

Name:

YOUR GUIDE TO:

KNEE REPLACEMENT SURGERY

September 2021

NEJACICÉANE

NORTH EAST JOINT ASSESSMENT

D'ÉVALUATION **DES ARTICULATIONS** CENTRE DU NORD-EST

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Introduction

Welcome to Health Sciences North / Horizon Santé-Nord. Together with your surgeon, you have decided that a Knee Replacement is necessary to alleviate the symptoms you are experiencing. This booklet is designed to provide you and your family with the information that you will need in order to have a successful surgical experience. It is very important that you read and understand the information provided in this booklet. You do not need to memorize it. Active involvement in your care is essential for a healthy recovery and obtaining a good working knee.

Read this booklet before your hospital stay and write down any questions that you may have.

Please bring this booklet with you when you come to the hospital.

Questions to Ask			

WHAT IS A KNEE REPLACEMENT?

A **Knee Replacement** is an operation that replaces the damaged knee joint with an artificial ones called a **prostheses**. The knee joint is made up of the thigh bone (Femur), which has a rounded end that fits onto the shin bone (Tibia). Both ends of these bones are covered in cartilage, which can be compared to a Teflon coating, allowing smooth movement to occur at the knee. The knee cap (Patella), which is attached by thigh muscles, is in front. In a Total Knee Replacement (TKR), complete ends of the thigh and shin bones and possibly the knee cap are replaced with prostheses (see below). In a Partial Knee Replacement, only the damaged sides of the thigh and shin bones are replaced. The knee cap is untouched.

The three things that help the *healthy knee* work smoothly and without pain are:

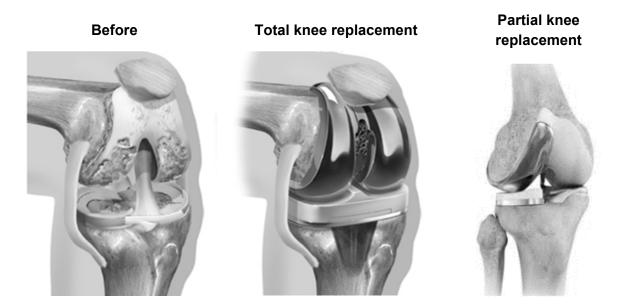
- The smooth coating over the bones.
- The slippery fluid inside the joint called synovial fluid.
- The muscles, ligaments and tendons which support and move the knee.

The three things that make the *damaged knee* painful and hard to move are:

- The smooth coating gets rough and worn away.
- The slippery synovial fluid begins to dry up.
- The muscles weaken and the knee gets stiff or unstable.

The four parts of the new *implanted artificial knee* are:

- The part that fits over the end of the thigh bone.
- The part that fits into the end of the shin bone.
- The plastic liner/spacer that fits between the 2 metal parts.
- A small button on the under surface of the knee cap.



PREPARING FOR SURGERY AND DISCHARGE

Patient Checklist

The following checklist will help you keep track of the important steps leading up to your surgery date and through your rehabilitation.

Once you know your surgery date

- I have read this Guidebook. I understand the information and have shared it with my family and friends. I have signed up to attend the Pre-Surgery Education Class by calling 705-675-4772.
- I have a plan which includes around-the-clock assistance in my home or a family or friend's home to help with groceries, meals, laundry, pet care and housekeeping for at <u>least 2 weeks</u> after I get home.
- □ I have booked my outpatient physiotherapy appointment for 1 week after surgery.

2 1-2 weeks before surgery

- □ I have made plans for someone to pick me up and drive me home from the hospital. I expect to go home ON THE SAME DAY of my surgery.
- I have made arrangements for ALL of the equipment that I will need at home.
 This may include a walker and cane.
- I have made plans for transportation to my physiotherapy and follow up appointments.
- I have ALL of the equipment that I will need at home.
- □ I practised using my walker and cane.

Day before and morning of surgery (follow Pre-op instruction sheet)

- I have showered or bathed twice with antibacterial soap (i.e. liquid hand soap or dish soap marked "antibacterial") – night before and the morning of the surgery.
- □ I will not eat any food 10 hours before surgery. I can take clear fluids until 3 hours before surgery
- I have packed a small bag with my personal items (scent free) that I will need while in the hospital. These items include: this Guidebook, a pair of non-slip shoes, comfortable clothes, toiletries and Kleenex.

