# My Leg Bypass Surgery

Including Preparation and After-Surgery Care



Date of Surgery:	_
My Surgeon:	
Estimated Date of Discharge:	



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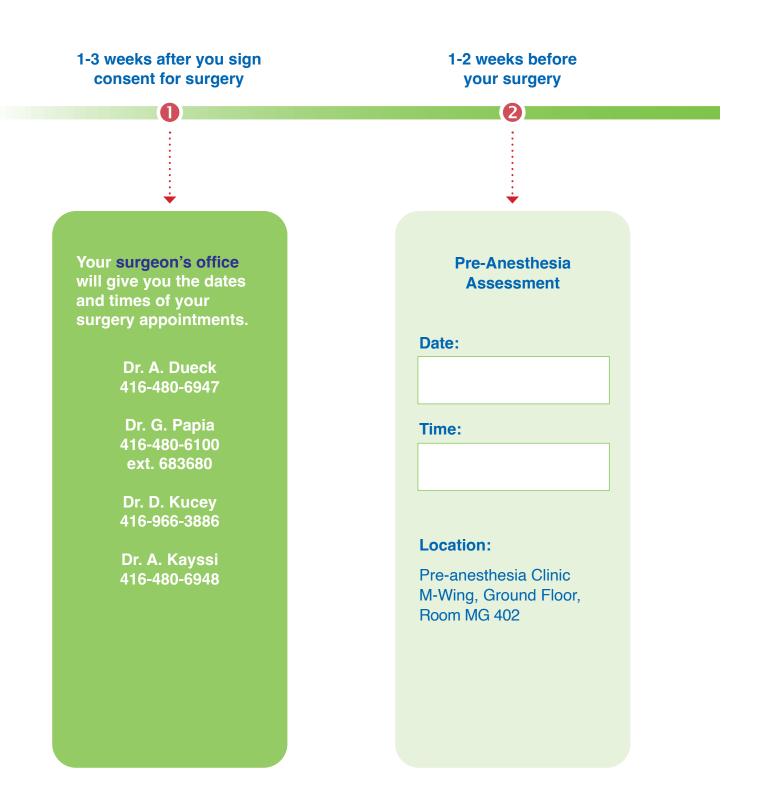
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## What is your preferred language?

Sunnybrook offers professional interpretation services to our patients. Learn more about this service at **sunnybrook.ca/interpreters**.

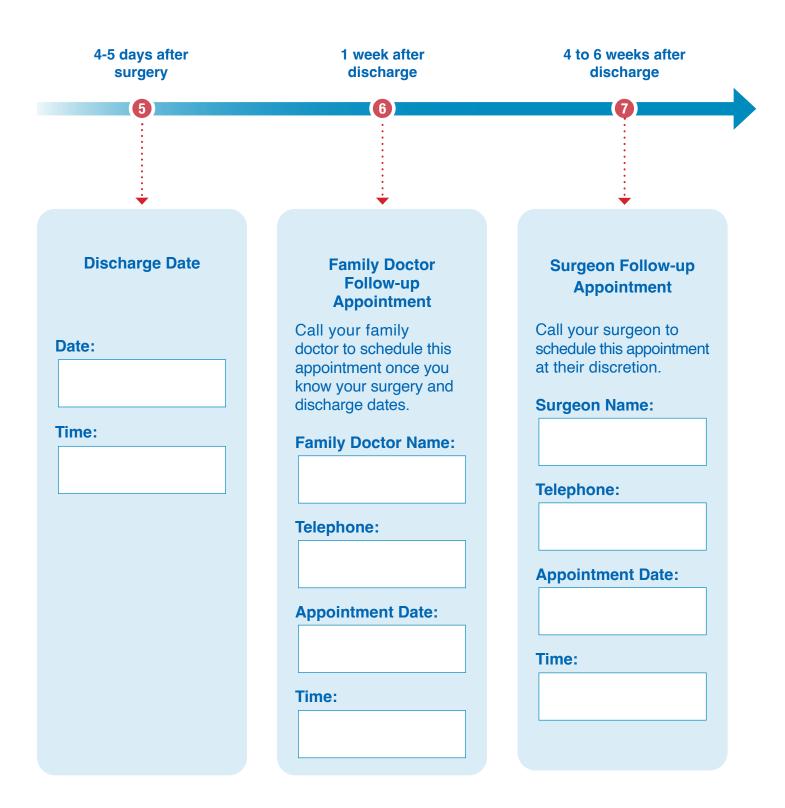


## Your Appointment Timeline



# 1 business day The day of before your surgery your surgery **Surgery** Date: The pre-assessment clinic will call you to tell Time: you when you need to be at the hospital for your surgery. Location: Same-Day Surgery **Admission Office** M-Wing, Ground Floor, Room MG 502

