

Day of surgery: _____

Expected discharge home: _____

Surgeon: _____

Phone number: _____

Knee Arthroplasty

Bring this guide with you to the hospital on the day of your surgery



Watch complimentary video on our website at hopitalmontfort.com/en/surgery/orthopedic

Introduction

This information guide will help you understand what is involved in knee arthroplasty (knee replacement). We hope the information in this booklet will help you prepare for your surgery



About Hôpital Montfort

Hôpital Montfort is a Francophone academic health care institution that provides quality care in both official languages and works with its partners to improve the health of communities.

Montfort strives for excellence and wants to be a hospital of choice for its personalized patient care, its workplace, teaching and research.

Our daily actions are guided by the values of compassion, commitment, excellence and respect.

WARNING

This guide does not replace the advice of your care provider.

Please consult your care provider to assess if the information presented in this guide applies to your situation.

The content of this guide was prepared by Vancouver Coastal Health and adapted by Hôpital Montfort.

Your Health Care: Be Involved!

- Be involved in your health care. Speak up if you have questions or concerns about your care.
- Tell a member of your health care team about your past illnesses and your current health condition.
- Tell your health team if you have any food or medication allergies.
- Make sure you know what to do when you leave the hospital.



Your Interprofessional Plan of Care

- Your hospital admission for your knee replacement will follow an “interprofessional plan of care” more commonly called a "Clinical Pathway".
- This is your version of the Clinical Pathway. It is an interactive document. Please take notes if necessary when the nurse is discussing with you.
- It has been prepared so that you, your family, and the members of the healthcare team know your plan of care. It gives you an idea of the tests, treatments and diet you will require during your hospital stay as well as the education and planning necessary for discharge
- Once you and/or your family have read the information in this booklet, please feel free to ask any member of the healthcare team any questions.

Table of content

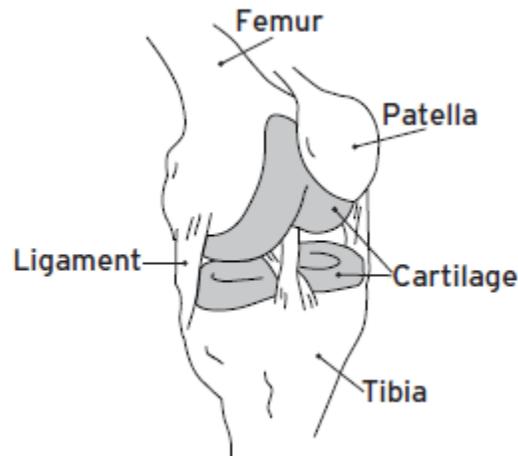
1. Knee arthroplasty	7
1.1 Anatomy of the knee.....	7
1.2 Common knee problems.....	7
1.3 Types of arthroplasty	7
1.4 Length of hospital stay.....	9
2. Preparing for surgery	10
2.1 Hôpital Montfort's Pre-Operative Education Session	10
2.2 Your appointment at the Pre-Admission Clinic.....	10
2.3 Prevention of surgical site infection.....	11
2.4 Nutrition	13
2.5 Weight Management	14
2.6 Pre-operative exercises	14
2.7 Preparing your home	15
2.8 List of accessories to obtain before surgery.....	15
2.9 Other things to do before your surgery	16
3. The surgery	17
3.1 Checklist of things to bring to the hospital.....	17
3.2 At home the day before surgery.....	17
3.3 The day of the surgery.....	18
3.4 At the Pre-op Unit on the day of surgery	18
3.5 During the surgery	18
3.6 In the recovery room after the surgery	18
3.7 In the patient care unit after the surgery	19
4. After surgery	20
4.1 General instructions after your surgery	20
4.2 Ankle and deep breathing exercises	20
4.3 Pain control	20
4.4 Pain control at home.....	21
4.5 Constipation and urinary elimination	22
4.6 Anticoagulants.....	22
4.7 Wound Care	22
4.8 Sexuality after knee arthroplasty.....	23
4.9 Dental work and medical procedures.....	23
4.10 Transportation	23
4.11 Driving	23
4.12 Air travel	24

5. Complications	25
5.1 Infection.....	25
5.2 Swelling.....	26
5.3 Blood clots.....	26
5.4 Anemia (low blood count)	26
5.5 Post-operative delirium.....	26
5.6 Skin complications.....	27
5.7 Joint loosening	27
6. Exercises and daily activities.....	27
6.1 Physiotherapy.....	27
6.2 Position of the leg in bed	28
6.3 Walking	28
6.4 Stairs	29
6.5 Getting in and out of bed	29
6.6 Sitting	30
6.7 Getting dressed.....	30
6.8 Bathroom safety	30
6.9 Car transfer	31
6.10 Returning to work	31
7. Follow-up with your surgeon	32
8. When to see an emergency doctor?	32
Total knee replacement: your hospital stay.....	33
Partial knee replacement: your hospital stay.....	39

1. Knee arthroplasty

1.1 Anatomy of the knee

The knee is a joint between the femur (thigh bone) and the tibia (shinbone). It is a joint that enables bending and straightening of the leg.



1.2 Common knee problems

All forms of arthritis can damage the cartilaginous pad of the knee. As the cartilage deteriorates, the bones gradually become bare and rub against each other, causing pain, stiffness, swelling and sometimes creaking. In cases of arthrosis, wear and tear destroys the cartilage, whereas in rheumatoid polyarthritis, it is the damage to the synovial membrane that leads to the deterioration of cartilage.

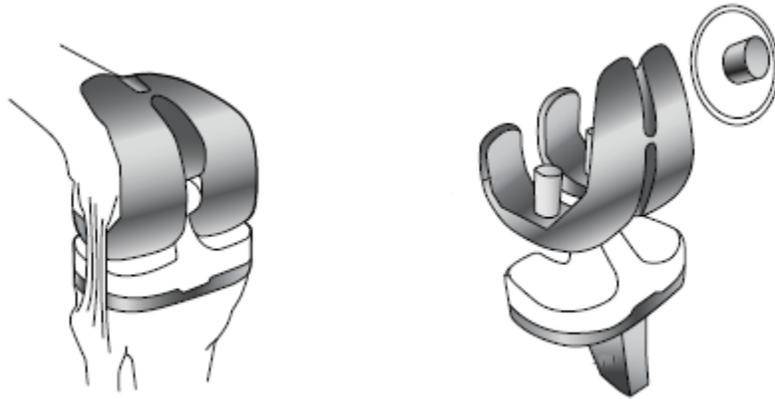
1.3 Types of arthroplasty

Total knee arthroplasty

Total knee arthroplasty consists of replacing the damaged joint with an artificial prosthesis. The surgeon first makes an incision in the skin to access the bones, then moves the muscles and ligaments of the joint out of the way. The damaged bones are then trimmed to accommodate the artificial prosthesis. The ends of the femur and tibia are covered with metal components separated by a piece of plastic. If the patella is damaged, it can be resurfaced with a plastic button. The muscles and ligaments are then repaired. The incision in the skin is closed with sutures or metal staples that hold the skin in place during healing. This operation takes about two hours.

Today, for many patients, knee arthroplasty provides greater joint mobility and pain relief. Patients can also walk more easily for up to 25 years after the surgery.

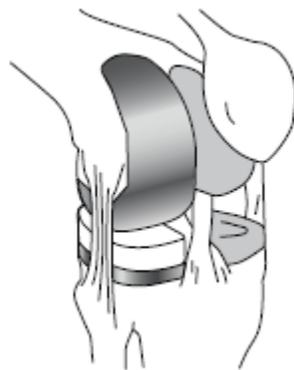
Artificial knee prosthesis



Unilateral (partial) knee arthroplasty

If you have bone lesions on only one side of the knee, your surgeon may perform a partial knee arthroplasty. As in the case of a total arthroplasty, the surgeon trims the damaged part of the bones to accommodate the prosthesis. Many people who undergo this procedure recover faster than those who undergo a total knee arthroplasty. Often, they can go home the day after the procedure.

Unilateral knee prosthesis



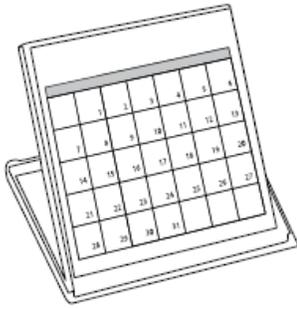
1.4 Length of hospital stay

Your hospital stay will be brief. The healthcare team will help stabilize your condition and make sure that you are able to perform your daily activities before you are discharged. **Before the surgery, it is important to arrange for your transportation home after you are discharged from the hospital.** Discharges are scheduled before 10 a.m. If your recovery is quick, you may be discharged earlier than planned. Make sure that someone is available to pick you up in that event.

