## Your Participation, Your Success!

Patient

Road for

**Education** 

**Preparation** 

PREP School!

# Hip Replacement Surgery



ROSS MEMORIAL

Kawartha Lakes

If you develop a cough, cold, fever or flu like symptoms 72 hours prior to your surgery, notify your surgeon immediately.

## **TABLE OF CONTENTS**

Important dates	Pg 3
Your Healthcare Team	Pg 4
Introduction	Pg 5
Today	Pg 6
The Surgery	
Medications	•
Smoking and Surgery	
Pre-Surgery exercises	Pg 12
Exercises	Pg 13
Nutrition	Pg 15
Resuming daily activities following surgery	Pg 17
Anaesthesia	Pg 19
12 weeks before surgery	Pg 20
2-3 weeks before surgery	Pg 21
1-2 weeks before surgery	Pg 23
What to bring	Pg 24
Pre surgery checklist	Pg 25
Night before surgery	Pg 27
Morning of surgery	Pg 28
Day of surgery	Pg 29
After surgery	Pg 31
Hospital care plan	Pg 32
Day of discharge	Pg 33
Discharge checklist	Pg 34
Home	Pg 35
Constipation	Pg 36
When to call the doctor	Pg 37
After surgery exercises	Pg 38
Leg exercises	Pg 39
Stairs	Pg 40
Avoiding Dislocation of your hip	Pg 41
Three rules for three months	Pg 42
Caring for your new hip "day to day"	Pg 44
Caring for your new hip homemaking activities	Pg 54
Tips to avoid falls	
Visiting hours/parking	
Hospital Map	
Glossary of hospital terms	Pg 60

## **IMPORTANT DATES**

My PREP School Appointment:
My Pre-Admit Testing (PAT) Clinic Appointment and Individual Occupational Therapist Session Appointment:
My Anaesthesia Appointment:
My Date of Surgery:
I need to arrive to the hospital at:
My Discharge Date:
You will be discharged 2-3 days after your surgery
My Follow Up Appointment With my Surgeon:



## YOUR HEALTHCARE TEAM

Before, during and after your surgery you will be meeting and working with various members of the healthcare team. You may wish to record their names below.

Surgeon
Pre-Admission Nurse(s)
Anaesthetist
Dietitian
Occupational Therapist (OT)
Pharmacist
Physiotherapist (PT)
The most important member of the team is <b>YOU!</b>

To achieve the best results from your Total Joint Surgery, YOU need to be an ACTIVE participant in your recovery.

Please always feel free to speak to members of you healthcare team regarding any questions or concerns that you may have.



## **INTRODUCTION**



# Patients who are prepared for surgery and who take part in their care can recover in less time and with less pain!

The purpose of this booklet is to provide information for you before your hip surgery. The success of your surgery largely depends on your commitment and participation. **Your participation actually starts today!** Although you may not know your date of surgery, you can begin today by making efforts to maximize your recovery. It is important for you to bring this book with you to ALL of your appointments and your surgery day.

Your journey has already begun; you have started to read this booklet! Continue reading and completing the questions. Throughout this booklet you will see this symbol:

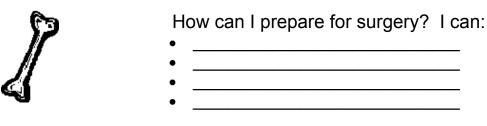
This is where YOU need to complete your homework!

Your answers will be reviewed at all of your appointments with the members of the healthcare team.

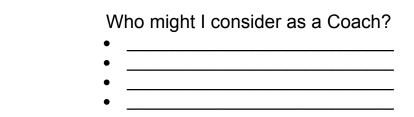
## **TODAY**

A successful surgery and recovery involves three vital parts:

 YOU. Your participation and commitment is crucial to your success. Begin to think of how you can prepare for surgery; for example, eating healthy meals and snacks, quitting smoking, being physically active.



YOUR COACH. A Coach is a person who will be with you throughout your pre-operative and post-operative period and surgery. This person can be a family member, friend or caregiver. Your coach will attend an education session with you prior to your surgery, and will support and work with you during your hospitalization and when you return home.

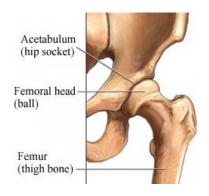


 THE HEALTH CARE INSTITUTION – The Ross Memorial Hospital. The dedicated and skilled members of our healthcare team are here to aid in your success. Our team includes: Surgeons, Anaesthetists, Nurses, Dietitians, Pharmacists, Occupational Therapists, Physiotherapists, Support Staff and many others.

## **THE SURGERY**

#### What Is A Hip Joint?

The hip joint consists of a ball and socket. It can move in many directions. The ball (femoral head) is attached to the top of the thigh bone (femur) and fits into a cup in the pelvis (acetabulum). A healthy hip has a layer of cartilage covering the surfaces of the ball and socket enabling the joint to move smoothly.



#### Why Do I Need A Hip Replacement?

Arthritis of the joint (osteoarthritis) is the most common reason for a hip replacement. Arthritis damages the cartilage and roughens the bone surfaces. This damage creates pain on movement and decreases joint flexibility and strength.



adam.com

The benefits of hip replacement or total hip arthroplasty surgery are:

- Less pain
- Better movement and strength
- Improved ability to do everyday activities.

## **TOTAL HIP REPLACEMENT**

In total hip replacement surgery, the surgeon replaces the diseased joint with artificial joint components called a prosthesis.

A total hip replacement consists of two parts:

- 1. A metal ball and stem that fit into the thigh bone (femur)
- 2. A metal socket and liner that fit into the socket in the pelvis (acetabulum). Sometimes screws are used to secure the cup.

Bone cement may be used to secure the components in place.



## **MEDICATIONS**

It is important that you are as healthy as possible prior to your surgery. This includes optimizing and stabilizing drug therapy for chronic medical conditions in the weeks prior to surgery

• Make an appointment with your pharmacist for a Medscheck® review. There is no cost to you for this service. You will need:



- o All of your prescription medications.
- o All over-the-counter medications you take, including vitamins.
- A list of allergies or bad reactions you have had to medicines in the past.
- Your pharmacist may identify concerns and he/she may need to follow-up with your doctor to sort them out.
- To obtain a copy of the completed review from your pharmacist.
   You will need it for future appointments.

#### See your family doctor

- o Take your Medscheck review with you to your appointment.
- Address any ongoing concerns with other medical conditions you may have.
- Make sure your blood pressure is checked, and is under good control.
- High blood pressure prior to surgery increases your risk of problems during surgery, possibly including problems with your heart or blood vessels.
- Get specific instructions about which of your medicines you should stop prior to surgery and when. Write this information down on page 26. You will need it for your pre-op assessment.

