

GUIDE TO YOUR TOTAL KNEE REPLACEMENT

Royal Victoria Regional Health Centre

Please bring this booklet to all hospital appointments, including your hospital stay.

TABLE OF CONTENTS

Intro	duction	4
Unde	erstanding Your Total Knee Replacement	5
Getti	ng Ready for your Surgery	6
•	Staying Active	6
•	Pre-op Exercises	7
•	Pain Control	8
•	Nutrition	8
•	Medications	9
•	Smoking Cessation	10
•	Blood Conservation	10
•	Getting your Home Ready	10
•	Equipment	11
•	Discharge Planning and Support Services	13
Your	Pre-operative Hospital Visit	15
•	What to bring to the Pre-Surgery Treatment Clinic Appointment	16
•	The Week Before Surgery	16
Your	Surgery Day	18
•	The Night before your Surgery	18
•	The Day of Surgery	18
•	Arriving at the Hospital	19
•	Pain Management	20
Your	Hospital Stay	21
•	Clinical Pathway	21
•	Pain Management	21
•	Anticoagulant Therapy	22
•	Nutrition	22
•	Your Healthcare Team	23

TABLE OF CONTENTS

Rehabilitation and Discharge Planning	25
Precautions	25
Learning How to Move	25
Learning How to Manage your Daily Activities	30
Exercises	31
Discharge from the Hospital	34
After Your Surgery Back at Home	35
Know how to Recognize Complications	35
Instructions for Anticoagulant Therapy	35
How to Care for your Incision	36
Ways to Reduce your Pain	36
Physiotherapy, Occupational Therapy, Exercise, & Activity	37
Follow-up Appointment with your Surgeon	39
Returning to your Regular Activities	39
Driving	39
Working	39
Leisure and Sport Activities	39
Sexual Activity	40
Dental and Other Medical Procedures	40
Other Useful Pesources	11

WELCOME

Welcome to Royal Victoria Regional Health Centre. This guide has been developed by your Healthcare Team to help patients having a total joint replacement. This booklet is to assist you to learn more about their surgery and plan for their recovery.

It is important for you to review the information in this booklet before your surgery, follow all instructions and attend all scheduled appointments.



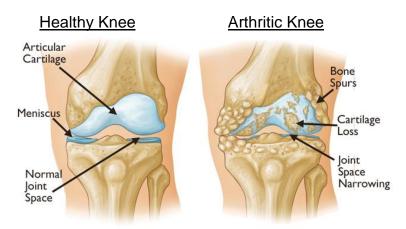
Please bring this booklet to all your hospital appointments related to your joint replacement including your hospital stay.

UNDERSTANDING YOUR TOTAL KNEE REPLACEMENT

The knee joint is a hinge joint made up of three bones: the thigh bone (femur), the shin bone (tibia) and the knee cap (patella). In the knee, the bone surfaces have a smooth layer of cartilage. This cartilage, lubricated by joint fluid, works as a cushion and allows the knee to move smoothly.

Damage to the cartilage, bones, and surrounding soft tissue due to an injury, overuse, or a disease such as arthritis can cause pain, swelling, and stiffness. Specifically when the cartilage wears away to the bone and there is bone rubbing on bone.

In a total knee replacement the damaged cartilage and bone are removed and replaced with artificial surfaces (combination of metal and plastic).



Reference: https://orthoinfo.aaos.org/en/diseases--conditions/arthritis-of-the-knee



Reference: Stryker www.aboutstryker.com

GETTING READY FOR YOUR SURGERY...

Now that you have decided to have surgery, it is important that you and your home are ready. Research shows that people do better with their surgery and recovery when they are prepared.

There are a number of things you can do before surgery to help get prepared, including being fit, healthy and getting your home ready.

1. Staying Active:

Even though your knee may be painful and therefore difficult to move, it is important to stay active before surgery. Research shows that exercise can decrease pain, improve strength, improve flexibility, and help keep your heart in good condition for surgery. Exercising before your surgery will also make your recovery after surgery easier.

Choosing the right exercise is important and if you are <u>not</u> currently on an exercise program you should consult your doctor, surgeon, or physiotherapist.

<u>Endurance Exercises</u> – Exercise such as swimming (water exercises), cycling and/or using a stationary bike can be easier and less painful on the knee because there is less impact on the joint. If you choose walking, do not forget to use your cane or walker, if needed. Using your walking aid will increase your endurance, ease the pressure on your affected joint, and limit the stress on your other joints or your back.





<u>Strengthening Exercises</u> – It is important to do specific strengthening exercises for your legs (similar to what you will be doing after your surgery) to maintain and/or improve the strength in the affected muscles. (See exercises on next page). Please note that these exercises can also be done in bed.

Repetitions – 5-10 times: you should feel the muscle working and getting tired. If the exercise causes excessive pain that does not go away, stop doing the exercise.

Frequency – 2-3 times per day.

Duration – hold each exercise for 5 seconds.



STATIC QUADRICEPS CONTRACTION Pull your toes up and push your knees down firmly against the bed by tightening the front of your

thighs. Hold for 5 seconds. Repeat 10 times, 3 times per day.

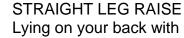
@ PhysioTools Ltd

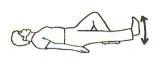


QUADS OVER A ROLL

Lie on your back. Bend your good leg up and put a can or rolled up towel under the knee on your affected side. Pull your foot and toes up by tightening your thigh muscle and lift foot off the bed (keep the knee on the roll). Hold 5 sec. then slowly lower your foot to the bed. Repeat 10 times, 3 times per day

@ PhysioTools Ltd





Lying on your back with your affected leg straight and the other leg bent. Keeping your knee as straight as possible and toes pointing up, lift your entire leg 20 cm off the bed. Hold approx 5 secs. Repeat 10 times, 3 times per day.

© PhysioTools Ltd



HIP AND KNEE BENDING

Lying on your back, bend and straighten your knee and hip by sliding your heel on the bed. You can use a strap or towel under the knee to help pull the leg up. Repeat 10 times, 3 times per day.

2. Pain Control:

Using your **pain medication** regularly will help control your pain and allow you to stay active. Consult your pharmacist or doctor for any questions or concerns.

The use of **ice** and/or **heat** can also help control your pain. Try both and use the one that better relieves your pain.