YOUR CARE PATHWAY

These tables summarize the Care Pathway that you will follow for your knee replacement surgery and what you can expect at each stage.

V4// 14 T TO	BEFORE SURGERY	DAY OF SURGERY (PRE-OP)
WHAT TO EXPECT	Pre-Admission Clinic Appointment	Surgical Day Care (SDC)
How to prepare	Please bring all the medicine you are currently taking, in their original packaging to the appointment.	You must stop eating 10 hours before surgery. Clear fluids (no milk products or orange juice) can be taken up to 3 hours before surgery.
Tests	We will do:	We will do:
	Blood testsElectrocardiogram (ECG) as needed	Blood tests, as neededCheck your vitals (heart rate, blood pressure)
	X-rays of your kneeYou may need to see the Anaesthetist	Interview you to confirm information from Pre-Admission Clinic appointment
Medicines	We will check all the medicines you are currently taking.	We will give you medicines as needed.
Activity	Keep active right up until your surgery day.	You will change into a hospital gown.
	Do the Pre-operative Exercises seen on page 15 of this Guidebook	 You may be given a "Bair Hugger" gown to wear which is attached to a warming system to keep you warm before your surgery.
Education and Discharge Planning	 You may arrange your physiotherapy appointment for 1 week after your surgery. Further details will be provided during the <u>Pre-Surgery Education Class</u>. 	We will review with you what to expect before, during and after surgery.
	You have obtained your equipment (walker, cane, etc.)	

WHAT TO EXPECT	DAY OF SURGERY (POST-OP) Post-Anesthetic Care Unit (PACU)	DAY OF SURGERY (POST-OP) Surgical Day Care (SDC)/ Surgical Short Stay Unit (SSSU)
Tests	We will do:Blood tests, as neededX-rays of your knee	
Treatments	 We will: Give medicines and fluids through the IV Check your dressing Check your pain level Give oxygen, if needed 	 We will: Remove your IV after the last dose of antibiotics Check your dressing and pain level
Medicines	Give you pain medication through the IV	 Through the IV, we will give you: Decadron to reduce inflammation as needed antibiotics to prevent infection Medicine for pain (by mouth)
Activity	Do deep breathing, coughing and ankle pumping exercises (p.21)	 Continue deep breathing, coughing and ankle pumping exercises (p.21) You will start walking and practise stairs (if applicable) with a walker/cane with the Physiotherapist
Nutrition	You will have clear fluids only.	You can gradually resume your regular diet as tolerated. Increase fluid and fibre intake to help reduce constipation.
Elimination Education and Discharge Planning	We will review with you: Breathing, coughing and ankle pumping exercises (p.21)	If you feel the need to pee, call for assistance. We will review with you: How to manage your pain at home (p.17) How to care for your dressing (p. 18) Breathing, coughing, ankle pumping exercises (p.21) Any follow-up appointments The Physiotherapist will also review the home exercise program (pages 22-23) and teach you how to move with a walker/cane

POSSIBLE COMPLICATIONS

With any surgery, there is a risk of complications. Please review the list below prior to your appointment. If you have any questions, you can discuss them with the surgeon or another member of your health care team.

General Health Concerns

Because the skin, tissues, ligaments, and bones are cut during surgery, recovery may be slow. Heart disease, diabetes, chronic lung disease, smoking, anemia (low iron), rheumatoid arthritis, obesity, and other medical problems may slow your recovery and wound healing.

Infection

The infection rate is less than 1%. If infection occurs, the artificial parts may need to be removed and replaced after the infection has been controlled.

Signs of infection can include:

- Increased pain or stiffness in a previously well-functioning joint
- Swelling
- Warmth and redness around the wound
- Wound drainage
- · Fevers, chills and night sweats
- Fatigue

Please contact your surgeon or go to the local Emergency Department if you experience the above symptoms. <u>See page 20 for more details</u>.

