have any questions, let us know. If you are at home and need help, call your orthopaedic surgeon's office at 570-321-2020. You can also contact the outpatient nurse navigator at 570-320-7548 or the inpatient nurse navigator at 877-852-2874.

Notes:

[illegible]

Using a Walker and Cane

Using a Walker

Standing

- Make sure the chair is stable and will not roll or slide — it must have arms and back support.
- Slide your bottom to the front of the chair.
- Use both armrests or one armrest and one hand gripping on to the walker to move from sitting to standing position.

Sitting

- Back up to chair until the “good” leg is against the seat of the chair.
- Put one hand onto the armrest/seat of chair and keep the other hand on the hand grip of the walker.
- Allow the “operated” leg to slide forward as you sit down slowly.

Walking

- Move walker forward a comfortable distance without leaning forward.
- Step forward with the operated leg, placing on the “imaginary line” between your hands. (If there was a line drawn between the walker hand grips, it should go through the middle of your ankle).
- Move the “good” foot forward and past the “operated” leg placing only the amount of weight allowed on your “operated leg” as directed by your orthopaedic surgeon and therapist.
- Repeat.

Curbs

The phrase “up with the good, down with the bad” is often used to help patients recall the appropriate step pattern for going up/down steps or curbs.

Going up if weight bearing — as tolerated:

- Approach step, moving up close to it
- Place walker up first
- Step up with the “good” leg
- Follow with the “operated” leg

For safety purposes, a coach should stand behind you until you are comfortable with the process.

Going up if limited weight-bearing:

- Back up close to step
- Step up and back with “good” leg
- Follow with the “operated” leg and walker

For safety purposes, a coach should stand behind you until you are comfortable with the process.

Going down — regardless of weight bearing:

- Approach steps, moving up close
- Place walker down first
- Move the “operated” leg down next
- Step down with the “good” leg
- Place only the amount of weight allowed on your “operated” leg as directed by your surgeon/therapist

For safety purposes, a coach should stand behind you until you are comfortable with the process.



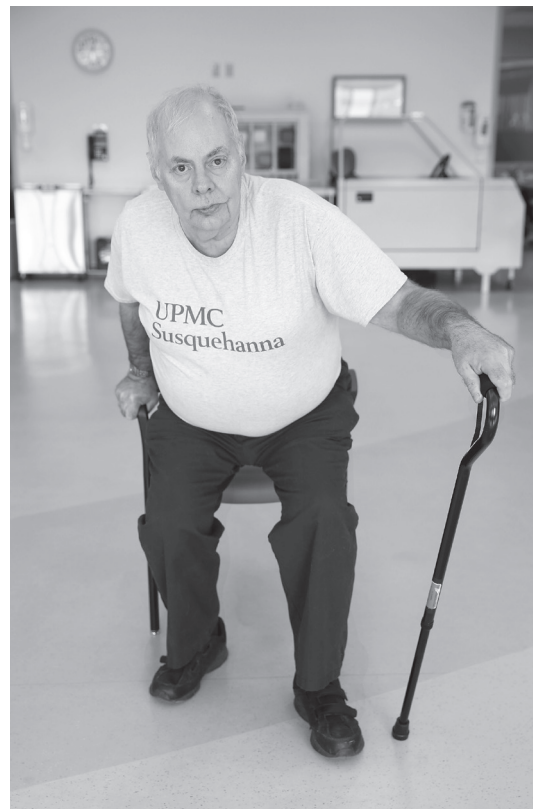
Using a Cane

Walking with cane on level surfaces

As you receive continued therapy beyond your inpatient stay, your physical therapist will help wean you from your walker and transition to use of a cane on level surfaces. Typically, you are using a cane two to three weeks after your surgery. Your therapist will help determine when you are strong and stable enough to use a cane safely.

You will use your cane in the opposite hand of your surgical leg. For example, if your right leg was operated on, you would use your cane in the left hand. This helps “unload” your operated leg when you are stepping through with your “good leg”. Your cane moves with your operated leg as you walk. When you step forward with your operated leg, you also place your cane forward then step with your “good leg”.

Gradually, as your pain improves, your legs get stronger and you are feeling confident with your joint replacement, you will graduate to walking without any device. Most individuals use some form of walking aid for about six weeks after surgery. Your therapist will work with you to help regain a “normal” walking pattern.