Ice – Ice pack, cold pack, ice compression wrap, or bag of frozen vegetables over a tea towel to protect your skin

- Apply for 10-20 minutes as needed
- 1 hour off between icing sessions

Heat – Heating pad, hot water bottle, warm bath, or whirlpool

- Apply for 15 minutes
- 1-2 times per day
- Do not use heat in acute flare-ups; if joint is inflamed, or post-operatively

3. Nutrition

Throughout all stages of life, eating a variety of nutritious foods will help you meet your vitamin, mineral, protein, and energy needs. At this time, eating healthy will help your body prepare for surgery and heal afterwards. To meet your nutritional needs, eat a variety of foods from each of the 4 food groups listed in **Canada's Food Guide: Milk and Alternatives, Grain Products, Vegetables and Fruits, Meat and Alternatives.** A copy of Canada's Food Guide is included and will give you the number of servings from each food group you need daily.

For more information:



www.healthcanada.gc.ca/foodguide

Eat Right Ontario 1-877-510-5102 www.eatrightontario.ca

If your diet is inadequate in one of the food groups, ask your doctor to recommend a multivitamin and mineral supplement that is right for you. For some, weight loss would be beneficial. It is important to remember that weight loss at the expense of nutrition

may lead to complications. A dietitian will recommend a healthy realistic weight loss plan for you and provide regular follow up.

You should let your doctor know if you drink **alcohol** daily. Some precautions may need to be taken to prevent symptoms of alcohol withdrawal after surgery. You must avoid alcohol for 24 hours before your surgery.

4. Medications

Please be prepared to bring a list of all medications you are taking, including over-thecounter medicines, herbal remedies, vitamins, and diet pills. Bring your labeled pill bottles so we can double-check them with your list.

It is also important that you let your doctor know if you take **herbal supplements** because they can increase your risk of bleeding and interfere with medications for sedation and pain control. Examples of herbal supplements are:

- Aloe vera
- Bromelain
- Danahen
- Dong quai
- Ephedra
- Feverfew
- Garlic (normal use in foods is fine)
- Ginger (normal use in foods is fine)
- Ginkgo, ginseng
- Goldseal
- Kava
- Licorice (not including licorice candy)
- Omega 3 fatty acids (doses greater than 3 grams)
- Senna
- St. John's Wort

All herbal supplements should be stopped at least 3 weeks before your surgery. **Echinacea** and **valerian** should also be discontinued as soon as possible. Valerian should be tapered to avoid withdrawal symptoms, ask your pharmacist for advice. Inform your doctor if you are taking individual vitamins or mineral supplements.

5. Smoking Cessation

If you smoke, there is no better time to quit. Smoking interferes with healing and may slow down your recovery. People who smoke are at higher risk of developing complications with their lungs, circulation, and surgical site healing. Talk to your family doctor about ways to help you stop smoking.



Also be aware that RVH is a smoke-free facility. This also includes the outdoor property.

Smokers' Helpline 1-877-513-5333

www.smokershelpline.ca

Simcoe Muskoka District Health Unit 705-721-7520

www.smdhu.org/HC

6. Blood Conservation

Most elective total joint replacements **DO NOT** require a blood transfusion. In the event that you do need a post-operative blood transfusion, blood will be provided through Canadian Blood Services. For more information, please visit www.blood.ca or call 1-888-2-donate.

7. Getting your home ready

It is important to have extra help from family, caregivers, and/or friends after your surgery. However, there are a number of things **you** can do before your surgery to get your home prepared:



☐ Install and secure railings along stairs (inside and out).
☐ Install railings or grab bars around toilets and bath
☐ Non-slip coating or mat in your shower/bath
$\hfill\Box$ Remove clutter, small mats, and throw rugs; and tape down edges of large rugs to
avoid tripping hazards.
☐ Keep electrical cords out of the way.
☐ Rearrange or remove furniture to have enough room to use your walker.

☐ Prepare and freeze some meals in advance.
☐ Organize frequently used items within easy reach to reduce need to bend to low
shelves or drawers (especially in the kitchen and bathroom).
☐ Add firm pillows to low chairs.
☐ Do heavy housekeeping activities ahead of time, or arrange for help.
☐ Make arrangements to have someone help with your pets.
☐ You may want to make temporary arrangements to stay on one level of your home to
avoid stairs, if necessary.
☐ Arrange for a ride to all appointments before and after surgery. Driving is not
recommended for 6 weeks after your surgery. Talk to your surgeon about driving
restrictions.
☐ Arrange for someone to bring you home from the hospital once discharged after your
surgery. Discharge time is 9:00 a.m. Most people are ready to return home within 2
days.
☐ Ensure that you have someone to help you at home after your surgery or stay with
family/friends. It is also possible to make arrangements for respite care, which is not
covered by OHIP (see more information on page 15).
☐ Make arrangements for the equipment you will need (see equipment list below).
Please note North Simcoe Muskoka Home and Community Care (formerly CCAC)
no longer rents equipment.
$f \square$ Pre-arrange your physiotherapy to start 7-10 days after your surgery (local hospital or
physiotherapy clinic in your community)

8. Equipment:

To purchase or rent adaptive equipment and/or mobility aids, please visit www.nsmhealthline.ca or call 310-2222 to be connected with the North Simcoe Muskoka Healthline. There you will find information on where to obtain your safety equipment in your area.

Needed:

- ☐ 4-wheeled walker
- ☐ Cane or crutches





Recommended:

☐ Bath bench or seat





☐ Raised toilet seat with handles, or commode







RVH-3242 16-May-2018 12

☐ Knee-height firm chair with hand rests	
☐ Rubber bath mat	
☐ Handrails on all stairs	
☐ High stool, if needed	1
☐ Hand-held showerhead	
☐ Elastic shoe laces, if needed	
$\hfill\Box$ Grab bars around bathtub and/or toilet, as needed	
☐ Ice/cold packs	
$\hfill\Box$ Reacher, long-handled shoe horn, and sock aid. `	Your Occupational Therapist will
demonstrate and have you practise after your sur	gery.

All equipment has a maximum weight capacity. If you weigh over 225lbs/102kg, your may need to rent bariatric equipment.