- If you have Diabetes, make sure your blood sugars are managed as well as possible.
  - Uncontrolled blood sugars before and after surgery also increases the risk of problems with your heart or blood vessels, impairs wound healing, increases the risk of infection, and may keep you in the hospital longer.
  - If you are testing your blood sugar at home, remember to take your logbook of results with you to your doctor'
  - For specific instructions about how to adjust medications for diabetes at the time of surgery, see a Diabetes Educator here at RMH. (705 328-6091)

#### After your surgery

- You will have pain. Your surgeon will order different types of medications used in combination, including narcotics, antiinflammatory medication, and acetaminophen.
- o If you have pain, make sure you ask for medicine.
- Constipation may be a problem after surgery. You will be given medicine to help you have a bowel movement while in hospital.
- At home, pain medicine and reduced activity may lead to constipation. Don't wait to deal with it. Your Pharmacist can advise you what treatment best suits you.
- Add fibre and water to your diet. See the section on Nutrition Page 15, 16 for helpful tips.





### **SMOKING AND SURGERY**

- Smoking damages your lungs; you may have difficulty breathing while under anaesthetic.
- Smoking puts your heart at risk, by reducing the amount of oxygen the blood can carry to your heart and vital organs.
- Smoking increases the risk of infection, slows recovery and increases the chance you will have to come back to the hospital because you are having problems at home.
- Stop as soon as you can—the further ahead of surgery, the more time you have for the lungs to heal and for toxins to leave your body.
- For helpful advice call Smoker's Helpline: 1-877-513-5333.
- If you have coverage under the Ontario Drug Benefit Program, the "Pharmacy Smoking Cessation Program" is available to you, and includes an assessment, counselling, support, and, if required, medication to help you quit.



Please request a Nicotine Replacement Patch be ordered if you will need it during your stay.

## PRE-SURGERY EXERCISES

Research supports patients exercising to improve strength and fitness before their surgery. Keep yourself as active as possible before your surgery. Do activities that put the least amount of stress on your painful joint; for example, exercising in a pool or walk short distances frequently throughout your day.

If you have not been physically active recently, you are advised to see your doctor before beginning an exercise program.

The following exercises are similar to those you will be required to perform after your surgery to ensure a good recovery.

#### **Equipment Needed at Home:**

Rolled towels or coffee can rolled in a towel. This is the "Roll". (Referred to in the Quads OverRoll exercise on page 13).

Sturdy chair with arms.

Access to a countertop.

Start with 3 repetitions of each exercise with each leg. Gradually increase until you can do 10 repetitions of each. Hold each position for 5 seconds. Start with 1 set of 10 repetitions per day, then increase to 2 sets of 10 repetitions per day, then increase up to 3 sets of 10 repetitions per day. After surgery, it is expected that you will do the exercises three times per day for many months as you recuperate.

The "involved leg" is the leg you are going to have surgery on.

#### **Hip and Knee Flexion**



Lie on your back and bend your involved hip and knee by sliding your heel up toward your buttocks while keeping your heel on the bed. Hold for 5 seconds. Slide your heel back down to the starting position. Keep your kneecap pointed up toward the ceiling during the exercise

#### **Hip Abduction and Adduction**



Lie on your back with your legs straight out in front of you. Slide your involved leg out to the side, keeping your kneecap pointed up toward the ceiling. Hold for 5 seconds. Slide your leg back to the starting position.

#### **Quads Over Roll**



Lie on your back with the "Roll" under the knee on your involved side. Straighten your knee. Hold for 5 seconds. Slowly lower your leg down. The back of your knee should stay in contact with the "Roll" throughout this exercise.

#### **Quads Arc**



Sit in a sturdy chair. Straighten your knee on the involved side as much as possible. Hold for 5 seconds. Slowly lower your leg down and relax.

#### **Chair Push Ups**



Sit on a sturdy chair with arms. Grasp the arms of the chair. Push down on the chair arms, straightening your elbows so that you raise your buttocks off the seat of the chair. Hold for 5 seconds. Lower yourself slowly back into the chair.

If you are feeling strong and able to stand comfortably, try this next exercise.

#### **Hamstring Curl**



Holding a sturdy counter for safe support, bend your knee on the involved side, bringing your heel toward your buttocks. Hold for 5 seconds. Lower foot to ground.

## **NUTRITION**

Good nutrition helps you recover from surgery and reduces the risk of infection. Important nutrients before and after surgery include:

#### **Protein**

Protein promotes healing after surgery.

Try to eat at least one protein food at every meal and snack. For example

- 2-3 oz of beef, pork, chicken, turkey, fish or other meat
- 2 eggs
- ¾ cup of beans, lentils or split peas
- ¾ cup of tofu
- 2 tbsp of peanut butter or other nut butter
- 1/4 cup of unsalted nuts
- 1 cup of milk or soy beverage
- 2 ounces of cheese
- ¾ cup of yogurt
- 1 tbsp of ground flaxseed

Make sure you have these foods at home before you have your surgery.

#### Fibre and Fluids

It is important to have a regular bowel habit before surgery because constipation can occur after surgery.

Fibre is found in grains, fruits, vegetables, beans, lentils, nuts and seeds.

It is important to increase your fluid intake at the same time as you increase your fibre intake.

Try to drink at least 8 glasses of water or other fluid every day. It may help to 'drink by the clock', for example drink 1 cup of water or diluted juice every hour during the day.

If you are going to take a fibre supplement (Metamucil, psyillum), be sure to take it first thing in the morning so you have a chance to drink enough fluid the rest of the day. Never take a fibre supplement before bed.

Your dietitian will talk about ideas to increase your fibre intake at PREP School.

#### **Vitamin and Mineral Supplements**

A basic "One A Day" type multivitamin and mineral supplement is recommended one month before and after surgery.

Single nutrient supplements provide very large doses are not recommended or needed with the following exceptions:

- Calcium is important for strong bones. Adults need 2-3 servings of dairy products daily. Examples include milk (1 cup or 250 mL), yogurt (3/4 cup or 175 g) or cheese (2 ounces or 50 g) daily. If you do not meet this recommendation, talk to your pharmacist, doctor or dietitian about a calcium supplement that is right for you.
- **Vitamin D** is also important for strong bones. Vitamin D is also found in milk, yogurt and cheese. All adults over 50 years of age should take a supplement with 400 IU of vitamin D. If you are not currently taking a vitamin D supplement and/or do not consume 2-3 servings of milk, yogurt or cheese daily, talk to your pharmacist, doctor or dietitian about a supplement that is right for you.
- If you have a history of **anemia** (low **iron**), talk to your pharmacist, doctor or dietitian about supplements.
- If you are a **smoker**, you have an increased need for **vitamin C**. Talk to your pharmacist, doctor or dietitian about a supplement that is right for you.

#### **Follow the Healthy Plate:**

Portion size your plate for healthy meals:

- ½ plate vegetables
- ¼ plate starchy foods
- 1/4 protein foods.

Fruits and dairy (milk or yogurt) make great snacks and dessert.

Follow this method for lunch and supper. Breakfast is a bit different, try to choose foods from at least 2 of the groups.

This will be reviewed in more detail at "PREP School". You will also be given information on easy-to-prepare meal ideas for after your surgery.