Stairs

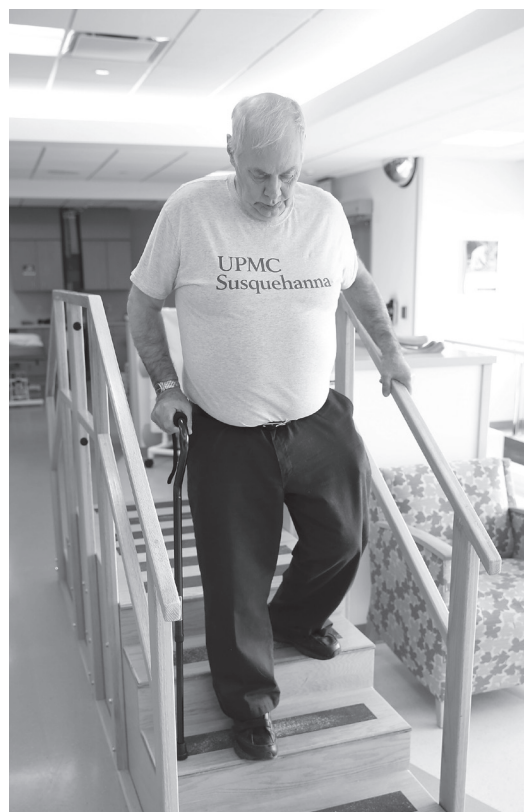
The phrase “up with the good, down with the bad (operated leg)” is also applied when negotiating multiple steps. Ideally, all stairs you need to negotiate around your home should have at least one handrail to increase safety. If there are two handrails on your stairs — have someone carry your cane up/down the stairs while you use both handrails to ascend/descend the stairs. If only one handrail is present, use your cane in your opposite hand to negotiate stairs.

Going Up Steps

- Approach steps, getting feet close to first step.
- Step up with the “good” leg.
- Follow with the surgical leg or “bad” leg.
- Follow with the cane.
- Your coach should walk up behind you the first few times attempting stairs at home.

Going Down Steps

- Approach steps, getting feet close to first step.
- Place cane down onto the next step.
- Step down with the surgical leg or “bad” leg.
- Follow with your “good” leg.
- Your coach should stand in front of you the first few times attempting.



Notes:

[illegible]

Exercise Program

Exercise program

Start Pre-operative Exercises

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

Exercising Before Surgery

It is important to be as flexible and strong as possible before undergoing a total knee replacement. Always consult your physician before starting a preoperative exercise plan. The exercises listed here should be started immediately unless instructed otherwise and continue until surgery. You should be able to do them in 15 to 20 minutes and it is typically recommended that you do all of them twice a day. Consider this a minimum amount of “training” prior to your surgery.

Remember that you need to strengthen your entire body, not just your leg. After surgery, you will be relying on your arms to support you when walking with the walker or crutches, getting in and out of your bed and chairs, as well as on and off the toilet. It is very important that you strengthen your arms by doing chair push-ups. You should also exercise your heart and lungs by performing light endurance activities — for example, walking for 10 to 15 minutes each day.

Pre- and Post-operative Knee Exercises

Do the following exercises before surgery:

1. Ankle pumps
2. Quad sets
3. Gluteal sets
4. Lying abduction
5. Heel slides
6. Knee extension
7. Straight leg raises
8. Standing knee flexion
9. Sitting knee extension
10. Standing heel/toe raises
11. Marches
12. Standing abduction
13. Shallow squats
14. Chair push-ups

Do NOT do any exercise that is too painful.

Exercises After Surgery

After surgery, your outcome is largely your responsibility. Compliance with your home exercise program will significantly impact your ability to return to the activities you enjoy doing.

Although your exercises may be unpleasant, they will help you regain your range of motion and strength needed to return to your desired activity level.




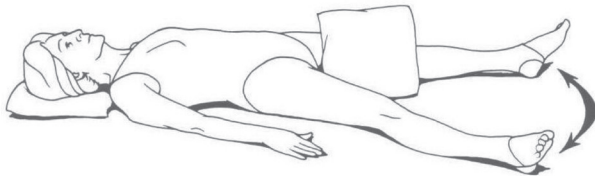
Total Knee Replacement Exercise Program

When doing these exercises, it is normal to experience some pain. It is important to listen to your body and work within your comfort level.



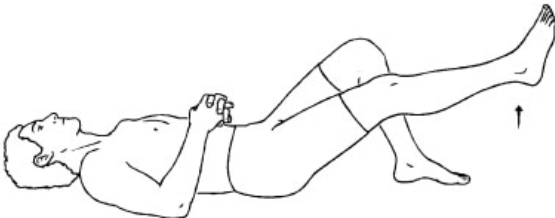

Repeat each exercise 20 to 30 times daily.