9. Discharge Planning and Support Services:

When you leave the hospital you will be returning to your home, staying with family or going to a retirement home with assistive living for respite. Arrangements for your discharge plan from the hospital are your responsibility and must be made before you have your surgery.

There are also programs in the community that offer options for extra assistance depending on your situation.

Respite Care Retirement Homes:

Short-term stay is available at a daily rate in some retirement homes which includes meals, physiotherapy 2-3 days/week, and limited Personal Support Worker (PSW). Please call Ontario 211 or visit nsmhealthline.ca for a list of retirement homes in North Simcoe Muskoka and inquire about respite services. For further information please see "Other Useful Resources" in the last section of this booklet.

Private Services

Private agencies are also available to provide caregiver services in your home, at a cost. Services may include:

- Nursing
- Personal care (bathing, dressing, grooming)
- Homemaking (housekeeping, shopping, laundry)

Some services/agencies are listed in the last section of this booklet ("Other Useful Resources") or check your telephone directory under Home Health Care Services and Nursing.

10. Other Helpful Pre-operative Planning Resources:

www.myjointreplacement.ca

Canadian Orthopedic foundation: whenithurtstomove.org or 1-800-461-3639

YouTube Video: Hip and Knee Replacement by Doctor Mike Evans

or www.evanshealthlab.com/hip-knee-replacement/

YOUR PRE-OPERATIVE HOSPITAL VISITS

Before your surgery you will attend:

1. Pre-Operative Knee Replacement Class

2. Pre-Surgery Treatment Clinic

You will be contacted by the hospital booking department with an appointment date, time, and location. Please bring a family member or friend and your "Guide to Your Total Knee Replacement" booklet with you to both of these appointments.

Please note: Please ensure there is someone to receive this call or that your voicemail clearly states your name so we can leave a message.

1. Pre-Operative Knee Replacement Class:

This will be a group education session to help you prepare for your upcoming knee surgery and recovery. This class may take 1 to 2 hours.

2. Pre-Surgery Treatment Clinic:

Before your Pre-Surgery Treatment Clinic appointment you will also receive an anesthetic questionnaire and a pre-admission medication review. Please complete the forms at home and bring them with you to this visit. Also bring all your medications in original containers or a medication reconciliation list from your pharmacy.

During this appointment you will meet with a Registered Nurse who will review your health history and provide you with information to prepare you for your surgery and post-operative needs. Please let the nurse know of any special needs you have that may affect your surgical experience. The nurse will have time to answer any questions that you may have.

You will also meet with a Pharmacy Technician who will review any medications you are taking as well as any recent medication changes.

This appointment will take between 2 to 4 hours as you may need blood work, electrocardiogram of your heart and x-rays completed. You may also have an appointment with an Anesthesiologist.

Wł	nat to bring to the Pre-Surgery Treatment Clinic Appointment:
	A family member or friend
	Completed questionnaire and pre-admission medication review
	All medications in original containers and/or updated medication list from your
	pharmacist
	All herbal preparations in original containers
	Any recent test results for health conditions such as heart or breathing problems
	(please ask your family doctor for copies of these reports)
	This booklet
	History and Physical form from your family doctor

You can arrange to have a medication reconciliation review with your pharmacist by calling your pharmacy and arranging this with them prior to your appointment with the Pre-Surgery Clinic. You will also need to have a History & Physical completed with your family doctor before your scheduled surgery. If you are unable to get this completed before your date of surgery please contact your surgeon's office.

If you do meet with an anesthesiologist at the time of your Pre Surgery Treatment Clinic visit, you may ask them to write down any special instructions about your medications for the day of surgery.

The Week Before Surgery

If you have received any special instructions regarding your medications during your Pre-Surgery Treatment Clinic visit, follow them closely. If you have questions speak to your surgeon, family doctor or pharmacist.

If you get a cold, fever, infection or open wound on the leg being operated during the week before surgery or if your health changes in any way, please inform your surgeon.

Night Before and Morning of Surgery

You will receive chlorhexidine disposable wash cloths and instructions to use them at the time of your Pre-surgery Treatment Clinic visit. The purpose of the chlorhexidine disposable wash clothes is to reduce the number of microorganisms on the skin prior to surgery.

Have a shower or bath the evening before surgery prior to using the chlorhexidine disposable wash clothes. Dry your skin well and then use the wipe(s) to cleanse the appropriate operative area as you were directed. Allow the chlorhexidine to dry completely before putting on clothing. Do not shower the morning of surgery. You will use the wipe(s) again that morning and allow the area to dry completely before getting dressed to come in to the hospital.

YOUR SURGERY DAY...



The night before your surgery, it is normal to be a bit nervous and excited.

Fo	llow these instructions:				
	Do not eat anything after midnight.				
	You may drink clear fluids (water, clear tea or coffee with sugar, apple juice,				
	cranberry juice, sports drinks, Kool-Aid) up until 2 hours before your arrival time. Do				
	not drink milk or orange juice!				
	The exception: Take your regular morning prescription oral medications with a sip				
	of water at 6:00 a.m. the day of your surgery unless instructed otherwise.				
	You should have a bath or shower the night before so you feel fresh and clean.				
	You will be given special cleansing wipes to clean the skin in the incision area (after				
	your shower or bath the night before) and the morning of your surgery.				
	Do not shave the hip or knee area – if shaving is required, this will be done at the				
	hospital.				
	Remove nail polish (fingers and toes) and artificial nails. Do not wear perfume or				
	aftershave.				
	Remove all body jewelry and piercings.				
	Leave all valuables (jewelry, cash) at home or with a relative or friend.				
	Plan to have a support person come with you on the day of your surgery. Only 1				
	person is allowed to stay with you in the Surgery Waiting Area.				
Th	e Day of Surgery				
W	hat to bring to the hospital:				
	Your health insurance card and any other medical insurance you may				
	have.				
	Any inhalers, sprays, eye drops, or specific medications or equipment that the Pre-				
	Surgery Treatment Clinic nurse/ Pharmacy technician has instructed you to bring.				