## RESUMING DAILY ACTIVITES FOLLOWING SURGERY

During your hospital stay, you may be seen by an Occupational Therapist (OT), who will help you increase or regain your independence with daily activities following your surgery. You will need to learn new ways of doing self-care, leisure and work activities. Your OT will teach you how to dress and bathe your lower body with special devices as needed. You will also learn how to safely transfer to and from the bathtub/shower, toilet and car, using certain pieces of equipment.

#### THE FOLLOWING ASSISTIVE DEVICES **may** be recommended:

- A Bathtub Transfer Bench or Shower Chair or Bath Board
- A Reacher
- A Long-handled Shoe Horn
- A Sock Aid
- A Long-handled Sponge
- Elastic Shoe Laces or Slip-on Shoes
- Wedge Cushion

If some or all of the above equipment is required you will be advised how to rent or purchase the equipment. It will be your responsibility to obtain the recommended equipment in preparation for your return home. Any equipment purchased or rented can be claimed as a medical expense on your annual tax return.

You will need to have the following equipment available for the day you are discharged home from hospital:

- Mobility Device (Walker, Crutches etc.)
- Raised Toilet Seat / Commode Chair

Your OT will also discuss your home environment/layout and provide strategies for how to manage household tasks.

Please complete your "Home Checklist" in your brown surgical envelope and bring it with you to PREP school.



## **ANAESTHESIA**

#### **Anaesthetist**

An anaesthetist is a doctor with specialized knowledge of illnesses, medications and treatment of serious medical problems. This doctor gives you the medicine that will relax you and allow you to sleep for your surgery, if required. A member of the anaesthetic team will stay with you and monitor you closely throughout your surgery. The anaesthetist is also responsible for helping you manage your pain after the surgery. The anaesthetist will discuss with you the type of anaesthesia you will be having with your surgery.

#### **Types of Anaesthesia**

#### 1. General Anaesthetic

The anaesthetic will allow you to be asleep during the surgery. A breathing tube is placed in your mouth and throat to assist with your breathing. The tube is removed once the surgery is done. After surgery, you will be taken to the Post Anaesthetic Care unit where you will wake up. *Possible Side Effects:* nausea, drowsiness, mild sore throat.

#### 2. Regional Anaesthetic (Spinal or Epidural)

Medication is injected in the spinal fluid below your spinal cord, freezing the nerves of your hips and legs. A small area on your lower back will be frozen. A very small needle is used to inject medication below your spinal cord (the needle is removed). You have the option of staying awake during surgery or having medication to put you asleep. If you choose to stay awake, you will not see the surgery taking place, nor feel any pain. *Possible Side Effects:* headache, backache.



# 12 WEEKS BEFORE YOUR SURGERY PREP SCHOOL

The PREP School will help you prepare for your surgery by determining what your individual needs are in relation to your surgery and your home to facilitate a seamless discharge from hospital.

Approximately 12 weeks before your surgery date <u>you and your Coach</u> will attend our PREP School Class. During the Class you will be educated by various members of the healthcare team:

- Physiotherapist.
- Occupational Therapist.
- Dietitian.
- Pharmacist.
- Nurse.

What of	questions would I like answered at the PREP School Class?
\$	
71	
Œ.	



You will need to bring your Coach and this book with you to PREP School!

## 2-3 WEEKS BEFORE SURGERY PAT (PRE-ADMIT TESTING) CLINIC

You will be contacted by our PAT (Pre-Admit Testing) Clinic with an appointment date and time.

While at this clinic you will be interviewed by a Registered Nurse and Occupational Therapist. The nurse will:

- Check your blood pressure, heart rate and respirations
- Review your medical and past surgical history
- Ask you about any allergies to medications or foods

Testing such as ECG, x-rays and blood tests may be performed.

#### Please bring:

- Reports from any specialist that you have seen example Respirologist, Cardiologist, Neurologist, Internist, sleep apnea studies or Hematologist.
- All your prescribed and over-the-counter medications including herbal medication and vitamins with you in their <u>original containers</u>
- Your Medscheck review.
- Bring your home checklist

You will be asked if you smoke or consume alcohol on a regular basis. Please be honest, as this may affect your surgery and recovery time.



You will need to bring your Coach and this book with you to PAT Clinic!

	What questions would I like answered at the Pre-Admit Testing Clinic?						
<u>4 -</u>							

## 1-2 WEEKS PRIOR TO SURGERY ANESTHESIA CLINIC

You will meet with the Anaesthetist prior to your surgery. At this appointment the Anaesthetist will assess you in relation to the risks associated with receiving anesthesia.

	What questions would I like answered when I meet with the naesthetist?							
<u>4</u> -								



You will need to bring your Coach and this book with you to meet the Anaesthetist!

## **WHAT TO BRING**

Items that you will need in the hospital:



- Slip on walking shoes
- Loose fitting clothing/walking shorts
- Toothbrush and toothpaste
- Dentures, eyeglasses, hearing aids
- Hairbrush
- Electric razor
- DO NOT bring valuables, large sums of money or medications with you to the hospital; the hospital is not responsible for lost items.
- Dressing aids (shoe horn, reacher, sock aid).
- Be sure each of these devices are labelled with your name.

#### Clothing and Belongings:

- Remove all jewellry, dentures, glasses, contact lenses, artificial body parts, clothing, nail polish and make up before your surgery
- Send all valuables home with your Coach.
- All other belongings will be taken to the 4<sup>th</sup> floor Surgical Unit that you will be going to after surgery.



## PRE SURGERY PATIENT CHECKLIST

#### Have the following ready before your surgery!

<u>1</u> .	Coach
2.	Equipment
3.	I know how to use my equipment (walker, dressing aids).
4.	I have railings on my stairways.
5.	will bring me to the hospital.
6.	will take me home from the hospital.
7.	I have practiced the exercises.
8.	I have packed my bag with the items outlined for my hospital stay.
9.	I have prepared some meals for when I get home that are high in fibre and include protein.
10	is my Coach and is available to assist and support me when I get home.
11	. I have talked to my Doctor about my medications which may need to be stopped prior to surgery and which medications should be taken on the morning of surgery.
12	. I have completed a Medscheck review with my community pharmacist and followed up with my doctor.

13. If I am using insulin or medications to control my diabetes, I

from my Diabetes Educator or doctor.

have obtained specific instructions about dosage adjustments

Some medications must be stopped several days before surgery.

Your doctor will tell you which medications to stop and when to stop taking them. Common medications stopped before surgery are:

- Warfarin (Coumadin, Taro-Warfarin)
- Acetysalicylic acid (ASA, Aspirin, Entrophen)
- Clopidogrel (Plavix)
- Dabigatran (Pradax)
- Rivaroxaban (Xarelto)
- Ibuprofen (Motrin, Advil)
- Herbal medications.