Total knee arthroplasty

3 days or less. Possible discharge on day 2.

Example: If your surgery takes place on Monday (day 0) and if you spend 3 nights in the hospital, you will probably be discharged Thursday morning (day 3).



Monday:	Day of surgery
Tuesday:	Day 1 post-surgery
Wednesday:	Day 2 post-surgery, possible discharge
Thursday:	Day 3, planned return home

Partial knee arthroplasty

One night or less

Example: If your surgery is on a Monday (day 0) and you spend three nights in the hospital, you will probably be discharged on Tuesday morning (day 1).



Monday:	Day of surgery
Tuesday:	Day 1 post-surgery, planned return home

2. Preparing for surgery

2.1 Hôpital Montfort's Pre-Operative Education Session

Hôpital Montfort offers a Pre-Operative Education Session to inform and prepare patients and their caregivers before surgery. It is mandatory and usually consists of a 1-hour group session. After your visit to the arthroplasty clinic, an appointment will be made during the following month for a Pre-Operative Education Session. We encourage you to bring along a friend or relative for additional support, if needed.

The physiotherapist will explain the surgery, what to expect during your hospital stay, exercises for you to do to prepare for the surgery and other things you must do to prepare for the surgery and your discharge from hospital.

You will be given a questionnaire about your situation at home. You must bring the completed questionnaire with you when you go to your pre-operative appointment at the Pre-Admission Unit so that the information can be validated with the physiotherapist.

2.2 Your appointment at the Pre-Admission Clinic

You will have an appointment at the Pre-Admission Clinic 6 to 8 weeks before your scheduled surgery date to help you prepare for your surgery.

Please bring the following items to your appointment:

- your health card;
- a recent list of your current medication from your pharmacy (even natural products and over-the-counter medications);
- if you are taking anticoagulants or aspirin, make sure to inform the surgeon and mention it to the nurse at the Pre-Admission Clinic;
- all information regarding your health insurance plan;
- the name and contact information of the person you have designated to be responsible for all decisions concerning you (if you choose not to sign the power of attorney for personal care form);
- this information guide.**

Hôpital Montfort's admitting department will call you
at home to schedule an appointment.

My appointment at the Pre-Admission Clinic is on:

If you have any questions, please call Hôpital Montfort at 613-746-4621, ext. 4919.

The appointment at the Pre-Admission Clinic usually lasts 3 to 4 hours. If possible, ask a relative or friend to accompany you. If you need an interpreter, have a relative come with you.

During your appointment at the Pre-Admission Clinic, you may have diagnostic examinations (x-rays) or laboratory examinations (blood tests) depending on your surgeon's recommendations.

To properly prepare for your surgery, you will have meetings with several members of your healthcare team:

- The **pharmacy technician** will meet you to take note of the medications you are taking at home. For this meeting, bring an up-to-date list of your medications.
- The **nurse** will meet you to complete your health assessment and specific questionnaires on your lifestyle and health needs. She or he will review the information guide and your care pathway with you.
- Next, to ensure personalized follow-up after your Pre-Operative Education Session, the **physiotherapist** will review the questionnaire about your situation at home, answer your questions about the exercise program and inform you in regards to the physiotherapy you will do after your discharge from hospital or any other questions you may have regarding your discharge.

You might meet other healthcare professionals during your appointment, including:

- an anesthesiologist (if you have questions about anesthetics, you will be able to ask them at this time);
- an internist (e.g., cardiologist, respirologist, etc.);
- a social worker;
- a professional dietitian.

2.3 Prevention of surgical site infection

How to prepare your skin before surgery

Two days before your surgery

1. Take a shower and wash your entire body, including your hair and scalp with regular shampoo;
2. Carefully rinse your body;
3. Use a clean towel to dry your body;
4. Do not use lotions, powders or creams after your shower.

The day before your surgery

1. Repeat steps 1 to 4
2. Freshly washed sheets and clean pillowslips must be used after this shower.

The morning of your surgery

1. Do not take a shower or bath and do not wash your hair;
2. Dress warmly with freshly washed clothes;
3. Do not use lotions, powders, creams, hair products, makeup or deodorant after washing.

Do not shave on the 2 days prior to the surgery, including your legs and armpits. Men may shave their face.

If you have questions after having read these instructions, please call 613-746-4621, extension 4311 to speak with a nurse in the Pre-Admission Clinic.

Pre-operative screening for Staphylococcus Aureus (SA)

Why screen for SA?

For several years, there has been a dramatic increase in the number of antibiotic-resistant bacteria (microbes). The most common resistant microbe in hospitals is staphylococcus aureus.

Generally, these microbes do not cause any health problems. However, they can sometimes cause infection if they penetrate the skin or the incision. No treatment is necessary unless the patient has an infection. If an infection develops, it may be harder to treat because the choice of antibiotics is limited.

How to screen for SA?

The laboratory technician will insert the tip of a cotton swab 1-2 cm into each of your nostrils and rotate it 2 or 3 times against your mucous membranes.

If your test is negative, no follow-up is necessary.

If your test is positive, you will receive a call from your treating physician. You will be given a prescription with instructions to follow for bacterial decolonization before your scheduled surgery date.



After your appointment at the Pre-Admission Clinic, you will know:

- what type of surgery you are having;
- what you need to do at home to prepare for your surgery;
- that you must not smoke or drink alcohol at least 24 hours before the surgery;
- what you need to do the morning of your surgery and where to go;
- when to stop drinking and eating before your surgery;
- what medications you need to take the morning of your surgery and which ones you need to stop taking before your surgery;
- how to prepare your skin before your surgery to prevent infection;
- the type of care you will need after your surgery.

Note: Please contact your surgeon's office as soon as possible if you have a fever, flu, cold or sore throat or if you need to cancel or postpone your surgery.

2.4 Nutrition

Good nutrition will help with recovery after your surgery and reduce the risk of infection. Here are some important nutrients you will need before and after your surgery.

Proteins

Protein promotes healing after surgery. You will need more protein than usual; therefore, eat at least 3 portions of each of these food groups everyday.

Meat and substitutes

1 portion contains :

- 85 grams (3 ounces) of meat, poultry or fish
- 2 eggs
- 170 grams (3/4 cup) of legumes
- 170 grams (3/4 cup) of tofu
- 2 tablespoons peanut butter

Milk and substitutes

1 portion contains :

- 225 ml (1 cup) of milk or soy beverage
- 55 grams (2 ounces) of cheese
- 175 ml (3/4 cup) of yogurt

Multivitamins

Multivitamins are not necessary if you have a healthy and varied diet. It is preferable to obtain your nutrients from a healthy diet than from supplements, when possible. If you have a history of anemia, talk to your physician, pharmacist or dietitian about possible supplements.

Calcium and vitamin D

It is important to take calcium and vitamin D to ensure strong bones. Adults should consume 2 to 3 portions of milk or calcium and vitamin D fortified food everyday. It is recommended that people 50 years and older take a vitamin D supplement of at least 400 UI. Ask your physician, pharmacist or dietitian to recommend the right supplements for you.

Fiber and water

Prior to an arthroplasty, it is important to have regular soft stools at least every 3 days. You may need to add emollients or laxatives if you go 2 days without stools, since constipation can lead to complications. Therefore, it is important to eat foods high in fibre before and after the surgery, such as whole grains, bran, fruits, vegetables, beans and lentils. Eat them throughout the day and drink at least 1,5L (8 cups) of liquid a day (juice, milk, tea, coffee), half of which should be water.

For more information on nutrition, consult Canada's Food Guide.

2.5 Weight Management

If you are overweight or underweight, you may have a more difficult post-operative recovery.

If you are overweight, it would be good to try to lose a moderate amount of weight in order to reduce your knee pain and enable you to accomplish more activities. Keep in mind that every $\frac{1}{2}$ kg (1 pound) you carry places approximately 2 additional kg (3 to 6 pounds) on your knees. If you are trying to lose weight before your surgery, do not exceed $\frac{1}{2}$ kg per week. Avoid fad diets that could deprive you of nutrients and slow down your recovery.

$\frac{1}{2}$ EXCESS KG (1 LB) = AROUND 2 ADDITIONAL KGS (3 TO 6 LBS) on your knees



If you are underweight, it may be harder for you to heal after surgery. Therefore, it is important for you to eat well in the weeks leading up to the surgery.

If you are worried about being over- or underweight before the surgery, talk to a professional dietitian. For information on nutrition or certain nutrients, visit the Dietitians of Canada website at www.dietitians.ca or if you live in Ontario, you can call Eat Right Ontario at 1-877-510-5102.

