



To guide you through your
Outpatient Total Knee Replacement

 **Central Maine Orthopaedics
Ambulatory Surgery Center, LLC**



Thank you for choosing Central Maine Orthopaedics Ambulatory Surgery Center, LLC, (ASC) for your total joint replacement.

It's our goal to provide you with warm attention, the very best in surgical procedures, comfortable surroundings, and fully detailed information about what your surgery day will be like. How you will feel, how to manage any pain, and how quickly to return to your favorite activities are all important aspects of your care. Our operating areas are state-of-the-art, and fully equipped for outpatient surgical procedures. Our facility is staffed with surgeons, physicians, nurses, and other clinicians - all of whom specialize in orthopaedic care.

Because of advances in medical techniques and technology, many surgical procedures can now be done on an outpatient basis. This means you can go home the same day as your operation, which generally leads to cost savings. Our ASC can be far less intimidating than a large hospital and, because you will be up and moving as soon as possible, you will already be on the road to recovery when you leave our facility.

We are one of the largest outpatient orthopaedic facilities in New England, and the only licensed independent surgical center in the Lewiston/Auburn area. We continually invest in the most advanced technology and our surgeons stay current with and specialize in using best-in-class techniques. We perform about 2,000 outpatient surgeries a year and are accredited by the Accreditation Association for Ambulatory Health Care (AAAHC) for meeting nationally recognized standards.

This guide contains a great deal of information related to your upcoming surgery. Review what you can expect before, during, and after you get home from your procedure. Please note any questions or concerns and be assured that our team will review these materials with you at the appropriate times.

Total Joint Patient Checklist

BEFORE SURGERY

- Clearance from PCP and/or all your providers
- Bring this book to all appointments regarding your surgery
- Designate a "recovery coach" to be with you for all pre/post-op appointments if able, most importantly, to hear your discharge instructions and stay with you for a few days after you get home for safety
- Take one tablet of iron supplement daily starting 30 days prior to your scheduled surgery date (325mg ferrous sulfate or 65mg elemental iron) - may cause constipation - use over-the-counter stool softeners and laxatives as needed
- Schedule your prehab physical therapy appointment to prepare you for surgery
- Eat a healthy diet with increased protein, fiber and iron before surgery
- We will provide you with chlorhexidine scrub to use before surgery with instructions
- Prepare home for after surgery
- No dental work for at least 5 days prior to surgery
- Begin your hydration protocol with Gatorade the night before surgery and the morning of

Note: If there are any changes to your health after your surgery has been scheduled, please contact your surgeon's office to discuss.

AFTER SURGERY

- No pillow under knee (applicable to partial and total knee replacements)
- You will be a fall risk - prepare your home for this ahead of time
- Please read through your knee replacement guide and become familiar with medications
- Participate in physical therapy postop appointments and follow your physical therapists instructions
- Take ASA or other blood thinner as instructed by your surgeon

DISCHARGE

- Have coach present for discharge instructions
- Walk every 1 hour during the day to prevent complications, reduce pain, and increase speed of healing process
- Report any signs of infection to your provider
- No dental work for 3 months
- After 3 months, please call your surgeon prior to any dental work for a one-time dose of antibiotic medication to prevent infection

CONTACT INFORMATION & DIRECTIONS

ADDRESS

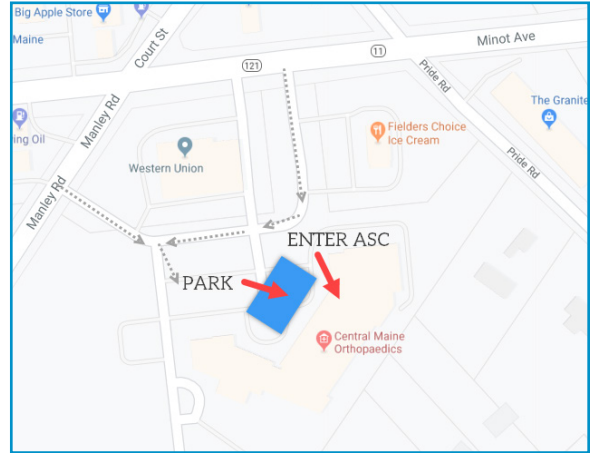
690 Minot Avenue, Auburn

OFFICE

207-783-1328

DIRECTIONS

Enter from either Minot Avenue or Manley Road, follow road into first parking lot on your left in front of the building. The surgery center entrance is on the left side when you are facing the building.



ENTER HERE



Look out for an email or text from GetWell Loop for important information on staying connected with your care team.

We stay in touch with our patients using GetWell Loop, an online platform that enables us to work together throughout your care journey.

- Daily follow up
- The support you need
- Answers to your questions and concerns

Our goals are to offer an outstanding experience and help you achieve the best possible outcome.

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Overview

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Understanding knee replacement

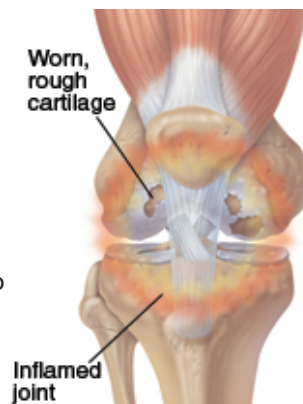
A knee is a hinge -like joint, formed where the thighbone, shinbone, and kneecap meet. It is supported by muscles and ligaments and lined with cushioning cartilage. Over time, cartilage can wear away. As it does, the knee becomes stiff and painful. A knee prosthesis (artificial joint) can replace the painful joint and restore movement.

A PROBLEM KNEE

A problem knee is stiff or painful. Cartilage cracks or wears away due to usage, inflammation, or injury.

Worn, roughened cartilage no longer allows the joint to glide freely, so it feels stiff.