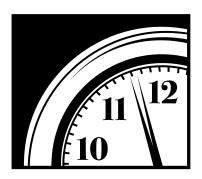
#### MEDICATIONS TO STOP BEFORE YOUR SURGERY:

 _WHEN
 WHEN
WHEN
 WHEN
 WHEN
 WHEN
 WHEN
WHEN



## WHAT TO DO THE NIGHT BEFORE YOUR SURGERY

- Shower or bathe the night before or morning of your surgery using unscented soap.
- Shampoo your hair.
- Trim nails and remove finger and toe nail polish.
- Do not eat or drink anything after 12 midnight the night before your surgery. This includes water, gum or candy.



## WHAT TO DO THE MORNING OF YOUR SURGERY

- Remove all jewellery and piercings.
- Leave all jewellery and valuables at home, as we can not accept responsibility for lost items.
- Do not wear makeup, cologne, perfume or lotion
- Partial plates, dentures, contacts and hearing aides may be worn but will be removed before going in for surgery.
- If you have sleep apnea, bring your apparatus with you to the hospital. For instance your **CPAP machine**.
- If you have diabetes and own a blood glucose monitor, test your blood sugar before coming to hospital.

MEDICATION TO TAKE MORNING OF YOUR SURGERY

(WITH A SIP OF WATER)					

## **DAY OF SURGERY**

Go to the Admitting Department at the Ross Memorial Hospital, located on the first floor.

Present your health card and receive your registration sheet.

You will be directed to the Day Surgery Department where you will check-in with the Day Surgery nurse.

The nurse will do a brief interview, take your blood pressure, temperature, heart rate and breathing rate.

You will then be given a gown to change into and a plastic bag in which to place your belongings. These will be delivered to your room after your surgery.

You will lay on a stretcher and the nurse will start an intravenous (IV) in your hand or arm. This IV keeps you hydrated and allows the nurse and anaesthetist to give you medications.

A scrub will be done to the hip you are having surgery on then your hip will be wrapped in a sterile towel.

Prior to going into the operating room the surgeon will come and speak with you and verify which hip is being operated on and mark it with a sterile marker. Take this time to ask any final questions.

Your Anaesthetist will talk with you and verify which anaesthetic you agreed upon when you saw them during your anaesthetic consult.

The Operating Room nurse will take you by stretcher into the operating room. You will move over to the operating table and the nurse will attached you to a heart monitor, place a blood pressure cuff on your arm and place an oxygen mask over your mouth and nose.

Prior to you receiving any medication, the surgical team will do a Surgical Safety Checklist in which all team members are present that are involved in your surgery. The following questions are asked:

- your name
- date of birth
- confirm any allergies
- state the procedure you are having done, and which side
- the surgeon is then identified, and you will be asked if you have any questions.

Your Anaesthetist will give you medication.

Your surgery will take approximately 1 ½ - 2 ½ hours.



## **AFTER YOUR SURGERY**

You will wake up in the post anesthetic care unit (PACU) on a hospital bed where you will stay for a minimum of 1 hour, you will then be transferred to the Surgical Unit for your 2-3 day stay.

The nurse will monitor your pain, blood pressure, temperature, pulse and respirations. The nurse will also be checking the circulation to both your legs. Your legs will feel heavy and will be difficult to move following a spinal anesthetic. The sensation will gradually return to normal.

You may have a compression device on both your lower legs called "moonboots" which gently squeezes your calves and pushes the blood back up to your heart to help prevent formation of blood clots.

You may also have a drain tube with a small container attached to help blood and body fluids drain from your incision site.

#### **Pain**

After your surgery you will be given pain medication. Good pain control allows you to: move about, get in and out of bed, walk and do exercises. A combination of medications will likely be used.

Your pain will be measured on a "pain scale" with 0 meaning no pain and a score of 10 would be the worst pain ever (i.e. if your hand was crushed in a vise).

**PAIN SCALE** 

no p	ain				_			WO	rst pai	n ever
0	1	2	3	4	5	6	7	8	9	10

#### Nausea and Vomiting

If you become nauseated or vomit after surgery, request a dose of antinausea medication from the nurse.

#### **Prevention of Blood Clots**

Your surgeon will order medications to help prevent the development of blood clots. This medication will be continued after discharge for 2 to 5 weeks.

## **IN HOSPITAL CARE PLAN**

	DAY ONE POSTOP	DAY TWO POSTOP	DISCHARGE	
GETTING DRESSED	Review dressing techniques with OT	Dress self independently	Dress self independently	
NUTRITION	Full Fluids (progress to regular diet)	Regular Diet	Regular Diet	
HYGIENE	Basin to wash with assistance	Wash self independently	Wash self independently	
WOUND CARE	Wound checked daily and dressing changed if needed	Ask questions about medications	Follow up arranged	
PAIN CONTROL/MEDICATION	Oral pain medications, stool softeners and blood thinners	Oral pain medications, stool softeners and blood thinners	Prescriptions to take home	
ACTIVITY	Sit at bedside, stand with help, Physiotherapy will assist with exercise and walking	Continue to exercise, practice stairs, up and about On your own with mobility aid	Up and about on your own with mobility aid	
DISCHARGE PLANNING	Review discharge planning with patient and coach	Ask questions about your recovery at home		

## **DAY OF DISCHARGE**

It is recommended that your Coach is present when your nurse and therapist(s) review your discharge instructions.

What qı ک	uestions do	I want to a	sk?		
<b>4</b> 5 –					 
_					
				<del> </del>	 

If you are travelling a long distance:

- Plan to make frequent stops
- Bring extra pillows, ice packs and wedge cushion
- Remember to take your pain medications before you leave the hospital
- Blood sugar monitor and treatment for low blood sugar
- Insulin and other medications
- Snacks



## **HOSPITAL DISCHARGE CHECKLIST**

Make certain that you check all items before you go home

- O I have confirmed my ride home.
- O I have had a bowel movement.
- O I know how to take care of my incision.
- O I know what my medications are supposed to do and when to take them.
- O I have an exercise program to follow.
- O I have a plan for healthy meals that include fibre and protein.
- O I have all the equipment I need to perform my activities of daily living
- O I have information about my follow up appointments with my Family Doctor and Surgeon.
- O I know the signs that mean I need immediate medical attention.
- O I have signed and kept a copy of my discharge instructions.



## **HOME**

#### **Pain Control At Home**

The pain that you experience will gradually decrease over the next 6 months.

Here are some ways to manage your pain:

- Take your medications, especially before any physical activity or exercise sessions. Take your pain medication **BEFORE** the pain is severe.
- Ice and elevation can reduce pain and inflammation. Place an ice pack in a towel and use on your joint as directed by your Physiotherapist.
- Try to relax use the breathing exercises you learned in hospital.
- Distract your self watch TV, listen to music or read a book.
- Don't overdo it pace yourself.
- Think positive it will get better!



## **CONSTIPATION**

Constipation can be a problem once you return home. Ways to prevent constipation include:

- Drink at least 8 glasses of water or other fluids a day. Drink 1 cup of fluids per hour.
- Eat foods high in fibre. Review the handout provided by your dietitian at PREP School for ideas to prevent constipation.
- Move around as much as you can
- Continue with your exercises

If you are experiencing constipation, try some of these ideas to increase your fibre intake. Remember to make sure you increase your fluid intake at the same time!