## Your Appointment Timeline



## Introduction

## How to Use this Guide

The information in this guide will help you get ready for your leg bypass surgery. It also has information about what will happen on the day of surgery and your care after surgery, including when you go home. Members of your health-care team will go over this guide with you.

We know this may be a stressful time for you and you will get a lot of information about your medical condition. This booklet will help you keep track of what you need to do before and after your surgery. If you have any questions about the material in this booklet, please contact your vascular surgeon's office.

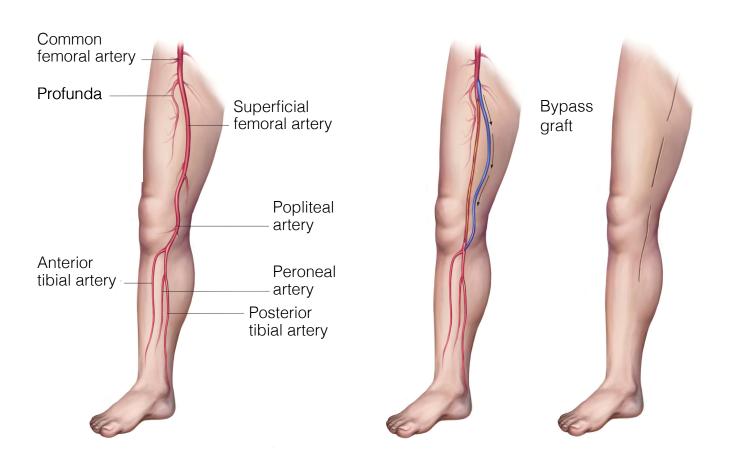
Use the timeline on pages 2 to 4 to write dates and times of all your appointments for your leg bypass surgery. In this booklet, there are pages for you to write notes of your own.

## What is Leg Bypass Surgery?

Leg bypass – also known as lower extremity bypass – is a surgery that improves the blood flow to the leg if your arteries are severely narrowed or blocked.

Because of your narrowed or blocked arteries, you may have pain and discomfort in your thigh, calf or foot that gets worse when you walk. You may also develop wounds in your leg and/or foot that are difficult to heal.

To fix your blood flow, a surgeon uses blood vessels (veins) from another area of the body, like your arm or leg, to avoid (or "bypass") the blockage by rerouting the blood from one area to another. The surgeon may choose to use an artificial graft if your vein is not a good fit for the procedure. Depending on your condition, you may have multiple bypasses in one surgery.



# **Before Surgery**

#### Please let your surgeon's office know if you do not have any of the below:

- Family doctor
- **Recovery Support Person:** the person who will help you when you get home. We recommend someone is available to help you for the first week (day and night) you are at home.
- **Driver:** the person who will pick you up on the day you leave the hospital. You will also need transportation to and from any appointments.
- Power of Attorney for Personal Care: the person you have appointed with the legal authority to make medical decisions on your behalf if you are unable. If you do not have a Power of Attorney for personal care, a substitute decision maker will be appointed for you in accordance with the Health Care Consent Act, 1996.

## Pre-anesthesia Assessment

At your pre-anesthesia appointment, our team will make sure you are fit and safe for surgery. Your surgeon's office will tell you the date and time of the appointment. It may be scheduled on the same day as some of the pre-operative testing your surgeon may ask for, such as a blood test, chest x-ray, and electrocardiogram (ECG) and/or echocardiogram (ECHO).

During the appointment, we will ask you about your medical history and talk to you about any special needs you might have after your surgery. We will also ask you about the medications you take - including herbal remedies, homeopathic medicines, and other over-the-counter medication – and tell you when to stop these medications before surgery. You may also meet with the anesthesiologist who will put you to sleep in the operating room when you have surgery.