Dental

- Patients should be in optimal oral health BEFORE having joint replacement surgery and should maintain good oral hygiene and oral health following surgery.
- Antibiotics are NOT needed for routine dental work such as cleanings. It is recommended that you inform your dentist that you have had a knee replacement so they can decide the proper course of action.

Blood Loss

You may lose a large amount of blood during or after the surgery. This is rare but you may need a blood transfusion

There is a very small risk that you can get an illness from a transfusion. The Blood Conservation Nurse will discuss this with you during your Pre-Admission Clinic visit.

Pain

Pain following knee surgery is different with each person. It is important to keep your pain under control in order to be able to participate in physiotherapy after surgery. It is better to treat your pain when it is mild than wait for it to become severe.

Bruising or Bleeding

After surgery, blood can collect in the wound. Your body will eventually resorb it. Dark bruising may also occur. This is quite common.

Blood Clots (Deep Vein Thrombosis or Pulmonary Embolus)

Harmless blood clots in the veins of the legs can occur in as many as 40% of knee replacement surgeries. It is rare for them to travel to the lungs (less than 1%), however, if this happens, it could result in death. Blood thinning medication is required for a minimum of 4 weeks after surgery to prevent clots from forming.

The medication may come in the form of a pill or needles. The needles are given under the skin of the stomach, usually by the patient. Instructions will be provided at discharge.

Nerve or Blood Vessel Damage

Nerve or blood vessel damage is rare. The incidence of damage to the major nerves of the knee range from 1% to 3% while damage to the arteries range from 0.1 to 0.2%. These injuries occur mostly during major revision surgery or surgery done to correct large deformities. If nerve damage occurs, it may leave numbness, weakness, or paralysis in the foot. Damage can be short term or permanent. A brace or sometimes additional surgery may be required.

It is common to have numbness over the side of the knee after surgery. In some, this may become permanent but it will not affect the way your knee functions.

Swelling (Edema)

The normal healing process will cause swelling in your leg. **This may last several weeks or months**. Swelling will often decrease if you raise your legs and pump the ankles. If the knee becomes severely painful or swelling continues to increase, call your surgeon's office or go the Emergency Department.

Delirium

Short-term confusion (delirium), following the surgery may be due to age, medication, anaesthesia, or medical conditions. It usually goes away after a day or two. Alcohol or drug use before surgery can make post-surgery delirium worse.

Slow Wound Healing

Because the skin, tissues, muscles and bones are cut during surgery, sometimes healing is slow. This may give some short-term local pain and swelling. Healing occurs with time. Those with medical issues such as diabetes will experience slower wound healing. Eating healthy and protein-rich foods will promote wound healing.

Constipation

After surgery, people may experience constipation because of decreased mobility, side effects of pain medications and anaesthetic. You may be prescribed a laxative after surgery.

Continue to maintain a high fibre diet and drink plenty of water. Over-the-counter stool softeners are also available at any drug store.

PREPARING FOR SURGERY

Pre-Surgery Education Class

You and your support person **MUST** attend the Pre-Surgery Education Class for Total Knee Replacement. Please sign up by calling **(705) 675-4772**.

For those living outside the Greater City of Sudbury, video conferencing is possible through MS Teams. Please sign up by calling **(705) 675-4772.**

If it is impossible for you to attend either in person or virtual class, you can also view the slides at: https://www.hsnsudbury.ca. This is the homepage of the hospital website. At the top right of the page you will see a "search box" as seen below:



Type "total knee replacement" and it will take you to links to this Guidebook and Presurgery Education Class video. You can view the slides there.

Pre-Admission Clinic (PAC) Appointment

Your surgeon's office will call to give you the date of your surgery. Health Sciences North will call two to six weeks before your surgery date to give you the date of your appointment for the Pre-Admission Clinic (PAC).

This is a 3 to 4 hour session where you can discuss current medical issues and ask questions.

What to expect:

- Medical testing and assessments will be completed.
- You may meet with the Blood Conservation Nurse who can help you increase your blood iron to avoid delaying surgery or possibly needing a transfusion.
- You may also meet with the Anaesthetist who will ask you about your medical history, will perform a medical exam, and will discuss which type of anaesthetic is best for your operation.