- Psyllium fibre and ground flaxseed can be added to yogurt, applesauce or when making a smoothie or milk shake.
- Choose prune juice over other juices.
- Try this delicious spread on whole grain bread, crackers, ice cream or yogurt:
  - o ½ cup pitted dates
  - o 1 1/4 cup prune nectar
  - o ½ cup dried figs
  - o ¾ cup raisins
  - ½ cup pitted prunes

Simmer dates and prune nectar until dates are very soft. Put date mixture in a food processor or blender. Add figs, raisins and prunes. Blend to a smooth paste. Store in the refrigerator

Be sure to have these foods on hand before your surgery so they are ready and waiting when you get home from the hospital.

Constipation can be serious, ensure that you do not ignore any symptoms of constipation.

# **CARE OF MY INCISION**

It is important to keep your incision dry and covered until it is fully healed. Your sutures or staples will be removed 7 to 10 days after your surgery.

When bathing, keep your dressing on until after your shower then remove the wet dressing. Cleanse the incision and reapply a new dressing.

It is normal to have some redness and clear drainage from your incision for the first several days.

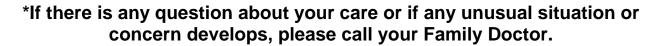
Do not touch or pick at the incision and maintain good cleanliness of the surrounding skin.

#### **Signs of Infection**

- Green, yellow or foul smelling drainage
- Increase in redness around your incision
- Increase in pain and or swelling of incision and surroundings area
- Temperature greater than 38°C (100°F)

#### When to see a Healthcare Provider

- Pain (not relieved by medication)
- Unusual swelling
- Excessive bleeding/drainage
- Temperature greater than 38°C (100°F)
- Unusual cough or shortness of breath
- Faintness or dizziness
- Leg (calf) tenderness or redness
- Signs of infection are present
- Nausea and vomiting
- Diarrhea or constipation
- High or low Blood sugar



\*If you are unable to contact your family doctor you should come to the Hospital Emergency Department.



# **AFTER SURGERY EXERCISES**

Now that you have had your surgery, it is time to get moving! You will be working with a Physiotherapist (PT) and a Physiotherapy Assistant (PTA) to improve your hip flexibility and strength and to improve your walking and ability to climb stairs.



# **Deep Breathing and Coughing Exercises:**

- Deep breathing exercises will keep your lungs clear and help you relax.
- This can be done either sitting up or lying down.
- Inhale deeply through your nose, keeping your shoulders relaxed.
- Hold 3 seconds and then exhale through your mouth.
- You will perform these exercises 10 times per hour while awake.
- After your 10 deep breaths, cough twice to clear any mucous.

#### **Post operative Swelling:**

Swelling is a very common and often persistent problem following any kind of hip surgery. It occurs because you are not very active and tends to increase as the day goes on.

The most effective way to decrease swelling is to elevate your leg so that gravity assists the drainage of fluid. All you need is 2 or 3 extra pillows. You must lie flat on the bed/couch with at least 2 pillows under the affected leg (see picture below). It is important to make sure that the top pillow comes far enough under your knee to support it in a **STRAIGHT** comfortable position.

**TIP** – Spend 30 mins after each exercise session resting on the bed with your leg elevated. You could put ice on your hip at the same time, if needed for pain control. Ice packs should be used for 20 mins at a time. Remember– do not place the ice pack directly on your skin; wrap it in a towel or pillow case.



# LEG EXERCISE PROGRAM (1) → Only do those exercises indicated with ( $\sqrt{}$ ) by your physiotherapist.

MEMORIAL HOSNITAL	
Pump your feet up and down at the ankles, repeatedly times.	2. Laying on your back, with both legs straight, pull your toes up towards you, tighten your thigh muscles and press your knees down towards the bed, as straight as you can. At the same time, tighten your seat muscles. Hold for 5 seconds, relax. Repeat times.  Do sessions per day.
Or State of the st	Marie Tolling
3. Laying on your back, place a roll under your knee(s). Pull your toes up towards you, lift your foot and straighten your knee. Knee remains on roll. Hold for 5 seconds, then slowly lower. Repeat times.  Do sessions per day.	4. Laying on your back, slide your heel up the bed by bending at the hip and knee. Don't allow your knee to roll in or out, or your heel to leave contact with the bed.  Repeat times, then times with other leg. Do sessions per day.
<ol><li>Laying on your back, with toes pointed to the ceiling, slide your leg out to the side and</li></ol>	6. Sitting on a chair, or the edge of your
back to the middle again.  Repeat times, then times with	bed, place feet flat on the floor. Slowly
other leg. Do sessions per day.	lift one foot, straighten the knee.
	Hold for 5 seconds, then slowly lower. Repeat times each leg. Do sessions per day.

# **STAIRS**

The Physiotherapy staff will instruct you how to go up and go down stairs It is advised that you use the railing and likely a mobility aid (ie; cane) when on the stairs.

Remember: The GOOD go UP, the BAD go DOWN.

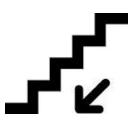
#### **Going UP Stairs:**



#### Order of Steps:

- 1. Non operated leg
- 2. Operated leg
- 3. Mobility aid

#### **Going DOWN Stairs:**



#### Order of Steps:

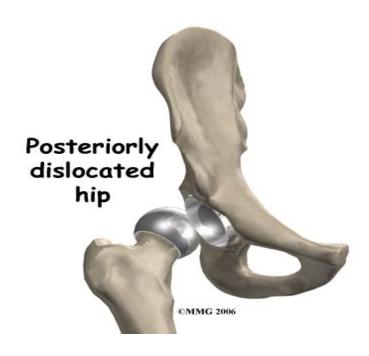
- 1. Mobility Aid
- 2. Operated leg
- 3. Non operated leg

# **AVOIDING DISLOCATION OF YOUR HIP**

During your surgery, your doctor cuts through the large muscle and tendons on the side of your hip. This weakens the muscle temporarily and makes the hip joint less stable. When your hip is less stable you are at risk of dislocation.

Dislocation can occur due to a sudden impact or quick change in position of the hip. Dislocation happens when bones are forced from their normal position or alignment. Remember the muscles and tendons are weakened from surgery and are no longer able to stabilize the hip bones in the joint; therefore the risk of dislocating your hip is greater in the first three months following your surgery. If you dislocate your hip, it is extremely painful and the joint must be manually manipulated back into position by your Surgeon.

Therefore, there are some rules that you **must** follow to reduce the risk of dislocating your hip.



