

Surgery

Surgery Date: _____

Your Surgeon: _____

Surgery _____

Coordinator: _____

Pre-op physical

Time: _____

Date: _____

Location: _____

Bring:

- Names and quantities of medications you take (some patients find it easiest to bring all of their bottles/dispensers)
- Any Clearance letter you have been instructed to bring

Arrival Time

For your arrival time, a nurse from Michigan Medicine will contact you.

If scheduled at Main Campus: you will receive a call 1-2 business days before your surgery at the preferred number in your medical record. If you do not hear from them, you can call them at (866) 936-8800.

If your surgery is in Brighton, they will call you 2 business days before surgery. If you do not hear from them, you can call them at 810-263-4440

If your surgery is at Michigan Medicine Chelsea, you will be contacted 2 business days before surgery. If you do not hear from them, you can call them at 734-593-5803

Arrival Time for Surgery: _____

For more information about Joint Replacement Surgery at Michigan Medicine
Go to: <https://medicine.umich.edu/dept/orthopaedic-surgery/>



Table of Contents

Knee Replacement Surgery at Michigan Medicine

Checklist for Success	5
Why choose Michigan Medicine?	6
Why do I need a knee replacement?	8
Why does my knee hurt?	8
What are my non-surgical treatment options?	8
What is a knee replacement surgery?	9
What risks and complications might I have?	9
What can I do to prevent surgery complications?	10
How do I prepare for my surgery?	11
Find a support coach	11
Attend a pre-op class	11
Pre-op medical history and physical exam	12
Stop smoking before surgery	12
Dentist	12
Prepare your home	12
Walker	13
Buy Supplies	13
Begin Exercising	14
Advance Directive or Durable Power of Attorney (DPOA)	14
Accommodations	14
Short-term care facility	14
Seven (7) days before surgery	16
Prescription Blood Thinners	17
Tylenol®	17
Narcotic/Prescription Pain Medications	17
1 Day before surgery	18
How do I find out when to arrive at the hospital?	18
What should I pack for the hospital?	18
When should I take my pre-op shower?	18

Day of surgery	19
What should I do the morning of surgery?.....	19
Where do I check-in?.....	19
What happens in the pre-op area?	19
How long will my surgery take?	20
What happens in the recovery room?.....	20
What happens in my hospital room?.....	20
What can I expect during my hospital stay?	21
How do I stay safe during my hospital stay?.....	21
What kind of therapy will I receive in the hospital?	22
What symptoms might I have after surgery?.....	22
Medication to prevent blood clots	23
What are the signs of a blood clot in my legs?	24
What are the signs of a blood clot in my lungs?.....	24
Pneumonia	24
When will I be discharged?	25
Your support coach.....	25
Your home care plan.....	25
What are the keys to discharge?.....	25
What are the final steps?	26
What will my recovery at home be like?	27
Care Pathway After Discharge	27
Home Therapy.....	27
How can I prevent blood clots?	27
How do I prevent constipation?	28
Recipe for severe constipation	28
How do I prevent a wound infection?	28
How do I reduce swelling?	29
Wear support stockings	29
Elevate your leg and ice your knee	30
How do I manage my pain after surgery?.....	30
How do I get refills for pain medication?	30
How and when do I wean off my pain medication?	31

When do I go back to the Orthopaedic clinic?	32
2 to 3 weeks	32
6 to 10 weeks	32
1 year	32
Every 5 years	32
How will I live with my new knee?	33
Everyday Activities	33
Weight Control	33
Continue exercising for the rest of your life	33
Antibiotics for the rest of your life	33
Dental care	34
No injections.....	34
How will I do everyday activities?	35
Physical Therapy Checklist	37
Total Knee Replacement Exercise Program.....	39
Dos and Don'ts after total knee replacement	43
Pre-Operative Showering Instructions	46
Pre-Operative Screening for Staphylococcus Aureus	47
Frequently Asked Questions (FAQs)	49
Frequently Asked Questions (FAQs) About Surgical Site Infections (SSI)	54

Check List for Success

Read

- Read this “Preparing and Recovering from My Knee Replacement Surgery” before surgery. Refer to it whenever you have any questions.

Stop

- Taking medications listed on page 16.
- Taking any Vitamins and supplements.
- **Do not** stop taking your diabetes, high blood pressure or other prescription medications unless instructed to do so at your pre-op appointment.

Purchase

- An over the toilet commode or raised toilet seat. Necessary for our hip patients but OPTIONAL for our knee replacement patients.
- Acetaminophen (Tylenol 500 mg tablets. See page 17.)
- Laxatives (Miralax® and Colace® or Senna; no prescription necessary). see page 13.

Your Surgery Arrival time

- You will be contacted by the facility with your arrival time. See page 1.

Prepare

- Shower the night before and the morning of surgery. Follow the instructions on page 46.
- Pack your bag following the instructions on page 18.

Bring

- This book "Preparing and Recovering from the Knee Replacement surgery"
- If you were given a Blue Pre-Admission Type & Screen Information form, bring this. Not all patients receive this.

Plan your recovery

- Plan to go home from the hospital 1 day after surgery. Some patients might go home the same day as surgery (Outpatient knee replacement).
- If you think you may need to go to a rehab facility, let our staff know before your surgery day. Call 734-936-5780 and ask to speak to one of the joint replacement nurses.

Why choose Michigan Medicine?

The University of Michigan Joint Replacement Program offers many services that help to manage arthritis and other causes of knee pain. If you are a candidate for knee replacement, our team will see you through your recovery so you receive seamless care from start to finish.

Our surgeons are fellowship trained in joint replacement surgery. Research shows that fellowship trained surgeons in a high volume practice leads to better outcomes for patients. Our surgeons are active members in multiple societies, including the American Academy of Orthopaedic Surgeons and the American Association of Hip and Knee Surgeons. They also participate in a state-wide registry called Michigan Arthroplasty Registry Collaborative Quality Initiative (MARCQI). This registry is dedicated to improving the quality of care for patients undergoing hip and knee replacement procedures in Michigan. If you would like more information on MARCQI, please refer to their website: <http://marcqi.org/>.

Our relationship with the Medical School improves the patient experience. This is a teaching hospital; Orthopaedic residents are part of our team and will be involved in your care and supervised by your surgeon. Our cutting edge institution offers high quality care, world-class facilities, partnerships with research, and the opportunity to work with the best and brightest educators. We offer data driven care focused on safety and early and full recovery.

Team approach

- You, the patient
- Your support coach
- Physicians
- Residents
- Physician Assistants
- Nurse Practitioners
- Nurses
- Pharmacists
- Physical Therapists
- Occupational Therapists
- Dietitian/Nutritionist
- Other skilled professionals

We work together starting before your surgery and through the recovery process. This team approach works well to provide you with the best possible care.

As you read through this book, you will see that you are an important part of this team.

Why do I need a knee replacement?

Why does my knee hurt?

Some reasons for knee pain are:

- **Knee arthritis:** Your joints are covered with a smooth, glistening white surface called cartilage. The cartilage allows your joints to move easily, like ice on ice. Arthritis destroys the cartilage. This is the most common reason for knee pain. There are many types of arthritis including osteoarthritis, rheumatoid arthritis, and psoriatic arthritis. When the cartilage is damaged your joint does not move smoothly and causes you to have pain. If you have arthritis, symptoms may include, pain, stiffness, and difficulty with daily activities (e.g. putting on your socks and shoes).
- **Obesity:** Increased weight can lead to pain and wear in your hip joint.
- **Traumatic injury:** Some arthritis is caused suddenly from an accident or injury.

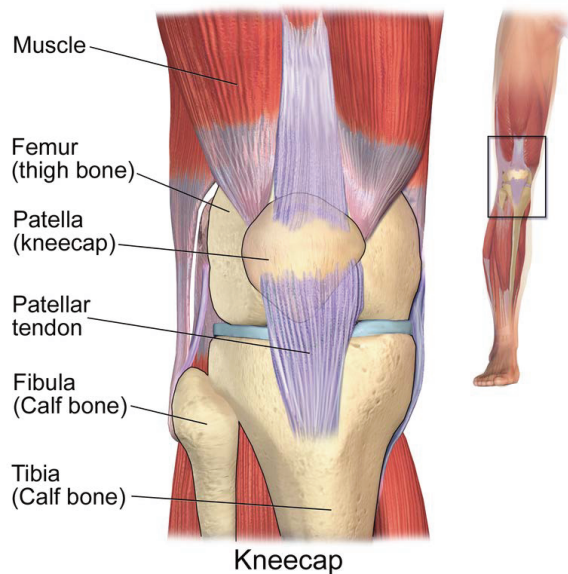
What are my non-surgical treatment options?