As more cartilage wears away, exposed bones rub together when the knee bends, causing pain. With time, bone surfaces also become rough, making pain worse.

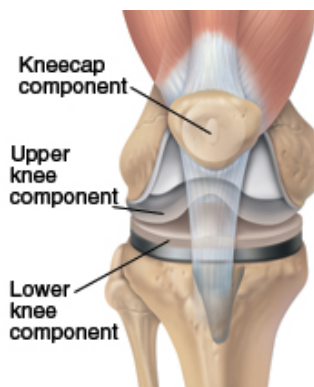


A KNEE PROSTHESIS

A knee prosthesis lets your knee bend easily again.

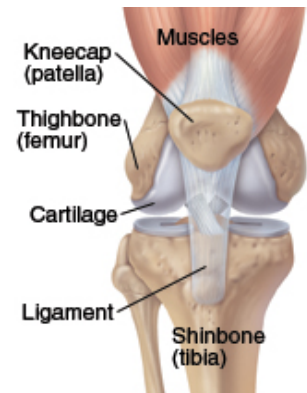
The roughened ends of the thighbone and shinbone and the underside of the kneecap are replaced with metal and strong plastic components. With new smooth surfaces, the bones can once again glide freely.

A knee prosthesis does have limitations, such as participating in high-impact activities like running, football, baseball and rock climbing. However, it can allow you to walk and move with greater comfort.



A HEALTHY KNEE

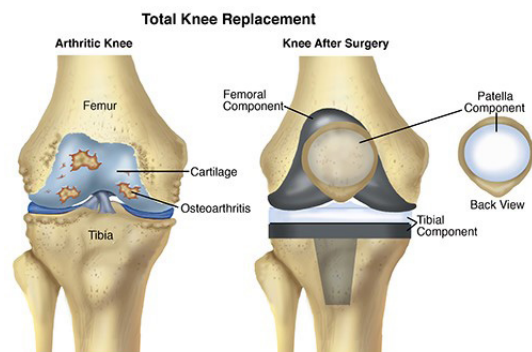
A healthy knee joint bends easily. Cartilage, a smooth tissue, covers the ends of the thighbone and shinbone and the underside of the kneecap.



Total knee replacement overview

It has been estimated that knee osteoarthritis affects 37.4% of adults > 60 years of age. Osteoarthritis (OA) is described as a “wear and tear” arthritis, usually occurring in adults > 50 years old, although it can occur in younger populations as well. It results in the damage, softening, and thinning of the cartilage that covers the bones of the knee. Eventually these bones rub together, causing pain and inflammation.¹ There is no radiological consensus indicating the need for a total knee arthroplasty (TKA) but the general agreement is that it is indicated when a patient can no longer tolerate the pain of OA.

A total knee replacement consists of replacing specific parts of the knee with artificial parts. A femoral component covers the end of the femur or thigh bone, a tibial component covers the top of the tibia or shin bone and the patellar component covers the underside of the patella or knee cap.



1. www.cdc.gov
2. www.apta.org

Before surgery

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- 5 Designate a recovery coach
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- 6 Pre-operative physical therapy guidelines
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What to expect before surgery

You have just talked with your doctor and together you have decided that you need a total joint replacement. There was a lot of information that was given to you today. If you experience illness (cold, flu, etc.) or injury to your surgical site, please let your provider know in advance of your surgery.

Here is a brief summary of what to expect in the weeks leading up to your surgery:

MEDICAL WORK-UP

Depending on your health history, you may be instructed to obtain lab work and see your primary care provider for a work-up. You may also be asked to receive medical clearance if you have a specialist such as a cardiologist. A nurse or medical assistant will ask you questions about your health history and present physical condition. This information is shared with our surgical team, including our ambulatory surgery center nurses and anesthesiologists.

OVER-THE-COUNTER MEDICINES

Your doctor will want you to take an iron supplement (ferrous sulfate 325mg or elemental 65mg once a day with meals; please note that iron may make your stools turn black). Iron is best absorbed with food. Consuming antacids, dairy products, tea, or coffee within 2 hours may decrease the effectiveness of the iron. This may make you constipated, so you may want to take a stool softener or laxative. Both supplements are available at your local drug store. You will be on an iron supplement one month prior to surgery and one month after surgery.

We will review all the information you will need to prepare for your day of surgery — and afterward — and make you feel comfortable and prepared for both surgery and recovery. We'll cover every detail, including physical therapy during your recovery.

For more information on this iron supplement, refer to page 21.

Designate a recovery coach

You're going to need assistance and support when you are discharged after your surgery. That's why you need to designate a "Recovery Coach." This person can be a family member or friend who is prepared to support you during recovery.

It's very important that your Recovery Coach understands what your needs will be. Your coach should come to your pre-operative appointment, attend at least one physical therapy session, and join you and your care team for post-discharge planning. The more they know about your procedure, and what your condition will be after the surgery, the better they will be able to assist you in returning safely to your everyday environment and activities.

Please be sure to let your care team know whom you have chosen as a Recovery Coach, and please provide contact information for them.

We cannot overstate the importance of support. It is the key to a faster recovery. Your coach should be able to help you with everyday life activities, such as climbing stairs and using bathroom facilities. Coaches often act as "cheerleaders" as well — encouraging you to do the movement and exercises assigned by your Physical Therapist.

EXTREMELY IMPORTANT: FINISH DENTAL WORK

Have any tooth or gum problems treated before surgery. Also finish any dental work that may be underway. If you don't, germs in your mouth could enter your blood stream and infect the new joint. This could delay your recovery. In extreme cases, an infection in the new joint might mean that the prosthesis would have to be removed.

