Knee Replacement Surgery

Please review this guide and bring it to all appointments.

For more information, visit:
http://mysurgery.nshealth.ca

This is a working document and subject to revision. Your feedback is welcome as we work to improve this guide for patients and families.

Please give your comments and questions about this guide to staff at the Orthopedic Assessment Clinic. Thank you!
Pre-surgical patient checklist

What you will need at home:
- Equipment that has been properly fitted.
- Someone to stay with you for the first 5 to 7 days after surgery (24 hours/day).
- Arrange to live on one level of your home for the first 2 to 4 weeks after surgery, or move to another location that is more accessible.
- Someone to drive you to appointments for 6 to 8 weeks after surgery.

Night before surgery:
- Follow the instructions from the Pre-Admission Clinic about eating, drinking, and taking medications.
- Have a shower and/or use wipes the night before surgery, as directed.
- Remove all nail polish on your fingers and toes.
- Remove all jewelry. Do not bring jewelry with you to the hospital.

What to bring to the hospital:
- This guide.
- Your walker and/or crutches so you can practice. Ask a family member or friend to hold onto them until you get to your room after surgery and are awake and aware.
- 2 to 3 sets of loose-fitting clothing (e.g., loose shirts, pants with an elastic waist, etc.).
- Shoes with a rubber sole and an enclosed back (no Crocs™, sandals, or slip-on shoes without a closed heel). Make sure there is enough room to allow for swelling.
- Toiletries (e.g., soap, toothbrush, toothpaste, denture care items, deodorant, etc.). Please remember, NSHA is scent-free, so all toiletries and personal care items must be scent-free.
- Dentures, hearing aids, and glasses, and cases to store them in.
- All prescription medications in their original containers or in blister packs.
- Hip Kit (long-handed equipment).
What you will need when you leave the hospital:

- Followup appointments with your surgeon in the clinic.
  - Stitches or staples will be removed (about 10-14 days after your surgery), if applicable
- Physiotherapy exercises (in this guide) to continue at home.
- Prescription for pain medication.
- Prescription for blood thinning medication and directions on how to use it.
- Instructions on how to change your dressing at home, if needed.
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General information

How does the knee work?
The knee has 3 bones:
› thigh bone (femur)
› lower leg or shin bone (tibia)
› kneecap (patella)
The knee joint works like a hinge, letting the lower leg (shin) bone bend back and forth over the thigh bone. This lets you bend and straighten your knee.

Muscles, ligaments, cartilage, and bones all help support and strengthen the knee joint to let it move freely. Cartilage is a hard, white tissue that acts as a shock absorber for the joint.
What is osteoarthritis?
Most people who need knee replacement surgery have a knee that has been affected by arthritis (inflammation or swelling of the joint). This usually gets worse as a person ages.

Osteoarthritis (OA) is a type of arthritis caused by the breakdown of cartilage on the ends of the bones inside a joint. As mentioned above, cartilage is a hard, white tissue that acts as a shock absorber for the joint. Each time the knee moves, cartilage softens the impact and lets the bones glide smoothly over each other.

As the cartilage wears away, or even wears out, the bones may rub directly against each other. This can cause stiffness and pain.

Osteoarthritic knee joint showing joint damage

Worn cartilage
What is knee replacement surgery?
When your OA symptoms can no longer be managed without surgery, your doctor may recommend a knee replacement (arthroplasty). Knee replacement surgery is when a surgeon removes all or part of the knee joint and puts in a new artificial joint (prosthesis). See page 7 for a description of the prosthesis, what it’s made of, and how it’s attached.

Knee replacements have a high success rate. After surgery, people can usually move the joint more easily, have less pain, and walk more comfortably for many years.

There are several types of knee replacement surgeries. Based on the reason you need the surgery and many other factors, the surgeon will decide which type is best for you. The main types are:

- Arthroplasty (total knee replacement)
- Partial (unicompartmental) knee replacement
- Knee revision
What are the types of knee replacement surgeries?

Arthroplasty (total knee replacement): The diseased joint is replaced with an artificial joint (prosthesis). An incision (cut) is made and muscles and ligaments are moved out of the way. The damaged bones are then reshaped to fit the prosthesis. The bottom of the femur and top of the tibia are then replaced with metal pieces, separated by a plastic liner. The muscles are then repaired, and your skin is closed with stitches or staples. This is the most common surgery for OA.
Total knee replacement

Partial (unicompartmental) knee replacement: If only part of the knee joint is damaged, the surgeon may decide to replace only the inside or outside part of the joint.

Knee revision: Sometimes, parts of an artificial knee need to be replaced. This may be because:

› the joint is loose or worn out
› there is bone loss or an infection in the joint

Knee revision surgery can be more complex, and you may need more rehabilitation after surgery. As well, you may not be able to put as much weight on your new joint while you are recovering.
Knee Precautions
Follow these Knee Precautions to protect your knee and help your muscles heal after your surgery.

1. **Move your knee often.** Do the exercises your physiotherapist taught you. You are encouraged to bend your knee.

2. **DO NOT put a pillow or support** directly under the back of your operated knee. Pillows and supports cause the muscles and ligaments in the back of your knee to shorten, making it hard to straighten your leg. If you use a pillow(s) to elevate (raise up) your leg, *make sure it is placed lengthwise (along the length of your leg) and that your knee is not bent while resting.*

3. **Avoid twisting.** Do not plant your feet on the floor while twisting your upper body. This puts your upper body out of line with your lower body.
What is my new knee made of?
Your new knee joint (prosthesis) is made of metal and plastic or ceramic and plastic. The prosthesis makes the knee joint smooth again, decreasing pain and restoring movement.

How is my new knee attached?
There are different ways that the surgeon may attach your new knee. The surgeon may use a cemented or non-cemented substance, or a combination of both.

• Cemented – The new knee is attached to the existing bone with special cement.
• Non-cemented – A special coating is used that helps the existing bone stick to the new knee. Over time, your body makes new bone tissue that grows into the tiny spaces in the coating, helping the joint to become firmly attached.
• Hybrid – A combination of the cemented and non-cemented substances are used.

NOTE: Your surgeon will decide what is best for you based on your age, disease type, bone quality, and other factors.
Before surgery

How do I get ready for surgery?

Choose a coach
Choose a family member or friend to be your coach. Your coach should:
› come to all appointments with you
› listen for information at your appointments to help you remember instructions
› help you plan your discharge home
› be available when you are discharged home or to another discharge location
› stay with you for 5-7 days after discharge to help you

Your coach will help support and guide you as needed through your recovery.

Pre-habilitation (Pre-hab)
Getting ready for knee replacement surgery involves a strong commitment to self-care and ‘pre-hab’ (doing activities that will help you get ready for surgery).

Pre-hab activities include:
› exercising
› eating healthy foods
› managing your weight
› stopping or cutting back on smoking
› understanding how to manage your pain
› keeping a positive attitude
› getting regular, restful sleep
› keeping a healthy blood pressure
› planning for discharge from the hospital
Exercise
Exercising before surgery will help make your recovery faster and easier. Daily exercise will strengthen your muscles. It will also help you get into a routine that will be part of your daily rehabilitation (rehab) and recovery after surgery.

Leg exercises will help to get your leg muscles ready for surgery. Exercising other muscles, like your upper body, will also help with your rehab. For example, you use your arms, shoulders, and abdominal (stomach) muscles to get in and out of bed, get up from a chair, and use your walking aids (e.g., canes or walkers).

Talk with your doctor before starting a new exercise routine. If you’re not sure how much to exercise, you can follow the “2 hour” rule. If you have an increase in your usual pain lasting more than 2 hours after exercising, you may be doing too much. Try exercising for a shorter time or with less intensity (force). Over time, you can slowly increase the amount of time and intensity that you can tolerate.

AVOID activities that put a lot of pressure on your joints such as:

› jogging or running
› hiking
› climbing stairs
› high-impact aerobics

Activities that put less stress on your knee joints include:

› aquatic (water) exercises (e.g., swimming or water walking/aerobics)
› walking with or without poles
› Tai Chi
› yoga (depending on the type)
› upper body weight lifting
› stationary cycling – make sure the bicycle seat is adjusted properly for your height to put less stress on your knee joints
› exercises recommended by your physiotherapist (see below)

Before your surgery you will be expected to complete a specific exercise program at least once each day.

(See the exercise program on page 73.)
Nutrition

Eating healthy foods speeds up your recovery time and lowers your risk of infection. Use Canada’s Food Guide to help you choose healthy foods and to find information on serving sizes and healthy meal ideas:

 › www.canada.ca/en/health-canada/services/canada-food-guides.html
 › www.dietitians.ca

Your diet should have plenty of vegetables, fruit, whole grains, dairy products, and lean protein sources.