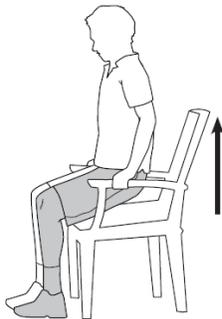
2.6 Pre-operative exercises

Doing exercises before your surgery will make for a faster and easier recovery. Also, getting to know a new exercise program adapted to your knee is easier before the surgery than after, given the incision and pain related to the surgery. Choose activities that do not stress your joints, such as:

- exercises in a pool, like swimming or walking in water;
- cycling;
- pole walking;
- light stretching and strengthening exercises;
- exercises recommended by the physiotherapist during your Pre-Operative Education Session;
- balance exercises (useful for preventing falls).

These activities will allow you to strengthen your muscles, improve your endurance and help you keep your joint moving. They will also help you build up your confidence and prepare you for the exercises you will have to do after the surgery. Remember, after surgery you will have to do daily exercises for several months as part of your rehabilitation.

Be sure to strengthen your arm muscles, as you will need to rely on your arms after surgery to use your walking aids, get into bed, sit down and get up. If possible, start the strengthening exercises at least 3 to 6 weeks before your surgery.



Example: While you are sitting, lift yourself up by pushing down on the armrests. Perform up to 10 repetitions twice a day. Make sure to maintain good back posture throughout the exercise, as if a small string were pulling you upward.

If this exercise is painful, you are just starting to do exercises or you have health problems, consult your physician before starting a new exercise program. If you don't know how to get started, talk to a physiotherapist.

2.7 Preparing your home

It is important to set up your home **BEFORE** your knee arthroplasty so that you can move around more easily with a walker or crutches and reduce your risk of falling. Use this checklist as a guide:

- Clear hallways and rooms. Remove objects that you could trip over like carpets and footstools.
- Lay down non-slip surfaces on stairs and outside entrances.
- Install handrails in stairways or ensure that existing handrails are properly secured.
- Make sure you have a firm chair with armrests.
- Make sure lighting is adequate in hallways and other rooms that you use.
- Arrange for help if needed for household tasks (e.g., vacuuming, laundry).
- Place frequently used household items (e.g., pots) at counter height. Consider moving items that are usually in the bottom of your refrigerator or freezer to a higher shelf. Items should be between knee and shoulder level.
- Purchase healthy food. There are also food and meal delivery services available in the community.
- Keep an icepack in the freezer that you can use after the surgery if your joint is swollen. You can also use a bag of frozen peas or corn.
- Arrange for additional help at home (e.g., relative or friend) to help you with your return home.
- For the bathroom:
 - Place a non-slip bathtub mat in the bathtub or shower stall and one beside it.
 - It is very useful to install grab bars in the bathtub, shower stall and beside the toilet. Some grab bars are removable.

2.8 List of accessories to obtain before surgery

Make sure you obtain the walking aids listed below prior to your surgery so that your physiotherapist can adjust them to your height during your hospitalization.

- Two-wheel walker (5" unidirectional) – **required**
 - 2 to 3 weeks for a partial knee arthroplasty
 - 4 to 6 weeks for a total replacement
- Single straight cane (strongly **recommended** if you have stairs at home)
- Long-handled shoe horn and sock puller (*optional*, only if you were already having difficulty putting on your shoes before the surgery)
- Shower and/or bath chair (*optional*, but may facilitate standing in the shower or avoiding sitting directly in the bathtub)

Orthopedic supply stores and pharmacies sell or rent these items. Some suppliers offer monthly rental, therefore, pick up this equipment a few days before your surgery, if possible. Check to see if your insurance plan covers these expenses. If a medical prescription is necessary, it would be best to discuss this with your surgeon so that you can get a refund. You can also ask your friends and relatives if they have any equipment you could borrow.

2.9 Other things to do before your surgery

- Hôpital Montfort's admitting department will call you between **2 p.m. and 5 p.m.** on the working day before your surgery, to confirm the time and place you need to go on the morning of your surgery.
- Prepare the items you will bring with you to the hospital the day of your surgery (see the list in Section 3.1 of this information guide).
- Complete your skin preparation for surgery as explained by the nurse in the Pre-Admission Clinic (see Section 2.3 of this information guide)
- Put your name on all items that you are bringing to the hospital (e.g., walker, crutches).
- Know when you will be discharged from the hospital so that you can arrange for your transportation home.
- Make arrangements for someone to be close by for the 72 hours following your discharge from hospital.
- Make sure you have a thermometer to take your temperature as needed at home after the surgery.

3. The surgery

3.1 Checklist of things to bring to the hospital

Pack your bag for the hospital. Bring:

- this information guide (important)**
- toiletry items (toothbrush, hair brush etc.)
- loose fitting clothes to wear home
- bring your walker labelled with your name
- comfortable, closed toe and heel shoes/slippers with non-slip soles. Your shoes should be roomy since you will have some swelling in your feet.
- if you wear elastic support stockings, bring them with you
- eye glasses and reading materials
- hearing aids
- your medication, following the instructions given to you during your appointment at the Pre-Admission Clinic
- if needed, credit card information for items such as hospital TV rental

Hôpital Montfort is not responsible for the breakage, loss or theft of personal effects. It is important that you not keep valuable items and large sums of money with you during your stay.

3.2 At home the day before surgery

- Do not eat anything after midnight. You can only sip water or apple juice, up to 3 hours before the surgery, **up to a maximum of 250 mL (one cup)**.
- Do not chew gum or eat hard candy. Gum and candy can cause the accumulation of 1.5L (6 cups) of liquid in the stomach.
- Do not wear jewellery, contact lenses, nail polish, makeup, perfume, hair spray or deodorant the day of your surgery.
- Take out any body piercings, particularly earrings. These objects can cause burns if electrical equipment is used in the operating room. If it is located close to the surgical site, the piercing can cause an infection.
- **Do not shave** your legs, because if you cut yourself or irritate your skin, your surgery could be cancelled.

Medication

- If you are diabetic, follow the instructions the nurse gave to you during your appointment at the Pre-Admission Clinic. It is usually recommended not to take oral hypoglycemics or insulin before surgery, **unless** indicated otherwise by your physician.
- Take your usual medication with a sip of water before going to the hospital, unless the nurse, surgeon or anesthesiologist has indicated otherwise.

- If you are asthmatic and you use an inhaler (pump), use it according to your prescription and bring it with you to the hospital.

3.3 The day of the surgery

When you get to the hospital, please proceed to the Operating Room reception, **room 2A105**, at the scheduled time. Be sure to bring your health card and insurance information.

3.4 At the Pre-op Unit on the day of surgery

- Be aware that the Pre-op Unit is a large room where both male and female patients are admitted before their surgery. Curtains are drawn between the beds for patient privacy.
- Before the surgery, you will change into a hospital gown, and the nurse will start an intravenous line.
- If the surgeon recommended a catheter, the nurse will insert the catheter before you are taken to the operating room.
- A porter will bring you from the Pre-op Unit to the operating room.

3.5 During the surgery

- Before entering the operating room, you will see the surgeon, anesthesiologist and operating room nurse.
- The anesthesiologist will evaluate your health condition and recommend the safest anesthetic for you. A regional anesthetic, such as spinal, or a combination of techniques, is often used. The spinal anesthetic is like the freezing you get at the dentist, except it is administered in the back and numbs you from your chest down to your lower limbs so that you won't feel any pain during the procedure.
- If you receive this type of anesthetic, you won't be able to move your legs for up to 4 hours after the surgery.
- The anesthesiologist will monitor your comfort throughout the surgery and will give you medication through your IV that will make you feel relaxed and sleepy.
- Some patients receive a general anesthetic, which involves administering medication that will put you to sleep during the surgery.

3.6 In the recovery room after the surgery

- After the surgery, you will be taken to the recovery room or post-anesthesia care unit. You will stay there for about 2 hours.
- The nurse will frequently check your blood pressure, pulse, pain level and incision site.
- You may be wearing an oxygen mask for a short time or nasal oxygen may be recommended overnight.
- As we check your condition, do not hesitate to describe what you are feeling, for example, nausea, pain, discomfort, thirst, dry mouth, itchiness, inability to urinate. The nurse can take steps to relieve your symptoms.

- You will feel drowsy after the surgery, but as you start to wake up you will be asked to breathe deeply and do exercises with your feet and legs. These exercises will help prevent complications related to blood clots.
- If you suffer from sleep apnea, you might be transferred to a special unit where you will be more closely monitored the first night following your surgery. You can discuss this in greater detail with your healthcare team if necessary.