Things to bring and things to consider:

- **Support person:** You may be able bring a designated family member / friend with you. Please check with the hospital when booking this appointment.
- Medications: Bring the medications you currently take in the <u>original</u> <u>prescription bottles and a list of the medications</u>. Don't forget to include

vitamins and supplements or other over-the-counter medications you take regularly. Your doctor may advise you to stop taking certain medications or supplements a week or two before surgery.

- Allergies or Adverse reactions: Identify if you have had issues in the past
 with certain medication and or anesthesia. Provide the name of the
 medication, why you were taking it, a description of your reaction and when
 this happened.
- **Medical conditions / Previous surgeries:** Make a list of all your past surgeries and any medical conditions. This will make the visit easier and faster.
- **Insurance coverage**: Know your insurance coverage, including the name of the company, your plan or group number and contact information. Be sure to have your health card, status card and insurance cards with you.
- **Legal arrangements**: You will be asked the name of your next of kin, substitue decision maker or Power of Attorney (POA) if you have a living will.

Get In Shape for Surgery

The following preparations can help improve the outcome of the surgery and your recovery time.

- If you smoke, cut down or quit. Smoking changes blood flow patterns, delays healing, slows recovery and increases risk of infection. The hospital offers nicotine replacement therapy ask your doctor or nurse about this. You must STOP smoking 48 hours before your operation. Also note that smoking is not allowed anywhere on the hospital property.
- Do not consume alcohol for at least 48 hours prior to surgery.
- If you use other controlled substances, tell your doctor. Narcotics and other drugs can have an impact on your surgery.
- Eat well. If you are overweight, try losing weight sensibly. Your doctor may recommend a weight loss program.
- It is particularly important to consume an iron-rich diet to help restore blood levels. Please see www.dieticians.ca for food sources that are rich in iron. Foods rich in Vitamin C will help absorb iron
- If able, keep active right up until the day of your surgery, including walking, swimming or cycling.
- Do the knee exercises (p.15).

Preparing Your Home

- Clear floors of obstacles or hazards such as telephone/electrical cords, loose rugs and other objects. If possible, fasten area rugs securely to the floor.
- Ensure you can easily move around your home with a walker.
- Set up a "**recovery center**" where you will spend most of your time. Things like the telephone, television remote control, radio, facial tissues, waste basket, pitcher of water and glass, reading materials and medications should all be within easy reach.
- Avoid rocking chairs, swivel chairs, and office chairs with casters or wheels.
- In the kitchen and bathroom, place all items you use regularly at arm level, so you won't have to reach up or bend down too much.
- Use nightlights, especially between your bedroom and the bathroom.
- If you must use stairs regularly, a sturdy railing(s) is essential. If you do not have a railing, it is recommended that one be **professionally** installed.
- Arrange for any equipment you think you will need (p.13).

Discharge Planning

Start planning now for your discharge from hospital. **Be prepared to be discharged home the same day of your surgery**. It is important to include your family and friends in your discharge planning. Have your ride available as early as the same day of surgery.

Assistance:

Many people live alone. If so, arrange **now** to have someone stay with you (or you could live with them) for <u>about 2 weeks after your surgery</u>. If you have no one to stay with you, there are a few Respite Beds (short term room and board) available at some retirement homes in the Sudbury region that you must pay for. **You must make the respite bed arrangements yourself before admission to hospital.**

Living Arrangements:

If you have stairs at home, your Physiotherapist will practise these with you before you leave the hospital. They may be more difficult at the beginning. You will go up and down the stairs stopping at each step. With time you will be able to do them normally! Try to arrange rooms you frequently use so that everything is within easy reach.

Driving:

You are not allowed to drive for 6-8 weeks after your knee replacement surgery.

Meals:

Prepare meals and freeze them ahead of time. Your local "Meals-on-Wheels" is another option. Make a schedule for friends and family to deliver meals. Ask your local supermarket about having groceries delivered.

Housework/Yardwork:

Do any big cleaning ahead of time. Contact friends and family to help you after surgery.