Eating a balanced diet before your surgery will give your body the nutrients, vitamins, minerals, fibre, and antioxidants it needs for recovery.

Below is an example of a balanced plate. You can use this guide to understand portion sizes and meal balance:

*Grains & starches (e.g., brown rice, whole grain pasta/bread, sweet potato, potato, corn)
*Meat & alternatives (e.g. fish, lean meat, chicken, beans, lentils)

The following list explains some common types of nutrients and supplements. Please talk to your dietitian, doctor, or community pharmacist before starting or adjusting any of the following:

Fibre and water – helps avoid constipation (not being able to have a bowel movement/poop) associated with surgery. Sources: whole grain cereals and breads, vegetables and fruit. Try to consume 25-35 grams of fibre and 8 cups (2 Litres) of fluids per day.

Protein – needed to keep your strength before surgery and promote healing after surgery. You may need 20-50% more protein while healing. You can get this by eating 3 servings of meat/alternatives and 3 milk products each day. Sources: meat, nuts, peanut butter, milk and milk products, and eggs.
Iron – carries oxygen to the tissues to help the healing process and is a key component of hemoglobin. Low hemoglobin can cause anemia (low blood count) and make you tired, slowing your recovery time. Sources: liver, red meat, fish, poultry, leafy green vegetables, fortified cereals, pulses, beans, and iron supplements.

Vitamin C – diets high in vitamin C have been found to slow the progression of OA. Vitamin C also helps your body use iron. Combine iron rich foods with vitamin C sources to help absorb iron (e.g., spinach salad with oranges and strawberries). Sources: strawberries, oranges, kiwis, grapefruit, tomatoes, peppers, and vitamin supplements.

Folate and vitamin B<sub>12</sub> – promote healing and the formation of red blood cells. B<sub>12</sub> sources include: meat, fish, poultry, eggs, dairy products, and nutritional yeast. It is suggested that those over 50 years of age supplement with vitamin B<sub>12</sub>.

Vitamin D – helps with absorbing calcium and slows the progression of OA. Sources: milk, fortified milk substitutes, salmon, mackerel, sardines, and vitamin supplements (400-1000 IU each day).

Calcium – helps bones to grow, and stay strong and healthy. Try to consume about 1200 mg each day. Sources: milk, plain yogurt, cheese, canned salmon, sardines, and calcium supplements.

Omega-3 fatty acids – increased intake of omega-3 fatty acids has been linked to a reduction in symptoms of arthritis and inflammation. It also helps with swelling in sore and damaged joints. Sources: fatty fish (e.g., sardines, salmon, trout, herring, mackerel), omega-3 eggs, flaxseed and flax oil, and omega-3 supplements.

If you need help with your diet, talk with your dietitian, family doctor, or community pharmacist. Call 902-835-0253 or email info@nsdassoc.ca to ask about licensed dietitians and nutritionists in Nova Scotia.
Managing your weight
Your weight can affect the outcome of your surgery.

If you are malnourished:
The following is a way to help you recognize if you may be malnourished. If you answer yes to both of the following questions, please consult a dietitian:

1. Have you lost weight in the past 6 months without trying to lose weight?
2. Have you been eating less than usual for more than a week?

Being malnourished can slow your healing and recovery process after surgery. It is important to eat well both before and after your surgery to make sure your body has the nutrients it needs to help you heal.

Being malnourished can cause:

› poor bone health  
› lower energy  
› a weaker immune system  
› a higher chance of infection

If you are overweight:
Each extra pound of weight puts an extra 3 to 6 pounds of force on your knee and hip joints. Losing extra weight can impact your mobility (movement) after surgery and how long your new joint will last. It can also help to decrease your joint pain. If you are overweight, try to aim for steady weight loss (one pound a week) before surgery. If you need support with weight management or health eating, contact a dietitian in your area.

Tips to live a healthy lifestyle with food:

• Eat regular balanced meals – try to go no longer than 4 to 6 hours without a meal or snack.
• Don’t rush your meals. Spend at least 20 minutes eating each meal while sitting and relaxing.
• Don’t skip breakfast.
• Choose water when you are thirsty.
• Eat more vegetables and high-fibre foods.
• Try to avoid late night snacking.
• Try to have a protein source at each meal and snack.
Quitting smoking
You should try to quit smoking before your surgery. **Smoking causes slower healing, a higher chance of complications (e.g., greater risk of infection), and a longer time spent in the hospital.**

For this surgery you will need to have an anesthetic (medicine that puts you to sleep). Your lungs should be as healthy as possible to get ready for the anesthetic, as well as for the breathing exercises you will do during recovery.

If you are having trouble trying to quit smoking, talk with your family doctor or community pharmacist. There may be medications that can help. If you are concerned about withdrawal symptoms, ask your doctor about nicotine patches.

**The following resources may help:**
The Lung Association of Nova Scotia
› www.ns.lung.ca
› 1-888-566-5864 (for support groups in your area)

Tobacco Free Nova Scotia
› https://tobaccofree.novascotia.ca

811 – ask about the Tobacco Free program
› 1-866-366-3667 (English)
› 1-866-527-7383 (French)

NSHA is smoke-free and vape-free, so this is a perfect chance to quit.
Pain management
Taking pain medication can help you stay active, reduce your pain, help you sleep. Controlling pain can result in: better mobility, less fatigue (tiredness), more sleep, and better mood and mental health.

The most common types of medications for managing joint pain include:

› **analgesics** – these work quickly to reduce pain without many side effects.
  Example: Tylenol® (acetaminophen)
› **anti-inflammatory drugs** – these reduce pain and swelling, but have a risk of side effects, such as bleeding or upset stomach. Example: Aspirin®, ibuprofen
› **narcotics** – Examples: Tylenol® with Codeine No. 3, morphine
  This type of medication tends to have more side effects, most commonly drowsiness, constipation, and nausea/feeling sick to your stomach

Your doctor or community pharmacist may prescribe a combination of these medications for you. As with any medication, check with your community pharmacist or doctor about all side effects and whether or not the medication is safe for you.

Make a schedule with your health care team for how much and how often you need to take these medications to allow you to stay active and comfortable. Your community pharmacist can be a great resource to help create your pain management plan.

Tell your doctor about all medications you are currently taking, including over-the-counter medicines, vitamins, and herbal supplements.

You may also need to stop taking some medications before your surgery. This will be reviewed in your Pre-Admission Appointment (see page 26).
Complementary therapies

Some patients use massage, chiropractic, acupuncture, holistic medications, and other therapies to help with their pain.

Ice may help to lower pain and decrease swelling.

• Wrap your joint in a towel.
• Apply ice for up to 15-20 minutes.
• Repeat as needed, every 2 hours (or once your skin has returned to normal temperature).
• Do not fall asleep with ice on.

Heat pack on knee joint

Heat may also help to control pain, reduce muscle stiffness, and relax tense muscles.

• Apply heat for up to 20 minutes, 3 times per day.
• Do not use heat if your joint is swollen or throbbing.
• Do not fall asleep with heat or ice on.

Heat can be helpful before exercise to help warm up your joint. Ice can be helpful after exercise to help calm irritation in your joint.
How do I get my home ready?

It is important to set up your home or other discharge location before your surgery. This will let you move more safely and freely, lowering the risk of falls, and helping you conserve your energy. Make sure important items are within reach. This will be important in the first few weeks after surgery, when your mobility is most limited and you are relying on your walker or other devices to get around. Make sure that household tasks, like housecleaning, laundry, preparing meals, gardening, etc., are completed before your surgery, or have someone complete them for you.

Floors and stairs

• Remove area rugs, electrical cords, doorway obstacles, and other hazards that may get in the way.
• Make sure lightbulbs are changed and that hallways, stairs, and bathrooms are well-lit.
• Buy bags of salt or sand if icy weather is expected. Arrange to have someone shovel and take care of your walkways. Stock wood for your wood stove, if needed.
• Make sure there are handrails on all staircases, both indoors and out.
• Make arrangements to stay on the main level of your home for the first few weeks after surgery in case you find stairs too challenging at first. A commode (portable toilet) can be used if your bathroom is upstairs. Consider moving a bed to the main level if your bedroom is upstairs.
Bathroom

- Add grab bars to the bathtub, and any other recommended equipment (e.g., hand-held shower, bath bench, non-slip bath mat, etc.) that you may need.
- You may need a raised toilet seat.
- Install nightlights along the route from your sleeping area to the bathroom.
- If getting in and out of your tub or shower is difficult, talk to an occupational therapist about other options.
- **DO NOT** use towel racks, curtain rods, or toilet paper holders to help you to stand or sit. They’re not strong enough to support you.

![Shower chair](image1)

![Raised toilet seat](image2)
Bedroom
• Your mattress should be at least knee height. If it isn’t, consider putting a second mattress on top of the bed or bed blocks underneath it to raise it up.
• Set up a bedside table for things you use often to conserve energy. Moving may be harder for the first little while after surgery.