# THREE RULES FOR THREE MONTHS

- DO NOT BEND your operated hip beyond 90° when sitting, standing or lying. 90° = L
  - Do not squat
  - Do not reach for items on the floor
  - Do not bring your operated leg towards your chest
  - Do not over reach forward when you are bending at the hips.
- 2. Do Not CROSS your legs or bring them together.
  - While sitting, do not cross your legs at the knees or the ankles.
- 3. Do NOT TWIST your body, especially at the hip or waist.
  - Keep your nose and toes facing the same direction.
  - When turning, step around instead of pivoting on operated leg.



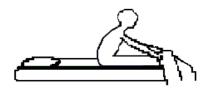
Do NOT bend your hip past 90 degrees



Do NOT cross your legs at the ankles or legs



Do NOT twist your body or legs



Do NOT bend over to pull between knees and feet blankets up or reach for toes







#### When lying down...

- DO NOT cross your legs
- DO NOT allow your surgery foot to roll inward or outward, a rolled towel can help you maintain this position.
- DO NOT use a pillow under knees when lying on your back, place the pillow between your knees to avoid crossing your legs.
- DO use a pillow between your legs when lying on either **side**.

#### When sitting...

- DO NOT bend down to touch toes, tie shoes, etc.
- DO NOT cross legs.
- DO NOT stand with toes turned in or out.

# When standing...

- DO NOT bend down to touch toes, tie shoes, etc.
- DO NOT cross legs.
- DO NOT stand with toes turned in or out.

# CARING FOR YOUR NEW HIP IN DAY-TO-DAY ACTIVITIES

Here are some tips for performing day-to-day activities safely, while maintaining your hip precautions. These are some examples of walking aids that you will be using during your recovery.



A 2 wheeled walker is typically used for the first 2 weeks after surgery.



A 4 Wheeled Walker is typically used weeks 3 to 4 after surgery.



Crutches maybe an option for you to use, for stairs or everyday walking.

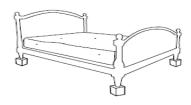


A cane is typically used weeks 5-6 after surgery.

This is just a guide as to what walking aid you will need and your physiotherapist will progress you at your own pace.

# **GETTING OUT AND INTO BED**

- Use a firm mattress. If your bed is low, have it raised on blocks.
- Have a night light lamp nearby so that you do not have to stretch or twist to turn the lamp off or on.
- Arrange your commonly used items so that they are on top or in a top drawer of the night stand.











#### **Getting out of bed**

- Move to your operated side, keeping your legs apart.
- Keep your operated leg straight while sliding it over the edge of the bed.
- As the operated leg slides out of bed, push through your hands and raise your trunk upright.
- Remember to follow your hip precautions: do not bend at your waist more than 90°, do not twist your operated leg, and do not let your operated leg cross the midline of your body.

#### **Getting in Bed**

- Sit at the edge of the bed (facing the foot of the bed) and place you un-operated leg up on the bed.
- Slide your buttocks back onto the bed.
- Raise your operated leg onto the bed as you lower your trunk with your arms at the same time.

# **GETTING ON AND OFF A CHAIR**

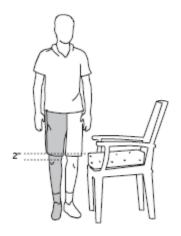
- The best chair for you is a high, firm chair with armrests.
- A dining room chair is an example of a good chair.
- When sitting in a chair, your knees should not be higher than hips.
- Avoid lazy boy type chairs and other recliner chairs, as it may be difficult to maintain hip precautions when exiting the chair.
- A wedge cushion could be used to ensure that the chair is high enough for proper hip positioning.
- If you have a favourite chair that is too low, you may want to raise your chair with blocks.

#### **Wrong Movement**



**Wedge Cushion** 





As you are not able to bend your hip past 90° for 3 months after hip surgery, ALL surfaces that you sit on MUST be at least 2 inches above knees height. This includes chairs, beds and toilets.

#### **Getting into a Chair**

- Back up until you feel the chair with the back of your legs.
- Place operated leg forward with your knee bent and your foot flat on the floor.
- Grasp the armrests and bend your knees
- Lower yourself gently into the chair.



### Getting out of a chair

- Slide to the edge of the chair while keeping your operated leg out in front of you.
- Use your arms to push up off the chair armrests and push up with your nonoperated leg. DO NOT bend forward at the hips.
- Avoid sitting for long periods of time to prevent stiffness and swelling of your operated leg.



# **DRESSING**

# **Putting Pants On / Taking Pants Off**

Due to hip precautions and the restrictions for bending forward, you will need to use a reacher for putting on and taking off pants and undergarments.

#### **Putting on Pants**

- Sit down.
- Dress the affected leg first.
- Use the reacher to grab the waistband of the pants.
- Lower pants to feet and guide the waistband over your feet.
- Thread feet fully though pant legs, before pulling pants up the rest of your legs.
- REMEMBER DO NOT BEND FORWARD AT THE HIP MORE THAN 90°
- Stand with the walker in front of you to pull your pants up the rest of the way.

#### **Taking Pants Off**

- Unfasten your pants and push garments down.
- Use reacher to push garments the rest of the way over feet.
- Use reacher to pick garments up off floor.





# **PUTTING ON TAKING OFF SOCKS**

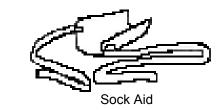
Due to hip precautions and the restrictions for bending forward, you will need to use a sock aid for putting on and a long handled shoe horn for taking off socks.

#### **Putting on Socks**

- Sit down.
- Slide sock onto sock aid. (Be sure the heel of the sock is on the curved side of sock aid).
- Hold the string and drop the sock aid to the floor.
- Slide your foot into the sock like a shoe.
- Pull firmly on strings, while pointing toes downward.
- Keep pulling until sock is on your foot and sock aid has come out of your sock.

### **Taking Socks Off**

- Place long handled shoe horn inside sock at base of heel.
- Push with shoe horn until sock is off.
- Pick sock up using reacher.
- REMEMBER DO NOT BEND FORWARD AT THE HIP MORE THAN 90°







# **PUTTING ON SHOES/TAKING OFF SHOES**

Due to hip precautions and the restrictions for bending forward, you will need to use a reacher and long handled shoe horn for putting on and taking off shoes.

Wear sturdy slip-on shoes or shoes with velcro closures or insert elastic shoe laces into sturdy laced shoes.

**DO NOT** wear high-heeled shoes or shoes without backs.

#### **Putting on Shoes**

- Sit down.
- Use reacher to pick up shoe from floor.
- Place shoe onto foot using reacher.
- Switch reacher for long handled shoe horn.
- Place the shoe horn inside shoe against the back of the heel. The curve of the shoehorn SHOULD line up with the curve of the shoe heel.
- Slide your heel down the shoe horn and into the shoe.

### **Taking Shoes Off**

- Place the shoe horn inside shoe against the back of the heel.
- Push on the shoe horn to slide shoe off foot.
- Place shoes with reacher out of walking pathway.

REMEMBER DO NOT BEND FORWARD AT THE HIP MORE THAN 90°



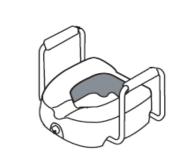


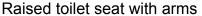


# **GETTING ON AND OFF THE TOILET**

Most toilets are too low to safely sit on. While following hip precautions a versa mode or raised toilet seat is needed to elevate the sitting surface height.