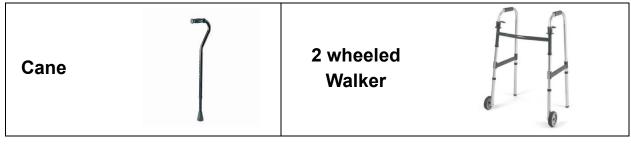
Care-giving:

- Consider getting the Senior's Help Line (in Sudbury 705-523-7000) for emergencies.
- If you do not already have a parking permit for your accessible parking, you may
 want to apply for a temporary permit several weeks prior to your surgery.
 Contact the Ministry of Transportation at (1-800-268-4686) or
 www.mto.gov.on.ca for an application. You will require a referral from a
 regulated health practitioner such as your Family Doctor or Physiotherapist
- You will need transportation for appointments or outings. You could access your local Handi-Transit services (in Sudbury 705-671-2489 or www.greatersudbury.ca). The Red Cross also has a Seniors' Transportation Program: 705-525-1244. In Espanola, there is the Espanola Care Van (Jubilee Bus) 705-862-0244.
- Consider signing up for on-line banking.
- Consider who will care for your pet(s).
- Consider who will care for your significant other if you are the primary caregiver.

Equipment and Supplies

Well before your surgery, shop for personal equipment that will make your life easier after surgery. You may qualify for financial assistance if you are under WSIB (formerly WCB), DVA or private insurance coverage. Often, community agencies such as the Lion's Club may have items that can be borrowed.

Required



Optional



SeamlessMD

Health Sciences North also offers an App called SeamlessMD

SeamlessMD is an interactive step-by-step guide to help you prepare for your surgery and recover faster afterwards. You and/or a caregiver <u>can access the platform on any</u> smartphone, tablet and/or computer.



Enrollment in SeamlessMD is based on surgeon participation. If your surgeon is participating in the program you will receive a call from HSN inviting you to enroll and an email will be sent with a link to register.

The program will guide you through both stages of your surgery – before surgery and at-home

Before surgery, SeamlessMD will:

Give you real time reminders about tasks you need to complete (ex: go to your Pre-Surgery Admission Clinic appointment)

Have a library of information on different pre-surgery topics

At-home, SeamlessMD will:

- Ask you to complete a daily health check, which will let you know whether you are on-track with your recovery, and alert your healthcare team if you have problems
- Give you information about diet and medications

SeamlessMD will let you know what to do based on your answers. It might tell you to try some self-care tips or it might tell you to call the healthcare team – please follow the instructions/actions.

Do not wait for someone from our team to call you back because we might not see it right away.

Pre-Operative Exercises

The following exercises will help you get into shape and prevent you from developing complications postoperatively:

Static Quadriceps Strengthening

- Sit as shown with small pad of towel under the knee to be operated on.
- Pressing the back of the knee into the bed and squash the towel.
- Repeat 10 times, 3 times per day.





Quadriceps Strengthening Over a Roll

- Lie as shown with 6-8 inch roll or coffee can under the knee to be operated on.
- While pressing the knee into the roll, raise the heel up off the bed until the leg is completely straight.
- Repeat 10 times, 3 times per day.





Straight Leg Raise

- Lying as shown with painful leg completely straight and good leg bent.
- Raise leg up about 6-8 inches while keeping it **completely straight**.
- Repeat 10 times, 3 times per day.





Day Before Your Surgery

- Shower or bathe <u>twice</u> with antibacterial soap (i.e. liquid hand soap or dish soap marked "antibacterial") – **night before and the morning of the surgery**.
- Leave ALL valuables and jewelry/piercings at home the hospital is not responsible for lost belongings.
- DO NOT wear makeup, perfume or any scented products.
- Pack a bag to bring to the hospital with the following items:
 - Health card
 - □ A pair of comfortable, well-fitting shoes with non-skid soles
 - □ Loose fitting clothing, preferably jogging pants or shorts

- Basic toiletries and a pack of Kleenex
- Bring this Guidebook with you
- Do not eat for <u>10 hours</u> before surgery. You may be able to drink <u>clear liquids</u> until 3 hours before the procedure. Follow your doctor's recommendations.