Living space
• Set up a recovery area in your home. This should include a firm chair, at least knee height (with armrests). Having a higher chair will make it easier to go from sitting to standing when you need to get up. You will use this chair for about 12 weeks. Do not use soft, low couches, armchairs, or “recliners”. If your chair is too low, use firm, dense cushions to make it higher.
• Make sure your phone and a list of important phone numbers are in easy reach of the chair.
Meals and food
• It is a good idea to prepare and freeze meals before your surgery so that you will not have to cook, and to stock up on canned foods.
• Check with your local grocery store to see if they have delivery programs. Call 211 or visit http://ns.211.ca to ask about food support programs in your area.
• If none of these options work for you, make sure you have a friend or family member who can help you get groceries, prepare meals, etc.
• Reorganize your cupboards and fridge so that the most commonly-used items are within easy reach so that you don’t have to bend down or use a stool.

Activities and services
• Do errands or activities that require you to leave the house before your surgery date, such as banking.
• It is recommended that any dental or gum work be completed before your surgery. If you need dental work in the first 3 months after surgery, talk to your dentist and surgeon about whether or not they want you to take antibiotics.
• Get a waist carryall (“fanny pack”) or lightweight backpack to carry small things around your house. This will let you keep your hands free to use your walker or cane. You can buy trays for certain types of walkers, to help you carry things around your home. Please see information on page 21 on how to buy equipment.
• Get a pair of slip-on shoes with an enclosed heel (or shoes with elastic laces) that are a half-size bigger than you usually wear. This will leave room for possible swelling after surgery.
• Cancel any services you will not need while you are in hospital, such as newspaper delivery.
Arranging for help

• If you don’t have someone living with you who can help, arrange to have a support person stay with you after your surgery. The length of time will depend on your personal situation, but you should plan for at least 5-7 days.

• Arrange to have someone take you home from the hospital on the morning of your discharge day. Most knee replacement patients stay in the hospital for 1-2 days. **It is possible that you may only stay in the hospital overnight.** Make sure your travel arrangements are flexible.

• Your support person should have a key for your mailbox, a house key, and instructions for caring for your pets and plants.

If you are going to be staying at a temporary location after your surgery, make sure that you have arranged for someone to help you at that location.
Where can I get equipment?
When you go home, you will need a walking aid and any other equipment recommended by your health care team. If you do not already have the equipment you’ll need, make sure that you will be able to buy, rent, or borrow what is recommended (from friends, family, or an equipment loan program in your community). You should have this equipment at home 1 week before surgery. Be sure to measure doorways and the spaces in and around toilets, bathtubs, and shower enclosures to make sure the equipment will fit properly.

Make sure you examine any equipment before your surgery to make sure it is in good working condition. Remember that equipment is not “one size fits all” — you may not be able to adjust it to fit yourself. Make sure that all equipment fits properly before your surgery.

Programs that loan equipment or provide funding usually have an application process to decide if you can receive their help. Approval for funding and/or equipment may depend on your age, income, type of injury and/or condition, and other factors.

If you have private insurance, check your coverage for equipment and find out if you need a prescription.
Renting equipment
Many home health care suppliers, such as drugstores and medical suppliers, offer equipment rentals. Some offer ‘rent to own’ as an option. Check in the Yellow Pages for a list of local suppliers.

Equipment loan programs
Some local groups, such as Lions Clubs, Royal Canadian Legion branches or Kin Canada (Kinsmen, Kinettes, Kin) clubs, have equipment available to loan to local residents. Check for groups in your area that offer this service.

The Canadian Red Cross has an equipment loan program in many areas of Nova Scotia. Equipment is loaned out for a 3-month period at no cost (with a referral from a health care provider). Check with your local Red Cross or visit:
› www.redcross.ca

Income Assistance
If you are on Income Assistance, the length of time that you need equipment may affect where you get it from. If you need it for a short time, borrowing equipment from a loan program may be the best option. If you will need equipment for a longer time, contact your Income Assistance worker to ask about funding.
What equipment will I need after surgery?

**Walking aids:**
› 2-wheeled walker
› cane

**Crutches**
Your health care team may recommend that you use crutches for going up and down stairs.
Toileting equipment:
› raised toilet seat (with or without armrests)

Dressing/bathing aids (knee kit/long-handed equipment):
› long-handed reacher
› long-handed shoe horn
› sock aid
› long-handed sponge
› elastic shoe laces (or use slip-on shoes with an enclosed heel)
Bathtub equipment:
› tub transfer bench
› grab bars or add-on tub rail
› non-slip bath mat
› hand-held shower

Walk-in shower equipment:
› shower chair
› non-slip bath mat
Pre-Admission Clinic

You will be given an appointment for the Pre-Admission Clinic. You will be given the date and time of your appointment by phone or mail. This visit will help prepare you for your surgery. This is usually 2-4 weeks before your surgery. Please note that this appointment may take 3 or 4 hours.

Please complete the Pre-Surgical Patient Checklist at the beginning of this guide and bring it with you to your appointment.

• Bring a family member or friend, preferably your coach, with you to this visit to listen and take notes.

• Make a list of questions and bring it with you. At this visit, you will be able to ask your health care team questions and talk about any concerns you have.

• Bring all of your prescription, over-the-counter medications, and natural health products/supplements in their original containers. You may need to stop taking some medications and supplements before your surgery — this will be reviewed with you during your pre-admission appointment so you know what medications to stop and when to do so.

• You will meet with a nurse. They will ask you questions about your health, including your medical history and any surgeries you have had. The nurse will give you information about your surgery, including when to stop eating and drinking, when to arrive at the hospital, and where to go when you arrive. They will also answer any questions you may have.

• You may meet with an anesthesiologist. This is a doctor who gives anesthetics (medications to put you to sleep or help with pain during surgery) or performs spinal anesthetic. They will talk with you about the pain medicine you will need during and after your surgery.
  › The type of anesthetic you will get depends on the type of surgery you are having and on your overall health. Talk to your surgeon and your anesthesiologist about the type of pain medication you will be given after surgery. See page 29 for information on different types of anesthetics.
At the Pre-Admission Clinic, you may also have the following tests:

› EKG (electrocardiogram) - test that records the electrical activity of your heart
› blood tests
› urine (pee) sample
› X-ray

Depending on the results of these tests, you may need followup tests and your surgery may need to be postponed.

Your surgery may need to be postponed if you have an active infection (such as a cold or flu) or a skin infection over the joint.

Questions you may want to ask:
• What type of anesthetic will I be having?
• What are the possible side effects and complications of this medication?
• What can I do to prevent complications before and after surgery?
• Will I be able to hear and see what’s happening during surgery?
• What should I do if I have pain after surgery?
• If I am given a spinal anesthetic during surgery and don’t feel pain right after surgery, should I still have pain medications regularly?

If you feel sick before your surgery, please call your surgeon or the OAC.
During your hospital stay

What will happen during my hospital stay?
There are different hospitals in Nova Scotia and some processes are specific to each location. Please check the end of this guide for information about the hospital where you are having your surgery:

› Cape Breton Regional Hospital – Appendix A (page 60)
› Aberdeen Hospital – Appendix B (page 63)
› Halifax Infirmary – Appendix C (page 65)
› Dartmouth General Hospital – Appendix D (page 68)
› Valley Regional Hospital – Appendix E (page 70)

Day of surgery

• Do not bring any valuables with you. The hospital is not responsible for lost items.
• Bring your Nova Scotia Health Card.
• Bring all of your medicines in their original containers.
• Go to the Admitting Desk and they will tell you where to go.
During surgery
A nurse will help you get ready for surgery. They will update your health history and review your medications. Your blood pressure, pulse, weight, and temperature will be taken and an intravenous (IV) will be started.

You will be given a spinal (nerve block) or general anesthetic.

• If you are having a spinal anesthetic (nerve block) for your joint replacement surgery, a doctor will place a very small needle between 2 bones in your back (vertebrae) and inject local anesthetic (“numbing”) medication around your spine. You will feel numb in the lower portion of your body (hips and below) and will not feel any pain. You will not be able to move certain areas for up to 4 hours after surgery. As the numbness wears off, you will have more pain and discomfort and will need medication for pain.

• If you are having a general anesthetic, you will be given a combination of drugs to make you unconscious during surgery. You will not feel anything during surgery.

Your anesthesiologist will give you medicine through your IV to make you relaxed and sleepy. If you have any questions about your anesthesia, be sure to ask the anesthesiologist during your Pre-Admission Clinic appointment.
After surgery

After your surgery you will be taken to the recovery room for about 1-4 hours. You may be given oxygen. The nurse will check your vital signs often, including your pulse and blood pressure. **Be sure to tell your nurse if you are in pain.** You may be given pain medication through your IV, as needed. You may also have a ‘butterfly’ needle on your upper arm. This is a piece of plastic attached to the skin with a tube injected subcutaneously (under the skin). It is used so patients don’t need to be poked with a needle every time they need pain medication, and to help give your pain medication more comfortably.