You must come to the pre-anesthesia assessment or your surgery may be cancelled.

## What do I need to do for my assessment?

Please check-in at M-Wing, Ground Floor, Room MG 402.

The visit will take place in the Pre-anesthesia Clinic (Room MG 223) and last 2 to 4 hours.

Please eat and take all your regular medications before you come to this appointment.

Ple	Please bring the following items to your assessment:			
	This booklet			
	Your Ontario Health Card or other medical insurance			
	The name and telephone numbers of your family doctor and any specialists who treat your medical conditions			
	A copy of your Power of Attorney for personal care and/or advanced directives			
	All of your prescription and over-the-counter medications in the containers they came in (e.g. pills, inhalers or puffers, injections, eye drops, herbal medicines and vitamins)			
	Only one family member or friend to the appointment			
N	Notes			

## Prehabilitation "Prehab" Program

Your doctor may ask you to join Sunnybrook's Prehab Program, which runs weekly at Sunnybrook's SCIL Centre in U-Wing. Prehab is an outpatient rehabilitation program that can help lower the risk of problems after surgery and help you recover faster.

At your first visit, we will review your medical history, function, strength, and balance. We will also assess any foot wounds and talk about proper footwear that may help with healing. We will continue to build your strength and health until your surgery.

#### **Exercise**

If you stay active before your surgery you can help maintain your cardiovascular health. This will also help you get better faster after surgery. Follow the advice of your prehab or vascular care team.

Try to walk at least 10-30 minutes every day. You can break this up into a few 5-10 minute walks if longer walking causes you pain or discomfort. If you cannot walk, seated exercises and/or pushing yourself in your wheelchair can also help. See page 29 for exercises you can complete leading up to and after your surgery.

#### **Foot care**

Regular foot care and check-ups can lower your risk of wounds that can become infected. The following tips may help prevent the development or progression of wounds:

- Check your feet every day. Use a mirror to look at the entire foot for wounds or cuts. If you see any new wounds, talk to your doctor.
- Put moisturizer on your feet if they are dry.
- Wear shoes that fit your feet and are not too small or tight.

## **Preparing for Your Surgery**

You will need to start getting your body ready a few days before your surgery.

Visit Sunnybrook's pharmacy on the first floor of M-Wing to pick up the antibacterial soap and any other products your surgeon said you will need for surgery.

#### 1 day before surgery



#### **Medications**

When to stop taking my medications:

Date

Date

Date



A member of our team will call you to give you the time you must be at the hospital for surgery. We will leave a message if nobody is home. Please make sure the office has the right phone number.



At night, use the antibacterial soap (SCRUB-STAT 4%) prescribed to you and wash from the neck down. Leave the soap on your body for 2 minutes before rinsing off. **DO NOT** shave the area where you will have surgery (groin or leg). After your shower, **DO NOT** use any lotion or powder. Wear clean pyjamas and use clean bed sheets.

#### **Diabetes**

If you have diabetes, continue to take all of your prescribed medications until your anesthetist and pharmacist tell you to stop. Keep your blood sugar between 4 and 7 mmol/L. This will help you heal faster and lower your risk of complications after surgery.



Get a good night's sleep. If you think you may have trouble sleeping, speak with your family doctor about taking a sleeping pill. It is normal to feel anxious or afraid. It may help to speak to someone to make you feel less worried.



**DO NOT** eat solid food after midnight. You can drink clear fluids, e.g. broth, water, etc.

## **Stop Smoking:**

Smoking can affect your healing and increase your chances of getting an infection after surgery. Try to stop or smoke less before your surgery. Speak to your doctor or nurse if you would like to quit smoking or you need help with withdrawal symptoms after your surgery. You may also visit smokershelpline.ca or call Health Connect Smoking Cessation Program at 1-866-797-0000 (press 3).



#### **Morning of surgery**





DO NOT eat or drink for 2 hours before your surgery. You may rinse your mouth with water or brush your teeth, but do not swallow. You may take a small sip of water if you are directed to take medication before surgery.



Take off all make-up, nail polish, jewelry and body piercings.



Use the special antibacterial soap prescribed to you and wash from your neck down again. This will lower the risk of infection. **DO NOT** use perfume, cologne, scented cream, body lotion, deodorant or hair products. Sunnybrook is a fragrance-free hospital.