We will explore various methods to help your knee pain without surgery, including:

- Physical therapy, especially strengthening your thigh (quadricep) muscle
- Modifying your activities
- Weight loss
- Devices to help you walk (cane or walker)
- Anti-inflammatory medications

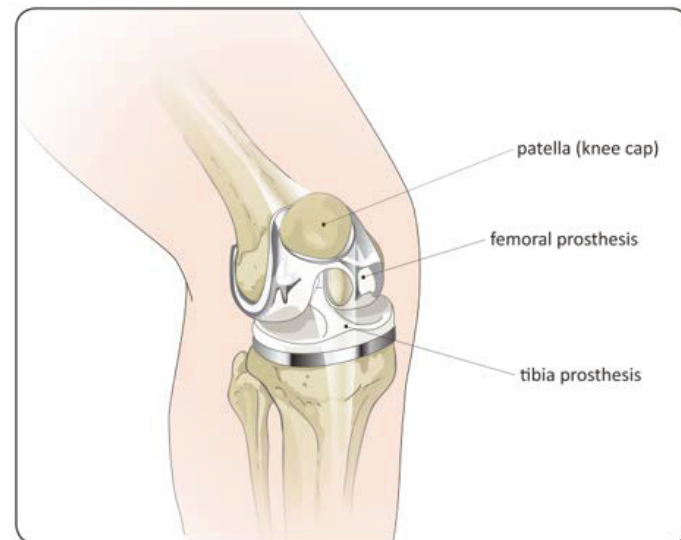
What is a knee replacement surgery?

Knee replacement is a very successful and long-lasting surgery that uses metal and plastic parts to cap the end of the bones that make up the knee.



By BruceBlaus (Own work) [CC BY-SA 3.0](#) via Wikimedia Commons

The knee after replacement surgery



© McGill University Health Centre (MUHC). See copyright notice on page 51.

What risks and complications might I have?

Like any surgery there are risks and complications that could occur. Some examples are:

- Bleeding
- Blood clots
- Heart attack
- Infection
- Stroke
- Pneumonia
- Pain or stiffness
- Damage to blood vessels, bones, or nerves
- Loosening or wear of the implant
- Knee fracture
- Anesthesia-related risks
- Death is a rare complication of any surgery

What can I do to prevent surgery complications?

Before surgery:

- You will have a physical exam and pre-operative tests done.
- You may need to see a specialist depending on your personal health history.
- Lose weight. Obesity greatly increases your risk for complications. Ideally we want your Body Mass Index (BMI) to be 35 or less. Complications increase when BMI is greater than 35 and dramatically increase if BMI is 40 or higher. We have nutritionists on staff that can work with you to help you lose weight if necessary.
- You must stop smoking before we will schedule your surgery. Nicotine interferes with healing and increases your risk of infection and other complications. We will check a urine test to make sure you have quit smoking before scheduling surgery. You must avoid all tobacco products for 2 weeks in order for this test to be negative. This means no cigarettes, no E-cigarettes, no nicotine patches or gum, no chewing tobacco. Nothing with tobacco in it. Do not start smoking again after the test. We may check you again before and after surgery.
- If you have diabetes, we will work with you to get your Hemoglobin A1c to 7.5 or less.
- If you have risk factors for obstructive sleep apnea (OSA), get a sleep study before surgery. We will review these risk factors with you at a clinic appointment before surgery and if necessary, refer you to the sleep clinic “fast track” scheduling. Risks of complications and death occur when patients have undiagnosed sleep apnea and then take narcotics after surgery that may decrease respirations even more when you sleep.

How do I prepare for my surgery?

Once your surgeon determines you are candidate for knee replacement, you will start preparing for your knee replacement several weeks before surgery. Being well prepared will help reduce risks and complications.

Find a support coach

A support coach is critical. This can be a relative or friend that helps you while you prepare for surgery. This person will also help you in the hospital and at home. You may have more than one support coach if one person is not available for all of the steps below.

A support coach must be available to:

- Attend the pre-op class with you.
- Bring you to the hospital the day of your surgery.
- Come to the hospital at 8:00 am the morning after surgery for education with nursing, PT and OT before discharge.
- Learn about your exercises, pain control, and important knee dos and don'ts.
- Take you home from the hospital (usually the day after surgery).
- Help you around your house with everyday activities.
- Drive you to post-op appointments.

Attend a pre-op class

You will be required to attend a 2-hour class to learn about your knee replacement.

You will learn about:

- Preparing for your surgery
- Your hospital stay
- Recovering after your surgery

You will be able to ask any questions you have during this class. Our patients and families find this class to be very helpful.

If you have not been scheduled for this class, please call the clinic at (734) 936-5780.

Pre-op medical history and physical exam

You will have an appointment scheduled for a pre-op physical.

- Bring a list of your medications and dosages or bring all your medicine bottles to this appointment.
- Pre-op testing may include blood tests, nasal swabs, and possibly an Electrocardiogram (ECG). An ECG is a test that measures the electrical activity of your heart.
- Depending on your personal health history, you may also need to see a medical specialist, such as a heart doctor or lung doctor, before surgery. We will make this decision when you are seen for your exam or when we receive test results.

Stop smoking before surgery

You must stop smoking, vaping and all nicotine products before we will schedule surgery. Nicotine interferes with healing and increases your risk of infection and other complications. See page 10 for more information about stopping smoking.

Dentist

- Do not have your teeth cleaned during the 2 weeks before your surgery.
- Bacteria from your gums can enter your blood stream and could infect your new knee joint.
- Any tooth or gum infections must be treated before surgery and your dentist must send us a note to say your infection is gone. Our fax number is: (734) 647-3125.

Prepare your home

- Remove throw rugs, fasten down loose carpet, and tape down electrical cords to prevent tripping.
- Place a non-skid, latex-coated bath mat on the floor beside your tub and a non-skid mat in the tub.
- Remove clutter anywhere you may walk.

- Add night lights in halls and bathrooms.
- Put an extra pillow on chairs so that you will sit higher. It will be easier to get up from the chair.
- Find a chair with arms to use as your main chair because it is easier to stand up and sit down.
- Prepare meals ahead and freeze them.
- Wash your laundry and put clean linens on your bed.

Walker

- If you have a walker, please have your coach bring it to your room on the day of surgery.
- The therapist will check it to make sure it is the right height and style for your needs.
- If you do not have a walker, one will be ordered and delivered to your room before discharge.
- If you are going to a short term care facility, the walker will be obtained for you there.

Buy supplies

- Purchase laxatives and stool softeners before surgery to use when you get home from the hospital. Pain medication is very constipating. You should take laxatives and stool softeners daily, for as long as you are taking a prescription pain pill (narcotic). No prescription is necessary (examples: Senna, Colace®, Miralax®, Milk of Magnesia, or any over the counter laxative).
- An over-the-toilet commode or raised toilet seat is recommended but not required.
- A shower chair or tub transfer bench and hand-held shower hose are helpful but not required.



Note: Your insurance may not cover the commode, shower chair, or tub transfer bench. You can find these items at stores such as Home Depot®, Meijer® and Wal-Mart® for a low price. You can also check local churches, senior centers or the Salvation Army.

Begin exercising

- Start the exercises, see pages 39-42.
- Start them today, even before surgery, and continue lifelong.
- These will improve muscle strength and help you recover faster.

Advance Directive or Durable Power of Attorney (DPOA)

- We encourage everyone to create an advance directive. This helps us and your family concerning future choices about your medical care.
- If you have an advance directive, please bring it to your pre-op appointment or surgery so we can add it to your health record.
- For more information, visit: uofmhealth.org/pvg/patients/advance-directive.