After Your Surgery

- The nurse will check your pain level, blood pressure, heart rate and temperature.
 The nurse will also check the circulation and feeling in your leg, check your dressing.
- The Physiotherapist will teach you how to use your walking aid, practise stairs and your exercises.
- Your ride home should be available on short notice. Be prepared to be
 discharged home on the same day of surgery. Depending on your surgical
 plan, however, you may be admitted for an overnight stay.
- You will be given a prescription for pain medication
- It is a good idea to ask your nurse for a dose of your pain reliever just <u>prior</u> to being discharged home. Expect to have significant discomfort from your car ride home. This is normal. Rest and elevate the leg immediately upon arrival home.
- Your staples will be removed approximately 14 days after your surgery either at the hospital or your doctor's office
- You will attend physiotherapy 1 week after discharge. Your home exercises must be started immediately after returning home.
- You will be given an appointment to follow up with your surgeon. This is generally 6-8 weeks after surgery.
- Follow the instructions provided by the hospital on discharge day.

At Home

	Instructions			
Managing	Pain Medicine			
Pain	By the time you leave the hospital, you will only need oral medicines to control you pain.			
	Mild Pain	Moderate Pain	Severe Pain	
	Around the clock Acetaminophen (Tylenol)	 Follow Step 1 Add a prescribed anti- inflammatory (Examples: Celebrex, Naproxen, 	Follow Steps 1 & 2 plus narcotic	
	Can be taken every 6 hours		Start with lowest prescribed dose of	
	Can affect the liver if taken in high doses for long periods of time Ibuprofen, Meloxicam or Diclofenac) Diclofenac	•	narcotic. Increase if needed to the higher prescribed dose	
	3 1		Narcotic use is recommended no longer than 5 days after surgery	
	Non-Medicine Methods			
	 Non-medicine methods can help relieve pain. Some of these include: Ice/cold packs - when applying a cold pack, apply the pack for 10-15 minutes at a time, 4 to 6 times a day or as needed. Make sure you place only a thin layer of cloth, such as a pillow case, between the ice pack and your skin. Physical techniques, such as positioning and touch can be helpful 			
		, distraction with breathing, a		
Taking care of	Your healthcare team will teach you how to take care of your wound before you leave the hospital. Do not put any of these products on your wound: Scented creams or powders Vitamin oil or creams			
your				
wound				
	Ointments (unless your	healthcare teams tells you to)		
	Do not take baths, go into safe to do so.	hot tubs or go swimming un	til your surgeon says it is	

	Instructions
	If you notice any of the following, call your surgeon. If you cannot reach your surgeon, and you do not think it is safe to wait, call your Family Doctor or go to the nearest Emergency Department.
	Redness that is increasing
	Warmth that is increasing
	Swelling that is getting bigger
	Blisters (little water-filled pockets)
	Hardness around the area
	Yellow or green liquid coming out of wound
	Bad smell from the wound
	Bleeding enough to soak through the dressing
	If you have staples/stitches, they may be removed at either the hospital or your Family Doctor's office about 14 days after surgery. You may also have dissolvable stiches that don't require any follow-up care other than managing the dressing.
Diet	Drink plenty of water, eat fruits and vegetables and add fibre to your diet to give you energy and prevent constipation.
Sleeping	Find a position that is comfortable for you. We recommend sleeping and resting with a pillow under your foot and ankle to prevent swelling.
Exercise,	Do your exercises 2-3 times a day.
Medications & Swelling	The Physiotherapist at your outpatient physiotherapy visit will progress your exercises.
	To keep your pain under control, take your pain medicines.
	To reduce and control swelling, ice for 10 to 15 minutes at a time throughout the day. Remember to put thin layer of cloth between your skin and the ice.
Showering & bathing	You may shower after the surgery, but do not soak your incision in water (do not take a bath, go swimming or use a hot tub) until it is fully healed. Do not scrub the incision. Let water cascade over the incision and pat dry. Do not leave a wet bandage on the incision. You may need a tub transfer bench. Use a hand-held shower head and long-handled bath sponge.