Be sure that when you are seated, the toilet paper is within easy reach, to avoid bending or twisting.







Raised toilet



- Back up until you can feel the toilet with the back of your legs.
- Slide your operated leg forward.
- Grasp the armrests and bend your knees.
- Lower yourself gently onto the toilet.
- To stand up, reverse the procedure.

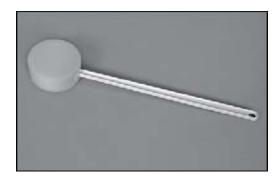


# **GETTING IN / OUT OF THE TUB / SHOWER STALL**

The Occupational Therapist will meet with you to determine the appropriate equipment for bathing as it depends on whether you use the tub or a shower stall.

- DO NOT get down into the bottom of the tub for at least 3 months due to hip rule #1 – DO NOT bend past 90°at hip.
- If you use the tub to shower, you may need a tub transfer seat that has two legs inside the tub and two legs outside. You will sit on this bench from outside of the tub and swing your legs in together (\*remember not to twist at the waist).
- You may need a grab bar to steady yourself while getting in and out.
- DO NOT pull or lean heavily on towel rods, soap dish holders, shower curtain rods, or anything else that could be pulled off the wall.
- Use a long handled sponge to wash your feet if you cannot bend far enough to reach them.

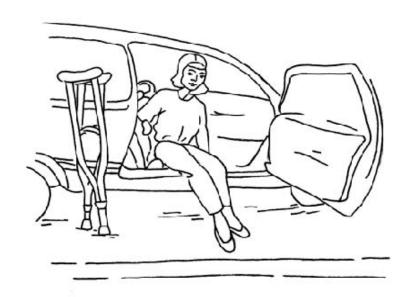




# **GETTING IN / OUT OF A CAR**

Consult with your Family Doctor or Surgeon before resuming driving a car. Generally, a minimum of six weeks is required before returning to driving.

- Most car seats are too low to safely sit on while following hip precautions.
- Place a wedge cushion on car seat.



- Push the seat back as far as it can go.
- Stand on ground, NOT curb, and lower yourself slowly to sit down keeping operated leg straight (DO NOT bend forward at the waist beyond 90°).
- Still facing the car door, slide back over the seat until your bottom is near the middle console / drivers seat.
- Move the legs into the car without twisting at the waist (\*you may want someone's help to guide your legs into the car).

# CARING FOR YOUR NEW HIP DURING HOMEMAKING ACTIVITIES

During all homemaking activities, it is important to remember the 3 rules for 3 months.

**AVOID** twisting at the hip.

**AVOID** bending past 90° (squatting or over reach forward where you are bending at the hips).

**AVOID** crossing your legs.

**DO NOT** do heavy housework such as vacuuming, mopping the floor, cleaning windows, mowing grass, heavy garbage removal or shoveling.

**DO NOT** do lighter tasks such as sweeping, cleaning the bathroom (toilet and bathtub) as these tasks require bending squatting, over reaching and twisting.

If possible have a family member or your Coach help you. If doing the housework independently is absolutely necessary, speak to your Occupational Therapist to help you modify the way these tasks are done.

#### Here are some tips:

#### Kitchen

- Reorganize cupboards and refrigerator so that items you use often are within easy reach (i.e. on counter top).
- Slide items along the counter, do not attempt to carry items with one hand while using walker.
- Use a wheeled tea wagon, trolley cart or a wheeled office chair to transport items. Push the cart on wheels then follow behind with your walker.
- You may wish to purchase a wire walker basket to attach to the walker to carry light items.
- When using a 4 wheeled walker, use the seat or basket to transport

items.

- Keep your reacher handy (attach it to the walker) to pick up light items that are out of reach.
- Use shortcuts such as frozen meals (purchased or prepared before surgery), Meals-on-Wheels, microwave or toaster oven, pre-cut or frozen veggies.

#### Laundry

- Do smaller loads of laundry, more frequently.
- You can use your reacher to assist with loading and unloading clothing from the washer and dryer. You may also find it helpful to sit on a chair, when loading / unloading front load machines, making sure to follow the 3 rules for 3 months

#### **Pet Care**

- Use reacher to pick up and set down your pet's food and water bowls.
- Keep pet food stored at or above waist level.
- Arrange for friends / family to change cat litter or walk your dog.

### **Shopping**

- Groceries can be ordered for delivery from many stores (a small fee maybe charged)
- Ask family / friends to do your shopping for you.
- Shop for less but more frequently.

# **Sexual Activity**

 You may return to sexual activity when it is comfortable to do so, as long as you follow the 3 Rules for 3 Months. If you have any questions, talk to your Physician.

#### **Returning to Work**

- When you return to work depends on the type of work you do. Most people do not return to work until at least 6-8 weeks after a hip replacement. You may return earlier if your job is sedentary in nature i.e. computer work.
- Make sure you bring along your assistive devices (raised toilet seat, wedge cushion and reacher) to ensure you follow the 3 Rules for 3 Months.
- You may need to speak with your employer about modifying your work area and duties to protect your new hip.

#### **Returning to Recreational Activities**

- Avoid activities such as gardening, golf, swimming, dancing for at least 3 months after your surgery, related to your "3 rules for 3 Months".
- Walking is strongly encouraged.

#### **Airport Metal Detectors**

- Your new hip may set off metal detectors, such as the ones in airports.
- Let the security officer know that you have a hip replacement.
- A hand-held wand can be passed over the area to confirm.
- If you have any concerns, ask your Family Doctor for a letter or card stating you have a hip replacement.

# TIPS TO AVOID FALLS

- Avoid going outside in bad weather if possible
- When walking outdoors, avoid poorly maintained sidewalks, dark streets and ice surfaces. Try to walk with a walking partner.
- In winter, wear boots with a good gripping sole.
- When you no longer need a walker, use a cane with an ice pick tip when walking on snow or ice.
- Remove floor mats around the house. Pathways should be cleared of cords, wired, and clutter.
- Make sure your home is well-lit. Use a night light or motion light if you get up during the night
- Have a handrail on all stairways.
- Always wear sturdy shoes with non slip soles that give your feet and ankles firm support.
- Never rush to answer the telephone. An answering machine or a cordless phone can be helpful.
- Do not carry too much in your arms use a home delivery or a push cart.
- Minimize the use of medications which increase the risk of falls.
- Be sure you are having enough to eat, especially protein foods (meat) that are high in iron so you are strong.
- Monitor your Blood sugar regularly to avoid lows and highs which can make you dizzy.



# **GENERAL INFORMATION**

#### **Visiting hours**

- 11:00 a.m. to 1:00 p.m.
- 5:00 p.m. to 8:00 p.m.

#### Please clean your hands

To protect yourself, the people at RMH, and those you love at home, reduce your risk of infection by washing your hands well and often. Hand washing is the single most important way to prevent the spread of germs.