Accommodations

If you do not live in the area, you may want to make plans to stay locally.

- Our Patient & Visitor Accommodation Program can help patients and their families make area hotel reservations at a discounted rate.
- They are available 24 hours a day at (800) 544-8684.
- The Med-Inn, attached to the hospital is also available but fills up quickly. Their number is (734) 936-0100.

Short-term care facility

- We would like you to go home with your support of your coach(es) after surgery.
- Studies show patients heal better and have fewer problems, less risk of infection and readmissions to the hospital when recovering at home.
- If after surgery, you are having difficulties moving and completing tasks, a therapist may recommend a brief stay at a short-term facility.

If you think you may need to go to a short-term facility, you should visit and tour a few facilities before your surgery and pick a first and second choice. To find short-term care facilities near you, follow the instructions below.

- Contact your insurance carrier to confirm coverage and if they have a preferred provider or designated short-term care facility (there is usually a phone number on the back of your insurance card).
- To find facilities near you online, visit www.medicare.gov
 1. Click on the link on the left side of the page titled “Find Nursing Homes”.
 2. The next page will ask for a zip code.
 3. Facilities in that area will appear.

Facilities have ratings, but these ratings can be misleading. We strongly recommend you visit potential facilities.

Seven (7) days before surgery

Stop taking:



- Herbal supplements, vitamins, weight loss, CBD products.
- All recreational drugs (heroin, cocaine, marijuana, LSD, Methamphetamine, etc.).
- Estrogen: If possible, stop 2 weeks before and for 4 weeks after surgery. This will decrease risk of a blood clot.
- All medications listed in the table below (these medications may cause you to bleed more easily).

Do not stop your other medication if they are not listed below, unless instructed to do so (for example, blood pressure or diabetic medications).

Actron [®]	Cope [®]	Indocin [®]	Oruvail [®] (Ketoprofen)
Advil [®] (Ibuprofen)	Daypro [®] (Oxaprozin)	Lodine [®] (Etodolac)	Pamprin - IB [®]
Aleve [®] (Naproxen)	Disalcid [®] (Salsalate)	Meclomen [®]	Pepto-Bismol [®]
Anaprox [®] (Naproxen)	Dolobid [®]	Medipren [®] (Ibuprofen)	Percodan [®]
Anacin [®]	Doan's [®]	Meloxicam [®] (Mobic)	Ponstel [®]
Ansaid [®] (Flurbiprofen)	Easprin [®]	Motrin [®] (Ibuprofen)	Relafen [®] (Nabumetone)
Aspirin	Empirin [®]	Nalfon [®] (Fenoprofen)	Rufen [®] (Ibuprofen)
Ascriptin [®] (Coated Aspirin)	Ecotrin [®]	Midol (Ibuprofen) [®]	Salflex [®]
Arthrotec [®] (Diclofenac)	Etodolac	Naprelan [®] (Naproxen)	Suprol [®]
Bayer Aspirin [®]	Excedrin [®]	Naprosyn [®] (Naproxen)	Tolectin [®] (Tolmetin)
Bufferin [®]	Feldene [®] (Piroxicam)	Naproxen	Trilisate [®] (Salicylate)
Butazolodin [®]	Fiornal [®]	Nuprin [®] (Ibuprofen)	Vanquish [®]
Cataflam [®] (Diclofenac)	Haltran [®] (Ibuprofen)	Orudis KT [®]	Voltaren [®] (Diclofenac)
Clinoril [®] (Sulindac)	Ibuprofen	Orudis [®] (Ketoprofen)	

Prescription Blood Thinners

If you take Coumadin[®] (Warfarin), Plavix[®], Aggrenox[®], Pradaxa[®], Fondaparinux[®] (Arixtra), Eliquis[®] (Apixaban), Xaralto[®] (Rivaroxaban) or other prescription blood thinners or Aspirin prescribed by your doctor, you will receive specific instructions at your physical exam about how and when to stop these medications.

Tylenol[®] (Acetaminophen)

Before Surgery you may take Tylenol to help manage your pain. Tylenol does not thin your blood like the medications listed on page 16.

After surgery we will want you to take Tylenol on a regular basis as part of your pain management. Purchase some Tylenol to have on hand. Studies show If you take it on a regular basis, this keeps your blood level of acetaminophen up and helps manage pain much better than if you just take it randomly.

Before surgery, purchase Tylenol (Acetaminophen) 500 mg tablets. No prescription is necessary. But if you have Tylenol at home, just check the strength.

Here are some recommended ways to take Tylenol.

- 500 mg size, take 1 every 4 hours or take 2 tablets (1000 mg) every 8 hours
- 325 mg; take 2 tablets (650 mg) every 6 hours
- 650 mg tablet; take 1 tablet every 6 hours
- You should not take more than 3000 mg of Tylenol (Acetaminophen) in a day (24 hour period)

Narcotic/Prescription Pain Medications

If you are taking a prescription narcotic pain medication before surgery, do not increase how much you are taking. You should minimize the amount of narcotic medication you take before surgery otherwise it will be very hard to manage your pain after surgery.

If you are taking large amounts of narcotic pain medication, please let us know. If you are taking too much, your surgery may be postponed to allow you to wean this down.

We will not prescribe any narcotic pain medications before surgery.

1 Day before surgery

Do not eat or drink anything after midnight, the night before surgery.
This means food, gum, hard candy, or water.

How do I find out when to arrive at the hospital?

- A nurse from the hospital will contact you one day before your surgery at the preferred number in your medical record. If your surgery is on a Monday, you will get a call on Friday.
- If your surgery is scheduled at the Brighton Surgery Center, they will call you 2 days before your surgery. 810-263-4440
- Michigan Medicine Chelsea will call you 2 days before surgery. 734-593-5803

What should I pack for the hospital?

- This book.
- Flat, sturdy, rubber soled shoes with a back (no clogs).
- Loose fitting clothes.
- Toiletries and personal care items.
- Copy of your advance directive, if you have one.
- Cash or credit card to pay for discharge medications if you plan to use our pharmacy.
- Eyeglasses, hearing aids, or dentures you usually use, labeled in containers.
- CPAP or Bipap machine, if you use one. Please bring to pre-op.
- Contact lens case.
- Braces or orthotics, such as an ankle brace, if you regularly use them.
- If you have a walker, please arrange for your support coach to bring it to your hospital room the day of surgery; label it with your name.

Note: Do not bring jewelry or valuables of any kind such as watches or wedding rings.

When should I take my pre-op shower?

Take a pre-op shower the night before surgery and the morning of your surgery. See page 46 for detailed instructions.

Day of surgery

Do not eat or drink anything

Do not eat/drink food, gum, hard candy, or water.
Only use a tiny sip of water to swallow any pills if you were instructed to take any of your medications.

What should I do the morning of surgery?

- Shower again with antibacterial soap (see page 46 for instructions).
- Brush your teeth, but do not swallow any water.
- Take your medications, if any, as directed with a small sip of water.
- Do not wear makeup.
- Do not apply lotions, powder or any other products around the surgical site.
- Do not wear contact lenses into surgery.
- Do not bring valuables to the hospital.
- Your suitcase. Your support coach can bring it to your room after surgery.
- Bring your walker, if you have one. Your support coach can bring it up to your room after surgery.

Where do I check-in?

- Arrive at the hospital's main entrance at your instructed time. You may use the P2 parking structure near the Taubman Center or valet parking.
- Leave your suitcase in the car, but if you were given a blue pre-admission type and screen information sheet, please bring that with you. If you require a CPAP machine, please bring that with you to check in.
- Check in at the Surgery Center on the first floor of the main hospital.
- Look for the red column down the first floor hallway.
- If your surgery is scheduled at our Brighton Center, 7500 Challis Road, follow the signs to the Surgery entrance.
- If your surgery is scheduled at Michigan Medicine Chelsea, 775 S. Main St., Chelsea. Follow the signs to the Surgery entrance.

What happens in the pre-op area?

- Your anesthesiologist will discuss your different options for anesthesia and answer any questions you may have.
- One person may stay with you in the pre-op area until you go to the operating room.

- When you go into surgery, we will give your support coach a pager.
- This pager will notify them when the surgery is complete and the surgeon can speak with them.