If an exercise causes significant pain, discontinue the exercise. Consult your therapist or surgeon.


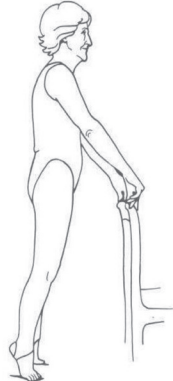


Remember: Do not hold your breath when performing these exercises. Lie in bed or on a reclined chair for all exercises. Do not lay on the floor.

	<p>1. Ankle Pumps</p> <p>Bend ankle up towards your body as far as possible. Now point toes away from body.</p> <p>Coach's Note: Perform throughout the day.</p>
	<p>2. Quad Sets</p> <p>Tighten muscles on top of your thigh — this will straighten the knee. Hold tight for five seconds.</p> <p>Coach's Note: Look and feel for the muscle above the knee to contract. If done correctly, the heel should lift slightly.</p>
	<p>3. Gluteal Sets</p> <p>Tighten buttock muscles — squeezing cheeks together. Hold tight for five seconds.</p> <p>Coach's Note: Patient can place hands on right and left buttocks area and feel for equal muscle contractions.</p>
	<p>4. Lying Abduction</p> <p>While laying on your bed, point your toes towards the ceiling. Keeping your knee straight, slide your hip out to the side away from your other leg, and then back.</p>

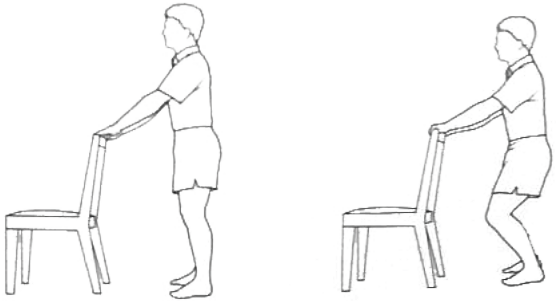

Total Knee Replacement Exercise Program

	<p>5. Heel Slides</p> <p>Bend opposite knee to support lower back. Slide heel of operated leg towards your buttocks, bending the knee. Hold for two seconds and slowly lower your leg.</p> <p>Coach's Note: The patient should pull their heel up on their own. If they can't, you can assist at the ankle.</p>
	<p>6. Knee Extension</p> <p>Put a rolled-up towel under knees. Raise heel until knee is straight. Hold for five seconds and slowly lower.</p> <p>Coach's Note: Have patient work toward full extension (straightening) of the knee. Assist with hand under the heel, encouraging to lift the foot from the hand.</p>
	<p>7. Straight Leg Raises</p> <p>Bend your "good" leg so your foot is resting beside your other knee. Tighten muscles on top of thigh on your "operated" leg. Keep knee straight and lift 10 to 12 inches off the surface. Hold this position five seconds and lower slowly.</p> <p>Coach's Note: Make sure the straight leg is maintained and that the knee does not bend with the lift. Go slowly. If needed, put hand under foot.</p>
	<p>8. Standing Knee Flexion</p> <p>Stand holding on to a solid object as shown. Slowly bend "operated" knee. Hold for five seconds and slowly lower.</p>

Total Knee Replacement Exercise Program

	<p>9. Sitting Knee Extension</p> <p>While seated on the edge of a chair or table, slowly straighten "operated" knee. Hold for five seconds and slowly lower.</p>
	<p>10. Standing Heel/Toe Raises</p> <p>Holding on to an immovable surface, rise up slowly on your toes as high as you can, then come back down slowly.</p>
	<p>11. Marches</p> <p>Stand with legs straight. Bend "operated" knee and hip upward as shown. Slowly relax.</p>
	<p>12. Standing Abduction</p> <p>Stand holding onto a solid object for balance. Raise "operated" knee out to side without letting it come forward. Hold for five seconds, then slowly relax.</p>

Total Knee Replacement Exercise Program

	<p>13. Shallow Squats</p> <p>Hold on to a solid object as shown. Keep feet flat on the floor, about shoulder width apart. Slightly bend knees, then stand up using as little help from the arms as possible.</p>
	<p>14. Chair Push-Ups</p> <p>Place hands on arm rests of chair. Lift buttocks off the chair by pushing with your arms.</p>

Activities to increase knee bending

Regaining normal motion in your knee is one of the most challenging aspects of your recovery. Exercises are critical to improving your ability to straighten and bend your knee. In addition to your exercises, there are other activities you can do to increase your range of motion:

- While sitting in a rocking chair, bend your knee as far as you can, then plant your foot on the ground. Gently rock back and forth in the chair keeping your operated leg planted on the ground. Gradually increase rocking motion to further bend your knee.
- Standing at bottom of a set of stairs with a hand on the handrail, place your operated leg on the first or second stair. Keep your “good leg” on floor level. Slowly lunge forward causing your operated leg to bend until a stretch is felt. Hold stretch for five to ten seconds and repeat ten to twenty times. If you do not have stairs for this activity, you can use the lower surface of a low kitchen cabinet to place your operated leg on.
- Sitting on the edge of a chair, place a plastic bag around your operated leg. Slowly slide your operated leg back, bending your knee, then use your “good leg” to push your operated leg back further. Hold stretch five to ten seconds and repeat ten to twenty times.