## **Notes**

## **Preparing for Your Recovery**

	Make enough meals for several days and freeze in single servings. You may want to have family or friends help you with your meals after your surgery. See page 39 for information about healthy eating.
	Move items you will need to areas that are easily accessible.
	Talk to your family and friends about the support you will need after surgery. Someone may need to help you care for pets or small children.
	Ask someone to help with physical tasks when you are at home after surgery, like cooking, home maintenance, and laundry. You will not be allowed to lift over 4.5 kilograms (10 pounds) for at least 4-6 weeks. See page 32 for activity guidelines after your surgery.
	You may need help to bathe: You may only have showers for 6 weeks, no baths. This timeline may change depending on how your wound is healing. You may want to rent or buy a bath bench or shower chair to make bathing easier for you while you recover.
	Arrange for someone to drive you to your appointments, if needed.
N	otes

# The Day of Surgery

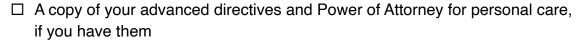
## Before Going to the Hospital

Do not eat or drink anything before your surgery.
Take off all make-up, nail polish, jewelry and body piercings.
Do not use perfume, cologne, scented cream, body lotion, deodorant or hair products. Sunnybrook is a fragrance-free hospital.
Do not smoke any tobacco products or recreational drugs.
Do not take or use any prescription creams, patches, over-the-counter or herbal medications unless directed by your pharmacist or surgeon.

## What to bring to the hospital:



- ☐ This booklet
- ☐ Your Ontario Health Card
- ☐ Glasses, dentures, hearing aids and any walking aids you may need
- ☐ Sleep apnea machine (CPAP or BIPAP), if you have one
- ☐ Toiletries, such as toothbrush, toothpaste and facial tissues
- ☐ Comfortable, non-slip-footwear and any orthotics or prosthetics you use
- ☐ Your prescription and over-the-counter medications in the containers they came in (e.g. pills, creams, patches, inhalers or puffers, injections, eye drops, herbal medicines and vitamins)



☐ A smartphone, tablet or other device to enjoy entertainment during your hospital stay (visit Sunnybrook.ca/BYOD for more information)

Please note: The hospital cannot accept responsibility for lost, stolen, or damaged items. We advise that you do not bring large amounts of cash, jewelry or other valuables.



## Registration

When you get to the hospital, check-in at the Same Day Surgery Admission Office in the M-Wing, Ground Floor, Room MG 502.

After you check-in, we will give you a hospital gown to put on. All of your personal clothing will be given to your family or put in a locker. A nurse will then bring you to a room to prepare you for surgery. The nurse will wash your skin, clip your hair, and carry out any orders from the surgeon.

## **Rescheduled Surgeries**

Sometimes surgery cases are cancelled because there is someone else who needs an emergency surgery. If this happens to you, you will be contacted by your surgeon's office and a new surgery date will be booked as soon as possible.

## **Operating Room**

After you finish pre-surgery registration, nurses will do the final checks. An intravenous (IV) will be started in your hand. When your surgeon is ready, you will be brought to the operating room. You will take part in a safety checklist with your surgeon and the health-care team before your surgery begins. The surgery usually takes between 2 to 4 hours.

## What will happen during my surgery?

- You will be put to sleep using a general anesthetic. The medication to make you sleep will be given through your IV.
- When you are asleep, a tube will be placed in your throat to help you breathe during surgery.
- An incision (cut) will be made from your groin area to your knee or further down your leg to give the surgeon access to your arteries and veins.
- The surgeon will take veins from your leg (inner calf), arm or use an artificial graft. The
  ends of the graft will be attached before and after the blocked artery. In some cases, the
  graft will be attached from the main artery in your unaffected leg, to the main artery in
  your affected leg.

- Your blood now flows through the graft instead of through the section of the artery that was blocked.
- The incisions are closed with stitches or staples and will be covered by a dressing or bandage. You may have a continuous negative pressure dressing (like a vacuum) applied to your wound to help you heal faster.