3.7 In the patient care unit after the surgery

- From the recovery room, you will be taken to the patient care unit where you will stay until you are discharged.
- On your arrival, you will be on an IV to keep you hydrated and to administer medications like intravenous antibiotics. You will also have a large dressing on the area of the knee that was operated.
- Your nurse will regularly check your pain level and administer medication as needed. Where possible, the physiotherapist and occupational therapist will coordinate their interventions with your analgesic schedule.
- A member of your healthcare team will help you get up for the first time on the day of the surgery, as recommended by your surgeon, in order to encourage circulation.
- You will be informed of the weight you can place on your new joint. This weight varies depending on the person. Most surgeons prefer weight bearing according to tolerance, where pain is your guide, in order to accelerate healing, as well as to normalize your gait pattern right away. However, you may have restrictions (e.g., partial, very light or no weight) for the operated leg, which will be explained to you by your healthcare team.

4. After surgery

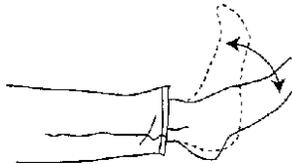
4.1 General instructions after your surgery

- Avoid activities requiring concentration. You will need several hours before you regain your full concentration.
- Eat a light first meal after the surgery.

4.2 Ankle and deep breathing exercises

Ankle exercises

Point your toes towards your head, then towards the foot of the bed. Make circles with your feet at least 5 times. Repeat these exercises 4 to 5 times a day until you start walking again.



Deep breathing exercises

Breathe deeply through your nose a few times and cough every hour to clear your lungs.

4.3 Pain control

It is very important to control post-operative pain in order to maximize your healing. The healthcare team will use several methods to relieve your pain including anti-inflammatories and local analgesic injections around the knee (given in the operating room); this will help to reduce the sensitivity of the area that was operated.

Once you are back in the patient care unit, your nurse will show you how to use the pain scale to describe the intensity of your pain. The number “0” is no pain while “10” is the worst pain possible.

Pain assessment



- The goal is to keep your pain at 4 or below at all times.
- As a general rule, analgesics are administered in the form of oral tablets or subcutaneously by injection.
- If you had a general anesthetic, you may have a patient-controlled analgesia (PCA) pump. This will allow you to push a button to administer a precise dose of analgesic through your IV.
- Different medications will be administered to control your pain. The combination of these medications makes it possible to reduce the side effects that are caused when each medication is taken alone, and provides more effective pain control. It is important to talk to your healthcare team to find out how and when to take these medications to maximize relief of your pain and symptoms.
- Analgesics can have side effects: nausea, vomiting, drowsiness, itchiness or constipation. If you feel any of these symptoms, talk to your nurse as soon as possible.

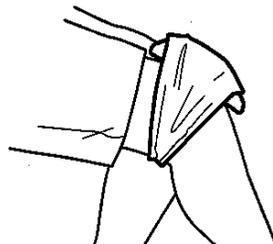
4.4 Pain control at home

Most people have less and less pain over the next 6 to 12 weeks. If pain is preventing you from caring for yourself, sleeping and/or exercising, talk to your physiotherapist or doctor. If your pain becomes increasingly worse or if you have pain in a new part of your body, seek medical attention immediately.

Here are some ways to manage your pain:

- Take pain medicine as directed. It is normal to have some increased pain or symptoms during physical activity or physiotherapy sessions. It may be helpful to take a dose of pain medicine 1 or 2 hours before engaging in these activities in the first weeks after surgery. It is better to take medicine BEFORE the pain is severe.
- Ice can reduce pain and inflammation. It is particularly useful for people who have had knee replacement surgery. Place an ice pack wrapped in a towel on your joint as directed by your physiotherapist. (maximum 20 minutes/hour)
- Pace yourself. Do not push yourself. Regular rest is an important part of your healing process.
- Relax. Use relaxation techniques such as breathing exercises or progressive muscle relaxation (progressive muscle relaxation is when you tighten and relax each part of your body, starting with the toes and working up to your neck).
- Distract yourself. Listen to music, visit with friends, write letters, watch TV.
- Think positively. You will become more and more comfortable as you recover from your surgery.

Ice pack on knee joint



4.5 Constipation and urinary elimination

Changes in your diet, reduced activity and the analgesics used to control your pain can reduce intestinal function and cause constipation. Here is how you can relieve this in the hospital and at home:

- Drink a minimum of 2 L (8.5 cups) of liquid a day. Water is the best choice for maintaining hydration.
- Eat foods high in fibre, such as prunes, bran, beans, lentils, fruits and vegetables.
- Move as much as possible and do your exercises.

The physician may prescribe laxatives and emollients as needed. You may have to continue to take these at home. If you suffer from constipation at home, talk to your family physician or pharmacist. Constipation can sometimes be serious so do not ignore your symptoms (nausea, abdominal pain, loss of appetite and, in rare cases, vomiting). If untreated, it could cause intestinal blockage.

The inability to urinate is a temporary problem and common after all types of surgery. If this is the case for you, tell your nurse right away. It may be necessary to temporarily insert a catheter (a tube) to empty your bladder, evacuate the urine and prevent complications.

4.6 Anticoagulants

After a knee arthroplasty, blood clots can form in rare cases. Here is how to reduce the risk of blood clots after surgery:

- Take the anticoagulants as prescribed by your surgeon at the same time each day (Xarelto, an injection of Lovenox, Fragmin or other);
- Get up and move regularly every hour (except at night);
- Maximize the use of intermittent pneumatic compression commonly referred to as a venous pump during your hospital stay. This air pump inflates and deflates an air-tight bag around your leg and prevents blood clot formation.

The format of anticoagulants varies. They come in tablet form or as an injectable solution. At the hospital, you may receive anticoagulant injections that you will continue at home. Or you may receive an injection at the hospital, but an oral anticoagulant will be prescribed once you are home. Your surgeon will discuss this with you in order to determine the best option based on your needs.

4.7 Wound Care

- The edges of the wound will be closed using absorbable stitches, staples or Steri-Strips. The staples are metallic and keep the edges of the wound in place while your skin heals. They will be removed approximately 14 days after the surgery in the physician's office. If you have Steri-Strips, do not touch them. They will detach and fall off on their own.
- It is important to keep the wound and dressings dry. Do not touch the incision and make sure the surrounding skin is very clean.
- You will leave the hospital with a dressing that you can take off 7 to 10 days after your discharge. If the dressing gets wet or dirty, you can replace it or reinforce it using dry

materials from the pharmacy (Elasoplast, etc.). Note that it is normal for the wound to be red and for clear liquid to drain from it, but make sure there are no signs of infection (for more information, see Section 5 – Post-operative complications of this guide).

- Once the wound has healed well, massaging the scar will be a very important aspect of cicatrization. Usually, scar tissue forms around the incision, which can cause adhesion of the skin and muscle. This phenomenon can hinder maximum knee movement. Talk to your physiotherapist about safe techniques for massaging the scar. Make sure to practise good hand hygiene before massaging the scar. Vitamin E cream, without perfume or skin irritants, can improve massage efficiency and healing of the wound.

4.8 Sexuality after knee arthroplasty

You can resume sexual relations as soon as you feel comfortable, usually 4 to 6 weeks after the surgery.

4.9 Dental work and medical procedures

It is important to tell your healthcare professional that you have had an arthroplasty before having dental work or undergoing any other medical procedures (particularly involving the bladder, prostate, lungs or colon). You may be put on antibiotics to prevent infection from moving through your bloodstream to your new joint. For 2 years following your surgery, preventive infection treatment is recommended for all dental work. After 2 years, preventive treatment is recommended for all invasive and bloody interventions (extractions, implants). Talk to your dentist or physician if you need more information.

4.10 Transportation

To get around after your surgery, call on friends or relatives, take a taxi or use adapted transportation (ex. Para Transpo); a public transportation service for people who cannot take a regular bus. Adapted transportation will pick you up and drop you off at appointments as needed. Make sure to find out if this service is offered in your municipality.

4.11 Driving

Your ability to drive will be reduced after your knee arthroplasty. First, talk to your surgeon or physiotherapist. When you will be able to start driving again depends on a number of factors. Here are the general restrictions:

- No driving for a **minimum** of 6 weeks following a total knee arthroplasty and a **minimum** of 3 weeks following a unilateral knee arthroplasty depending on the operated knee;
- No driving while you are still taking narcotics (morphine, hydromorphone, etc.);
- No driving until the physiotherapist has conducted a complete assessment of joint range of motion and strength of the operated limb.