Follow these tips to help you with your exercises at home.

- Do your exercises on your bed or in a reclining chair. AVOID performing your exercises on the floor to avoid strain on your new joint and prevent a potential fall.
- Exercise should be performed in a “tolerable” manner. AVOID extreme pain with your exercise program. Exercises may be uncomfortable, but should not cause unbearable pain that does not stop within 15 minutes of exercising.
- A few items that will help with your exercises include: a cookie sheet, a large piece of cardboard, a lid of a plastic storage tote, or a garbage bag slid onto leg will help with your sliding exercise, and a large coffee can/thermos will work well under your knee to perform leg kicks.

Notes:

[illegible]

MRSA Education

MRSA Education

What is MRSA?

MRSA (Methicillin-resistant *Staphylococcus aureus*) is a bacteria that causes infections in different parts of the body. It's tougher to treat than most strains of *staphylococcus aureus* (staph) because it's resistant to some commonly used antibiotics. It is a germ that commonly lives on the skin and in the nose. Usually staph bacteria do not cause harm, but sometimes they get inside the body through a break in the skin and cause an infection. These infections are usually treated with antibiotics, but sometimes the antibiotic that is used does not kill the staph bacteria. This can mean that the bacteria have become resistant to those antibiotics.

Community-Acquired MRSA (CA-MRSA)

This is a skin infection that has been identified among certain populations that share close quarters or experience more skin-to-skin contact. Examples are team athletes, military personnel, and prisoners. CA-MRSA is being seen in the general community more and more.

Hospital-Acquired MRSA (HA-MRSA)

This type of infection is most common among people who have weak immune systems and are living in hospitals, nursing homes, and other health care centers. Infections can appear around surgical wounds or invasive devices like catheters or implanted feeding tubes.

Signs and Symptoms of MRSA

Some MRSA infections start as small red bumps on the skin that look like pimples or spider bites, a cut that is swollen, hot, and filled with pus, or blisters filled with fluid (called impetigo). Although often more serious, this is less common. These sores can quickly turn into severe abscesses (pus-filled areas of infection). MRSA can also appear in other areas of the body, such as blood, lungs, eyes, and urine. It can spread deeper into the body where it can cause one or more of the following:

- Infections in bones, muscles, and other tissues.
- Pneumonia (a serious lung infection).
- Infection in a wound from an operation.
- Infection in the bloodstream.
- Endocarditis (infection of the lining of the heart and the heart valves).
- Infection of the urinary tract (bladder and kidneys).

What Causes It?

Garden-variety staph is common bacteria that can live on our bodies. Plenty of healthy people carry staph without being infected by it. In fact, 25 to 30 percent of us have staph bacteria in our noses. But staph can be a problem if it manages to get into the body, often through a cut. Once there, it can cause an infection. Staph is one of the most common causes of skin infections in the U.S. Usually, these are minor and don't need special treatment. Less often, staph can cause serious problems like infected wounds or pneumonia.

How is MRSA Spread?

- People who are colonized with MRSA have MRSA in their noses or on their skin. Though they are not sick themselves, they can spread the germs to others.
- In hospitals and long-term care facilities, MRSA can spread from patient to patient on the hands of health care workers. It can also spread on objects such as cart handles, bed rails and catheters.
- Outside health care settings, MRSA usually spreads through skin-to-skin contact, shared towels or athletic equipment or through close contact with an infected person.

What Does it Mean to be a MRSA Carrier?

Infected or colonized patients are the major reservoir of MRSA in institutions. Colonized patients carry the MRSA organism in epithelial and mucosal regions without suffering MRSA infection and with no obvious signs of colonization. The carrier state is clinically significant, because any surgical intervention or exudative (draining) skin condition will predispose the MRSA carrier to MRSA infection.

Also, health care personnel unknowingly have contact with carriers of MRSA and transmit the organism to vulnerable patients missing treatment of MRSA.