Preventing surgical site infections

When you have a surgical procedure, including joint replacement, there is the risk of infection at the surgical site. This section tells you more about surgical site infections, what we do to prevent them, and how they are treated if they do occur, and what you can do to keep infection away.

RISK FACTORS FOR SURGICAL SITE INFECTION

Infections can happen to anyone who has had surgery. However, your risk is greater if you:

- Are an older adult
- Are a smoker - Smoking is dangerous to your health and there is evidence it will increase the amount of time needed to recover from your surgery. If you smoke, please quit 45 days in advance of your surgery. If you need assistance, please ask your provider or call the Maine Tobacco HelpLine at 1.800.207.1230.
- Have a weakened immune system
- Have a serious health problem, such as diabetes
- Don't eat enough healthy food
- Are very overweight

KEEPING INFECTIONS AWAY

What you can do to help prevent infection:

- Please keep your occlusive dressing on after surgery until your follow up visit with your surgeon
- Be sure to follow the pre-operative instructions given to you by your surgeon or other member of the care team
- If you smoke, quit or cut down 45 days prior to your surgery date and 6 months after surgery
- Be sure to avoid contact with cat litter and arrange for assistance with caring for your soiled litter box
- Take antibiotics ONLY when told to do so by a healthcare provider. Unnecessary use of these medications can build up resistance and create germs that are harder to kill
- Be sure you and your healthcare providers clean their hands thoroughly before and after caring for you — don't be afraid to remind them
- Eat healthy meals after surgery

Prior to your procedure our team takes every precaution to prevent infection by performing the procedure in a sterile operating room.

WHAT TO LOOK FOR

and when to call your doctor:

If you develop an infection, you will usually see increased redness and swelling around the incision. It is normal for bruising, swelling, and pain in the first 2-4 weeks after surgery around your new joint.

If you are experiencing signs of infection, such as increased swelling, redness, drainage or a temperature above 101.5 degrees, call your provider immediately.

Please note that infections can appear any time from hours, weeks, months, or even a year after surgery. That's why it's so important to prevent infection in the first place. If you have questions, please ask your provider.

Pre-operative PT guidelines

It is very important to plan ahead for physical therapy (PT) appointments. A visit to PT is required prior to your surgery. In some cases, your physician will ask you to attend PT for several weeks before the surgery to improve your motion and strength. Follow instructions from your PT about frequency of home exercises before and after surgery. Your PT will also review proper use of crutches and discuss how you will move through your house after surgery. You will learn how to walk with as much weight as you can tolerate on the leg. It will be important for you to take the time to learn the exercises and have proper understanding of how your leg will feel after surgery. It is important to change your position at least every hour while you are awake to help prevent blood clots.

Your PT will provide guidelines on frequency of icing and elevation of your entire leg to reduce pain and swelling, and how to achieve healthy range of motion in the first few weeks after surgery. The pre-operative physical therapy visit is a great opportunity for you to ask any questions or express concerns. It will also be helpful to meet your PT and visit the facility so that you are familiar with it before your surgery.

Chlorhexidine scrub procedure

Preparing your skin before surgery can reduce the risk of infection at the surgical site. This facility, along with your physician, recommends Chlorhexidine Gluconate (CHG) antiseptic solution designed to reduce the risk of infection. **This skin cleansing is to be done at home the night before surgery and again the morning of surgery.**

1. Do not shave for 3 days before surgery on any area of the body, including legs and underarms. Men may shave their face.
2. Wash and rinse your hair first using your normal soap and shampoo. Make sure you completely rinse the shampoo from your hair and body.
3. We will provide you with a bottle of chlorhexidine.
4. Pour approximate amount 1-1.5oz onto a clean wash cloth/brush and wet it enough to produce lather.
5. Lather your entire body from the neck down only. Never use chlorhexidine solution near your eyes, ears, or private area.
6. Turn the water off or step away from the running water to avoid rinsing the solution off the body.
7. Gently wash your body for about 3 minutes and focus on the areas where your incision will be located. Avoid scrubbing your skin hard.
8. Once you have completed the scrub, turn the water back on or step into the running water and rinse the solution off your skin, using water only.
9. On your surgical day, please only wear freshly laundered clothes.

Day of surgery instructions

The information below is to assist you in preparing for your surgery. It includes very important details, so please read it carefully.

Please follow all instructions
These instructions are for your safety and must be followed exactly.

CLOTHING, MAKE-UP, AND JEWELRY

- Wear comfortable, loose-fitting clothing
- Do not wear any makeup or nail polish. We must be able to see your fingernails, eyelids, and toenails to check for changes in circulation.
- Do not wear jewelry. This includes wedding rings and all body piercings.

BATHING

- Bathing is very important prior to surgery.
- Shower or take a bath the night before and the morning of surgery. Preparing your skin before surgery can reduce the risk of infection at the surgical site.
- Do not use perfume or scented lotions the morning of your surgery.
- Stop shaving your operative leg 3 days before your surgery.

HOME PREPARATION

- Remove any floor rugs or obstacles that would be in your way while ambulating (walking).
- Prepare bathing area with hygiene supplies and hand grips, if possible.
- Place foods at an accessible level, including pet foods.
- Prepare food in advance, if possible.

EATING AND DRINKING

- Do not eat any food after midnight the night before your surgery.

Drink 20 ounces of Gatorade the night before surgery and drink 20 ounces 2 hours prior to your arrival to the surgery center. Otherwise, no fluids after midnight.

- For your safety, your stomach must be empty upon arrival to surgery. Please adhere to the instructions given, otherwise your surgery may be postponed or cancelled.
- Do not smoke cigarettes on the morning of your surgery.
- Do not chew gum on the morning of your surgery.
- Do not eat candy on the morning of your surgery.