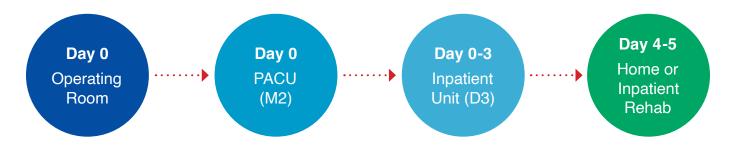
Your family can stay in the waiting area on the second floor of M-Wing (M2) while you have your surgery. They may also want to get food or visit the Parking and Transportation Services Office on the ground floor of C-Wing (CG01) to buy a discounted weekly parking pass.

#### What will happen after my surgery is done?

After surgery, you will be moved to the Post-Anesthetic Care Unit (PACU) on the second floor of M-Wing (M2) for your recovery.

The surgeon will go to the M2 waiting room to speak with your family after the surgery is done. If your family members or caregivers are not in the waiting room, the surgeon will call them by telephone.

You will likely be in the PACU for the first 2 to 6 hours. Once you are medically fit, you will be transferred to our surgical inpatient unit on the third floor of D-Wing (D3) until you go home or to an inpatient rehab facility.





#### **Care Closer to Home**

If you have been transferred to Sunnybrook for specialized care that you could not have received locally, you will be transferred back to the hospital closer to home when your specialized care is complete. For more information, visit **sunnybrook.ca/repatriation**.

# **After-Surgery Care**

## How will I feel after my procedure?

After your surgery is done, you will be moved to the Post-Anesthetic Care Unit (PACU). When you wake up, you may notice a lot of tubes and equipment. Please do not worry. A nurse will take care of you.

 You may have a sore throat from the breathing tube that was in place during your surgery.



- You may feel tired from the medications you were given.
- You may have some bruising and tenderness in the area of your operation.
- You will continue to get pain medication and fluids through your intravenous catheter (IV) in your arm.
- In some cases, medications may cause temporary delirium (see page 19). You may have restraints on your arms if you are at risk of harming yourself.

## **Getting Moving**

It is very important to move after surgery. This can help prevent some common complications like pneumonia, blood clots in the legs, and muscle weakness or stiffness. Your nurse or physiotherapist will help you move the first day after your surgery. They will also help you sit in your chair for all your meals.

On the first day after surgery, a physiotherapist will assess you and help you with deep breathing, coughing, exercises and general mobility. Use the inpatient progress tracker on page 23 to track your progress throughout your inpatient stay.

## Don't Fall, Call:

Please call for assistance when you need help getting up. Wear non-slip footwear and any aids such as glasses, hearing aids and a walker to help prevent you from falling.



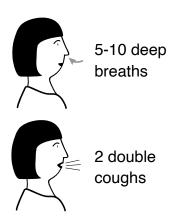
## **Deep Breathing and Coughing**

Breathing deeply gets air down to the bottom of the lungs. It helps clear mucus to prevent you from getting a lung infection.

Breathe in deeply through your nose until your lungs feel full of air. Hold the air in your lungs for 2 to 3 seconds, and then slowly breathe out through your mouth. Repeat 10 times.

After your breathing exercises, take a deep breath in followed by a strong cough. Repeat this two times.

Practice deep breathing and coughing **every hour** you are awake for as long as you are in the hospital.



#### **Ankle Pumps**

Pump your ankles to help with circulation. Pull your toes toward you and then push down like on a gas pedal. Repeat 10 times. Practice ankle pumps **every hour** you are awake for as long as you are in the hospital.



#### Walking

You will usually start walking on the first day after your leg bypass surgery when you are on the inpatient unit. You will need some help at the beginning. You may need to use a walker or other aid. Walks should last about 5 minutes at a comfortable and safe pace, three times a day for as long as you are in the hospital.

## **Swelling**

It is common for your legs to swell after leg bypass surgery. If your swelling does not go away in a few months, speak to your doctor. Here are ways you can help decrease swelling and improve circulation:



- Do ankle pumping, lower leg exercises, and walk frequently. Avoid standing or sitting for long periods of time.
- When resting in bed, use pillows to raise your legs higher than your heart. When sitting in a chair, elevate your feet using a foot stool.
- Do not cross your legs this limits blood flow.
- Wear a compression sock or stocking, if recommended by your vascular care team.

## Nutrition

Good nutrition is important for your recovery. Avoid any weight loss until you have recovered from your surgery and your incisions have healed.