How long will my surgery take?

Average surgery time is 1 ½ to 2 ½ hours but may be longer depending on your specific surgery.

What happens in the recovery room?

After surgery, you will wake up in the recovery room. Nurses will check on you frequently. You might be hungry, but in these first few hours, you should only take tiny sips of water to avoid getting sick. Visitors are generally not allowed in the recovery room.

What happens in my hospital room?

- Your family can visit you in your hospital room.
- Your support coach/friends should bring your suitcase and walker (if you have one) to your room after surgery.
- Once you get to your room, you may eat if you are not nauseated. We will start with Jell-O and broth and then advance SLOWLY to solid food.
- If you are doing well, staff will help you get out of bed; you may get to a chair or even walk in the hall.
- Ask for ice to help reduce pain and swelling. We recommend 20 minutes of ice every hour that you are awake.
- Start your exercises.
- Use your incentive spirometer (breathing machine), 10 times every hour when you are awake.
- Make sure your squeezers (SCDs) are on both legs at all times unless you are walking.
- A copy of the Knee Replacement Pathway should be on your bedside table. **READ THIS.** It outlines what to expect during your hospital stay.

What can I expect during my hospital stay?

- See the Inpatient Knee Replacement Pathway for more details about what to expect during your hospital stay. If you did not receive this, ask the staff to get you a copy.
- Most patients leave the day after surgery. This is why it is critical that your support coach is with you.
- Our physician assistant and residents will see you between 6:00 am and 7:00 am. They may remove your dressing and drain (if you have one). A new dressing may not be applied. The surgical glue acts as a bandage and seals the wound.
- If you have a Foley Catheter, it will be removed the morning after surgery. Removing the catheter and drinking plenty of fluids decreases the risk of a urinary tract infection.
- If you are tolerating fluids, have normal blood pressure and are not dizzy, your nurse or aide may disconnect your IV.

How do I stay safe during my hospital stay?

You are at increased risk for falling after surgery

- When taking pain medications
- When wearing the “squeezers” on your legs to prevent blood clots.
- When attached to IV poles
- If you are dizzy, especially when getting up.
- If your legs feel weak or numb
- Confusion, decreased alertness
- When in unfamiliar surroundings.

How do I prevent falls during my Hospital Stay?

- Always use your call light to ask for assistance to get up from bed, chair or to go to and from the bathroom
- Expect staff (RN, PT, OT or Aides) to use a gait belt & walker to assist you in walking
- Staff might remain with you in the bathroom for your safety.

What kind of therapy will I receive in the hospital?

The Physical Therapist will:

- Review knee dos and don'ts with you.
- Work on walking and activities to make sure you are safe to go home.
- Review and make sure you understand the exercises shown on pages 39-42.
- Teach you how to get in/out of bed, safely climb stairs and get in/out of a car.

The Occupational Therapist will:

- Teach you techniques to bathe, dress and use assistive devices for daily activities.

What symptoms might I have after surgery?

Nausea

- Medications are available to help relieve nausea.
- You will start eating Jell-O and broth. You will then slowly move to a solid food diet.
- Eat slowly and drink plenty of fluids.

Leg swelling

- Your leg will swell for several weeks to months after surgery.
- You can decrease swelling by elevating your leg and icing your knee.
- Wear compressive stockings (TED hose) for 2 weeks following surgery. Remove them at least once per day to check skin for sores and wash your legs.

Constipation

- Constipation is common after surgery because of pain medications and a decrease in activity.
- We will give you laxatives while in the hospital.
- You should continue laxatives at home for as long as you are taking prescription narcotic pain pills which are very constipating.

Pain

Your nurse will monitor your pain and frequently check on how you are doing overall. Michigan Medicine has developed a pain protocol to minimize post-operative pain. Most patients are very comfortable and are able to go home the day after surgery. If you experience pain:

- Use your red call button to ask for pain medication and ice. Nurses do not always know when your ice has melted.
- Ice will help to decrease pain and swelling.
- Change your position in bed.
- Elevate your leg to reduce pain and swelling.

Blood clots

A blood clot can occur following surgery. A blood clot happens when blood cells stick together and block blood flow inside of a blood vessel. A blood clot causes painful swelling of your leg. Rarely, they may break loose in the blood vessel and travel to your lungs, causing a blood clot in your lung called a pulmonary embolus (PE). This can be life threatening.

- To help prevent blood clots, you will have Sequential Compression Devices (SCDs) placed on both legs after surgery. These “squeezers” will help pump blood from your legs back up to your heart.
- Wear the SCDs at all times (in bed or sitting in a chair) while you are in the hospital. Only take them off when you are up walking.
- Please remind staff to put your SCDs back on when you return to your bed or chair.
- Do your Ankle Pump exercises 10 times an hour when you are awake. Continue to do them for about a month after surgery.

Medication to prevent blood clots

- You will be placed on some type of blood thinning medication (e.g. Aspirin or prescription blood thinner) to help prevent blood clots from forming.
- You will be on this medication for 4 weeks after surgery.

What are the signs of a blood clot in my legs?

- Painful swelling of your leg that does not go down after elevating your leg.
- Pain in your calf when you pull your foot up (doing your ankle pumps)

What are the signs of a blood clot in my lungs (Pulmonary Embolus)?

- Chest pain
- Shortness of breath
- Difficult and/or rapid breathing
- Sweating
- Confusion

Pneumonia

After surgery you are at risk for lung complications because of lack of movement and pain. When you get to your room you will get a breathing device called an incentive spirometer.

Use your incentive spirometer **at least 10 times per hour** when awake. This will help to:

- Reduce the risk of post-surgery lung complications (pneumonia).
- Bring down a spiking fever.
- Increase deep breathing, which keeps your airways open.
- Reduce your hospital length of stay.



When will I be discharged?

Most patients leave the day after surgery. Our goal is for your discharge to be as timely and safe as possible. Your support coach will take you home on your discharge day. If you are going to a short-term care facility, your support coach may drive you or a wheelchair van can pick you up. There is a fee for the wheelchair van. Fees vary depending on the distance to the facility. The discharge planner can find out the cost and arrange for the van to pick you up. If you brought a CPAP or Bipap machine, remember to take it home with you.

Your support coach:

- Should arrive at the hospital by 8:00 am the morning after surgery. We suggest that the support coach use valet parking.
- They will learn about your knee dos and don'ts, exercises and how to help you move safely.
- They will be available to take you home.

Your home care plan:

- Our case manager nurse will meet with you and discuss possible home care needs.
- We prefer you start going to an Outpatient Physical Therapy clinic soon after discharge but if you are unable to do so, the case manager may arrange for a Physical Therapist to come to your home for a few visits until you can go to outpatient Physical Therapy.

What are the keys to discharge?

- Tolerate diet.
- Be comfortable on oral pain medication.
- Meet Physical Therapy goals.
 - Stair climbing, as needed.
 - Walking a household distance.
 - Getting in/out of our fake car.

- Meet Occupational Therapy goals.
 - Learn techniques for safely dressing.
 - Activities of daily living (e.g. bathing).
 - Learn how to use assistive equipment if necessary.
- Walker is delivered to room (if needed).
- Have no difficulties urinating.
- Have two bladder scans less than 250 mL.
- Discharge order is placed in computer by MD/PA.
- Prescriptions are sent/e-prescribed to your pharmacy.
 - You will have prescriptions for your pain medicine and any other medications needed for recovery.
- Patient has copy of post-discharge pathway (handed out in pre-op class, additional copies available on 5A).

What are the final steps?

- 1) Review written discharge instructions with your nurse.
- 2) Nurse will remove IV.
- 3) Your support coach or transport services will take you to the front entrance.
Call the valet (734-471-5030) and they will bring your car to the front entrance.

What will my recovery at home be like?

Care Pathway After Discharge

The Care Pathway After Discharge, which also applies at a short term care facility, is available for your reference in the pocket of this book. It provides day to day instructions for your recovery at home. If you need an extra copy, ask for it before you leave the hospital.

Home Therapy

Most knee replacement patients go directly to outpatient Physical Therapy. We have found patients do better if they go out to a clinic for therapy.