Because you will be moving less for some time after surgery, keeping your lungs clear is very important. You should **start doing deep breathing and coughing exercises as soon as you can after surgery.**

**Deep breathing and coughing helps to:**

› keep your lungs fully expanded
› clear mucus from your lungs and throat
› lower your chance of getting a chest infection (pneumonia)

You should try to do deep breathing and coughing every hour while you are awake.
Deep breathing

1. While in a lying or sitting position, place both hands high on your stomach below your rib cage.
2. Breathe in as deeply as you can. Feel your stomach push out against your hands.
3. Hold briefly.
4. Breathe out slowly through your open mouth.
5. Repeat 3 to 4 times.
6. Give a strong cough – clearing your throat is not enough.
7. Follow this with 2-3 more deep breaths.
8. Do this exercise every hour while you are awake.
Foot and ankle pumping
Another way to help prevent complications after surgery is to pump your feet and ankles. This helps the blood flow in your legs and helps prevent swelling and blood clots. Foot and ankle pumping should be done every hour while you are awake.

1. Relax your legs.
2. Gently point your toes towards the ceiling.
3. Then gently point your toes towards the bottom of the bed.
4. Do this exercise for 1-2 minutes every hour while you are awake.
Once you are medically stable, you will be moved to a hospital room in the Orthopedic/Surgery Unit.

Weight bearing
After surgery, you will be told how much weight you can put on your operated leg. The amount of weight bearing will be different for each person.

Ask the physiotherapist or nurse if you don’t know how much weight you can put on your leg.

Staff will help you stand and walk on your new joint as your doctor allows. They will help you walk to the bathroom when you are able.

Swelling
You should expect some swelling in your operated leg. Sometimes it can go as far down as your foot. Your health care team will continue to monitor you for pain and check that the amount of swelling is normal.

How long will I be in the hospital?
The usual length of stay for a knee replacement is 1-2 days. It is possible that you may only stay in hospital overnight. Your health care team will work with you to make sure you are medically stable and able to manage daily tasks before you go home. Before surgery, it is important to make arrangements to have someone pick you up from the hospital on the morning of your discharge home.

Make sure your travel arrangements are flexible.
Pain control
Your nurse will ask you to use the pain scale below or a similar scale to describe your pain after surgery. On this scale, “0” is no pain and “10” is the worst possible pain.

![Pain Assessment Scale]

Our goal is to keep your pain around 3-4 or lower after surgery.

As your pain starts to approach level 3 or 4, call for your nurse. Pain medication can usually be given every 3-4 hours, and will only be given if you ask for it. At home you will control your own medication, so make sure you understand how to do this before you leave. Please ask your nursing team if you have any questions.

Patients who ask for and get pain medication do better during their recovery. If you are in pain, it will be harder to get moving. Pain can also make you feel nervous or upset and afraid to do the exercises you need to recover. It is important to ask for medication when your pain increases. It can also help to have pain medication about 30-60 minutes before your exercises.

It is NOT a good idea to ‘tough it out’ after surgery and refuse medications to help your pain.

What type of pain medication will I get?
Please refer to the “Pain Management” section on page 14 for a reminder of the different types of pain medication.
What are the side effects of pain medications?
Make sure to tell your nurse if you have any of these side effects:
› nausea (feeling sick to your stomach)
› vomiting (throwing up)
› drowsiness
› itchiness
› constipation (being unable to have a bowel movement/poop)

Blood thinning medications (blood thinners)
This medication helps stop blood clots from forming. Your doctor will decide if this medication is right for you, and prescribe the type and dose that is best for you. It is important to take these medications as prescribed until they are finished. You will be given blood thinning medication by needle or in pill form while you are in the hospital after your surgery, and after you return home. When you return home, you will give yourself this medication. Your nurse will teach you how to give yourself this medication.
Possible complications

Constipation
You may have constipation (not be able to have a bowel movement/poop) after surgery. This happens because of a change in your diet, being less active, and taking pain medication.

To help with constipation:

• Drink at least 8 glasses of water or low-calorie fluid every day.
• Eat fibre, such as prunes, bran, beans, lentils, fruits, and vegetables.
• Move around as much as you are able and do your exercises.

Your nurse may give you laxatives (medications to help you have a bowel movement/poop) and/or stool softeners. You may need to keep taking these medications at home. If you have constipation at home, talk with your family doctor or pharmacist. Constipation can be serious, so do not ignore your symptoms.

Bladder function
Some patients have trouble urinating (peeing) after surgery. Please tell your nurse right away if you are having problems, as you may need a temporary catheter (hollow tube to drain your urine).
Blood clots
A very small number of people get blood clots after surgery. Blood clots usually develop in the deep veins in the legs (Deep Vein Thrombosis or DVT). People who are not active or who have problems with their circulation are more likely to develop a blood clot.

Symptoms of a DVT:
› an increase in pain, swelling, or tenderness in the calf or thigh of either leg, or in the groin area
› heat and redness in the lower leg

In some cases, a blood clot may travel from your leg to your lung, cutting off the blood flow to your lungs. This is known as a Pulmonary Embolism (PE) and is a medical emergency. PE is rare, but you should know the signs just in case.

Symptoms of a PE:
› cough (that you didn’t have before surgery)
› shortness of breath (worse than before surgery)
› wheezing (that you didn’t have before surgery)
› coughing up blood
› fever
› extreme sweating (while resting)
› confusion (that you didn’t have before surgery)
› pain when taking deep breaths (worse than before surgery)
› chest pain or pain in your chest muscles

A Pulmonary Embolism can be life-threatening. If you are in the hospital, tell the nurse or doctor right away if you have any of these signs or symptoms. If you are at home, call 911 immediately.

Foot and ankle pumping (see Appendix F near the end of this guide), walking regularly, and taking blood thinning medications as prescribed by your surgeon help to lower the risk of complications.
Swelling
It is normal to have some swelling in your leg after surgery, sometimes as far down as your foot. This may get worse as you become more active. Swelling may make it harder to move, make your pain worse, and lower your range of motion. To help lower swelling:
• Do foot and ankle pumping exercises (see Appendix F near the end of this guide).
• While lying down, place pillows under your legs to raise them up. Be sure to follow Knee Precautions and make sure your knee is not bent when resting.
• Do short periods of activity. For example, walk a few steps, rest, then repeat.
• Use ice (see page 15 for instructions).

Bruising
You will likely have some bruising after surgery. It may be located at the site of your surgery and/or in your operated leg.

Anemia (low blood count)
If you have lost blood during surgery, you may have anemia after surgery. Tell your nurse if you have any of these symptoms of anemia while in hospital:
› feeling faint, weak, dizzy, or tired
› shortness of breath
› fast heartbeat
If you have any of these symptoms once you have returned home, call your family doctor. You may need an iron supplement.

It is normal to have some redness and clear drainage from your incision site. However, you should watch for these signs of infection:
› redness around the incision that spreads
› green, yellow, or smelly pus coming from the incision site. It is common for fluids to drain for 3-5 days after surgery. However, this should stop, and your incision should then stay dry
› increased pain or swelling around the incision and surrounding area
› temperature over 38°C or 101°F. Signs of a fever may include chills, sweating, and headaches
How can I get comfortable?
It is important to be comfortable as you recover from surgery. When you are resting in bed for long periods of time, there are things you can do to make yourself more comfortable:

Lying down
If you are resting in bed for a long time, **the best position is to lie is on your back**. Try to keep your knees and toes pointing up. If you are lying on your side (for short periods of time only), you need to lie on the **non-operated side** and put 1 or 2 pillows **between** your knees. This will make you more comfortable and make sure your operated leg does not fall forward.
How do I get in and out of bed?
The first day after surgery, your nurse or physiotherapist will show you how to get in and out of bed safely. You can reach for things easily by using a long-handled reacher.

Be sure to follow your weight bearing restrictions when standing and your Knee Precautions when sitting.

To get in bed:
1. Using your walking aid, back up until you feel the bed behind you.
2. Slide your operated leg forward and sit on the edge of the bed.
4. Using your arms for support, slide your bottom across the bed, and bring both legs up onto the bed. (You may use your arms to lift your operated leg onto the bed, if needed. Have someone help lift your leg into bed or use your non-operated leg, if needed.
5. Position yourself on your back, or on your non-operated side. Do not cross your legs.
6. Place a pillow (body pillows work well) between your legs.
To get out of bed:

1. Make sure that you can reach your walking aid.

2. Remove the top sheets and pillows. Bend your non-operated leg and, using your elbows for support, slide your bottom to bring yourself to the edge of the bed.