After surgery, you will start with clear fluids like broth, juice or Jell-O. If this is tolerated well, you will progress at the next meal to heart-healthy meals that are low in fat, cholesterol and salt. Many patients experience poor appetite, nausea, and change in taste after surgery. This usually resolves in time.

Ask a member of your care team if you want to speak to a dietitian during your stay. A dietitian can work with you to improve your nutrition by discussing your food preferences, adjusting your diet in hospital and offering nutritional supplements if necessary. For heart-healthy eating tips when you are at home, see page 39.

## **Emotional Changes**

It is common to become sad, depressed or more emotional after any major surgery. It is often related to the anesthesia, medications, lack or loss of sleep, and stress. Your loved ones may also have many emotions. They may feel helpless, scared and overprotective. These feelings may come and go over time and usually pass in 6 to 12 weeks. If these feelings continue for a few months after your surgery or make it difficult to take part in daily activities, speak with your family doctor or vascular care team.

## **Delirium**

After surgery, it is common to have temporary changes to your thinking and behaviour. You may become disoriented, forgetful, easily distracted, or have difficulty thinking clearly. Your health-care team will ask you questions to assess your level of delirium and decide the best ways to help prevent or manage your condition. Visit **sunnybrook.ca/delirium** for help on preventing and recovering from delirium.

## Pain and Discomfort

Each patient feels pain and discomfort in a different way. After leg bypass surgery, you may feel discomfort at the leg incision sites for a few weeks as you heal. The pain has been described by patients as a dull ache, sharp at times or as a pulling sensation and usually gets better with pain medication.

You will get medication to help you with your pain. If the medication does not help, speak with a member of your vascular care team so they may adjust your medication or give you other solutions.

## Constipation

Constipation is common because of your pain medication, reduced activity levels, or iron supplements. While in hospital, you will get a mild laxative. If constipation continues to be a problem, talk to a pharmacist or your family doctor.

## Medication

Changes may be made to your medications after your surgery. New medications may be added, and you may be prescribed some temporary medications to help with pain or constipation after surgery. Some of your previous medication, such as pain medications, diabetes medications, or blood thinners may be adjusted or stopped.

On the day you leave the hospital, you will get a new prescription that will include a complete list of all the medications you are to take when you go home. A member of your health-care team will review your medications with you before you go home. Your family doctor, nurse practitioner, or vascular surgeon will review these medications at your follow-up appointments and provide refills as needed.

Fill your prescription on the day you go home to avoid missing any medications. You may fill your prescription at Sunnybrook's pharmacy on the first floor of M-Wing or at your local community pharmacy. If you do not have medication coverage and cost is a concern, please talk to your health-care team.

Contact your doctor, nurse practitioner or pharmacist if you have any questions about your medications and potential side effects.

## Sleeping

It is important to your recovery to rest and sleep. After surgery, it is common to have temporary changes in sleep habits. You may have difficulty sleeping because of pain or anxiety. Talk to your health-care team if you have trouble sleeping.

#### Infection Control:



Please clean your hands each time you enter and leave your room and unit using the hand sanitizer stations throughout the hospital.

Friends and family should not visit you if they are sick.

## Preparing to Go Home

Your health-care team has evaluated your progress since your surgery and has decided that you are ready to leave the hospital. By the time you leave the hospital, you should be able to take frequent walks around the inpatient unit on your own and may have a shower.

The recovery period after you leave the hospital is different for each person and can last for 6 to 8 weeks. How long you spend recovering depends on your age, activity level before surgery, general health and your progress in hospital. Do everything in moderation.

We recommend you have someone at home to help you. You will feel tired, and normal tasks such as showering or making meals might be more difficult than usual. To let your leg or groin heal properly, you will not be allowed to lift anything greater than 4.5 kilograms (10 pounds) for 4 to 6 weeks following your surgery.