POST-SURGERY TRANSPORTATION AND CARE

You must have a responsible person to drive you home after surgery. It is also important that you have a responsible adult stay with you for the next 24 hours and be available to assist you in the first week of your recovery after your procedure.

WHAT TO BRING

- A list of your current medications (prescriptions and over-the-counter medications) including dosages and last time taken.
- Inhaler(s) you use for difficulty breathing or asthma.
- Loose-fitting comfortable clothing is recommended.
- Glasses, readers, and/or hearing aids.
- Supportive, comfortable shoes for walking.
- This Patient Information Kit and any other notes, forms and paperwork that you have from previous visits with your surgery team.
- Bring your walker or crutches if you have them. If you do not have your own, arrangements will be made for you to obtain them as needed.

Questions? If you have any questions, remember we are here to help you. Please do not hesitate to call your provider.

Frequently asked questions

Every patient is different. Please be sure to ask any questions you may have about your surgery and recovery. There are no silly questions. We want you to feel that you have all the information you need to be ready for your surgery — and taking care of yourself afterwards.

Q: How long do I have to be on the iron pills?

A: For 4 weeks before and after surgery, take 1 tab daily, ideally on an empty stomach with food and a citrus beverage. To prevent upset stomach, Vitamin C helps iron absorb.

Q: What should I watch for after surgery?

A: If you notice any redness, increased drainage, temperature of 101.5 or greater, or sudden onset of calf pain with redness, swelling, and warmth, call your provider. If you experience shortness of breath or chest pain, call 911 immediately.

Q: Do I need antibiotics for dental work?

A: Call your surgeon prior to any dental procedure to confirm the necessity of an antibiotic.

Q: After discharge, if I have general questions about my surgery or pain, who should I call?

A: Call your provider's office.

Q: If I have to change or confirm an appointment or for prescription questions, who should I call?

A: Call your provider's office.

Q: When can I drive?

A: When cleared by your physician and when you are off narcotic pain medications.

Q: When can I shower?

A: After your surgery, you may shower with your waterproof occlusive dressing.

Q: Where do I get a handicap parking permit?

A: You can get an application at your physician's office, or on-line at maine.gov.

Q: What is the average time out of work?

A: You will be back to light duty work within 3–4 weeks.

Q: When can I start exercising and what is recommended?

A: Please follow your physical therapy instructions.

Please write down any other questions you may have here, and your care team will review with you. Remember, there are no silly questions .

Discharge

11 Discharge overview

Discharge overview: knee replacement

Upon discharge, members of your care team will provide you detailed discharge instructions. They will review your sheet as well as other important information — much of which is in this patient kit. Some of the topics your team will cover include the following:

ACTIVITY

- Follow walking instructions as specified on your discharge form.
- After your surgery, you may shower with your waterproof occlusive dressing.
- Continue your total knee exercise program as instructed.
- Do not drive until cleared by your doctor.

NUTRITION

- Eat a well-balanced diet based on the five basic food groups: grains; fat-free or low-fat dairy; lean meats/ poultry/fish/beans/nuts/legumes; fruits and 100% fruit juices; and vegetables.
- Use of pain medication and prolonged rest may cause constipation. Drink 6–8 glasses of water daily and eat high fiber foods (whole grains, raw fruits and vegetables).

LONG-TERM RESTRICTIONS TO PRESERVE YOUR NEW JOINT

- Consult your physician before running, jumping, or performing any other high-impact activities.
- Maintain your normal weight.
- Before any invasive procedures (e.g., dental work, minor surgery, or surgery) call your doctor to see if you need an antibiotic prescription.

WHEN TO CALL YOUR SURGEON IMMEDIATELY

- If your incision becomes red or swollen; has drainage; or your temperature spikes greater than 101.5°F.
- If you have sudden increase in pain, unrelieved by pain medication.

RECOVERY COACH

- Please keep a journal of your activity and medications for the first week after surgery. This will help keep you on track and help your coach assist you in your recovery.
- Your recovery coach is an important part of your full recovery. We recommend that they are with you when discussing your discharge with your care-givers so they can fully understand your instructions and can be of more help to you once you are at home. Encourage them to ask questions and bring up any concerns they may have about your care.

PREVENTING BLOOD CLOTS

It is essential to your recovery that you move as instructed by your surgeon and physical therapist. Take blood thinner as directed.

MEDICATIONS

- We recommend that you check with your doctor before taking a new prescription or over-the-counter medications unless already instructed.
- Conservative use of narcotic pain medication is advised. You should try non-narcotic medication, such as Tylenol, and reserve prescribed pain medication for more severe pain.
- Prescription pain medication will be given to you upon discharge. As surgical pain decreases in the days after surgery, you should begin to wean off the prescription pain medication by decreasing the dose and the frequency of use. This will occur over the first few days or a few weeks depending on your pain levels after surgery.
- Pain medication should be taken with food to decrease the chance of nausea.
- Pain medication may also cause constipation. Speak with your pharmacist about an over-the-counter stool softener, if needed.
- Questions regarding your home medications should be directed to your primary care physician.

Medicine

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- 16 Iron supplement, stool softener, Aspirin

What you need to know about pain management

This section is designed to help you understand and manage your pain following your surgery.

TALKING ABOUT YOUR PAIN

Immediately following your surgery your team will frequently ask you about your pain levels. Why is this so important? Pain can change over time — even from hour to hour. Your health care providers need to know how you are feeling so they can help you alleviate pain.

WHY YOU NEED TO TELL US ABOUT YOUR PAIN

Don't try to "tough it out." If something hurts, say so. Your care team may ask you to describe how bad your pain is on a scale of zero to 10, with 10 being the worst pain. They may use other pain scales that employ words, colors, faces, or pictures. Tell them where and when it hurts. Be sure to tell them if specific actions — such as walking, going up stairs, or lifting your arm to a certain height — make the pain worse. The more they know about your pain, the better they can treat it.