3. From a semi-lying position, push up on your elbows and hands. Do not cross your legs.

4. Slide your hips and legs over to the edge of the bed.

5. Swing your body around to sit up.

6. Extend your operated leg and stand up, using your non-operated leg for support.

7. Once you have your balance, use your walking aid.
How do I sit and stand?

Sitting down
Your chair should have a firm seat and armrests.

When sitting, your hips should be higher than your knees. You can make the seat higher by adding a firm cushion. Do not sit in low or soft chairs. **If you are not sure, ask your nurse or physiotherapist if the chair in your room is suitable.**

Be sure to follow your weight bearing restrictions when sitting and/or standing.

**To sit in a chair safely:**
1. Back up until you feel the edge of the chair touching the back of your leg.
2. Slide your operated leg forward.
3. Reach for the arms of the chair behind you, and hold onto the armrests.
4. Lower yourself to a sitting position slowly and gently.
5. Reposition yourself to the back of the chair.
6. Bend the knee on your operated side to a comfortable position.
Standing up
To stand up from a chair safely:
1. Move to the edge of the chair.
2. Bend your non-operated leg under you to hold your body weight.
3. Slide your operated leg forward.
4. Push down with your hands on the armrests, and raise your body to stand up. Put most of your weight on your non-operated leg.
5. Once you have your balance, use your walking aid.
Walking
On the day of surgery, depending on how you are feeling, you will be asked to sit at the edge of the bed, walk a few steps to a bedside chair, and even take a short walk. You will use a walker at first, and then progress to a cane as recommended by the physiotherapist.

Make sure a nurse or physiotherapist is with you the first few times you get out of bed. You may feel weak or dizzy. Tell the nurse or physiotherapist if you feel weak or dizzy. The physiotherapist will make sure you are walking correctly. They will also tell you when it is safe for you to walk by yourself using your walking aid.

Take short walks as often as you can, using your walking aid. Try to walk longer distances as you are able.

Be sure to follow your weight bearing restrictions when walking.
Walking with a 2-wheeled walker:
1. Move your walker ahead first.
2. Step forward with your operated leg first, then your non-operated leg second.
3. Bend your operated knee as you are walking.
4. When changing direction, turn toward the non-operated side, if possible. Pick up your feet to take small steps. In between taking steps, pick up and reposition the walker as you turn. Do not twist your body.

To measure the proper height for your walker, the handle of the walker should be at your wrist when you are standing up straight, and your arm is hanging by your side.
Walking with a cane:
1. Place the cane in your hand on the side of your non-operated leg.
2. Moving your cane with you, step forward with your operated leg.
3. Follow with your non-operated leg.

To measure the proper height for your cane, the handle of the cane should be at your wrist when you are standing up straight, and your arm is hanging by your side.

How do I climb stairs?

To climb stairs with a handrail and a cane:
1. Hold the handrail with one hand and the cane in your other hand.
2. Stand close to the first stair.
3. Step up onto the first stair with your non-operated leg.
4. Straighten your non-operated leg, and bring the cane and your operated leg up together so that both feet are on the same stair.
5. Use the handrail and cane for support.
6. Repeat steps 1-5 for each stair.
To walk down stairs with a handrail and a cane:
1. Hold the handrail with one hand and the cane in your other hand.
2. Stand close to the first stair, facing down the stairs.
3. Step down onto the first stair with your cane, followed by your operated leg.
4. Then step down onto the same stair with your non-operated leg.
5. Use the handrail and cane for support.
6. Repeat steps 1-5 for each stair.

**Remember:** Your “good” leg goes up first and your “bad leg” goes down first.

*Even if you don’t have stairs at home, you should learn how to climb stairs safely.* Your physiotherapist will practice climbing stairs with you before you leave the hospital.
How do I get dressed?
There are tools to help you get dressed and reach for things after knee surgery.

Using a long-handed reacher (pants and underwear)
To put on your pants:
1. Sit on a firm chair or at the edge of your bed.
2. Clamp the waistband of your pants or underwear with the reacher, then lower your clothing to the floor.
3. Dress your operated leg first, then your non-operated leg.
4. Use the long-handed reacher to pull your pants up past your knees. Make sure that your feet come completely through the pant legs.
5. Stand up and pull your pants up the rest of the way. Use your walking aid for support.

To take off your pants:
1. Stand in front of a firm armchair or at the edge of your bed. Hold on to your walker with one hand.
2. Use your other hand to start lowering your pants to the floor.
3. Lower your pants enough that you can sit on the chair or on the edge of the bed without sitting on your pants.
4. Use the reacher to lower your pants the rest of the way, if needed. Be sure to undress your non-operated leg first, then your operated leg.
Using a sock aid
Use a sock aid for socks that are ankle high or higher. Loose fitting above-ankle socks work best. You can use baby powder or cornstarch to help with sliding socks on.

To put on your socks:
1. Put your sock on the sock aid. It works best if you pull the sock on tight so that the toe of the sock is not hanging over the edge of the sock aid.
2. Lower your sock aid to the floor, making sure not to bend over.
3. Slide your foot into the sock aid and pull the sock aid up.
4. If the sock does not come up all the way, you can use a reacher to help pull the sock up.

To take off your socks:
You can take off your socks using a reacher or a long-handled shoe horn.
Using a long-handled shoe horn
Use slip-on shoes with an enclosed heel (or shoes with elastic laces) that are a half-size bigger than you usually wear. This will leave room for possible swelling after surgery.

To put on your shoes:
1. Position your shoe using a long-handled shoe horn.
2. Slide your foot into your shoe using the shoe horn.

To take off your shoes:
Use a long-handled shoe horn to slip off your shoe.
What exercises should I do?
Doing exercises helps to promote good circulation, increase muscle strength, and prevent joint stiffness and blood clots. Your physiotherapy team will show you how to do your exercises. As you heal, you will be able to do more every day.

Make sure to follow the Knee Precautions (page 6).

What can I do to help with my recovery?
Your physiotherapy team will talk with you about your physiotherapy needs when you meet after your surgery.

Be sure to keep moving. Continue your daily exercises after you return home to strengthen your muscles. Doing your exercises every day will help you recover faster and feel better so you can get back to your usual activities.

Do each exercise 10 times, 3 times a day for 6-12 weeks (page 73). At your 6-week followup, talk with your health care team about how you should progress your exercises.
At home

What can I expect at home?

Before you leave the hospital
• Make sure you have prescriptions for any new medications.
• Make sure you have a followup appointment with your surgeon, and any other appointments you will need as part of your followup care.

Followup appointments
• Make sure you review any paperwork you were given in the hospital when you get home.
• Your first followup appointment usually takes place between 2-6 weeks after your surgery.
• You can expect to see your surgeon several times over the next year. You will be given appointment dates and times for each visit in person, over the phone, or by mail.
• It is a good idea to have a family member or friend come with you to your first followup appointment to listen and take notes.
Write down any questions you have for your surgeon and bring them with you.

When can I drive?
• You won’t be able to drive for at least 6 weeks after your surgery. Your surgeon will tell you when you are ready to drive again.
• You can ride as a passenger for short distances to and from appointments and other activities. Avoid long drives. Move your leg often and do foot and ankle pumping exercises while riding in a vehicle.
• Sit in the front passenger seat. You may need to make some adjustments depending on your height and physical condition. Depending on the height of the vehicle, it may be easier to get in from a curb or from street level. Avoid vehicles with low seats.
To get into a vehicle

1. Have your driver or support person fully open the passenger door, move the bottom of the seat back as far as it will go, and recline (lean back) the backrest. **Tip: If it helps, place a cushion on the seat to make it higher. Placing a plastic bag on the seat will help you slide onto the seat more easily.**

2. With the car door fully open, use your walking aid to back up to the vehicle until you feel the base of the car against your leg. Put your right hand on the frame of the vehicle. Put your left hand on the dashboard and slide your operated leg forward. If you cannot easily reach the dashboard with your left hand, roll down the window and hold onto the door frame instead. Then slowly lower yourself onto the seat. You are now sideways on the seat, still facing out of the side of the car.

3. Lean back and slide your bottom across the seat.

4. While leaning back, turn into the vehicle. Your driver may help you lift your operated leg into the vehicle, if needed.

5. Buckle your seatbelt and the driver or your support person can close the door for you.

Try to limit car rides in the first 6-12 weeks (recovery phase) to essential travel only.
**To get out of a vehicle:**

1. Have your driver or support person fully open the door. Unbuckle your seatbelt. Recline the backrest.

2. Lean back and turn slowly out of the vehicle. Slide forward onto the edge of the seat.

3. Put your right hand on the frame of the vehicle. Put your left hand on the dashboard. If you cannot easily reach the dashboard with your left hand, roll down the window and hold onto the doorframe instead. Your driver may help you lift your operated leg out of the vehicle, if needed. Stand up, using your arms for support.