RVH-3242 16-May-2018 18

If you wear glasses, contact lenses, hearing aids, or dentures, be sure to bring a
case to put them in, as well as any cleaning or storage solutions. These should be
labeled with your name and telephone number.
Comfortable, flat, well-fitting, non-slip closed heel shoes or slippers.
Loose-fitting clothing to practice exercises and dressing.
Personal care items and toiletries (hygiene items such as a toothbrush, soap,
deodorant, any personal incontinence products you use, and a razor).
This booklet.
Leave clothing and personal care items in a carry bag in the car and when your bed
on the unit is ready, we will have your support person take these items to your room.

Arriving at the Hospital...

- 1. You should arrive at the Surgical Services Reception area on the second floor to be admitted at your designated arrival time (Level 2 Atrium entrance).
- You will be shown where to change into a hospital gown and housecoat. Your clothes will be labeled and taken to your room later.
- You will be seen by a day surgery nurse who will admit you for your surgery.
 You will then wait with your support person in the waiting area until your Surgeon and Operating Room (OR) are ready.
- 4. You will receive medications by mouth to assist with pain management and have an intravenous line (IV) inserted pre-operative.
- The Anesthesia Care Team will assess whether you need to have a spinal
 injection for anesthesia and pain management prior to your surgery. This will be
 performed in a designated area.
- 6. Next you will be escorted to the Operating Room area. You will meet the Operating Room Nurse and the Anesthesiologist. Be sure to ask any questions you have at this time.
- 7. After the surgery is completed, you will be taken to the Post Anesthesia Care Unit (PACU). Your PACU nurse will frequently check your vital signs and dressing. Pain medication will be given to you as needed. When you are awake and comfortable, you will be taken on your bed to your room on the surgical unit, where you meet your support person who came with you.

Pain Management:

Pain management begins even before surgery. Medications are administered in the admission area prior to the operative procedure. The medications given work on different pain pathways and provide you with pain control before your surgery.

When you have a joint replacement you will likely receive a spinal anesthetic for your operation. This allows for administration of local and long lasting pain medication to prepare you for your surgery and recovery after. You will be positioned either side lying or sitting on the edge of the stretcher. A small amount of local pain medication will be injected into the skin at the area of insertion to numb it. The spinal needle is then inserted and medication is administered. The effects are almost immediate. You will have a sense of warmth in your legs and buttocks and then quickly lose the ability to move your legs. This is normal. There are usually no tubes or needles left in after this procedure. Your level of sleepiness can be adjusted, which you would have discussed with the Anesthetist before your surgery.

For your total knee replacement surgery you may be offered a femoral nerve block. This involves injecting local pain medication around the femoral nerve (a nerve in your thigh) pre-operatively, which allows for better pain control in the first 18 to 24 hours post-operatively. This is done either in the block room or the operating room itself. An ultrasound machine is used to find the nerve bundle and to confirm placement of the pain medication. The femoral nerve is easily found at the top of your thigh. This area is cleansed and a small amount of local pain medication is placed under the skin. As the nerve is seen on the ultrasound machine, the pain medication is injected and surrounds the femoral nerve. As the spinal anesthetic wears off, the effects from the femoral nerve block continue to provide good pain control. Most people find they have much less pain for 12 to 24 hours after surgery and are able to walk and complete their therapy much more comfortably than without this nerve block.

YOUR HOSPITAL STAY

Once you have been transferred to your room, your progress is watched closely. Your blood pressure, temperature, pulse, and breathing are carefully monitored. The dressing over the incision is watched closely for drainage and the operative limb is checked frequently to ensure there is adequate circulation. Staff will encourage you to breathe deeply and cough to help expand your lungs and your position will be changed frequently. You will also be encouraged to move your ankles and toes to encourage a steady circulation. (See page 34)

Patients often return from surgery with a variety of tubes and drains. Some tubes may deliver material to you. Examples of these are oxygen and intravenous tubes. Other tubes may have been placed to provide drainage. Examples of these are drains near the incision and urinary catheters.

On the day after your surgery, have your family member/support person bring the following items up to your room:

Your reacher to be used for dressing and grabbing items.
Your walking aid, clearly labeled with your name.
Long shoehorn and sock aid, if needed.

Clinical Pathway:

Typically, patients who have undergone a Total Knee Replacement are in the hospital for 1- 2 days. Every person is different after their surgery, but the Pathway is an outline of what normally occurs in those 1-2 days while in the hospital.

Pain Management:

Postoperative management of pain involves oral medications and in some situations, the addition of the PCA (Patient Controlled Analgesia) pump. Pain medication will be given around the clock for the first 48 hours and then on an as-needed basis. You may also receive medication to relieve nausea and vomiting. The Acute Pain Service (APS) team includes the Anesthesia Assistant and Anesthesiologist. You will be seen each

day and changes will be made to your pain management routine to provide optimum comfort based on your needs.

Anticoagulant Therapy:

Blood clots are a potentially serious complication after your joint replacement. While in hospital, you will be given an anticoagulant medication (blood thinners). Anticoagulant therapy will reduce your risk of blood clots and are given in either a pill or needle form. What can I do to prevent blood clot?

- It is important to take your anticoagulant medication post operatively as prescribed by your physician.
- You will do deep breathing and coughing exercises for several days after surgery. You may be asked to use a breathing device as well. This is done to expand your lungs and help get oxygen to the tissues.
- Active movement before and after surgery helps to prevent possible complications. Some patients get out of bed the day of surgery. A nurse or physiotherapist will help you do this. It is important to also perform your ankle pumping exercises while in bed.

These activities will help reduce the risk of blood clots.

Nutrition:

At admission, please complete the Patient Preference Sheet so your menus will be individualized according to your food preferences.

As your digestive system recovers from the effects of the surgery and anesthesia, your diet will be progressed from drinking liquids to eating solids. While your body is healing, it is important for you to eat a nutritious, well-balanced diet that provides enough calories and protein to meet your needs. Excellent sources of protein are found in the Milk and Alternatives, as well as the Meat and Alternatives groups of Canada's Food Guide. Nutritional supplements such as Ensure, Glucerna (for diabetics) or Carnation Anytime may be provided with your meals. Consuming these nutritional supplements throughout the day will help you meet your increased need for protein and

nutrients during your recovery. It is not unusual for constipation to occur following surgery due to pain medications and limited activity. A high fibre diet may be ordered for you. To prevent constipation:

- Drink at least 8 cups (2 litres) of non-caffeinated fluid a day
- Increase fibre in your diet (whole grain products, fruits, and vegetables are the best sources of fibre)
- Complete daily activities as recommended
- Do not overuse laxatives
- Develop a regular bowel routine

If you have any questions regarding medications for constipation, contact your pharmacist.