For some surgeries, you will receive a copy of the Medical Conditions Report form sent to the Ministry of Transportation of Ontario and signed by your surgeon (if applicable). It will contain clear instructions on the restrictions you must respect.

4.12 Air travel

Talk to your surgeon if you must fly shortly after your surgery.

After surgery, air travel may require special precautions. Be sure to give yourself extra time when flying. Your new joint may set off airport metal detectors. To avoid awkward situations, inform the security agents before passing through detectors. Usually, you are not required to have a letter from your physician or photos of your x-rays.

If you are planning on flying less than 3 months after the arthroplasty, be sure to take several breaks to stretch in order to prevent serious complications. In the plane, do ankle exercises every hour to prevent blood clot formation. If, after your discharge from hospital, you need to fly home, ask the airline if medical documents are required.

5. Complications

5.1 Infection

Less than 1% of patients contract a wound infection after surgery. However, an infection elsewhere in the body can reach the new joint through the bloodstream. Infection can start in your joint during surgery, in the hospital or from bacteria from another part of your body. People who contract an infection in the joint must often take antibiotics. In rare cases, they must have another surgery. Prevention is the key to success in avoiding infections or other problems related to the incision.

Here is how to prevent infection:

- Wash your hands often.
- Get in shape by following a healthy diet.
- Take the antibiotics you receive after the surgery.
- Avoid contact with people with colds or infections.
- Talk to your physician if you suspect or see signs of infection.

Here are the signs of infection to watch for:

Infection of the incision	<ul style="list-style-type: none">○ Redness extending beyond the contour of the wound;○ Unusual coloration or discharge (greenish, yellowish or foul-smelling pus)○ The wound and surrounding area are increasingly painful or swollen;○ Fever above 38°C or 100°F;○ Stitches falling off earlier than expected.
Urinary infection	<ul style="list-style-type: none">○ Pain when you urinate;○ Frequent or urgent need to urinate;○ Foul-smelling urine;○ Fever above 38°C or 100°F.
Sore throat or chest infection	<ul style="list-style-type: none">○ Swollen lymph nodes in the neck, pain when swallowing;○ Frequent coughing, yellowish or greenish sputum, shortness of breath;○ Fever above 38°C or 100°F.

5.2 Swelling

It is likely that the operated leg will be swollen after the surgery and during your recovery (for the first few weeks). It may swell a little more as you become more active. To reduce swelling:

- Elevate the operated leg (ideally 20 to 30 cm above the level of your heart). Lie down on your back and lift your legs by placing pillows under the entire length of your leg;
- Avoid sitting for long periods and do the ankle exercises described above every hour except at night;
- Be active for brief periods. Walk a few steps, rest, then start again;
- Place an icepack or bag of frozen peas or corn wrapped in a towel on your joint. Maximum 20 minutes an hour.

5.3 Blood clots

In rare cases, blood clots can form after surgery, generally in the deep veins of the legs. These blood clots can detach and lead to serious health risks. This phenomenon is more common among people with heart or blood circulation problems, who are inactive or who are overweight or have other health problems like diabetes. The signs and symptoms are:

- Red and painful calf;
- Abnormal swelling of the operated leg.

If this is the case, inform your family physician or surgeon immediately.

If you have the following symptoms, call **911 immediately**:

- Shortness of breath;
- Sudden chest pains.

5.4 Anemia (low blood count)

You may lose a considerable amount of blood depending on the type of surgery you have. Anemia is characterized by a reduced hemoglobin count (molecule that transports oxygen in the blood). The symptoms of anemia are:

- Dizziness or faintness;
- Nausea or headaches;
- Great fatigue or weakness;
- Rapid pulse or shortness of breath.

If you present symptoms of anemia, consult your family physician. You may require iron supplements and/or a blood transfusion.

5.5 Post-operative delirium

Sometimes, elderly patients experience a period of confusion or delirium after surgery. They may act or talk strangely. Delirium usually disappears in a few days, but sometimes it can persist for a

few weeks. Some of the common causes of delirium include the side effects of anesthetics and medication, lack of sleep, pain, infection, alcohol withdrawal, constipation or low oxygen levels. The healthcare team will try to find and correct the cause of the delirium.

5.6 Skin complications

A decubitus ulcer (commonly referred to as a bedsore or pressure sore) can occur among patients who are in bed for long periods. It is possible to prevent this complication by using good skin care techniques, among others. A healthy and balanced diet and adequate hydration also help to maintain healthy skin and prevent pressure wounds.

5.7 Joint loosening

Over many years, the bond between the joint replacement and your bone may loosen. This can cause pain and make it difficult for you to move your artificial joint. To reduce the risk of this complication, avoid high-impact physical activities. If you notice increased pain in your artificial joint, talk to your doctor as soon as possible.

6. Exercises and daily activities

6.1 Physiotherapy

Physical activity plays a very important role in your recovery. Not only does it improve your joint function, but it also helps to clear your lungs, reduce the risk of blood clots in your legs, relieve pain and promote good intestinal function.

The physiotherapist will assist you during your hospital stay. He or she will show you how to:

- use a walker or crutches;
- do your daily exercises;
- go up and down stairs safely.

The hospital's physiotherapist will advise you on how to obtain physiotherapy services once you are home. Depending on your needs, where you live and the services available in your area, your appointment may be at a physiotherapy clinic (private or public) or hospital outpatient department or you may receive care at home. This follow-up generally occurs between the 5th and 10th day after the surgery to improve mobilisation and adapt the exercise program. Your physiotherapist will adapt your exercise program according to how your condition has progressed for a period of 4 to 8 weeks on average.

Your physiotherapist will give you exercises to stretch and strengthen your legs and improve your walking and balance. As you recover, the exercises will get harder. With these exercises, you will learn how to use your new joint and become more autonomous. It is important to do them for at least a year after your surgery.

Talk to your physiotherapist if you have questions about your exercises or concerns about your progress.

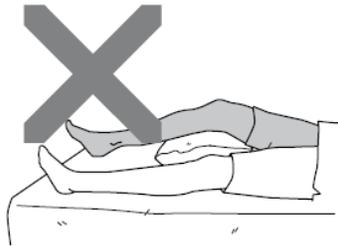
Before your discharge, be sure to set up an appointment at a physiotherapy clinic.

6.2 Position of the leg in bed

After the surgery, you must follow these precautions **for 3 months**, unless otherwise indicated by your surgeon. By limiting your activities, you will help your joint heal properly and reduce stiffness.

In the following illustrations, the shaded leg indicates the operated leg.

Do not place a pillow under the operated knee:



You can place a pillow lengthwise beneath your legs:



You can also sleep on your side with pillows between your legs to maintain the alignment of your leg.



6.3 Walking

You can expect to use walking aids, such as a walker, crutches or cane, for 2-3 months after surgery. By 4 to 6 weeks after your surgery, you should be walking with more confidence, have more strength and be able to walk longer distances. Regular physiotherapy after your surgery will

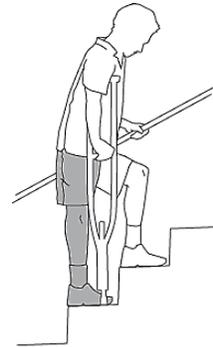
help you get the most out of your new joint. Physical activity will help you have a faster recovery and will get your blood moving. This will also reduce your risk of developing a blood clot.

6.4 Stairs

It is a good idea to practice the stairs with the hospital physiotherapist so that you are able to manage stairs safely and independently.

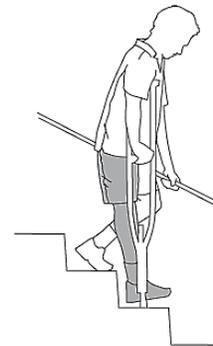
Going up the stairs:

- Use a handrail and crutches or cane
- Step UP with your good (non-operated) leg first
- Follow with your operated leg and crutch or cane, one stair at a time.



Going down the stairs

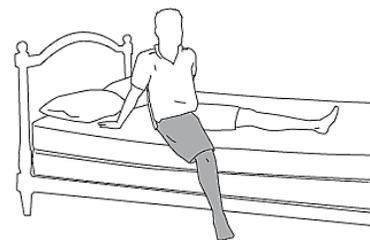
- Use the handrail and your crutches or cane
- Place your crutch or cane on the step below
- Step DOWN with your operated leg first
- Follow with your good (non-operated) leg, one stair at a time.