4. Have your driver place your walking aid in front of you.

**How do I manage pain at home?**

Your pain should get better over the next 6-12 weeks. If pain is preventing you from taking care of yourself, sleeping, and/or exercising, talk with your physiotherapist, community pharmacist, or doctor. Remember to:

- Take your pain medication as directed.
- Pace yourself and take your time doing things, especially in the first few days after surgery. Be sure to rest and get enough sleep.
- Wrap your joint in a towel, apply ice for up to 15-20 minutes. Repeat as needed, every 2 hours (or once your skin has returned to normal).
- Elevate (raise) your leg above the level of your heart while lying down at least a few times each day. This will help with swelling.
- Relax your body. Try breathing exercises and progressive muscle relaxation (tightening and relaxing each part of your body, starting with your toes and working up to your neck).
- **Think positively.** You will feel better over time. Try not to get discouraged. Take care of yourself. Stay positive! This will help you get back to your usual activities soon. **If your pain gets worse over time or if you have pain in a new part of your body, call your family doctor right away.**

Use the Personal Pain Medication Log on the next page to keep track of your medication use.
<table>
<thead>
<tr>
<th>Date &amp; time</th>
<th>Pain scale rating (0-10)</th>
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How do I care for my incision (cut)?

While you are in the hospital, your nurse will teach you how to care for your incision at home.

Your incision will be closed with stitches, staples, Steri-Strips™, or a combination of these.

- Do not rub creams or ointments on your incision until it has completely healed.
- Do not pick at any dry areas, scabs, or blisters at or around the incision site.
- You may have a special bandage that will stay on until you see your surgeon again.
- You may shower right away after surgery as long as you make sure to cover your bandage with plastic (e.g., plastic wrap, a clean grocery bag, etc.) and keep it dry. Make sure to tape the plastic at the top so water will not run underneath. Change your bandage after your shower, if needed.
  - use your recommended bathtub equipment and/or walk-in shower equipment (see page 24) to help you get in and out of the shower.

It is normal to have some redness and clear drainage from your incision site. However, you should watch for these signs of infection:

- redness around the incision that spreads
- green, yellow, or smelly pus coming from the incision site. It is common for fluids to drain for 3-5 days after surgery. However, this should stop, and your incision should then stay dry
- increased pain or swelling around the incision and surrounding area
- temperature over 38°C or 101°F. Signs of a fever may include chills, sweating, and headaches

If you notice any of these symptoms, call your surgeon’s office or or the Orthopedic Assessment Clinic (OAC) right away. If you are not able to reach your surgeon, call your family doctor or go to the nearest Emergency Department.
When can I go back to my everyday activities?

**Work**
When you can go back to work depends on what type of job you have, as well as your work environment. Most patients take 8-12 weeks off work after knee replacement surgery. You may need to change your work environment to be able to follow Knee Precautions. Ask your surgeon when you should go back to work.

**Travel**
Do not travel by air until you have met with your surgeon after your surgery. Your surgeon will tell you if you are ready to fly.

When you are ready, make sure to plan ahead to give yourself extra time to take regular breaks to walk and stretch.

For flights longer than 90 minutes (1 ½ hours), try to get an aisle seat so that you can get up and walk around during the flight. When you are on the plane, do foot and ankle pumping exercises every 30 minutes to keep the blood moving and help lower the risk of blood clots. You may be advised to wear compression stockings to lower the risk more.

**Staying active (sports and leisure)**
When you can go back to sports and leisure activities depends on your physical condition and the difficulty of the activity. High impact activities (e.g., running, jumping) may not be recommend following your surgery; however, low impact activities (e.g., walking, biking, dancing, swimming) are generally encouraged. Ask your health care team if you have any questions.
Sexual activities (sex)
Most patients are able to go back to sexual activities after knee replacement surgery. In fact, many patients who had stiffness and pain during sex before surgery find that they have less pain and more mobility after surgery.

It is generally recommended to wait about 6-8 weeks after surgery before having sex. This gives your incision and muscles time to properly heal.

When choosing a sexual position, let pain be your guide. Pick positions that feel the most comfortable and pain-free.

Think about your Knee Precautions — if they don’t work with your usual positions, you may need to try different positions until you are fully recovered.

Dental work
It is important to tell your dentist about your knee replacement surgery. Bacteria from an infection in your mouth can travel through your bloodstream to your new joint and cause an infection.

We recommend that you have any dental work (e.g., cleaning or fillings) or gum work done before your surgery.

Once you’ve had a joint replacement, some surgeons want you to take antibiotics for any future dental work.

Call your surgeon’s office directly to see what they recommend.
What are your questions?
Please ask. We are here to help you.

Questions for my health care team:
Appendix A – Cape Breton Regional Hospital

General information
Cape Breton Regional Hospital
1482 George Street
Sydney, NS
B1P 1P3
Switchboard: 902-567-8000

Orthopedic Assessment and Pre-hab (Hip & Knee) Clinics

<table>
<thead>
<tr>
<th>Sydney</th>
<th>Inverness</th>
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<tbody>
<tr>
<td>Suite 101, 200 Churchill Drive</td>
<td>39 James Street</td>
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<tr>
<td>Membertou, NS</td>
<td>Inverness, NS</td>
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<tr>
<td>B1S 0H5</td>
<td>B0E 1N0</td>
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<tr>
<td>902-563-8512 (Orthopedic Assessment Clinic)</td>
<td>902-258-1955</td>
</tr>
<tr>
<td>902-563-8513 (Pre-hab Clinic)</td>
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Parking
Parking is available on-site, with a fee to be paid at time of exit. Please check with hospital staff or on the hospital website for current prices at the time you are admitted.

Equipment
You must bring your 2-wheeled walker and other equipment (see page 84 for checklist) to the hospital as you will need it to get up on the day of your surgery.

Visiting hours
› 8 a.m. to 8 p.m.

Please be advised that restrictions may be put in place at any time due to active illness outbreaks or any other concerns, at the discretion of our infection control team.

On-site food
Patients are encouraged to use the “Dial for Dinner” service. A menu and phone number will be provided to you, and you can call to order your meals in advance. To opt out of this service, please talk to your nurse.
Restaurants
› Cafeteria, basement floor (Level 1), weekday hours: 7:30 a.m. to 4 p.m.*
› Subway®, 1st floor of HealthPark, weekday hours: 7:30 a.m. to 8 p.m.*
› Starbucks®, 1st floor of HealthPark, weekday hours: 7 a.m. to 9 p.m.*
*Weekend hours may vary.

Patient accommodations
The hospital offers 3 types of accommodations for patients:
› standard ward: 4 beds per room
› semi-private: 2 beds per room
› private: 1 bed per room

It is not always possible to give you the room you ask for. However, we will try our to transfer you to your preferred room as soon as it becomes available. There is a daily charge for semi-private and private rooms. If you have private insurance, please check with your insurance provider whether this is covered.

Family and friends accommodations
Hotels in our community may offer discounted rates for patients and their families. Please contact these places directly to ask about discounted rates.

CBRH contact information

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
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<tbody>
<tr>
<td>Dr. F. Dodd</td>
<td>902-567-0509</td>
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<tr>
<td>Dr. M. O’Neill</td>
<td>902-270-3778</td>
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<tr>
<td>Dr. D. Brien</td>
<td>902-539-5954</td>
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<td>Dr. K. Orrell</td>
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<tr>
<td>Inverness Hip &amp; Knee Clinic</td>
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<tr>
<td>OAC/Pre-hab Physiotherapist (PT)</td>
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<td>OAC/Pre-hab Occupational therapist (OT)</td>
<td>902-563-8516</td>
</tr>
<tr>
<td>OAC/Pre-hab Dietitian</td>
<td>902-563-8514</td>
</tr>
</tbody>
</table>
Community supports
• Information on community resources in your area can be found by calling 211 or visiting http://ns.211.ca
• Continuing Care
  › 1-800-225-7225

Getting equipment
Canadian Red Cross – Sydney*
1140 Upper Prince Street
Sydney, NS
B1P 5P6
Phone: 902-564-4114
Fax: 902-539-4349
Weekdays: 8:30 a.m. to 4:30 p.m.

*Referral from a health care professional is needed.

Home health care stores and pharmacies often carry equipment for loan or purchase. Please contact these places directly to ask about prices and availability. Please note: a prescription from a health care provider may be needed in order to submit these costs to an insurance company. Please call 211 or refer to the phone book, websites, etc. for more information.