While in hospital, if you are concerned that you are not eating well or you would like diet information (such as how to increase your protein or fibre intake) for use at home after discharge, ask to have a registered dietitian visit you.

Your Healthcare Team:

Physician Assistant (PA)

Physician Assistants (PAs) follow your course of stay at the hospital and they will be the main link between your surgeon, your healthcare professionals, and you. Any issues will be brought to the PAs attention and he or she will consult your surgeon for recommendations.

Nursing

During your hospital stay, your nurses play an important role in your daily medical care and rehab goals. Keep your nurse well informed regarding any concerns.

Physiotherapist (PT)

Physiotherapists provide a detailed musculoskeletal assessment and plan individualized treatment with specific goals. Treatment includes education, exercises, walking progression, discharge planning, and progression of functional activities.

Occupational Therapist (OT)

Occupational Therapists provide a detailed musculoskeletal assessment and cognitive screening, and plan individualized treatment with specific goals. Treatment includes education and implementation of the activity precautions set out by your surgeon, specifically regarding daily activities and safety for discharge.

Rehabilitation Assistant (RA)

During your hospital stay you will be seen daily by a Rehabilitation Assistant. They work under the direction of the OT and/or PT to deliver treatment. This will include: exercises, transfers, ambulation, activities of daily living and education. The R.A. regularly reports back to your OT and PT regarding treatment, progress and any concerns.

Additional Healthcare Professionals Available if Required May Include:

Discharge Planner

The Discharge Planner ensures timely and appropriate discharge of patients. They act as a liaison and provide guidance to patients and their families pertaining to relevant community agencies to support their needs. They collaborate with your Healthcare team to establish a safe discharge plan for you.

Dietitian

Registered Dietitians are available to provide a nutritional assessment, an individualized nutrition care plan, and nutrition education/advice. If you have a concern about your nutrition or diet, you may request a visit from a dietitian.

REHABILITATION AND DISCHARGE PLANNING

Rehabilitation starts on the day of your surgery and includes your entire Healthcare Team including **you** as an active participant.

The goals for your rehabilitation while in the hospital are:

- Minimize your pain
- Get you moving (getting in and out of bed; up to a chair; walking)
- Provide education regarding your knee precautions
- Teach you how to safely care for yourself at home
- Prepare you to safely go home

Precautions:

- **Do Not** rest your operated knee bent over a pillow. This can cause stiffness in both your hip and knee, making it harder to straighten your leg.
- Do Not be afraid to bend your operated knee after surgery. Be gentle at first, but keep doing it.

Learning How to Move:

Your therapists will teach you how to move and provide other helpful tips if you are having difficulties.

Standing up from a bed, chair, or toilet:

- Move to the edge of the bed or chair
- Slide your operated leg forward and lean forward
- Keep your hands on the bed or armrests and push yourself to standing



RVH-3242 16-May-2018 25

Sitting Down:

- Back up with your walker/crutches until the back of your legs touch the bed/chair/toilet
- You may need to keep your operated leg out in front of you for the first few days until your knee is more flexible
- Reach back with both hands for arms of chair
- Lower self gently



Walking:

Your physiotherapist or occupational therapist will determine the appropriate walking aid for you (crutches or walker) and instruct you on how to walk with your walking aid.

Using a walker or crutches:

- Stand up tall and look ahead while you walk
- Move your walker or crutches first and then move your operated leg forward, followed by your other leg.
- Put weight through your walker/crutches for support
- Take small, even steps
- Avoid pivoting through the operated leg



RVH-3242 16-May-2018

Stairs:

- Hold onto railing with one hand and put your cane or crutches in the other
- Go up the stairs with the non-operated leg first, followed by the operated leg and then the cane or crutches
- Going down the stairs, lower the cane or crutches to the step below, followed by the operated leg, and then the other leg.



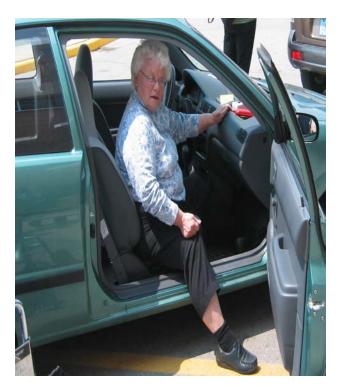


RVH-3242 16-May-2018 28

Car Transfers:

- Make sure the front passenger seat is pushed back as far as possible
- Put a firm cushion in a garbage bag and place it on the seat. This is to raise the height of the seat and make sliding easier
- Slightly recline the back rest of the seat
- Back up using your walking aid and feel for the car on the back of your legs.
 Place one hand on the dashboard or secured door and the other on the side of the car or backrest
- Straighten your operated leg and sit down slowly
- Slide back as far as you can and swing your legs in, one at a time, and keep your operated leg straight out (bend your knee slightly to clear the door frame)
- Reverse above steps to get out of a vehicle
- For vans, step up backwards onto a firm step stool or running board with the good leg first, then your operated leg
- Make sure someone is around to help you





29

RVH-3242 16-May-2018

Learning How to Manage Your Daily Activities

A member of your therapy team will assist you with the progression of your daily activities, using appropriate equipment as necessary. This will include how to care for yourself following your new knee precautions, and preparation for you to safely go home.



Bathing



Dressing



Toileting



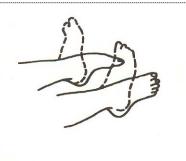
RVH-3242 16-May-2018 30

Exercises

Immediately after your surgery it is important to start your deep breathing, coughing and ankle pumping exercises. These are to be done 10 times every hour while you are awake.

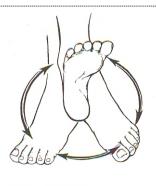


DEEP BREATHING AND COUGHING
Sitting up in bed or in a chair, keep your
shoulders relaxed and take a deep breath in
through your nose, allowing your abdomen to rise
and slowly breathe out through your mouth.
Repeat 10 times, followed by a strong cough,
every hour when awake.