If for some reason, this is not possible for you, our Case manager nurse might arrange for a therapist to come to your home for a few visits. They will make sure you:

- Understand your knee dos and don'ts.
- Are doing your exercises correctly. See pages 39-41.

How can I prevent blood clots?

- Continue looking for signs of blood clots after discharge (e.g. swelling that does not improve after elevation, chest pain, shortness of breath, confusion).
- You will be on some type of blood thinner for 4 weeks after surgery.

Common medications include Aspirin, Coumadin, Xarelto or Eliquis.

Call the Clinic at (734) 936-5780

If you have increased pain and swelling in your leg, especially swelling that does not go away after an hour of elevating your leg. These symptoms are signs of a DVT (blood clot in your leg).

CALL 911 if you have any of the following:

- Chest Pain
- Shortness of Breath
- Difficult and/or Rapid Breathing
- Confusion

Call 911 to get to the nearest emergency room as quick as possible to evaluate you for a blood clot to your lungs.

How do I prevent constipation?

Constipation is a common complication after surgery because of narcotic pain medications and limited activity. To prevent constipation:

- Take a stool softener every day.
- Use a laxative as needed while on narcotic pain medications (laxative examples: Dulcolax®, Colace®, Miralax®, Milk of Magnesia).
- Drink lots of fluids (water and fruit juices) and minimize caffeine intake.
- Eat foods rich in fiber. We recommend 15-20 grams of fiber per day.
- Be as active as possible.

Recipe for severe constipation

- Mix together
 - 1 cup applesauce
 - 1 cup coarse unprocessed bran
 - ¾ cup prune juice
- Take 1-2 tablespoons every evening with a glass of water.
- Refrigerate between uses.
- Take until your bowel habits are regular.

How do I prevent a wound infection?

- Keep your incision clean and dry.
- You may shower. See Page 36.
- Do not take a tub bath or use ointments or lotions until the wound is completely healed with no scabs.

Call the Clinic at number below if:

- Increased pain, redness or swelling
- Drainage from your incision
- Incision is hotter
- If you have a fever over 101.5
- Chills
- Calf pain

Nurse Navigator (734) 936-7299. (8:00 am - 4:30 pm, M-F).

After hours Paging Number: (734) 936-6267, ask for the Orthopaedic resident on call.

How do I reduce swelling?

Your leg will swell off and on for up to a year after surgery. Your knee will swell the more you are standing and walking. Swelling may cause your knee to throb. Your entire leg may bruise, even down to your toes. This is normal and will go away in a few weeks.

Wear support hose compression stockings

- Wear your support stockings for 2 weeks after surgery. Your support coach should help you with putting your socks on and taking them off.
- Most patients take their support hose off at night and put them back on in the morning.
- Remove stockings at least once per day to check skin for sores and to wash your legs.
- Hand wash and air-dry stockings.
- You can purchase an extra pair at pharmacies, Meijer®, or Walmart®.

Elevate your leg and ice your knee

- Prop your leg up when sitting throughout the day.
- Elevate your leg above your heart at least 4 times a day for 20-30 minutes.
- Ice your knee often for a few weeks after surgery to reduce swelling.



Managing Your Pain

How do I manage my pain after surgery?

There are 4 things to help Manage your Pain, including both medication and non-medication options:

- 1) ICE often when you are awake: 20 minutes every hour or, if you can tolerate the cold, 20 minutes on and 20 minutes off. Use this treatment as needed for up to a month. Ice will help decrease swelling.
- 2) ELEVATE your leg on a recliner or ottoman when sitting. Then, 4 or 5 times a day you should lay flat and elevate your leg on pillows so your knee is higher than your heart. Shown in picture below. 20 minutes at a time. You should visibly see the swelling go down.
- 3) TYLENOL (Acetaminophen). No prescription needed. Take Tylenol on a regular basis; either 500 mg every 4 hours or 1000 mg every 8 hours. Studies show that if you take Tylenol on a regular basis and not just when painful, it will help reduce your need for a Narcotic pain medication. Always wean (see below) off the Narcotic pain medication before stopping the Tylenol.
- 4) NARCOTIC: Take the narcotic pain medication (usually an Opioid) only as needed and only as a last resort. This type of medication is very powerful and, if not used correctly, can be addictive. Think about it before you take it. Do you really need it or will elevating, ice and Tylenol work so you can wait a bit longer to take it? Wean off the Narcotic before stopping the Tylenol.

You will be given a prescription for pain medication (an Opioid/Narcotic). If you need a refill, you must call the clinic (734-936-7299) during regular business hours, 8a-4:30 p. Our Nurse Navigator can assist with refills. We cannot refill narcotics after hours, on weekends/holidays. Do not drive or operate machinery while taking a narcotic pain medication.

It is recommended that you take a laxative such as milk of magnesia or Miralax while also taking narcotic pain medications. Narcotics are very constipating.

How and when do I wean off my pain medication?

We will give you a prescription for pain medication that should last until your 2-week post-op appointment. Your pain and need for medication should decrease slowly with each day.

- When you first get home, you should take your pain pills on a regular basis.
- Begin taking less medication as you get further along in your recovery. If you are taking 2 tablets at a time, decrease to 1 tablet.
- As you have less pain, increase the time between pain pills. For example, take 1 pill every 6 hours and then decrease to 1 pill every 8 hours.
- Eventually, you may only need to take pain pills when you expect a lot of activity or at night to help make you comfortable enough to sleep.
- Most patients are off narcotics in 1 to 3 weeks.
- We will only prescribe narcotics up to a maximum of 6 weeks after surgery.
- After 3-4 weeks, narcotic pain medicine can actually prolong pain and slow your recovery.
- We want to help you manage your pain and use pain medications when necessary, but it is important to switch to over the counter medications as soon as you can.
- Discuss with us when you may start using medications like Motrin[®], Advil[®] or other non-steroidal anti-inflammatories. We usually will let you start these types of medications starting 2 weeks after surgery.
- Remember, icing and elevation are very important in helping to reduce your pain.

If you have questions about weaning your pain medicine, please call the clinic.

When do I go back to the Orthopaedic clinic?

2 to 3 weeks

You will see your Orthopaedic surgeon or a mid-level practitioner (PA or NP). During this appointment we will:

- Obtain x-rays.
- Examine your knee and answer any questions you have.
- Remove any staples or stitches you may have.
- Discuss whether you need to continue wearing support stockings.

6 to 10 weeks

Follow-up appointment to see how well you are doing.

1 year

After 1 year of recovery, we will see how you are doing and take x-rays.

Every 5 years

You should schedule an appointment with us every 5 years for the rest of your life. If you move out of the area, please follow up with an orthopaedic joint replacement surgeon in your new area.

How will I live with my new knee?

Everyday Activities

We encourage you to be active and participate in low impact activities such as:

- Walking
- Hiking
- Biking
- Dancing
- Swimming (after your incision has completely healed)
- Gardening

You can also use a treadmill, bike, or elliptical.

We recommend avoiding high impact activities that can shorten the life of your joint. If you participate in activities that include excessive bending, like yoga, you may need to modify some positions to avoid extreme ranges of motion. Avoid heavy lifting, jumping or twisting.

Weight Control

- Keeping your weight down reduces stress on your new joint.
- For every 10 lbs. you lose, you decrease stress on your joints by 50 lbs.

Continue exercising for the rest of your life

- The thigh muscles help you get up from a low chair or off the toilet.
- Keeping thigh muscles strong are essential to help stabilize your hip and knee and keep you living independently as long as possible.
- Continue the exercises starting on page 39 or Google: Quad strengthening exercises.

Antibiotics for the rest of your life

- If you have any infections, you may need antibiotics promptly to prevent your joint from becoming infected.
- Ask your primary care physician, the person doing any procedures, or us for advice on when you should take antibiotics.