<table>
<thead>
<tr>
<th>Canadian Red Cross – Antigonish</th>
<th>Canadian Red Cross – Cheticamp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 2, 36 Market Street</td>
<td>(located inside Sacred Heart</td>
</tr>
<tr>
<td>Antigonish, NS</td>
<td>Community Health Centre)</td>
</tr>
<tr>
<td>B2G 3B4</td>
<td>15102 Cabot Trail</td>
</tr>
<tr>
<td>Phone: 902-863-8222</td>
<td>P.O. Box 129</td>
</tr>
<tr>
<td>Fax: 902-863-1701</td>
<td>Cheticamp, NS</td>
</tr>
<tr>
<td></td>
<td>B0E 1H0</td>
</tr>
<tr>
<td></td>
<td>Switchboard: 902-224-4000</td>
</tr>
</tbody>
</table>
Appendix B – Aberdeen Hospital

General information
Aberdeen Hospital
835 East River Road
New Glasgow, NS
B2H 3S6
Switchboard: 902-752-7600

Parking
Parking is available on-site, with a fee to be paid when you exit the hospital parking lot. Change machines are available in the lobby.

Weekly parking passes are available from the commissionaire for a fee, with a deposit. The deposit will be refunded when the pass is returned.

Equipment
You must bring your 2-wheeled walker and other equipment (see page 84 for checklist) to the hospital as you will need it to get up on the day of your surgery.

Visiting hours
› 8 a.m. to 8 p.m.
› Patient rest period: 1:30 to 3 p.m.

Cafeteria
Keltic Bistro hours:
› Weekdays: 7 a.m. to 1:30 p.m.
› Weekends and holidays: 8:30 a.m. to 1 p.m.

Patient accommodations
The hospital offers 3 types of accommodations for patients:
› standard ward: 3 beds per room
› semi-private: 2 beds per room
› private: 1 bed per room
It is not always possible to give you the room you ask for. However, we will try to transfer you to your preferred room as soon as it becomes available. There is a daily charge for semi-private and private rooms. If you have private insurance, please check with your insurance provider whether this is covered.
Family and friends accomodations
Hotels in our community may offer discounted rates for patients and their families. Please call these places directly to ask about discounted rates.

Aberdeen contact information

<table>
<thead>
<tr>
<th></th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. T. Boudreau</td>
<td>902-752-7971</td>
</tr>
<tr>
<td>Dr. P. Sequeira</td>
<td>902-752-8110</td>
</tr>
<tr>
<td>Dr. T. H. El-Tahan</td>
<td>902-755-3884</td>
</tr>
<tr>
<td>Dr. V. Prasad</td>
<td>902-752-2415</td>
</tr>
<tr>
<td>Dr. A. Hayward</td>
<td>902-752-4332</td>
</tr>
<tr>
<td>Surgical Pre-Admission Clinic</td>
<td>902-752-7600 ext. 4080</td>
</tr>
<tr>
<td>Central Registration</td>
<td>902-752-7600 ext. 2230</td>
</tr>
<tr>
<td>Surgical floor</td>
<td>902-752-7600 ext. 2540</td>
</tr>
<tr>
<td>Physiotherapy/Occupational Therapy</td>
<td>902-752-7600 ext. 2420</td>
</tr>
<tr>
<td>Pre-hab Clinic</td>
<td>902-752-7600 ext. 1197 or ext. 1199</td>
</tr>
</tbody>
</table>

Community supports
- Information on community resources in your area can be found by calling 211 or visiting http://ns.211.ca
- Continuing Care
  ‣ 1-800-225-7225

Getting equipment
You can rent or buy equipment by checking with your home pharmacy. Please call 211 or refer to the phone book, websites, etc. for more information.

Canadian Red Cross
Pictou: 902-485-1789
Truro: 902-895-3894
Antigonish: 902-863-8222
Appendix C – Halifax Infirmary

General information
Halifax Infirmary
1796 Summer Street
Halifax, NS
B3H 3A6
Switchboard: 902-473-1510

Parking
› Halifax Infirmary: 1901 Robie Street
› Veterans’ Memorial Building: 5955 Veterans Memorial Lane
› Museum of Natural History: 1747 Summer Street

Please note: each of these locations requires a fee to be paid either when you enter or exit the parking lot. Please check with hospital/parking staff for current prices at the time you are admitted.

Equipment
You must bring your 2-wheeled walker and other equipment (see page 84 for checklist) to the hospital as you will need it to get up on the day of your surgery.

Visiting hours
› Visitors are welcome throughout the day
› Patient rest period: 2:30 to 3:30 p.m.

On-site food
› Cafeteria (Level 2) hours: 7 a.m. to 7 p.m. (weekdays)
› Gift shop (for snack foods and cold drinks) hours:
  9:30 a.m. to 5 p.m. (weekdays)
› Vending machines for snacks and beverages are located on most floors
Patient accommodations
This hospital offers 3 types of accommodations for patients:

› standard ward: 3 beds per room
› semi-private: 2 beds per room
› private: 1 bed per room

When you register for your surgery, you may request a private or semi-private room. However, it is not always possible to give you the room you ask for. We will try to transfer you to your preferred room as soon as it becomes available.

Family and friends accommodations
Hotels in our community may offer discounted rates for patients and their families. Please feel free to call and ask them directly.

Halifax Infirmary contact information

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. M. Biddulph</td>
<td>902-473-6322</td>
</tr>
<tr>
<td>Dr. M. Dunbar</td>
<td>902-473-7337</td>
</tr>
<tr>
<td>Dr. M. Gross</td>
<td>902-473-6811</td>
</tr>
<tr>
<td>Dr. R. Leighton</td>
<td>902-473-4035</td>
</tr>
<tr>
<td>Dr. D. O’Brien</td>
<td>902-405-3200</td>
</tr>
<tr>
<td>Dr. B. O’Neill</td>
<td>902-797-0999</td>
</tr>
<tr>
<td>Dr. G. Reardon</td>
<td>902-473-5626</td>
</tr>
<tr>
<td>Dr. G. Richardson</td>
<td>902-473-1641</td>
</tr>
<tr>
<td>Inpatient floor, Unit 8.1</td>
<td>902-473-4434</td>
</tr>
<tr>
<td>Physiotherapy</td>
<td>902-473-6308</td>
</tr>
</tbody>
</table>
Community supports

- Information on community resources in your area can be found by calling 211 or visiting http://ns.211.ca
- Continuing Care
  › 1-800-225-7225

Getting equipment

Please call 211 or refer to the phone book, websites, etc. for more information.

Canadian Red Cross* – Dartmouth*

133 Troop Avenue
Dartmouth, NS
B3B 2A7
Phone: 902-423-3680
Fax: 902-420-9589
Weekdays: 8:30 a.m. to 4:30 p.m.

*Referral from a health care professional is needed.

Home health care stores and pharmacies often carry equipment for loan or purchase. Please contact these places directly to ask about prices and availability. Please note: a prescription from a health care provider may be needed in order to submit these costs to an insurance company.
Appendix D – Dartmouth General Hospital

General information
Dartmouth General Hospital
325 Pleasant Street
Dartmouth, NS
B2Y 4G8
Switchboard: 902-465-8300

Parking
The Dartmouth General Hospital parking lot is accessed off of Acadia Street at Pleasant Street. A fee must be paid when you exit the parking lot. Payment is made at a parking machine inside the main lobby.

Equipment
You must bring your 2-wheeled walker and other equipment (see page 84 for checklist) to the hospital as you will need it to get up on the day of your surgery.

Visiting hours
› Visitors are welcome throughout the day
› Patient rest period: 2:30 to 3:30 p.m.

On-site food
› Cafeteria (Level 1) hours: 7:30 a.m. to 3 p.m. (weekdays)
› The Corner Shoppe (Level 1) has snack foods and cold drinks
  hours: 9:30 a.m. to 5 p.m. (weekdays)
› Vending machines (Level 1)

Patient accommodations
This hospital offers 2 types of accommodations for patients:
› semi-private: 2 beds per room
› private: 1 bed per room

When you register for your surgery, you may request a private or semi-private room. However, it is not always possible to give you the room you ask for. We will try to transfer you to your preferred room as soon as it becomes available.
Family and friends accommodations
Hotels in our community may offer discounted rates for patients and their families. Please feel free to call and ask them directly.

Dartmouth General Hospital contact information

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. R. Hurley</td>
<td>902-293-9015</td>
</tr>
<tr>
<td>Dr. J. Leighton</td>
<td>902-797-0777</td>
</tr>
<tr>
<td>Dr. D. O’Brien</td>
<td>902-405-3200</td>
</tr>
<tr>
<td>Dr. B. O’Neill</td>
<td>902-797-0999</td>
</tr>
<tr>
<td>Dr. D. Smith</td>
<td>902-797-0777</td>
</tr>
<tr>
<td>Dr. N. Urquhart</td>
<td>902-477-6002</td>
</tr>
<tr>
<td>Surgical Floor (3 East)</td>
<td>902-460-4127</td>
</tr>
<tr>
<td>Physiotherapy (outpatients)</td>
<td>902-465-8303</td>
</tr>
</tbody>
</table>

Community supports
- Information on community resources in your area can be found by calling 211 or visiting http://ns.211.ca
- Continuing Care
  › 1-800-225-7225

Getting equipment
Please call 211 or refer to the phone book, websites, etc. for more information.