ANKLE PUMPING

Lying on your back or sitting, point your toes down and then up in a slow, steady motion to improve circulation and range of motion. Repeat 10 times every hour when awake.



ANKLE CIRCLES

Move your ankle around slowly in a large circle. Repeat in the opposite direction. Repeat 10 times every hour when awake.

© The Saunders Group Inc.

Your physiotherapist and/or rehab assistant will instruct you on the exercises below. You will be expected to practice these exercises on your own as well as with the therapist.



STATIC QUADRICEPS CONTRACTION

Pull your toes up and push your knees down firmly against the bed by tightening the front of your thighs. Hold for 5 seconds. Repeat 10 times, 3 times per day.

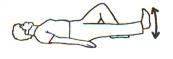
© PhysioTools Ltd



QUADS OVER A ROLL

Lie on your back. Bend your good leg up and put a can or rolled up towel under the knee on your affected side. Pull your foot and toes up by tightening your thigh muscle and lift foot off the bed (keep the knee on the roll). Hold 5 seconds then slowly lower your foot to the bed. Repeat 10 times, 3 times per day.

© PhysioTools Ltd



STRAIGHT LEG RAISE

Lying on your back with your affected leg straight and the other leg bent.

Keeping your knee as straight as possible and toes pointing up, lift your entire leg 20 cm off the bed. Hold approximately 5 seconds. Repeat 10 times, 3 times per day.



HIP AND KNEE BENDING

Lying on your back, bend your knee as much as possible. Using a strap or towel under the knee to help pull the leg up. Hold 5 seconds. Repeat 10 times, 3 times per day.

@ PhysioTools Ltd



KNEE EXTENSION STRETCH

When lying down, place a can or roll under your ankle of your operated leg and let your knee straighten as much as possible. You will feel a stretch in the back of the knee. Do what you can tolerate and work up to a 5 minute stretch, 3 times per day.

© PhysioTools Ltd



KNEE EXTENSION

Sitting on a chair, tighten your thigh muscle and straighten your knee while keeping toes pointing up. Hold 5 seconds and slowly relax your leg. Repeat 10 times, 3 times per day.

© PhysioTools Ltd



KNEE BENDING/FLEXION

While sitting on a chair, bend your operated knee as much as possible. You can cross your other leg over top to help push your knee into bending. When you feel strong pulling through your knee, hold for 5 seconds. Repeat 10 times, 3 times per day.

Discharge from the Hospital

Your discharge plans were initially discussed with you at your pre-operative visit. For most people, the goal is to return home by Day 2 after their surgery. The final decision of where and when you will be discharged is based on your initial plans, your medical condition, your progress with therapy, and the recommendations of the Healthcare Team. Your healthcare Team will work with you to establish a safe discharge plan and determine your discharge date.

Most patients having a total knee replacement meet their acute rehab goals in hospital and are discharged directly home.

It is also important for you and your family members to be involved and be prepared. As previously discussed in the "Getting Ready for Your Surgery" section and your pre-operative appointment, you are also responsible for making sure your equipment is ready for you at home. You may have already made arrangements, and if not, you may have to have a family member or friend organize this while you are in the hospital. Please note the North Simcoe Muskoka LHIN Home and Community Care (formerly CCAC) no longer rents equipment.

AFTER YOUR SURGERY...BACK AT HOME

Know How to Recognize Complications...

Most people recover from their joint replacement **without** any complications. Some pain and swelling is normal. Even so, you should know how to recognize problems if they develop.

Possible signs of Infection:

- Change in colour or odour or amount of drainage from your incision
- Your incision opening up or gapping
- Unexplained fever, chills, night sweats (temperature higher than 38°C/101°F)
- Increased redness or swelling of the incision edges

If you notice any signs of infection, call your surgeon or family doctor.

Anticoagulant Therapy

It is likely that you will be given a prescription for anticoagulant medication. This medication prevents clots from forming. There are several different anticoagulant medications (blood thinners). Some are taken orally and others are by injection. Some blood thinners require routine blood tests to make sure that it is working properly. Your surgeon will determine which anticoagulant medication is best for you. Take this medication for as long as directed by your surgeon.

Before you leave the hospital, your nurse will provide you with specific instructions on your anticoagulant medication. Contact your physician if you notice easy bruising, nosebleeds or blood in your urine.

Warning Signs of Blood Clots:

- Swelling in the thigh, calf or ankle that does not go down with elevation
- Increased pain in the calf that becomes more difficult to control
- · Redness or warmth in your calf

What to do:

Taking your **blood thinners** and staying **active** as recommended by your surgeon will help minimize your risk of blood clots.

 Notify your physician immediately if you notice increased pain or swelling in either leg.

On the rare occasion a blood clot can travel to your lungs, which is a medical emergency.

- Call 9-1-1 if you have any of the following:
 - Shortness of breath
 - Difficulty breathing
 - Chest Pain
 - Uncontrolled bleeding (i.e. coughing up blood, bleeding after a bowel movement, etc.)

How to Care for Your Incision

- Your skin staples are removed 14 days after your surgery by your family doctor.
- This may be done by your family physician, surgeon, or at a walk-in/urgent care clinic. Please note, Home and Community Care no longer performs this service (formerly CCAC).
- You will receive further instructions regarding incision care before you leave the hospital.
- Caring for your wound is important for healing and to avoid infection.
- Wounds heal quicker when they are kept clean and edges are held together.
- Do not scratch, rub, or pick at your staples.
- Eat a healthy diet to give your body what it needs to heal.
- Stop smoking as smoking decreases blood flow and will slow down the healing process
- Talk to your outpatient therapy team if you have concerns regarding your scar appearance.

Ways to Reduce Your Pain...

 Don't be afraid to take your pain medication as recommended (use laxatives and stool softeners with narcotics).

- Use ice, cold packs, ice compression wrap placed over a tea towel (not directly on the skin) for 10-20 minutes, as needed; 1 hour off between icing sessions.
- Do your exercises as shown by your physiotherapist. Even though your exercises
 may cause some discomfort at first, doing your exercises will decrease your
 stiffness, improve your healing, and allow you to return to all your normal activities
 sooner.
- Rest as needed.