Dental care

- Wait at least 3 months after your knee replacement before scheduling your first dental appointment, unless you have a dental emergency.
- Bacteria can get into your blood stream during a teeth cleaning or during some dental procedures and may cause an infection in your artificial joint.
- Taking antibiotics prevents your knee replacement from being infected by the bacteria that normally live along your gum lines.
- You may need to take antibiotics before all teeth cleanings and some dental procedures.
- Tell your dentist that you have had a joint replacement. Your dentist can determine if you need antibiotics by going to the web site www.orthoguidelines.org/
Click on: Appropriate use criteria
Click on: management of patients with orthopaedic implants undergoing dental procedures
- Take the antibiotics one hour before the scheduled dental appointment. No additional doses are required after the procedure. The antibiotic prescription can be called to your pharmacy by your orthopaedic surgeon, dentist, or primary care physician. The antibiotic will be one of these options:
 - Amoxicillin, 2 grams, by mouth, one hour before each dental procedure.
 - Clindamycin 600 mg, by mouth, one hour before each dental procedure (if allergic to penicillin).

No injections

- Your new knee is made up of all artificial parts.
- We removed the arthritis. Steroid or cortisone type injections are not helpful now because the parts are artificial.
- **Do not** have any injections into your knee without checking with us first. This could cause an infection.

How will I do everyday activities?

Standing up

- Place one hand on your walker and the other on the surface you are pushing up from to stand.
- Never start with both hands on your walker.
- Avoid chairs without armrests and add firm cushions to low chairs.

Going up Steps/curbs

- Remember “Up with the good, down with the bad”.
- When going up a step, lead with your good leg and then bring your operative leg up onto the same step.
- When going down a step, lead with your operative leg and then bring your good leg down onto the same step.
- To prevent falls, have someone behind you as you go up steps and in front as you go down steps.

Getting in/out of a car

- Have a support person prepare the passenger seat by moving it back as far as possible to make room.
- Back up to the seat and place your operative leg out in front of you.
- Lower yourself onto the car seat and pivot your legs around into the car.

Toileting

- Using a raised toilet seat may make it more comfortable to get on/off the toilet.



Bathing

- Stand in the shower or use a shower chair or bench.
- Ask for help to get into and out of the shower.
- You may shower and let water gently run over the incision. Pat dry.
- Do not scrub the incision.
- If we placed a waterproof dressing over your incision, you can shower over it. Remove it 10 days after surgery and then you can shower over the incision itself.

Physical Therapy

Guidelines for your therapist

We have found that going out to a Physical Therapy Clinic after surgery rather than in-home therapy is much better. Therefore we prefer NOT to have in-home therapy. Outpatient Physical Therapy helps not only improve motion and strength but also pain management and swelling post-op.

Before your surgery, schedule/set up your post-op outpatient physical therapy appointments at a Physical Therapy facility near you.

Schedule your first appointment to start within 2 - 7 days after your surgery date.

Pick a facility near your home that is close and convenient. It does not have to be a Michigan Medicine facility Remember someone will need to drive you.

Contact us for a prescription needed to set this up. We can fax it to the Clinic you have chosen.

If you are unable to get out to a Therapy Clinic, our case manager will talk to you when you are in the hospital about possible home care for a short time.

The case manager would set this up.

Check list for your physical therapist:



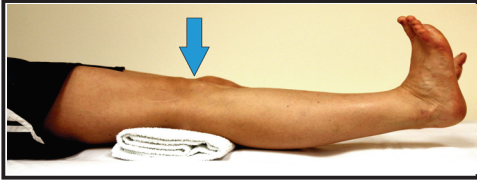
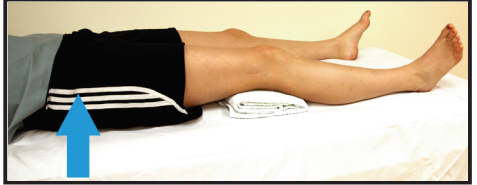
Patient Assessment	✓ Completed
Patient demonstrates safe mobility	
Bed transfers	
Sit to stand	
Stairs/steps	
Donning/doffing shoes, socks and pants	
Toilet/tub transfers	
Car transfers (if appropriate)	
Ambulation goals	
Encourage daily ambulation- focus on eliminating compensatory gait patterns.	
Assess baseline ambulation (distance and/or time) and establish a plan of progression based on gait pattern, pain/discomfort and endurance.	
Progress to Independent ambulation without an assistive device Discuss when it is appropriate to move from a walker → cane → independent ambulation.	

Guidelines for your Physical Therapist (continued)

Patient Assessment	✓ Completed
Early goals	
Focus on achieving AAROM 0-90° in sitting, before 2 week post-op appointment.	
Control swelling: Establish 'ice & elevation sessions' 3x/day	
Review Home exercise program	
Focus on terminal knee extension and deep knee flexion	
Demonstrates proper exercise technique	
Assess baseline function and discuss exercise progression	
Gentle soft tissue mobilization around patella/incision	
Review/Discuss: When to contact your physician	
When pain is not controlled with medication, ice and/or elevation.	
When incision is draining, red, hot	
If you have a fever greater than 101.5°	

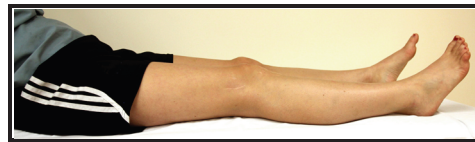
Total Knee Replacement Exercise Program

These exercises will help increase the motion and strength of your operated leg. Your physical therapist in the hospital will teach you these exercises, and you should continue to do your entire exercise program every day at home. Do not hold your breath while doing the exercises. Do the exercises with both legs.

<p>1. Ankle pumps</p> <ul style="list-style-type: none">• Pull your toes up toward your head and then point your toes down.• Repeat 10 times per hour lying or sitting.	 
<p>2. Thigh squeeze</p> <ul style="list-style-type: none">• Lying down, tighten your thigh muscles.• Press the back of your knee into the bed and hold 5-10 seconds if able.• Work up to 10 reps, 2-3 times per day.	
<p>3. Buttock squeeze</p> <ul style="list-style-type: none">• Lying down, squeeze your buttocks together tightly (hips raise slightly).• Hold for 5 seconds, then release.• Work up to 10 reps, 2-3 times per day.	

4. Heel slides

- Lying down, start with your leg straight, then bend your knee.
- Slide your heel toward your buttock.
- Do not lift your heel off the bed or let your knee roll inward.
- Work up to 10 reps, 2-3 times per day.



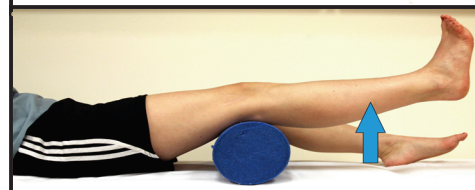
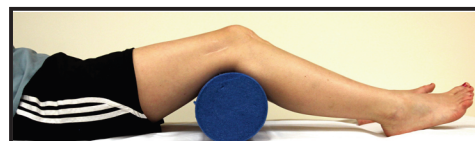
5. Straight leg raises

- Lay with your operative leg straight and other leg bent.
- Lift straight leg up and hold for 5 seconds.
- Work up to 5 reps, 3 times per day.



6. Knee extensions

- Lying down, place a rolled towel, blanket, pillow, foam roller or ball under your knee.
- Lift your heel, straighten your knee and tighten your thigh.
- Hold for 5-10 seconds.
- Work up to 10 reps, 2-3 times per day.



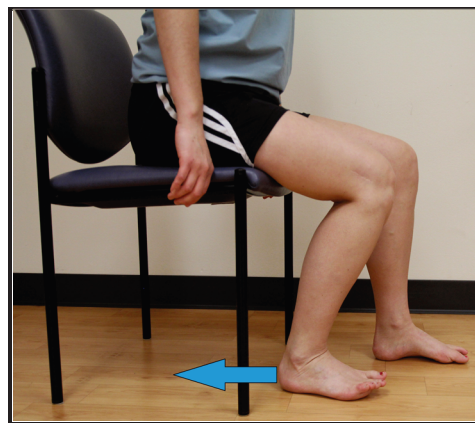
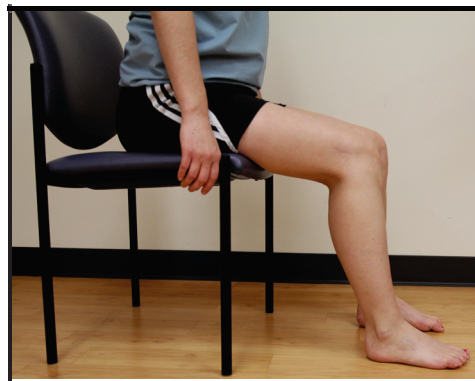
7. Knee bends

- Lie on your back & bring your operative knee toward your chest.
- Let your operative knee bend, using gravity to help improve knee flexion.
- Try to hold your leg in this position for 15 to 20 seconds, and then take a rest.
- Repeat 5 to 10 times. Do this exercise 2-3 times each day.