Here are some words you can use to describe the type and level of pain you are experiencing:

- aching
- dull
- sharp
- bloating
- numbing
- shooting
- burning
- cramping
- pressure
- stabbing
- throbbing
- constant
- tightness
- cutting
- searing

If at any time your pain gets worse be sure to tell your healthcare provider. Tell them how bad the pain is, how often you feel it, and if the medicine or other recommended treatment is not working.

Medicines are one of the ways healthcare providers can alleviate your pain.

NARCOTICS

These are commonly prescribed for moderate to severe pain following surgery. Your physician may prescribe one of several types of pain medications for a period of time after your surgery. Side effects: nausea, vomiting, anorexia, constipation, cramps, light-headedness, dizziness, sedation and, sometimes, urinary retention. Precautions: You should not drive, work, consume alcohol, or use marijuana while taking narcotic pain medications.

REFILL INSTRUCTIONS

- Do not wait until you're completely out of your medication to call in for a refill
- Your prescriptions will be sent to your home pharmacy electronically
- Please remember that requests for medication refills should be called in to the office during normal clinic hours of 8am-4pm
- Plan ahead and allow 24 hours for refills
- A member of our staff will contact you only if your medication will not be refilled
- If your medication has not been refilled after 24 hours please notify the office

Refills

For refills, please contact your surgeon's office

What you need to know about pain management (CONT.)

NSAIDs

(Non-Steroidal Anti-Inflammatory Drugs:
Ibuprofen / Naproxyn)

You will be prescribed an NSAID after your surgery for mild to moderate pain.

Side Effects: Nausea, headache, anorexia, abdominal pain, dizziness, drowsiness.

Recommendations: Take with food and follow instructions.

ACETAMINOPHEN

(Tylenol)

Is sometimes prescribed for mild to moderate pain.

Side Effects: Nausea, abdominal discomfort.

Recommendations: You should take this medication with food. If you are already on another pain medication it is important to know whether that medication has acetaminophen in it so you do not exceed the recommended daily dosing of this medication. The maximum dose of acetaminophen is 3000 mg within a 24-hour period.

NON-MEDICINE PAIN MANAGEMENT

While you will likely use medicine right after surgery — and perhaps for a short time following your procedure, there are other effective ways to manage pain. It all depends on the cause, type, and amount of pain you have. Some other treatments are listed here:

- Taking your mind off the pain by reading, watching TV or movies, and talking with friends, relatives, and family members
- Physical Therapy — your provider may prescribe a PT plan for you. This can include a variety of activities and treatments
- Massage
- Exercise

- Hot or cold compress (follow instructions on duration for treatment)
- Relaxation (guided relaxation audio CDs are available)

There are many different kinds of pain. Pain can be caused by injury, sickness, or surgery. Your healthcare providers have the job of treating your pain. You can help them by asking questions. Here are some questions you should ask before you are discharged after your surgery:

- What pain medication will I be receiving?
- Can you explain exactly how and when to take this medicine?
- Should I take it with or without food?
- Can I take this medicine with my other medicines? (Please be sure you have listed ALL medicines, vitamins, and supplements on your pre-surgical questionnaire.)
- Should I avoid alcohol on this medicine?
- Are there particular side effects I should know about? Should I call you if I have side effects?
- Will this medicine upset my stomach, and what should I do about that?
- What can I do if the pain medicine doesn't work?
- What else can I do to manage the pain?

Your physician, or another member of your care team will be happy to answer these questions. Please do not hesitate to ask us to spend time with you reviewing medicines and other discharge instructions. Our job is to help speed your recovery, and the more you know, the faster you will heal.

Frequently asked questions

Here are the answers to the questions about pain management we hear most often from our patients.

Q: Should I include my pain medicine on my list of medications?

A: Yes. You should keep a list in your wallet of all medications you are taking — including prescriptions, over-the-counter (OTC) drugs, and vitamins and supplements.

Q: Does my medicine have side effects?

A: All medicines, even OTC medicines have some side effects. We have listed some in this brochure. Most OTC drugs list side effects on their packaging. If you have any questions ask the pharmacist or your doctor. If you experience any severe side effects get in touch with your physician immediately. They may change your medication or offer other pain relief methods.

Q: Do I need to worry about becoming addicted to a prescribed narcotic?

A: Narcotic addiction can occur within as little as 5 days of beginning use. Narcotics are associated with side effects such as drowsiness, constipation, impairment of judgement, serious breathing difficulties, and death. For your safety:

- refills of narcotic pain medication will be limited to normal business hours with 24 hours notice
- **OR** prescriptions for controlled medications will not be refilled outside of normal business hours unless the on-call provider is the patient's treating provider, reviews the patient medical history, or speaks with the patient's treating provider to verify the appropriateness of the request

Q: Will my medication stop being effective over time?

A: Possibly. It's called "tolerance." It means that after a while your body gets used to the medicine and you need to make a change to get pain relief. It's also possible that the condition causing your pain is getting worse, or you have a new kind of pain. You may need more medicine or a different kind of medicine. Be sure to talk with your physician.

Iron supplement (ferrous sulfate oral tablet)

An iron (ferrous sulfate) oral tablet, extended release, replaces iron that is essential to healthy red blood cells. It is used to help prevent or treat iron deficiency anemia.

IRON AND ANEMIA

Anemia may cause problems like tiredness, shortness of breath, or slowed growth in children.

Only take iron if your doctor has told you to do so.

Do not treat yourself with iron if you are feeling tired. This medicine may be used for other purposes; ask your healthcare provider or pharmacist if you have questions.