Canadian Red Cross* – Dartmouth*
133 Troop Avenue
Dartmouth, NS
B3B 2A7
Tel: 902-423-3680
Fax: 902-420-9589
Weekdays: 8:30 a.m. to 4:30 p.m.

*Referral from a health care professional is needed.

Home health care stores and pharmacies often carry equipment for loan or purchase. Please contact these places directly to ask about prices and availability. Please note: a prescription from a health care provider may be needed in order to submit these costs to an insurance company.
Appendix E – Valley Regional Hospital

General information
Valley Regional Hospital
150 Exhibition Street
Kentville, NS
B4N 5E3
Switchboard: 902-678-7381

Parking
Parking is available on site, with a fee to be paid when you exit the hospital. Change machines are available in the lobby.

Equipment
You must bring your 2-wheeled walker and other equipment (see page 84 for checklist) to the hospital as you will need it to get up on the day of your surgery.

Visiting hours
› 11 a.m. to 8 p.m.
› Patient rest period: 2 to 3:30 p.m.

On-site food
› Cafeteria hours: 7a.m. to 2:30 p.m. (weekdays), closed (weekends/holidays)
› On-site snack kiosk hours: 7 a.m. to 2:30 p.m. (weekdays),
  8:30 a.m. to 6 p.m. (weekends/holidays)

Patient accommodations
This hospital offers 3 types of accommodations for patients:
› standard ward: 4 beds per room
› semi-private: 2 beds per room
› private: 1 bed per room

It is not always possible to give you the room you ask for. However, we will try to transfer you to your preferred room as soon as it becomes available. There is a daily charge for semi-private and private rooms. If you have private insurance, please check with your insurance provider whether this is covered.
Family and friends accommodation

• Fidelis House is a home-away-from-home, located on the Valley Regional Hospital grounds. Fidelis House Society is a volunteer, non-profit organization which provides accommodations for families and patients. Overnight accommodation may be available at a reasonable fee. To make a reservation, call 902-679-6567.

There are also many hotels and motels available in the Kentville and New Minas areas. Hotels in our community may offer discounted rates for patients and their families. Please call these places directly to ask about discounted rates.

Valley Regional Hospital contact information

<table>
<thead>
<tr>
<th>Dr. W. Beveridge</th>
<th>902-678-6878</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. G. Clarke</td>
<td>902-678-7707</td>
</tr>
<tr>
<td>Dr. E. Hewins</td>
<td>902-678-3349</td>
</tr>
<tr>
<td>Dr. E. Howatt</td>
<td>902-678-4404</td>
</tr>
<tr>
<td>Dr. N. Murphy</td>
<td>902-678-7447</td>
</tr>
<tr>
<td>Dr. M. Gillis</td>
<td>902-599-4104</td>
</tr>
<tr>
<td>Hip &amp; Knee Clinic</td>
<td>902-679-2657 ext. 2909</td>
</tr>
<tr>
<td>Surgical floor</td>
<td>902-679-2657 ext. 3000</td>
</tr>
<tr>
<td>Physiotherapy/Occupational Therapy</td>
<td>902-679-2770</td>
</tr>
</tbody>
</table>

Community supports

• Information on community resources in your area can be found by calling 211 or visiting http://ns.211.ca

• Continuing Care
  › 1-800-225-7225
Getting equipment

Please note: this is not a complete list — please call 211 or refer to the phone book, websites, etc. for more information.

Canadian Red Cross*

<table>
<thead>
<tr>
<th>Bridgewater Service Centre</th>
<th>Kentville Service Centre</th>
<th>Yarmouth Service Centre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Arts Building</td>
<td>10 Pelton Drive</td>
<td>341 Hwy #1</td>
</tr>
<tr>
<td>Suite 102, 42 Glen Allen</td>
<td>Kentville Industrial Park</td>
<td>Dayton Mall</td>
</tr>
<tr>
<td>Drive</td>
<td>Kentville, NS B4N 3V7</td>
<td>Yarmouth, NS B5A 4A5</td>
</tr>
<tr>
<td>Bridgewater, NS B4V 3N2</td>
<td>Phone: 902-678-0415</td>
<td>Phone: 902-742-3656</td>
</tr>
<tr>
<td>Phone: 902-543-8565</td>
<td>Fax: 902-678-8713</td>
<td>Fax: 902-742-5225</td>
</tr>
<tr>
<td>Fax: 902-543-7047</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Weekdays: 8:30 a.m. to 4:30 p.m.

*Referral from a health care professional is needed.

Home health care stores and pharmacies often carry equipment for loan or purchase. Please contact these places directly to ask about prices and availability. Please note: a prescription from a health care provider may be needed in order to submit these costs to an insurance company.
Appendix F – Exercises

Do not do any exercise that is too painful.

Repeat each of the following exercises 10 times, 3 times each day. Do these exercises before and after surgery.

Make sure you are not holding your breath during these exercises.

Foot and ankle pumping
1. Relax your legs.
2. Gently pull the toes on your operated leg towards your head.
3. Then gently push your toes towards the bottom of the bed. Repeat with your non-operated leg.

Do this exercise for 1-2 minutes every hour while you are awake.
Quad sets
1. Lie on your back with your non-operated leg bent.
2. Press the back of your knee of your operated leg into the mat by tightening the muscles on the front of your thigh.
3. Hold for 5 seconds.
4. Relax.

Coach’s note: Look and feel for the muscle above your knee to contract (squeeze together). Done correctly, your heel should come up slightly off the bed.
**Gluteal sets**
1. Squeeze your buttocks (bum) together.
2. Hold for 5 seconds.
3. Relax.

**Coach’s note:** Place your hands on your right and left gluteal (buttocks) area and feel for equal muscle contractions.
Hip flexion heel slides
1. Lie on your back with your legs straight.
2. Bend the knee of your operated leg and slide your heel up towards your buttocks. You may use a strap around your foot to help.
3. Straighten your leg and relax.
**Short arc quads**

1. Lie on your back with your legs straight.

2. Place a rolled towel under the knee of your operated leg.

3. Lift the foot of your operated leg, straightening your knee as far as possible. Do not lift your thigh off of the rolled towel.

4. Bend your knee, lower your foot, and relax.
**Straight leg raise**

1. Lie on your back with your non-operated knee bent and foot flat.
2. Tighten quad on operated leg and lift leg 12 inches from surface.
3. Keep knee straight and toes pointed toward your head.

**Coach’s note:** If you are able, you can add a small ankle weight to your leg to increase your strength before surgery.
Armchair pushups
1. Sit in a sturdy chair with armrests.
2. Keeping your feet flat on the floor, slide to the front of the seat.
3. Hold onto the armrests.
4. Straighten your arms, lifting your buttocks up from the seat as far as possible. Use your legs to help, if needed keeping in mind your weight bearing restrictions for your operated leg. Do not hold your breath or strain too hard.
5. Over time, work towards using only your arms and your non-operated leg.
6. Bend your arms and lower your buttocks back onto the chair. Relax.
Seated knee flexion
1. Sitting in a straight-back chair, bend operated leg as far as possible under chair (can use opposite foot to help).

2. When maximum bend is reached, plant foot and slide hips forward further bending knee.

3. Hold for 20 to 30 seconds.

Coach’s note: Each time bend until a stretch is felt and then a little more if possible. You can use your non-operated leg to apply some overpressure to increase the stretch in your operated leg. Be sure your hips stay flat on the chair.
Knee flexion (knee bending)
1. Holding on to a chair or countertop, bend the operated leg up behind you.
2. Straighten to a full stand, with weight on both legs.

Coach’s note: The tendency is for the hip to come forward as the knee is bent. Encourage a straight line from your shoulder to your knee.
What are your questions?
Please ask. We are here to help you.

Questions for my health care team:
Questions for my health care team:
Questions for my health care team:

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Looking for more health information?
Find this pamphlet and all our patient resources here: http://library.nshealth.ca/PatientGuides
Contact your local public library for books, videos, magazines, and other resources.
For more information, go to http://library.novascotia.ca
Connect with a registered nurse in Nova Scotia any time: call 811 or visit https://811.novascotia.ca
Learn about other programs and services in your community: call 211 or visit http://ns.211.ca

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www.nshealth.ca

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Designed by: NSHA Library Services

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The information in this pamphlet is to be updated every 3 years or as needed.