8. Scooting knee bend

- While sitting in a chair, try to bend your knee as far back as possible. Once you have your knee bent as much as you can, try scooting yourself forward to the edge of the chair while keeping your foot planted on the floor.
- Hold this stretch for 10 to 20 seconds, then scoot back in your chair
- Work up to 5 to 10 reps, 6 times per day



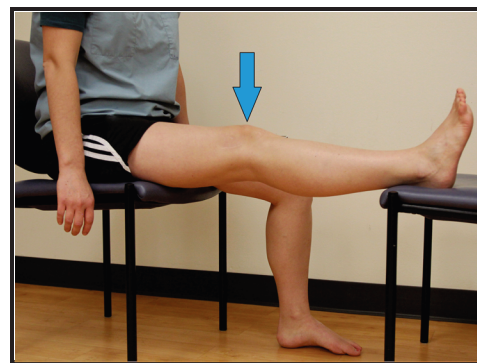
9. Sitting knee extensions

- Sit in your chair and work on bending and straightening your knee all the way.
- Work up to 5 reps, 3 times per day



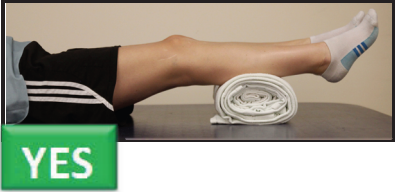
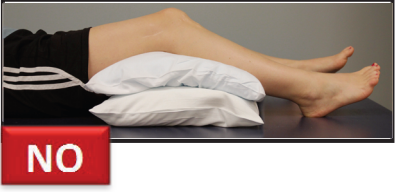
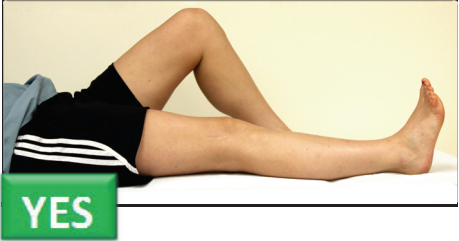


10. Two-chair stretch

- Place the heel of your operative leg on a stool or chair directly in front of you.
- Push your knee down towards the floor by tightening the muscles on the top of your thigh.
- Work on getting your knee straight.
- Do this exercise 3 to 6 times every day.



Dos and Don'ts after total knee replacement

A therapist will come to your home to start your physical therapy. You will continue physical therapy in your home for up to 2 weeks. You will then progress to physical therapy at an outpatient clinic for the next 4 weeks.

<p>Do not rest with a pillow positioned under your knee.</p> <ul style="list-style-type: none"> When lying down, place a rolled up towel or blanket under your calf. 		
<p>Rest with your leg straight.</p>		
<p>Do not sit for long periods with your feet on the floor.</p> <p>Elevate your leg(s).</p>		

Preventing Infections from your Surgery



Follow the steps below to prevent infections from your surgery and increase your chances for a good recovery, and overall health. Ask your care team about specific instructions related to your surgery.

Before surgery:



Do not shave or use hair removal products around the surgical site for at least 3 days before surgery. These can irritate the skin and could lead to infection.



Keep nails clean, trimmed and free of polish or artificial nail products. These may carry germs and increase infection risk. This applies to the patient and anyone caring for the patient.



Quit smoking and avoid second hand smoke. People who smoke or who are exposed to smoke get more infections. Talk to your care team about how you can quit before your surgery and what tools are available to help quit smoking. It is recommended to stop smoking 4-6 weeks before surgery.

Day before surgery:



In the evening, **shower or bathe with a liquid or new bar of antibacterial soap** such as Dial, Hibiclens, or the soap provided to you at your clinic visit. Pay special attention to skin folds, arm pits, groin, and belly button.



Wash your hair with any shampoo and dry off with a clean towel.



Do not apply any deodorant, lotions, creams, powders, makeup or perfume to your skin.



Dress in clean clothes and sleep with **clean linens and clean comfort items (such as blankets, stuffed toys, pacifiers, etc.)** on the bed. Clean means laundered and dried and not used until the night before or day of surgery.

Day of surgery:



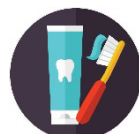
Shower or bathe with a **liquid or new bar of antibacterial soap** such as Dial, Hibiclens, or the soap provided to you at your clinic visit. Pay special attention to skin folds, arm pits, groin, and belly button.



Do not apply any deodorant, lotions, creams, powders, makeup or perfume to your skin.



Dress in **freshly laundered, loose fitting clothes**. Make sure all comfort items being brought to the hospital are clean such as blankets, toys, and other comfort items.



Brush your teeth and rinse your mouth. This reduces your chances of pneumonia after surgery.

After surgery:



Keep your **incision clean and dry**. Always **wash hands** before and after changing dressings or touching the incision. Scrub fingers, forearms, and under nails with soap for at least 20 seconds.



Do not take a bath or submerge your incision in water (such as in a pool or hot tub) until cleared by your care team. **Ask your team about when it is safe to start showering and what type of soap to use.**



Wear clean clothes, sleep on clean linen, and keep pets away from your incision.

Icons created by macrovector via freepik.com
Scan the QR code below to open and save this flyer on your device.



M | MICHIGAN MEDICINE
UNIVERSITY OF MICHIGAN
Infection Prevention and Epidemiology

Last revised: 06/2019

Pre-Operative Showering Instructions

You play an important role in your own health. Because your skin is not sterile, we need to be sure that your skin is as clean as possible before surgery.

To clean your skin before surgery, shower the night before and again the morning of surgery. Use an antibacterial soap like Dial[®], Lever[®], or Safeguard[®] (bars or body wash). In addition, we will give you an antiseptic soap with Chlorhexidine gluconate (CHG) in it to wash your surgery site (knee). If you are allergic to any of these products, you should not use them and call your Nurse Navigator (734) 936-7299.

If you did not receive the bottle of antiseptic soap, (CHG/Bactoshield[®]/Hibiclens[®]) you can purchase it at your local pharmacy. You do not need a prescription.

Showering instructions before surgery:

1. Shower both the night before and again the morning of your surgery with an antibacterial soap such as Dial[®], Lever[®] or Safeguard[®].
2. Pay special attention to your neck, underarms, breasts, feet, groin, and skin fold regions.
3. Do not shave the area of your body where you are having surgery.
4. Wash your hair with your normal shampoo.
5. Rinse and then apply the special CHG soap to your surgical site (knee).
6. Use gentle friction with a washcloth or soft sponge to remove dirt.
7. Avoid rough scrub brushes and harsh scrubbing.
8. Rinse well after washing.
9. Do not use lotion, cream, powder or perfume after washing.
10. Remove nail polish and make up.
11. Put on clean clothes after each shower.
12. Put clean sheets on your bed the night before surgery.

Pre-Operative Screening for Staphylococcus Aureus

Staphylococcus aureus or “staph” is bacteria that live on the skin and in the noses of many healthy people. Staph bacteria do not cause problems for most people. Sometimes these bacteria can cause serious infections including surgical wound infections.

There are two main kinds of Staph:

1. **Methicillin-resistant staphylococcus aureus or “MRSA”** is a type of staph that is resistant to some antibiotics that are commonly used to treat staph infections.
2. **Methicillin-sensitive staphylococcus aureus or “MSSA”** is a type of staph that is **not** resistant to antibiotics that are commonly used to treat staph infections.

How do we screen or test for Staph?

- To find out if you have Staph, we will swab the inside of your nose.
- We send the swab to the laboratory. It takes a few days for the results to come back.
- If the result is positive, the clinic will contact you and will call a prescription for an antibiotic nasal ointment to your pharmacy. You will use this antibiotic before surgery.
- This can help prevent some staph infections after surgery.
- **A positive screening test does not mean you have an infection and will not cancel or delay your surgery. It simply means you are a “carrier”.**

If my test is positive, what treatment will I receive?