WHAT SHOULD I TELL MY HEALTHCARE PROVIDER BEFORE I TAKE THIS MEDICINE?

They need to know if you have any of these conditions:

- Frequently drink alcohol
- Bowel disease
- Hemolytic anemia
- Iron overload (hemochromatosis, hemosiderosis)
- Liver disease
- Problems with swallowing
- Stomach ulcer or other stomach problems
- An unusual or allergic reaction to iron, metals, other medicines, foods, dyes, tapes, latex, or preservatives
- Pregnant or trying to become pregnant
- Breast-feeding

HOW SHOULD I USE THIS MEDICINE?

Iron is best absorbed on an empty stomach (usually if taken 1 hour before or 2 hours after meals) with water or a citrus beverage. If stomach upset occurs, you may take this with food. Avoid antacids, dairy products, tea, or coffee within 2 hours of taking this medication as they will decrease the effectiveness. Do not take your medicine more often than directed. Do not stop taking except on your doctor's advice.

Give your healthcare provider a list of all the medicines, herbs, non-prescription drugs, or dietary supplements you use. Also tell them if you smoke, drink alcohol, or use illegal drugs. Consult with your primary care physician or pharmacist if you are taking other medications for what may interact with this medicine.

Stool softener (docusate calcium oral capsule) Senna docusate

Docusate is stool softener. It helps prevent constipation and straining or discomfort associated with hard or dry stools. This medicine may be used for other purposes; ask your healthcare provider or pharmacist if you have questions.

WHAT SHOULD I TELL MY HEALTHCARE PROVIDER BEFORE I TAKE THIS MEDICINE?

They need to know if you have any of these conditions:

- Nausea or vomiting
- Severe constipation
- Stomach pain
- Sudden change in bowel habit lasting more than 2 weeks
- An unusual or allergic reaction to docusate, other medicines, foods, dyes, or preservatives
- Pregnant or trying to get pregnant
- Breast-feeding

HOW SHOULD I USE THIS MEDICINE?

- It is recommended to begin taking this medicine at the same time you begin taking narcotics
- Take this medicine by mouth with a glass of water.
- Follow the directions on the label.
- Take your doses at regular intervals.
- Do not take your medicine more often than directed by your physician.

Aspirin (coated) 81 mg

HOW SHOULD I TAKE ASPIRIN?

Beginning the morning of surgery, begin taking aspirin 81mg twice a day for 4 weeks, unless otherwise directed by your physician. Do not use the medication in larger or smaller amounts or use it for longer than recommended. Take this medication with a full glass of water. Taking aspirin with food or milk can lessen stomach upset.

Rehabilitation

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Most common postop complications

DVT (DEEP VEIN THROMBOSIS)

DVT is a risk of this surgery; signs and symptoms include pain in leg or calf unrelated to incision, tenderness or redness above or below knee and increasing swelling in calf, ankle or foot but often is asymptomatic – prevention includes pharmacological agents or a mechanical compression device. Screening can be done by your physical therapist utilizing the Wells Score System.

INFECTION

Signs and symptoms include low grade fever, night sweats, high skin temperature of the knee, redness or drainage from the incision, hardening of the incision, swelling, severe pain, malaise or delayed healing.²

ARTHROFIBROSIS OR “STIFF KNEE”

Prevention includes prioritizing ROM gains early in rehab. Slight post-operative stiffness is to be expected after surgery which may persist for months to years and is usually more apparent after exercise or increased activity. Arthrofibrosis is different in that it presents as a disproportionate amount of pain and stiffness that worsens as opposed to improves as time progresses, persistent swelling different from typical fluid build-up and persistent “hotness” around the knee > 2-3 weeks.

Timeline of appointments

PRE OP

1-3 pre-operative physical therapy appointments will be made prior to surgery to review your home exercise program, review gait training with an assistive device, and to discuss your timeline moving forward.

POST OP

You will have routine follow up appointments in the office for one year following your joint replacement. Consult your physician if you have questions regarding your follow up timeline of appointments.

Post-operative activity guidelines

- Change your position at least every hour while you are awake. This helps prevent your knee from getting stiff and promotes blood circulation in your legs, which can help prevent blood clots.
- You will be sent home with a reusable ice pack – this is to be utilized at a minimum of 3-4 times/day for 15-20 minutes to control swelling and reduce pain. During icing sessions, you should also elevate your entire leg so that it is higher than your heart. Elevation should be done with 2-3 pillows under your ankle; no pillows should be placed under your knee to allow for improved extension.
- Use cold therapy after every session of exercises for 15-20 minutes to decrease swelling in your knee and for pain relief.
- You can “Weight Bear as Tolerated” (WBAT) on your operated leg following surgery unless otherwise instructed by your physician or physical therapist.
- Use your walker or crutches for walking until discontinued by your doctor or physical therapist. Practice walking with a “heel to toe” gait pattern, trying to bend your knee as you normally would when you walk.
- You will receive proper gait training by a physical therapist and the goal is to advance to a cane by 2-3 weeks.
- After your surgery, you may shower with your waterproof aquacell dressing.
- You are clear to fly 6 weeks after surgery.
- Massage your scar/incision 2 times per day once your staples are removed and your incision is well healed.
- You can safely sleep on your back, either side or your stomach.
- You will usually be cleared to drive in 4-6 weeks as determined by your physician, provided you are off narcotics and can safely operate a vehicle.
- The goal for range of motion of your operated knee is 0 to 90 degrees by two weeks after surgery and 120 degrees by the 3 month visit.
- “Clicking” sensations in your operated knee are normal.
- Kneeling on your operated knee is acceptable when it is not too uncomfortable for you and when this activity can be tolerated.
- You will be instructed in a home exercise program by your physical therapist. It should be performed at least 3 times per day.
- Return to work varies based on job requirement but, generally, you can return to more sedentary work by 3 weeks and higher level work by 2 months.
- The timeline for returning to any impact, leisure or sports activities varies from person-to-person, your physical therapist will be able to estimate your unique timeline based on your specific condition.