	Instructions		
Walking	Do not progress from a walker to a cane unless you are instructed by your Physiotherapist. This will help you walk without a limp. Walking with a limp puts more pressure on your joint. It will also stop your muscles from getting stronger. It is better to walk without a limp using a cane or a walker. Walking with a limp without a cane or walker is also unsafe.		
Going up and down stairs If available, always use a hand rail and a cane.	Going up the stairs, step up with your non-operated leg first, followed by your operated leg and cane If you are going down the stairs, put your cane down first, and then step down with your operated leg.		
Sexual activity	You may resume sexual activity if you feel comfortable. If you are not sure about positions, speak with your therapist or surgeon. Try positions gently and stop if you have pain.		
Leisure and sport activity	Walking is an excellent activity after surgery! You are strongly encouraged to increase both walking distance and the amount of time as tolerated. Walk outdoors when conditions are dry. Consider going to a mall to walk during poor weather conditions.		
	Within 6 to 12 weeks, you may return to your day-to-day activities. You may also return to recreational activities such as cross-country skiing, swimming, golf, tennis, biking or using the elliptical. We do not recommend you ever take part in prolonged high impact activities, such as running or jumping. Your surgeon and Physiotherapist can advise and guide your return to activities.		

Complications after Surgery – what to do:

If you are having the following problems:

Increasing calf swelling and pain

New or sudden chest pain

Trouble breathing at rest

Go immediately to the Emergency Department

If you notice the following problems:

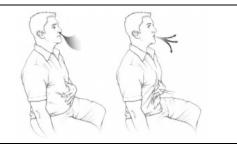
Wound that is:

- · red or increasing warmth
- has swelling and hardness that is increasing
- yellow or green liquid coming out
- has a bad smell
- bleeding enough to soak through bandage
- splitting open
- Severely painful (8, 9 or 10 out of 10)
- Operated leg suddenly looking shorter with severe wound pain
- Fever above 38°C
- If you had an accident or fall

Call your surgeon. If you cannot reach your surgeon, and you do not think it is safe to wait, call your Family Doctor or go to the nearest Emergency Department.

After surgery, we will encourage you to do the following exercises to help prevent blood clots in your leg and lungs. Your nurse and/or Physiotherapist may review these with you.

Deep Breathing and Coughing

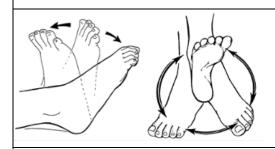


Do this exercise in any position (such as lying in bed or sitting in a chair).

- Take 5 deep breaths
- Then cough 2-3 times.

Repeat this every 15 minutes during your waking hours.

Ankle Pumping



Do this exercise while lying on your back or sitting up in bed.

*Make sure you keep your legs straight. You should feel a stretch in you calf muscles.

- Pump your ankles by pointing your foot up and down as far as possible.
- Pump each ankle 10 times.
- You may also move your ankles in circles, 10 times in each direction.

Repeat this every hour while you are awake.

Post-Operative Knee Replacement Exercises

EXERCISES

Foot and ankle pumps

- Point your foot up and down and make ankle circles
- Repeat 10 times every hour





Static Gluteal/Hamstring Strengthening

- Tighten your buttock muscles while pressing your heel into the bed.
- Hold for 5 seconds
- Repeat 10 times. 3 times per day



Static Quadriceps Strengthening

- Tighten your thigh muscles while pressing your knee into the bed.
- Hold for 5 seconds
- Repeat 10 times. 3 times per day





Heel Slides

- Bend your operated knee by sliding your heel as far as possible towards your buttocks
- Repeat 10 times. 3 times per day





EXERCISES

Quadriceps Strengthening

- Lies as shown with 6-8 inch roll or coffee can under the operated knee
- While pressing the knee into the roll, raise the heel off the bed until the leg is completely straight
- Repeat 10 times. 3 times per day





Straight leg Raise

- Lying as shown with operated leg completely straight and good leg bent
- Raise operated leg up about 6-8 inches while keeping it completely straight
- Repeat 10 times. 3 times per day





Knee Extension Stretch

- Place a rolled up towel under the heel and push down on your knee to feel a stretch
- Hold down <u>30-60 seconds</u>
- Repeat 3 times, 3 times per day

Knee Bending Stretch

- Sitting at the edge of a chair
- Use the good leg to bend the operated knee
- Hold for <u>30-60 seconds</u>
- Repeat 3 times, 3 times per day





Personal Notes			

We hope this booklet has helped to give you the information you need on to get the best possible outcome after your total knee replacement. The information comes from the knowledge and experience of your health professionals.

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