Treatment

Staph can usually be treated with antibiotics. But over the decades, some strains of staph, such as MRSA, have become resistant to standard antibiotics that once destroyed it. MRSA was first discovered in 1961. It's now immune to methicillin, amoxicillin, penicillin, oxacillin, and many other antibiotics. While some antibiotics still work, MRSA is constantly adapting. Researchers developing new antibiotics are having a tough time keeping up.

In an effort to provide the best care to our patients, screening is completed on all of our total hip and knee patients in pre-admission testing.

- Your results will be known before you enter the hospital.
- All patients will treat themselves with Bactroban (Mupirocin Ointment) twice a day for five days prior to your scheduled surgery.

What can be done before your operation to prevent an infection?

- Take showers for three consecutive days prior to your procedure.
- Tell your doctor about other medical problems you may have. Health problems such as allergies, diabetes, and obesity could affect your surgery and your treatment.
- Quit smoking. Patients who smoke get more infections. Talk to your doctor about how you can quit before your surgery.
- Do not shave near where you will have surgery. Shaving with a razor can irritate your skin and make it easier to develop an infection.
- Call your surgeon or the nurse about any cuts, scrapes, or open areas on your skin.

Shower with antimicrobial soap or four percent hibiclens liquid three consecutive days before surgery. Apply one ounce of liquid soap to a clean, new washcloth. Wash all skin surfaces from the neck down, with attention to skin fold such as armpits, groin, wrists, between fingers, and elbows. AVOID CONTACT WITH EYES AND EAR OPENINGS. Allow soap to have contact with the skin for three minutes before rinsing off skin.

Notes:

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Appendix

Assistive Medical Equipment



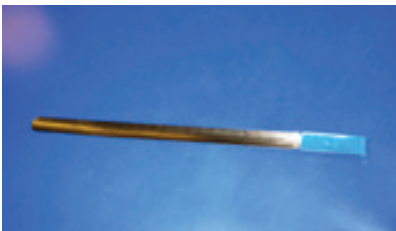
An alternate toilet modification/setup utilizes a portable/bedside commode over a normal toilet.



A standard toilet equipped with raised toilet seat and toilet frame railing improves accessibility and safety with knee replacement precautions.



A shower bench allows increased accessibility and safety following knee surgery. There are many different styles. This is the most basic.



A long-handled shoe horn increases independence with donning shoes or slippers.



A long-handled reacher assists dressing lower limbs (undergarments, pants, shorts). It can be used for retrieval of items in the closet, cupboards, or items on the floor.



Elastic laces eliminate the need of continued untying and retying shoes. This converts the shoe into a slip-on style shoe.



A sock aid assists with putting on socks independently.

Donning Instructions

Tips for Properly Putting on Compression Garments:

1. Skin should be dry when putting on the garment.
2. Rings and other jewelry can cause snags, so it's best to remove them before putting on the garment.
3. Wearing rubber gloves to grip the fabric is helpful.
4. Do not roll, gather or bunch the fabric — this will increase the pressure.

The Heel Pocket Out Method:

1. Turn stocking inside out (Figure 1).
2. Slide foot in, position tow heel properly inside the garment.
3. Grab the top of the stocking and pull it up over the ankle and heel until it is properly in place (Figure 2).



Figure 1

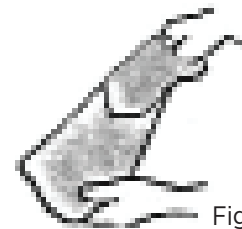


Figure 2

The Pull-On Method:

1. Allow garment to hang on the foot. Hold the stocking by both sides at the top and pull it onto the foot and p onto the leg as far as possible (Figure 3).
2. Pick a spot on the leg where you can get hold of the stocking on both sides again, and then pull it up continuing around the heel until you meet resistance (Figure 4). Once the garment is on the foot fold the extra fabric back down onto your leg instead of letting it bunch or roll.
3. Grasp stocking at the top and pull out the fold. Grab garment from the inside working up the extremity, until the top of the garment is reached.
4. Repeat until the heel is in place.

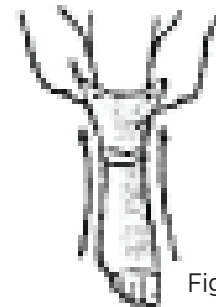


Figure 3



Figure 4

Sock Aid:

A sock aid or specialty compression stocking aid can be utilized and can be found at pharmacies and medical supply stores.

Removing a Garment:

Start at the top of the garment and peel it off, the garment will be inside out. **NEVER** roll down the garment and try to remove the fabric at once.

Notes:

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