Total knee replacement protocol

YOU WILL HAVE A PRE-OPERATIVE VISIT WITH A PHYSICAL THERAPIST TO:

- Introduce you to the rehabilitation department who will help guide you through your post-operative rehabilitation.
- Instruct you on specific pre-operative and post-operative home exercises.
- Familiarize you with the Total Knee Arthroplasty rehabilitation protocol and specific goals.
- Gait training-learning how to walk using an assistive device and to negotiate stairs properly.
- Educate you on home modification and assistive device recommendations

GENERAL POST-OPERATIVE CONSIDERATIONS:

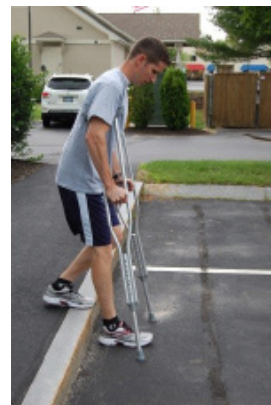
Please keep in mind that the time frames listed below are approximate and may not be met by all patients as specified due to differences in healing, patient tolerance, and differences in the surgical procedure. Actual progression will be based upon clinical presentation.

- Use your assistive device, i.e. walker, crutches, or single point cane (SPC) until discontinued by your Physician or Physical Therapist. Patients are WBAT (weight bearing as tolerated) on the operated limb unless otherwise specified.
- Change your knee position at least once per hour when awake to avoid stiffness and help prevent blood clots.
- Perform your home exercise program at least 3 times daily.
- Use your icing system a minimum of 3-4 times/day for 15-20 minutes to reduce swelling and control pain.
- You will be released to drive by your physician when appropriate, usually by 4-6 weeks post-operatively.

- Stairs/curbs



Upstairs – the non-operated leg goes first, then the operated leg, followed lastly by the crutches or cane.



Downstairs – the crutches or cane go first, followed by the operated leg, followed lastly by the non-operated leg.

Post-operative rehabilitation

0-2 WEEKS

Goals:

1. Safe ambulation with walker, crutches, or cane (level surfaces and stairs). May begin weaning as able with goal of SPC by 2 weeks.
2. Range of motion 0-90 degrees.
3. Pain management and edema control through exercise, modalities, and manual therapy.
4. Normal quad activation

PROM/AAROM/AROM exercises (i.e. supine heel slides, seated knee flexion, PT assisted knee flex, heel propped knee extension - weighted as tolerated).

Early emphasis for full knee extension equal to the opposite side with active VMO recruitment. Patient education on post-op surgical positioning (no pillows under knee, heel prop). Your Vastus Medialis Oblique (VMO) is the most important quad muscle and vital for knee stability.

Isometrics—Quad sets, gluteal sets, abdominal isometrics.

NMES for quad activation

Isotonics—Ankle pumps, short arc quads, straight leg raises (standing and on a block), calf raises and supine hip abductor/adductor.

Gait training for instruction in proper mechanics, progression of weight bearing as tolerated, and to minimize compensation.

Manual therapy and soft tissue treatments to the quads, surgical incision, posterior musculature, and patellofemoral joint to improve ROM and decrease fibrosis.

TENS use for pain control as needed

Monitor for signs of DVT/PE – utilize Wells Score system if signs present.

Progression Criteria:

- Normal gait pattern with assistive device on level surfaces.
- No extension lag.
- Active knee range of motion 0-90°
- Double leg squat to 45° knee flexion.

2-6 WEEKS

Goals:

1. Continue to progress ambulation with walker, crutches, or cane with goal of walking with no assistive device by 6 weeks.
2. Active knee ROM 0-100 degrees.
3. Progression of exercise program, CKC (closed kinetic chain) and functional exercises, balance/proprioceptive activities
4. Tolerate bilateral stationary cycling for knee ROM and aerobic conditioning.

Continue with home program.

AAROM/AROM exercises (i.e. heel slides with overpressure, wall slides, sit to stand training for knee flexion).

Straight leg raises (4 planes—flexion, abduction, adduction, extension) – standing (B) and on a block – and long arc quads

Standing exercises: Terminal Knee Extensions, hamstring curls, mini-squats, step ups, wall squats to 45 degrees and calf raises.

Core stabilization exercises (bridging, clamshells)

Stationary bicycle—Begin with forward and backward to tolerance to improve knee flexion range of motion.

Single leg balance/proprioceptive exercises & activities.

Wean from single point cane if patient demonstrates proper gait pattern with minimal to no compensation.

Continue with manual therapy to the patella, soft tissues, and incision to improve range of motion, prevent fibrosis, and decrease pain/edema.

Can begin aquatics once incision is healed and you are cleared by your surgeon.

Progression Criteria:

- Regain muscular strength, focusing on quadriceps and glut med.
- Active ROM 0-100 degrees
- Progress to no assistive device by 6th week with minimal to no compensation.
- Double leg sit to stand with no upper extremity compensation.

Post-operative rehabilitation (CONT.)

6-12 WEEKS

Goals:

1. Ambulation without assistive device with a normal gait pattern.
2. Active range of motion 0-120 degrees.
3. Increase intensity of exercise program (i.e. add resistance, use of ankle weights, increase height of step exercises).
4. Ascend/descend stairs with reciprocal pattern.
5. Independent with all ADL's.

Continue with ROM focus until patient can actively flex knee to 120 degrees.

Continue patellofemoral joint mobilizations as indicated.