6.5 Getting in and out of bed

Getting into bed

- Sit down on the side of the bed. It may be easier to start with your stronger side.
- Slide yourself onto the bed using your arms. A plastic bag under your buttocks can make this easier.
- A half-side rail for the bed could help you get in and out of bed more easily but it isn't mandatory. It has a handle and 2 long metal bars and is placed between the mattress and the box spring. You can get one from a medical supply store.
- Lift your operated leg onto the bed, or use a "leg lift" (this can simply be the belt from a robe or a crutch that you turn around and hook your foot into, to lift your leg with your arms).



Getting out of bed

- Slide your body to the edge of the bed
- Use your arms to push yourself to a sitting position.
- Slide your operated leg off the bed, followed by the non-operated leg.
- Bring your body to a sitting position at the bedside

6.6 Sitting

- Use a firm chair with armrests.
- If you had difficulty sitting before the surgery, stand beside the chair to check the height of the seat before you sit down.
- Back up until you feel the edge of the chair behind your knees.
- Move the operated leg forward and hold the armrests with your hands.
- Slowly lower your body until you are sitting.



6.7 Getting dressed

- Sit on a chair or bed
- Dress your operated leg first and undress it last
- Use adaptive aids like a long-handled reacher, sock aid and shoehorn to reach the foot of your operated leg and put on socks, pants, shoes, etc. if you had difficulty getting dressed prior to surgery.



6.8 Bathroom safety

Falls can happen anywhere but are most likely in the bathroom. Here are ways to reduce the risk:

- Do not rush. Plan to use the toilet often. Have a bedside commode if needed.
- When bathing, use a bench or chair if needed and use non-slip bath mat and grab-bars.
- Make sure the route from your bedroom to the bathroom is well-lit
- Wear sensible, non-slip shoes or slippers
- **If you feel dizzy or unsteady, talk to your family doctor.**

Using the toilet:

Make sure that the toilet seat has secure armrests or that you can use the counter to push yourself up. You can also install grab bars to help you stand or sit. Do NOT use towels racks or toilet paper holders to help you stand or sit down.

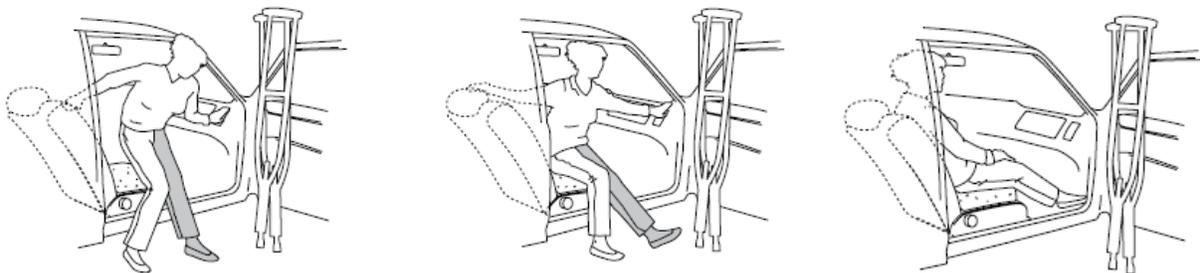
Bathtub:

- Some surgeons will want you to do sponge-baths until your staples are removed in order to avoid getting the new incision wet
- Use a tub transfer bench with a hand-held shower (in a bathtub) or shower chair (in a shower stall) for the first few weeks after surgery. Do NOT try to sit on the bottom of the tub. If you are tall, you may need bench leg extensions.
- Sit down as you would in a chair. Slide back as far as you can on the seat. Then lift your legs over the edge of the tub.
- Use long-handled aids to clean your feet and other hard-to-reach places.

6.9 Car transfer

Talk to your physiotherapist if you have questions about car travel. Please practice these instructions before you come to the hospital:

- Park away from the sidewalk or curb so you are not stepping down from the curb to the car. If you have a high truck or sport-utility vehicle, you may need to park near the curb so that you do not have to climb up to the seat.
- Move the seat as far back as possible
- Back up to the seat until you feel the back of the seat on your legs
- Extend your operated leg
- Hold onto the back of the seat and the car to stabilize yourself
- Lower yourself to the seat
- Slide back and lift your legs into the car
- A piece of plastic or a large garbage bag over the seat may help you to slide in more easily
- You can also try a device called a “Handybar” that can assist you to get in and out of a regular car. This can be purchased at medical supply stores.



6.10 Returning to work

Allow yourself time to recover from surgery and focus on your rehabilitation before returning to work. Some people return to some form of work quickly after surgery but others need a longer time to heal and recover. This depends on factors such as health status and the type of work you do. Talk to a health care professional about what is right for you.

Review your workstation before surgery so that you can make the necessary adjustments before you return to work.

Work environment adaptations

- Chair: Choose a standard chair for sitting. Avoid chairs with wheels; they can roll away from you when you are getting up.
- Desk: Position your phone, paperwork and computer close to you.
- Keyboard Tray: If your desk is too low, use a height-adjustable keyboard tray so that you can sit comfortably while typing.
- Schedule: Plan lots of stretch breaks. Get up and move around frequently. Avoid sitting in the same position for more than 45 minutes at a time.
- Bathroom: Check the location of grab bars.

7. Follow-up with your surgeon

You will have a follow-up appointment with your surgeon about 2 weeks after your surgery, following your return home, to check the wound, remove stitches/staples and renew prescriptions, if necessary.

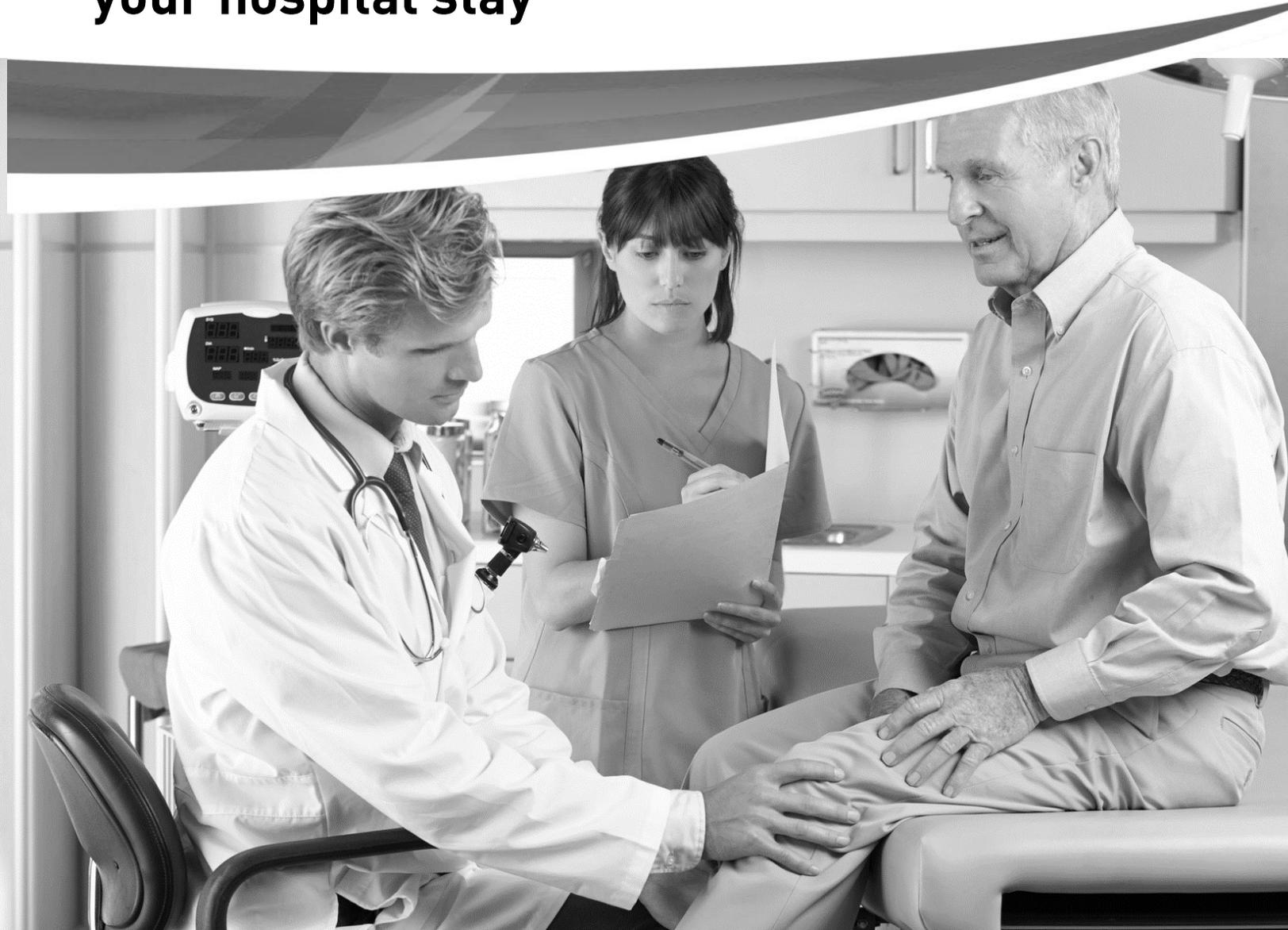
You should also make an appointment with your family physician, once you have recovered, for a general health check-up. Your operated report can be sent to your family physician as needed.