Physiotherapy, Occupational Therapy, Exercise, and Activity

Once you are home it is important to continue your exercises, walking, and daily household chores as taught to you by your physiotherapist/occupational therapist when you were in the hospital. Gradually increasing your activity (walking and daily chores) will help you regain your strength, mobility, and endurance. Be sure to follow the instructions you were given by your therapists.

Outpatient **physiotherapy** is recommended and your surgeon will provide you with a referral for Physiotherapy services. Book your appointment at your local hospital or physiotherapy clinic in your community to start 7 days after your surgery. How much physiotherapy you require will depend on your individual progress and be determined by you and your physiotherapist.

OHIP Funded Physiotherapy Clinics

CLINIC NAME	CLINIC ADDRESS	CITY	POSTAL CODE	TELEPHONE
Rarrie Physiotherany (linic	103-1 Quarry Ridge Road	Barrie	L4M 7G1	705-725-1980
	950 Mosley Street	Wasaga Beach	L9Z 2G8	705-429-9619
Healthcare – South Muskoka Memorial Hospital Site)		5	P1L 2E4	705-645-0055
Closing the Gap Healthcare Group – Barrie	507-80 Bradford Street	Barrie	L4N 6S7	888-776-0991

CLINIC NAME	CLINIC ADDRESS	CITY	POSTAL CODE	TELEPHONE
Closing the Gap Healthcare Group - Huntsville	202-395 Centre Street North	Huntsville	P1H 2P5	888-660-3959
Closing the Gap Healthcare Group – Innisfil	7896 Yonge Street	Innisfil	L9S 1K9	877-560-0202
Lifemark Collingwood Sport Medicine and Rehabilitation Centre	10 Keith Ave., Unit 105	Collingwood	L9Y 0W5	705-445-5303
Midland Physiotherapy and Rehabilitation Centre	375 William Street, Unit 1	Midland	L4R 2S4	705-528-0044

OHIP Funded Hospital Physiotherapy Clinics

CLINIC NAME	CLINIC ADDRESS	CITY	POSTAL CODE	TELEPHONE
Royal Victoria Regional Health Centre – Adult Ambulatory Rehabilitation Clinic	201 Georgian Drive	Barrie	L4M 6M2	705-728-9090 x 47310
Orillia Soldiers Memorial Hospital	170 Colborne Street West	Orillia	L3V 7B8	705-325-2201
Collingwood General & Marine Hospital	459 Hume St	Collingwood	L9Y 1W6	705-445-2550
Georgian Bay General Hospital - Physiotherapy	1112 St Andrew's Drive	Midland	L4R 4P4	705-526-1300 X 5474
Muskoka Algonquin Healthcare- Huntsville District Memorial Hospital	100 Frank Miller Drive	Huntsville	P1H 1H7	705-789-2311 x 2249
Muskoka Algonquin Healthcare- Almaguin Health Centre	150 Huston Street	Burk's Falls	P0A 1C0	705-382-2900 x 235

Please note, the clinic contact information may change without notice. If you would like more up-to-date information, search online for "Publicly-Funded Physiotherapy Ontario".

Follow-up Appointment with Your Surgeon

Your first follow-up appointment with your surgeon will be 4-6 weeks after your surgery. You will need to call your surgeon's office to book this appointment. The appointment will be in the Fracture Treatment Clinic, which is located on the first floor of the hospital.

RETURNING TO YOUR REGULAR ACTIVITIES...

At this point, you are getting ready to return to regular activities and probably have a lot of questions about getting your life back to normal.

Driving

Driving is **not** recommended for **6 weeks** after your surgery. Talk to your surgeon at your 6 week follow-up appointment about your driving restrictions. This will depend on which leg was operated and how you are progressing.





Working

Returning to work will depend on the type of work you do. It is recommended you take at least 4-6 weeks off and will need clearance from your surgeon to return to work. It is also beneficial to speak to your employer regarding any special needs. For example, you may still be using a walker or a cane to walk.



Leisure and Sport Activities

When to return to your sports or leisure activities will depend on the type of activity you want to return to doing. For example, **walking** is encouraged right away and is part of your rehab. **Swimming** is often a good activity in the early stages.

3 months after your surgery you may resume low impact activities such as golfing, bowling, dancing, gardening, cycling, curling, along with walking and swimming.

Other activities will depend on previous experience and should be discussed with your surgeon before resuming.

Activities that are **not recommended** are jogging, running, squash, racquetball, high impact aerobics, basketball, football, soccer, volleyball, and singles tennis. These activities are high impact and cause stress on your new knee. You must protect your new joint so it will last.

Remember, being active along with a healthy diet helps you maintain your ideal body weight. Being overweight also adds stress to your new knee and can cause damage.

Sexual Activity

It is often recommended that sexual intercourse can be resumed 4-6 weeks after your surgery. Most people prefer to start by taking a more passive position which requires less energy. Avoid any position that causes pain. Check with your surgeon or Occupational Therapist if you would like more information.

Dental and Other Medical Procedures

It is important to tell your dentist and other doctors about your total knee replacement before any dental work, procedure, or other surgery. You may need antibiotics to prevent bacteria from infecting your new joint.

OTHER USEFUL RESOURCES

The following are some programs, services and agencies available that you may find helpful.

- You may also want to check your telephone directory under Home Health Care and Nursing for other services/agencies available.
- Friends, family and neighbours may also know of helpful services in your community.
- Please note services and contact information may change without notice. RVH will update as this booklet is updated.

Barrie Specialized Transit [formerly Barrie Accessible Community Transportation Service (BACTS)]

Specialized bus transportation service to assist those with mobility difficulties. **Telephone:** (705) 737-2304

Canadian Orthopedic Foundation:

Resources about orthopedic care, including hip and knee replacements, nutrition, and many other resources

Toll Free: 1-800-461-3639
Website: www.whenithurtstomove.org

Canadian Red Cross

Provides a variety of services including (1) caregiver relief/respite care; (2) friendly visiting; (3) housekeeping; (4) transportation; (5) social work; and telephone assurance.

Telephone:

(705) 721-3313

E-mail:

simcoe@redcross.ca

Website:

www.redcross.ca

Chronic Disease Self-Management Program

This is a six-week program offered by the Barrie Community Health Centre, designed to teach participants the skills needed to manage the day-to-day challenges of living with a chronic health condition.