#### **Parking**

Hospital parking revenues are applied directly to the operation of the Hospital and therefore, help the Ross Memorial Hospital to provide patient care services.

If you need coins for either the metered parking spaces or to exit the parking lot, change machines are located in the Emergency department, in the main lobby adjacent to the cashier's office, and in the main hallway opposite the admitting department.

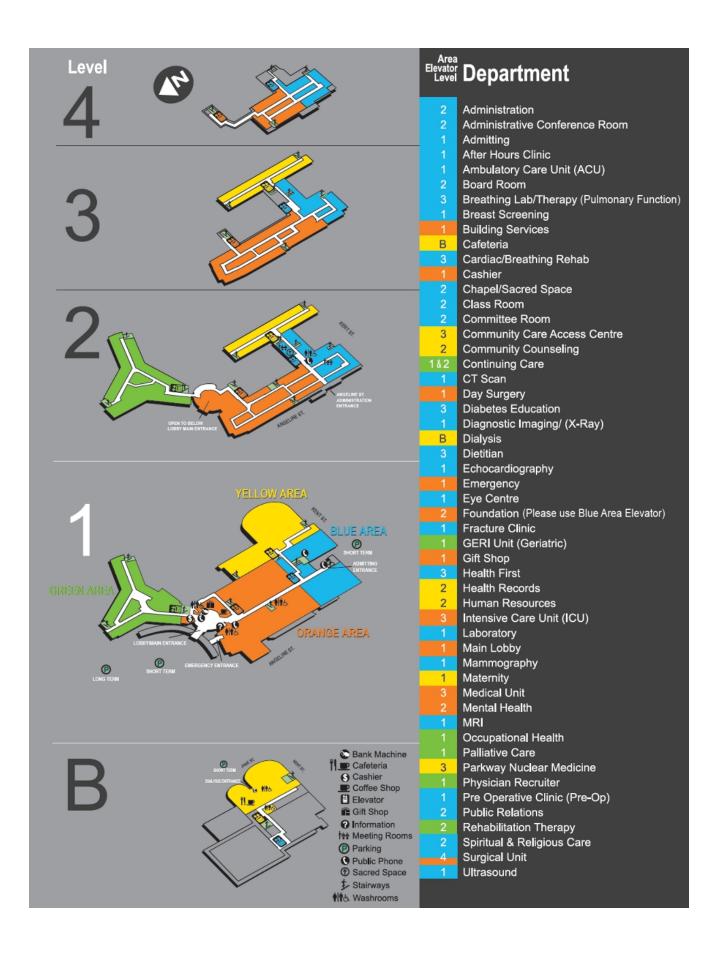
The circular lot in front of the new main entrance is dedicated to short-term parking and individuals are required to purchase a ticket from the pay-and-display machine. The validation ticket must be displayed on the dashboard of your vehicle. Validation tickets are purchased on an hourly rate and are monitored on a 24-hour basis.

### **Hospital Cafeteria**

The cafeteria is located on the basement floor, beside the Dialysis Unit, accessible by taking the yellow or blue elevator to the basement level. Each day, the Nutrition Services team offers a variety of hot and cold meals, a fresh salad bar, and deli counter, soup, desserts and take-out products. The cafeteria's servery is open 7:30am to 3:00pm.

### Reflections Café and Gift Shop

Reflections Café is located in the main lobby. Hours of operation are Monday to Friday, 7:00 a.m. to 7:00 p.m., and Saturday & Sunday, 11:00 a.m. to 3:00 p.m.



# **GLOSSARY OF HOSPITAL TERMS**

- **Anesthesia** Partial or complete loss of feeling during which patient may or may not be asleep.
- Anesthetic Medication usually given by injection, IV (intravenous tube or small needle) or inhalation to block any sensation of pain or discomfort. General anesthetics frequently administered during surgery. Local anesthetic may be injected into and around a specific operative area. Local anesthetic greatly diminishes trauma to nerves in and around the operative site during surgery, therefore dramatically lessening postoperative pain.
- Anesthesiologist A specialized physician who calculates and administers a pre-determined amount of anesthetic depending on specific data relative to the patient and his/her operative procedure. This doctor is present throughout surgery to make certain your body is constantly functioning properly.

### **Anti-Embolism Reduction Devices**

- A) Elastic Support Stockings (TED Hose) Stockings which stimulate blood flow in the legs and help reduce blood clots following surgery; these are worn by both men and women.
- **B) Moon Boots** Automated devices designed to pump the blood from the foot and lower leg to help circulation and reduce the possibility of blood clots.
- Bladder Catheter A small tube inserted into the bladder to drain urine.
- **ECG or EKG (Electrocardiogram)** A graphic recording of the heart's activities.
- **Incision** A precision cut made in the body during an operation

- **Injection** A "shot" of medication.
- **IV (Intravenous)** A thin needle or tube placed in a blood vein to transport liquids, medicine and nutrients into the body during and following surgery.
- **NPO** An abbreviation for the Latin terms, nil per os, meaning "nothing by mouth", including food, drink, chewing gum, tobacco or other substances.
- Occupational Therapist- The role of an occupational therapist is to work with a client to help them achieve a fulfilled and satisfied state in life through the use of "purposeful activity or interventions designed to achieve functional outcomes which promote health, prevent injury or disability and which develop, improve, sustain or restore the highest possible level of independence".
- **OR (Operating Room)** The specialty equipped room where surgery is performed.
- **PACU (Post Anesthesia Care Unit)** An area outfitted with special equipment and monitored by post anesthesia trained staff to assist patients as they wake up after surgery.
- **Pre-Op (Pre-Operative)** Before surgery.
- **Post-OP (Post-Operative)** After surgery.
- **PRN** An abbreviation for the Latin terms, prorena'ta, meaning "according to the circumstances." For example, pain medicine is given PRN, or when it is needed.
- **PCA (Patient Controlled Analgesia)** Gives you control over any pain you may experience by pushing a button you will receive a very small dose of pain medication through your IV.
- **Recovery Room** Same as PACU

**Shave and Prep** The pre-op special cleansing (sterilization) or removing of hair around the operative area. Hair may be removed by shaving or using hair remover cream.

**Surgeon** A doctor specially trained to perform surgery.

Vital Signs Temperature, pulse, blood pressure and breathing rate.

# **REFERENCES**

Baylor University Medical Centre at Dallas (2008) Joint Wellness Program.

Champlain Joint Replacement Program for Hips and Knees: Clinical Care Model and Guidelines across the Continuum of Care.

GTA Rehab Network website.

Holland Orthopaedic & Arthritic Centre: A guide for Patients Having Hip or Knee Replacement (booklet).

Queensway Carleton Hospital Total Hip Replacement Patient Information (booklet).

Saskatchewan Ministry of Health (December 2010) Total Knee Replacement.

Vancouver Island Health Authority Manual (November 2010).



RMH FM# 1793 PREP School Hip Replacement Surgery (August, 2012)