8. When to see an emergency doctor?

Call 911 if you have:

- sudden intense pain in the operated leg
- inability to move the operated leg
- sudden chest pain
- sudden shortness of breath

Total knee replacement: your hospital stay



Pre-admission

Assessment	<ul style="list-style-type: none">• We will check your temperature, blood pressure, pulse and oxygen level, weight and height.• You will be asked about your general health and medical history, including alcohol intake and smoking status.• You will be seen and be assessed by other members of the health care team including a physiotherapist (PT).• Your doctor may also want you to be seen by an anaesthetist, a social worker and/or a dietitian.
Tests	<ul style="list-style-type: none">• To ensure you are ready for surgery, we will do blood tests, nasal swabs and may have to repeat a knee x-ray.• An x-ray of your chest may be done.• An electrocardiogram may be ordered today (ECG).
Medications	<ul style="list-style-type: none">• Bring your drugs with you to the hospital in their original package, if possible. Also bring an up-to-date list of medications from your pharmacy.• Any drugs you are taking will be reviewed; you may be advised to stop taking some.• Instructions will be given for drugs taken on day of surgery.
Nutrition	<ul style="list-style-type: none">• The nurse will inform you on when to stop eating or drinking on the night before your operation.
Activity	<ul style="list-style-type: none">• You have attended the Prehab education class prior to this session where we have taught you the exercises that you will be expected to do prior to your surgery, during your hospital stay and post-discharge. A team member will verify that you have acquired the recommended equipment that you need to get prior to your surgery. A list was given in Prehab.• A member of the team will review the completed questionnaire that you have received in the Prehab education class and assist you with any questions you may have for a safe discharge from the Hospital.
Education	<ul style="list-style-type: none">• A team member will be reviewing the Knee Replacement booklet and patient pathway with you.• Feel free to ask any questions you may have.
Discharge planning	<ul style="list-style-type: none">• The nurse will ask you and your family about the plans for when you are discharged from the hospital. If you are unsure and need help planning your discharge, we can arrange for you to meet with a social worker.

Day 0 (day of your admission)

Assessment	<ul style="list-style-type: none">• We will check your temperature, blood pressure, pulse and oxygen level before the surgery and frequently throughout the day.• We will also be assessing your pain levels. We use a scale and will be asking you to rate your pain from 0 (no pain) to 10 (worst pain).• We will be checking the color, sensation and movement in your operated leg every 4 hours.• We will be looking at your dressing frequently to make sure it is not draining too much through the bandages.• If you have a small drain in your leg, we will be emptying and measuring the drainage.• We will be asking you and recording how much you drink and how much you urinate.
Tests	<ul style="list-style-type: none">• The doctor may order some blood work before and after the surgery.
Medications	<ul style="list-style-type: none">• You will have an intravenous and be given fluids as the doctor orders.• The nurse will give you your medications as ordered by the doctor.• You will receive an antibiotic to prevent infection.
Nutrition	<ul style="list-style-type: none">• You will be allowed to drink clear fluids (fluids you can see through, like water) after your surgery.• You may be able to drink or eat regular food as tolerated.
Activity	<ul style="list-style-type: none">• The nurse will help you move, position in bed or get up to use the commode as needed.• The team will be reminding you the precautions to take to remain comfortable. Do not try to get out of bed by yourself – always have a member of our team assist you.
Treatment	<ul style="list-style-type: none">• We will ask you to take deep breaths and cough. This exercise helps clear your lungs and prevent pneumonia.• You will be encouraged to use the toilet, commode or urinal to empty your bladder as soon as you feel the need. Have a nurse assist you.• We will be monitoring the urine volume in your bladder using a bladder scan.• We will ask you to pump your ankles and feet 2 to 3 times per day while you are awake. This helps prevent blood clots from developing and keeps your muscles active.• While in bed, you will be wearing a portable intermittent pneumatic compression device (IPCD) on your feet to help with blood circulation and prevent blood clots from developing in your legs (deep venous thrombosis) or lungs (pulmonary embolism).
Education	<ul style="list-style-type: none">• The nurse will make sure that you know how to do deep breathing and coughing exercises and the ankle pumping exercises.• The nurse will talk to you about managing your pain.• Your healthcare team will be referring to the knee replacement booklet you have received before your surgery throughout your hospital stay. Feel free to ask any questions you may have.
Discharge planning	<ul style="list-style-type: none">• The nurse will review information with you and your family about your home situation and your plans for discharge. If you need help planning your discharge, we can arrange for you to meet with a social worker.

Day 1 (day after your admission)

Assessment	<ul style="list-style-type: none">• We will check your temperature, blood pressure, pulse and oxygen level every four hours and then every shift.• We will also be assessing your pain levels frequently to make sure you are able to do your exercises.• We will be checking the color, sensation and movement in your operated leg every shift.• We will be looking at your dressing every shift to make sure it is not draining too much.• We will be asking you and recording how much you drink and how much you urinate.• We will be assessing your abdominal sounds and bowel routine every shift to prevent constipation.
Tests	<ul style="list-style-type: none">• The doctor will order some blood work to verify your hemoglobin levels (molecule that carries oxygen throughout your body).
Medications	<ul style="list-style-type: none">• If you are drinking well and your hemoglobin is normal, we will be removing the intravenous today.• The nurse will give you your medications as ordered by the doctor.
Nutrition	<ul style="list-style-type: none">• You may eat regular food today.
Activity	<ul style="list-style-type: none">• The team will help you to transfer from lying to sitting and from sitting to standing.• The physiotherapist will teach you how to walk using a walker or some gait aid.• A member of our team will help you to bathe, if needed• The team will encourage you to sit up for meals throughout the day, as tolerated.• The team will encourage you to do the exercises that the physiotherapist has taught you in the prehab education session.
Treatment	<ul style="list-style-type: none">• If you have a small drain in your leg (hemovac), we will be removing it today.• You will be encouraged to use the toilet, commode or urinal to empty your bladder. We will be monitoring the volume of urine in your bladder using a bladder scan if needed.• While in bed, you will still be wearing a portable intermittent pneumatic compression device (IPCD) on your feet to help with blood circulation and prevent blood clots from developing.• If your hemoglobin is low, you may need a blood transfusion. Your doctor would talk to you about this option if needed.
Education	<ul style="list-style-type: none">• The nurse will talk to you about managing your pain and your nausea.• We will make sure that you know how to do your bed exercises and your safe transfer techniques.• Your healthcare team will be referring to the knee replacement booklet throughout your hospital stay. Feel free to ask any questions you may have.
Discharge planning	<ul style="list-style-type: none">• The nurse will review your home situation and make sure your plans for discharge are in place.

Day 2

Assessment	<ul style="list-style-type: none">• We will check your temperature, blood pressure, pulse and oxygen level every shift.• We will also be assessing your pain levels and checking the color, sensation and movement in your operated leg every shift.• We will be assessing your abdominal sounds and bowel routine every shift to prevent constipation.
Tests	<ul style="list-style-type: none">• The doctor may order some blood work.• The doctor will order a knee x-ray to be done today.
Medications	<ul style="list-style-type: none">• The nurse will give you your medications as ordered by the doctor.• Please ask the nurse if you have any questions about your medication.
Nutrition	<ul style="list-style-type: none">• You will eat regular food today. We recommend high fiber food to help prevent constipation.
Rest and activity	<ul style="list-style-type: none">• The team will watch you transfer from lying to sitting and from sitting to standing.• The physiotherapist will help you walk using a walker or some gait aid.• The physiotherapist will help you practice the stairs if needed at home.• The team will encourage you to sit up for meals throughout the day, as tolerated.• We will encourage you to do the exercises that the physiotherapist has taught you.
Treatment	<ul style="list-style-type: none">• We will be changing your dressing today.• While in bed, you will still be wearing a portable intermittent pneumatic compression device (IPCD) on your feet.
Education	<ul style="list-style-type: none">• The nurse will focus on talking about nutrition, your exercises, your bowel routine and your blood thinner medication (if needed).• Your healthcare team will be referring to the knee replacement booklet throughout your hospital stay. Feel free to ask any questions you may have.
Discharge planning	<ul style="list-style-type: none">• We will make sure your plans for discharge are in place and that you have all the equipment you need at home.• It is possible that you may get your discharge today.• You will be going home tomorrow. Please make sure your transportation is arranged.• If you need home care services, the hospital will refer you to the champlain community care access centre (CCAC).