Telephone: (705) 734-9690 Ext. 241

Happy at Home Support Services

Non-medical support services (personal care; housekeeping/laundry; meal preparation; caregiver relief; companionship; transportation for appointments/errands).

Telephone: (705) 326-9355
Website: www.happyathome.ca

Helping Hands Community Support Services

(*services Midland, Penetanguishene, and Orillia area)

Provides a variety of services including: (1) caregiver relief/respite care; (2) friendly visiting; (3) housekeeping; (4) transportation; (5) meals and (6) outdoor maintenance. **Telephone:** (705) 325-7861

Home and Community Care

North Simcoe Muskoka Local Health Integration Network (Formerly CCAC)

Provide a broad range of community and home-based services such as respite care, and in-home professional health care (e.g. nursing, occupational therapy, physiotherapy, speech and language, social work, personal support and case management.)

Telephone: (705) 721-8010
Toll-Free: (888) 721-2222
Website: www.healthcareathome.ca/nsm

Meals on Wheels provided through Red Cross

Provide meals to people in their homes for a fee. (705) 721-3313

• Barrie Ext. 228 or 223

South Simcoe
 Collingwood
 Midland

Ext. 223

 Ext. 254
 Ext. 237

Meals to Go

Frozen entrees are available from **RVH** Nutrition and Food Services Department. Meals must be ordered 1 day prior to pick up.

Telephone: (705) 728-9090 Ext. 44428

myJointReplacement.ca

A Canadian patient friendly website to help guide and support patients through their joint replacement experience.

Website: www.myjointreplacement.ca

Ontario March of Dimes

OMOD provides a variety of services to people with disabilities, including funding, recreation, assistive living, and employment training.

Website: www.dimes.on.ca
Provincial Office: (416) 425-3463
Toll-Free: (800) 263-3463
E-mail: provincial office@dimes.on.ca

Central Region (Toronto, York, Peterborough, Durham, Northumberland, Victoria, & Haliburton) (416) 425-3463 Ext. 227

E-mail: centralregion@dimes.on.ca

North East Region (includes Parry Sound) (705) 674-3377 E-mail: northeastregion@dimes.on.ca

West Central Region: (Peel, Waterloo, Bruce, Grey, (905) 607-3463

Dufferin, Wellington, Simcoe, and Muskoka)

E-mail: westcentralregion@dimes.on.ca

North Simcoe Muskoka Healthline

Accurate and up-to-date information about health services for consumers and healthcare providers across the North Simcoe Muskoka region of Ontario. Contains over 3,000 service listings of organizations and programs servicing North Simcoe Muskoka residents.

Telephone: 310-2222
Website: www.nsmhealthline.ca

Ontario 211

Provides information on Ontario's community, social, health-related, and government services. Serves as an "information gateway" for Ontarians.

Telephone: Dial 211

Website: <u>www.211ontario.ca</u>

Seniors for Seniors

Companion service to assist seniors live independently in the community. Services include personal support and homemaking, driving, overnight assistance, live-in companions, house cleaners, and drop-in companions.

Telephone: (705) 719-1444

Senior Services

Services available include (1) caregiver respite; (2) errands; (3) in-home hairdressing; (4) companion service; and (5) shopping.

Telephone: (705) 735-6105

Senior Homecare by Angels

Non-medical homecare services (personal care; meal preparation; light housekeeping; errands/shopping; companionship; caregiver respite).

Telephone: (705) 719-1300

Website: <u>www.seniorhomecarebarrie.com</u>

With Open Arms

Services available include: (1) housekeeping; (2) errands; (3) shopping; (4) transportation; and (5) Private Recipes frozen meal service.

Telephone: (705) 737-5215

Exercise and Arthritis Related Resources:

Arthritis Exercise Class – Woods Park Retirement Home

Occurs every Wednesday

Contact: Pat Leavoy (705) 735-9747

The Arthritis Help Line – The Arthritis Society

This is a province-wide helpline for information on arthritis, education materials, and how and where to seek professional treatment.

Toll-Free: (800) 321-1433 Website: www.arthritis.ca

City of Barrie Recreation and Leisure

The City of Barrie Recreation and Leisure department offers arthritis exercise programs for persons aged fifty-five and over. Check the "City of Barrie Recreation & Leisure Community Guide" for current program offerings and fees.

Telephone: (705) 739-4223 Website: www.play.barrie.ca

Von SMART Program: gentle fitness program

Barrie	(705) 737-5044	Ext. 221
Orillia		Ext. 231
Midland		Ext. 232
Muskoka		Ext. 233

Pool Programs:

Barrie	YMCA	(705) 726-6421 Ext. 280
	Arthritis Pool Program at RVH	(705) 733-2073
Collingwood	YMCA	(705) 445-5705
Huntsville	Centennial Centre	(705) 789-6421 Ext. 23
	"Joint Effort"	
Midland	YMCA	(705) 526-7828 Ext. 210
Orillia	YMCA	(705) 325-6168
	"Own Pace"	(705) 326-7635

NOTES/QUESTIONS:

REFERENCES

- myJointReplacement.ca (2005). Retrieved from http://www.myjointreplacement.ca/
- Royal Victoria Hospital (1997) RVH Forms. RVH-4057 Self Care after Hip & Femur Surgery
- Royal Victoria Hospital (1997) RVH Forms. RVH-4059 Self Care after Knee Surgery.
- Royal Victoria Hospital (2006) RVH Forms. RVH-3292 Emergency Department Patient Information for your Care Care of Patient with Coagulation Issue.
- Royal Victoria Hospital (2008) RVH Forms. RVH-4106 Total Hip Surgery (Rehab Kare Pathways Education Package).
- Royal Victoria Hospital (2008) RVH Forms). RVH-4108 Total Knee Surgery (Rehab Kare Pathways Education Package).
- Soever, L., & MacKay, C. (July, 2005). Best Practices across Continuum of Care for Total Joint Replacement.
- The Bone and Joint Health Network (2009). Retrieved from http://www.boneandjointhealthnetwork.ca
- Bone and Joint Canada (2009) Retrieved from http://www.boneandjointcanada.com
- Understanding Hip and Knee Pain (2009). Retrieved from http://www.aboutstryker.com

exercises. PhysioTools Ltd.

Developed: April, 2010 Revised April 2018

Developed by: Interprofessional Practice

Copyright ©