We will send a prescription for mupirocin nasal ointment (Bactroban®) and chlorhexidine 4% topical solution (CHG) to your pharmacy.

- Use 2 times a day for the 5 days before your surgery.
 1. Place a small amount of the nasal ointment on the tip of your finger or on a Q-tip.

2. Swab the inside front part of each nostril with the ointment.
 3. Gently press or squeeze your nostrils together and release several times (for about a minute) to spread the ointment through your nostrils.
- Wash or shower with the chlorhexidine 4% topical soap solution (CHG) each day for the 5 days before your surgery. Only use the soap from the neck down.

If I test positive, will I be treated differently while in the hospital?

- No, if you have showered with a Chlorhexidine soap and used the nasal ointment as instructed, you will not need any additional precautions.

Frequently Asked Questions (FAQ)

What is a support coach?

A relative or friend that can help you prepare for surgery, take you home from the hospital, and support you during recovery. See page 11 for more information about their role.

How will my pain be managed after surgery?

Michigan Medicine has a pain protocol that works very well to keep you comfortable after surgery. A spinal anesthetic is part of the pain protocol in addition to intravenous (I.V.) medications and pain pills. Please do not hesitate to let your nurse know if your pain is not under good control. Ask for ice which also helps with pain control.

How long will I be in the hospital?

Most patients are discharged the day after surgery.

How do I help prevent blood clots?

You will be on some type of blood thinning medication for 4 weeks after surgery. It is also important to do ankle pump exercises, get up, and get moving.

Will I need a blood transfusion?

The state of Michigan has the lowest transfusion rate in the country. You have less than 2.5% risk of needing a transfusion after surgery. We will monitor your blood count while you are in the hospital and will talk to you if we think you may need a transfusion.

When can I shower or bathe?

You may shower right away, see page 36.

Do not apply any ointments, creams, or lotions.

Expect your incision to be tender, pink and warm. It can be warm for several months after surgery. It is also normal to see scabbing.

Who helps coordinate my discharge?

Your case manager will arrange home care needs, if any, or will arrange a short term care facility if necessary.

Short- Term care facility

When you are at a Short Term Care facility, you are not under our medical care. Do not assume the facility is contacting us with any problems you are having. Please call us if you have questions about your recovery or notice problems with healing, such as drainage from your incision.

Can I go upstairs?

Yes. The therapist will work with you in the hospital to teach you the safest way to do this. Discuss your home layout with the in-patient therapist so they can practice with you.

How do I prepare myself before surgery?

See Pg 11

How do I prepare my home before surgery?

See Pg 12

How do I make sure my joint lasts?

See Pg 32

When can I drive?

You can drive after your surgeon and Physical Therapist say it is safe and you are no longer taking narcotic pain medication. The minimum time estimate is 4 weeks. You should not drive while you are taking pain medications. It is OK to be a passenger in a car immediately after your surgery.

Why do I have to wear support hose? How often should I wear them?

Support hose help reduce swelling in your leg. Wear them every day for 2 weeks after surgery. Take them off at night.

What therapy goals do I need to do in order to leave the hospital?

- Walk household distances (with your assistive device),
- Climb and descend stairs as needed for your home.
- Perform a car transfer (get in and out of our fake car).
- Demonstrate safe use of adaptive equipment during bathing and dressing (or be able to identify a person that will assist you with these activities).

How long do I need a walker or assistive device?

We like you to use your walker for the first 2 weeks after surgery or as instructed by your therapist. Your therapist can help you switch to a cane when it is safe.

How do I get refills for my pain medicine?

See page 30

How do I control my pain?

See page 30 for information on controlling your pain.

How do I taper my pain medication after I get home?

See page 31 for information on weaning off medication.

Will I need to tell my dentist that I have a joint replacement?

See pages 12 and 34 for details on dental care after joint replacement.

What if my dentist says I do not need to take an antibiotic?

We recommend antibiotics lifelong, but at minimum, please take them for the first two years.

Will I set off metal detectors?

Possibly. Allow a little extra time at the airport or courthouse to get through security. A wallet card that indicates you have a metal implant is available for you, but security at the airport generally does not accept that as proof.

How do I avoid constipation?

See page 28 for constipation treatments.

What is NOT normal for my incision?

- Seek medical attention if your incision is painful, red or hot.
- Any amount of drainage is not normal. If you have drainage, call today, not tomorrow.
- A fever greater than 101.5 degrees is also not normal.

Do I need authorization from my insurance for surgery?

Yes. Our surgical schedulers will seek authorization from your insurance company before your surgery.

Disclaimer: This document contains information and/or instructional materials developed by the University of Michigan Health System (UMHS) for the typical patient with your condition. It may include links to online content that was not created by UMHS and for which UMHS does not assume responsibility. It does not replace medical advice from your health care provider because your experience may differ from that of the typical patient. Talk to your health care provider if you have any questions about this document, your condition or your

Author: Jean Hergott, PA-C, Michelle Davis, NP, and Tamara Bennett, PA-C
Reviewers: Joseph Maratt, MD, Brian Hallstrom, MD, Physical and Occupational Therapy

Patient Education by [University of Michigan Health System](#) is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License](#). Last Revised 10/25/2016

The Knee after Replacement image on page 9 was developed by the McGill University Health Centre (MUHC). It is copyrighted and cannot be changed or reproduced elsewhere without authorization from the MUHC Patient Education Office. It has been included here with their permission.

FAQs

(frequently asked questions)

about “Surgical Site Infections”

What is a Surgical Site Infection (SSI)?

A surgical site infection is an infection that occurs after surgery in the part of the body where the surgery took place. Most patients who have surgery do not develop an infection. However, infections develop in about 1 to 3 out of every 100 patients who have surgery.

Some of the common symptoms of a surgical site infection are:

- Redness and pain around the area where you had surgery
- Drainage of cloudy fluid from your surgical wound
- Fever

Can SSIs be treated?

Yes. Most surgical site infections can be treated with antibiotics. The antibiotic given to you depends on the bacteria (germs) causing the infection. Sometimes patients with SSIs also need another surgery to treat the infection.

What are some of the things that hospitals are doing to prevent SSIs?

To prevent SSIs, doctors, nurses, and other healthcare providers:

- Clean their hands and arms up to their elbows with an antiseptic agent just before the surgery.
- Clean their hands with soap and water or an alcohol-based hand rub before and after caring for each patient.
- May remove some of your hair immediately before your surgery using electric clippers if the hair is in the same area where the procedure will occur. They should not shave you with a razor.
- Wear special hair covers, masks, gowns, and gloves during surgery to keep the surgery area clean.
- Give you antibiotics before your surgery starts. In most cases, you should get antibiotics within 60 minutes before the surgery starts and the antibiotics should be stopped within 24 hours after surgery.
- Clean the skin at the site of your surgery with a special soap that kills germs.

What can I do to help prevent SSIs?

Before your surgery:

- 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.

At the time of your surgery:

- Speak up if someone tries to shave you with a razor before surgery. Ask why you need to be shaved and talk with your surgeon if you have any concerns.
- Ask if you will get antibiotics before surgery.

After your surgery:

- Make sure that your healthcare providers clean their hands before examining you, either with soap and water or an alcohol-based hand rub.

If you do not see your providers clean their hands, please ask them to do so.

- Family and friends who visit you should not touch the surgical wound or dressings.
- Family and friends should clean their hands with soap and water or an alcohol-based hand rub before and after visiting you. If you do not see them clean their hands, ask them to clean their hands.

What do I need to do when I go home from the hospital?

- Before you go home, your doctor or nurse should explain everything you need to know about taking care of your wound. Make sure you understand how to care for your wound before you leave the hospital.
- Always clean your hands before and after caring for your wound.
- Before you go home, make sure you know who to contact if you have questions or problems after you get home.
- If you have any symptoms of an infection, such as redness and pain at the surgery site, drainage, or fever, call your doctor immediately.

If you have additional questions, please ask your doctor or nurse.

Co-sponsored by:





Notes



Notes