Day 3 (until discharge)

Assessment	<ul style="list-style-type: none">• We will check your temperature, blood pressure, pulse and oxygen level before discharge• We will also be assessing your pain level and nausea.• We will make sure you are emptying your bladder and recording your bowel routine to prevent constipation.• We will be checking your dressing and the color, sensation and movement in your operated leg.
Medications	<ul style="list-style-type: none">• The nurse will provide you your medication as needed.
Nutrition	<ul style="list-style-type: none">• You will eat regular food today.
Rest and activity	<ul style="list-style-type: none">• You will walk using a walker or some gait aid with minimal or no assistance as tolerated.• You will be able to use the bathroom/bathe with minimal or no assistance and resume your daily activities.• The physiotherapist will help you practice the stairs if needed at home.• We will encourage you to do the exercises that the physiotherapist has taught you.
Treatment	<ul style="list-style-type: none">• We will be changing your dressing as needed.
Education	<ul style="list-style-type: none">• We will talk to you about pain control at home.• We will also focus on your exercises, your bowel routine, your at-home medication (including blood thinners), and your daily activities.• We will be reviewing post-op complications with you and when to seek medical treatment or consult your doctor.• Your healthcare team will be referring to the knee replacement booklet for your discharge instructions and follow-ups. Feel free to ask any questions you may have.
Discharge planning	<ul style="list-style-type: none">• You will be going home today.• The physiotherapist will assist you to coordinate any outpatient physiotherapy appointment that may be required.• We will make sure that any other appointments you may need are arranged including arrangements to remove the clips you have on your incision.

Partial knee replacement: your hospital stay



Pre-admission

Assessment	<ul style="list-style-type: none">• We will check your temperature, blood pressure, pulse and oxygen level, weight and height.• You will be asked about your general health and medical history, including alcohol intake and smoking status.• You will be seen and be assessed by other members of the health care team including a physiotherapist (PT).• Your doctor may also want you to be seen by an anaesthetist, a social worker and/or a dietitian.
Tests	<ul style="list-style-type: none">• To ensure you are ready for surgery, we will do blood tests, nasal swabs and a may have to repeat a knee x-ray.• An electrocardiogram may be ordered today (ECG).
Medications	<ul style="list-style-type: none">• Bring your medication with you to the hospital in their original package, if possible.• Any medication you are taking will be reviewed; you may be advised to stop taking some.• Instructions will be given for medication taken on day of surgery.
Nutrition	<ul style="list-style-type: none">• The nurse will inform you on when to stop eating or drinking on the night before your operation.
Activity	<ul style="list-style-type: none">• You have attended the Prehab education class prior to this session where we have taught you the exercises that you will be expected to do prior to your surgery, during your hospital stay and post-discharge. A team member will verify that you have acquired the recommended equipment that you need to get prior to your surgery. A list was given in Prehab.• A member of the team will review your completed questionnaire that you have received in the Prehab education class and assist you with any questions you may have for a safe discharge from the Hospital.
Education	<ul style="list-style-type: none">• A team member will be reviewing the Knee Replacement booklet and patient pathway with you.• Make sure you refer to the Partial Knee Replacement sections of the booklet when appropriate.• Feel free to ask any questions you may have.
Discharge planning	<ul style="list-style-type: none">• The nurse will ask you and your family about the plans for when you are discharged from the hospital. If you are unsure and need help planning your discharge, we can arrange for you to meet with a social worker.

Day 0 (day of your admission)

Assessment	<ul style="list-style-type: none">• We will check your temperature, blood pressure, pulse and oxygen level before the surgery and frequently throughout the day.• We will also be assessing your pain levels. We use a scale and will be asking you to rate your pain from 0 (no pain) to 10 (worst pain).• We will be checking the color, sensation and movement in your operated leg every 4 hours.• We will be looking at your dressing frequently to make sure it is not draining too much through the bandages.• If you have a small drain in your leg, we will be emptying and measuring the drainage.• We will be asking you and recording how much you drink and urinate.
Tests	<ul style="list-style-type: none">• The doctor may order some blood work before and after the surgery.
Medications	<ul style="list-style-type: none">• You will have an intravenous and will be given fluids as the doctor orders.• The nurse will give you your medications as ordered by the doctor.• You will receive an antibiotic to prevent infection.
Nutrition	<ul style="list-style-type: none">• You will be allowed to drink clear fluids after surgery.• You may be able to drink or eat regular food as tolerated.
Activity	<ul style="list-style-type: none">• The nurse will help you move, position in bed or get up to use the commode.• The team will keep reminding you about the positions you need to avoid. Do not try to get out of bed by yourself – always have a member of our team assist you.
Treatment	<ul style="list-style-type: none">• We will ask you to take deep breaths and cough. This exercise helps clear your lungs and prevent pneumonia.• You will be encouraged to use the toilet, commode or urinal to empty your bladder as soon as you feel the need. Make sure a nurse assists you.• We will monitor the volume of urine in your bladder using a bladder scan.• We will ask you to pump your ankles and feet 2 to 3 times per day while you are awake. This helps prevent blood clots from developing and keeps your muscles active.• While in bed, you will be wearing a portable intermittent pneumatic compression device (IPCD) on your feet to help with blood circulation and prevent blood clots from developing in your legs (deep venous thrombosis) or lungs (pulmonary embolism).
Education	<ul style="list-style-type: none">• The nurse will make sure that you know how to do deep breathing and coughing exercises and the ankle pumping exercises.• The nurse will talk to you about managing your pain.• The nurse will make sure that you and your family understand the positions you must avoid.• Your healthcare team will be referring to the knee replacement booklet you have received before your surgery throughout your hospital stay. Feel free to ask any questions you may have.
Discharge planning	<ul style="list-style-type: none">• The nurse will review information with you and your family about your home situation and your plans for discharge. If you need help planning your discharge, we can arrange for you to meet with a social worker.

Day 1 (until discharge)

Assessment	<ul style="list-style-type: none">• We will check your temperature, blood pressure, pulse and oxygen level every four hours and then every shift.• We will also be assessing your pain levels frequently to make sure you are able to do your exercises.• We will be checking the color, sensation and movement in your operated leg every shift.• We will look at your dressing every shift to ensure it is not draining too much.• We will be asking you and recording how much you drink and urinate.• We will be assessing your abdominal sounds and bowel routine every shift to prevent constipation.
Tests	<ul style="list-style-type: none">• The doctor will order some blood work to verify your hemoglobin levels (molecule that carries oxygen throughout your body).• The doctor will order a knee x-ray to be done today.
Medications	<ul style="list-style-type: none">• If you are drinking well and your hemoglobin is normal, we will be removing the intravenous today.• The nurse will give you your medications as ordered by the doctor.
Nutrition	<ul style="list-style-type: none">• You may eat regular food today.
Activity	<ul style="list-style-type: none">• The physiotherapist will help you walk using a walker or some gait aid.• The physiotherapist will help you practice the stairs if needed at home.• The team will encourage you to sit up for meals throughout the day, as tolerated.• We will encourage you to do exercises the physiotherapist taught you.
Treatment	<ul style="list-style-type: none">• If you have a small drain in your leg (hemovac), we will be removing it today.• You will be encouraged to use the toilet, commode or urinal to empty your bladder. We will be monitoring the volume of urine in your bladder using a bladder scan if needed.• While in bed, you will still be wearing a portable intermittent pneumatic compression device (IPCD) on your legs to help with blood circulation and prevent blood clots from developing.
Education	<ul style="list-style-type: none">• We will talk to you about pain control at home.• We will also focus on your exercises, your bowel routine, your at-home medication (including blood thinners), and your daily activities.• We will be reviewing post-op complications with you and when to seek medical treatment or consult your doctor.• Your healthcare team will be referring to the knee replacement booklet for your discharge instructions and follow-ups. Feel free to ask any questions you may have.
Discharge planning	<ul style="list-style-type: none">• We will make sure your plans for discharge are in place and that you have all the equipment you need at home.• You will be going home today.• The physiotherapist will assist you to coordinate any outpatient physiotherapy appointment that may be required.• We will make sure that any other appointments you may need are arranged including arrangements to remove the clips you have on your incision.



Hôpital universitaire
Academic Hospital

713 Montreal Rd
Ottawa, Ontario K1K 0T2

Phone: 613-746-4621
hopitalmontfort.com