Progression of single leg balance activities, use of foam pad, balance challenges, etc.

Lateral training exercises: lateral steps, lateral step-ups, step overs, progressing in height

Incorporate single leg exercises: single leg RDLs, single leg squats, step-ups, step-downs, swiss ball hamstring curls, etc.

Neuromuscular re-education to minimize substitution patterns.

Continue stationary bicycle with goal of achieving complete revolutions (backward/forward) without compensation

Work specific training for those with higher level work activities with goal of return to work by 2 months.

Progression Criteria:

- Active ROM 0-120 degrees
- Normal gait without assistive device
- Elimination of substitution patterns/balance safety with basic functional activities

12 + WEEKS

Goals:

1. Independent with all ADL's (activities of daily living).
2. Independent with advanced home exercise plan.
3. Return to appropriate recreational sports/activities.

ROM exercises if patient cannot actively flex involved knee to 120 degrees.

Continue with CKC (closed kinetic chain) exercises: Step-ups, step-downs, lateral step-ups, wall sits, squats & lunges as able and within comfort ranges.

Single leg strengthening exercise progression

Functional exercises: retro walking, side-to-side shuffles, chair squats, dynamic single leg balance activities.

Stationary bicycle: complete forward revolutions with minimal to no compensation. May add resistance when appropriate (i.e. complete forward revolutions without compensation).

Criteria for return to non-impact sport/work activities:

- Normal gait on all surfaces, including distances > 1 mile.
- Dynamic neuromuscular control without an increase in pain or swelling.
- Return to impact sports such as tennis will be discussed with your surgeon and physical therapist.

Total knee replacement home exercise program

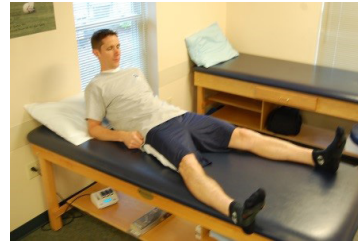


REPITITIONS

SETS

ANKLE PUMPS

Lie on your back or elbows with your operated leg elevated on pillows and pump your ankle (i.e. point your toes then pull toes up).



REPITITIONS

SETS

SUPINE HIP ABDUCTION/ADDUCTION

Lying on your back, begin with your legs together. Tighten the muscle on top of your thigh and slide your operated leg away from the other.

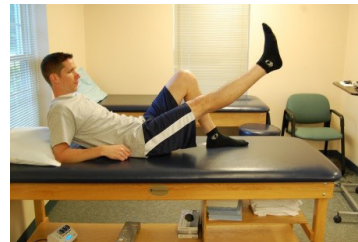


REPITITIONS

SETS

HEEL SLIDES

Lie on your back or propped on your elbows and begin with your knee straight. Slide your heel towards your buttock until a stretch is felt in your knee. Hold 10 seconds and return to starting position.

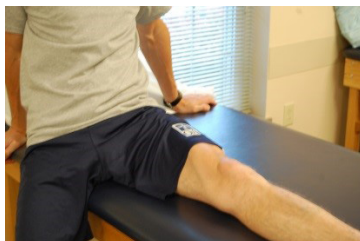


REPITITIONS

SETS

STRAIGHT LEG RAISES

Lie on your back or propped up on your elbows. Bend your non-operated leg. Tighten the quadriceps muscle (top of thigh) and lift your operated leg 12 inches from the table keeping your knee as straight as possible.

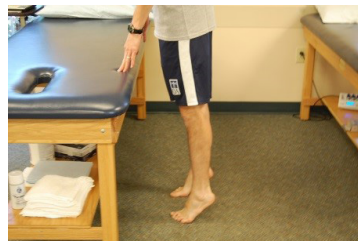


REPITITIONS

SETS

QUAD SETS

Tighten the front thigh muscles (quadriceps) by pressing your knee into the table keeping your knee as straight as possible. Concentrate on contracting your inner quad muscle (VMO). Hold as tight as possible for 5 seconds, and then completely relax the muscle.



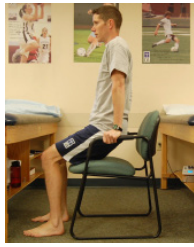
REPITITIONS

SETS

CALF RAISES

Stand with weight equally distributed on both feet. Push through toes to lift heels off floor and then slowly lower to the resting position.

Total knee replacement home exercise program (CONT.)



REPITITIONS

SETS

CHAIR PUSH-UPS

Begin seated in a chair with your hands on the armrests. Push down through your hands/arms to get your hips to come up off the chair.



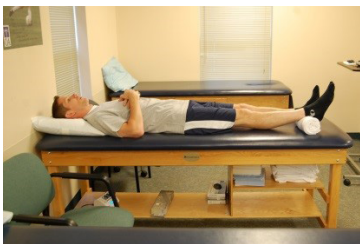
REPITITIONS

SETS

SEATED HEEL SLIDES

Sitting in a chair, begin with your operated knee straight and then slide your foot back towards the chair until a stretch is felt in your knee.

Hold 10 seconds.

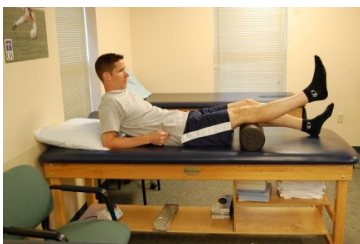


REPITITIONS

SETS

HEEL PROPS

Lie on your back or elbows and prop your ankle on a pillow or towel roll. Be sure the entire leg is off the floor, especially the back of the knee. Relax the entire leg and hip and allow gravity to pull the knee straight.



REPITITIONS

SETS

SHORT ARC QUAD

Begin by lying on your back with a pillow or bolster placed under your operated leg. Straighten your knee by tightening your thigh muscle.