	Your	Discharge Checklist
		Arrange for a friend or family member to pick you up on the day of discharge.
		Make sure your family brings you loose fitting clothing on the day before you go home.
		Speak to your physiotherapist about follow-up exercises and outpatient cardiovascular rehabilitation programs following bypass surgery.
		Review your discharge paperwork with your nurse, including follow-up appointments and letters for your family doctor.
		Review your discharge prescriptions with your nurse, pharmacist or doctor.
		Arrange for someone to be home with you or nearby for the first week to help you, if you haven't done so already. Remember you will not be able to lift more than 4.5 kilograms (10 pounds) for 4 to 6 weeks.
		Bring this booklet home with you. It contains information about your home recovery program.
ľ	Notes	
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## My Inpatient Progress Tracker

Your health-care team will help you get moving throughout your stay at the hospital. You can use this table to track your progress. The progress tracker follows our expected pathway to recovery, but recovery is different for each person. Please do not be discouraged if your progress isn't exactly as shown.

Day 0 (Day of Surgery)		
After surgery, you will be moved to the PACU. You may be moved to the D3 inpatient unit later in the day. You may feel that you can do light activity such as sit on the edge of your bed.		
Sit on the side of your bed	$\square$	
Day 1		
You will be on the D3 inpatient unit. On the inpatient unit, you should be wearing closed-toe, rubber-sole slippers. Your care team will help you with the activities below.		
Sit in a chair for all three meals		
Deep breathing and coughing		
Ankle pumps		
Walk for 5 minutes alone or with help, as directed		
Day 2		
You will stay on the D3 inpatient unit. Your urine catheter will be removed and you will be expected to walk to the bathroom with help or alone.		
Sit up in a chair for three meals		
Deep breathing and coughing		
Ankle pumps		
Walk for 5-10 minutes alone or with help, as directed		

Day 3		
You will stay on the D3 inpatient unit. If you have not had a bowel movement, you may be given medication to help. You will be going home today or tomorrow. Have your family bring you clothes if they haven't already.		
Sit in your chair for three meals		
Deep breathing and coughing		
Ankle pumps		
Walk for 5-10 minutes alone or with help, as directed		
Day 4-5		
You will go home today. In some cases, you may stay in hospital longer. Repeat day 3 until your discharge day. The dressings over your incision will be changed. Your driver should arrive to pick you up from D3 at the time specified by your care team.		
Sit up in your chair for breakfast		
Get dressed to go home		
Continue with your walking and ankle pumps until you are discharged		

# Taking Care of Your Incisions

The look of your incisions will improve over time. During the first weeks after surgery, you may notice itching, swelling, redness or bruising, numbness or soreness around your groin or leg incisions. You may also notice small amounts of fluid coming from the incisions. This is common and will slowly disappear. Continue to look at your incisions until they heal. In some cases, your vascular care team may refer you for community care nursing if you need help with your incisions at home.

If you have pain or discomfort, you may take acetaminophen (Tylenol) or another pain medication ordered by your care team.



#### Use bandages or dressings as ordered.

Cover your incisions with a bandage for the first 3-4 days at home and until there is no fluid coming out of your incisions. If fluid continues to come out of your incision for 2-3 weeks after your surgery, talk to your doctor.

Do not use any lotions, creams or powders around your incisions until your incisions are healed and the scabs and stitches have come off.

**Keep your bandages dry.** You may shower but do not take baths or soak your incision until the incisions are fully healed. Use unscented soaps to avoid irritating the incision. After your shower, pat your incisions dry with a clean toweltowel — do not scrub.



## Wear comfortable clothing.

Wear comfortable, loose clothing to put less stress on your incision.



## Get your stitches or staples removed.

Staples or stitches that do not dissolve will need to be removed by a doctor or nurse in 2-3 weeks. If your incisions were closed with dissolvable stiches, these stiches will go away on their own.

# Getting Back to Daily Activities

#### When should I get medical help?

Contact your family doctor or go to the nearest emergency department immediately if you notice any of these symptoms:

- Bloody drainage or yellow/green pus drainage from any of your incisions (cuts)
- Fever of 39 degrees Celsius (100 degrees Fahrenheit) or higher for more than 24 hours
- Your incisions (cuts) are getting worse: new bleeding, increasing warmth and redness along the incision, skin at your incision is separating
- Sudden severe chest pain, back or stomach pain
- Extreme pain in your legs or feet that does not feel better with rest or pain medication
- Worsening numbness or weakness in your leg or foot
- Feet or lower legs that are turning white or blue in colour, or are cold to touch

If you are exercising and experience the symptoms below, stop and rest. Wait for the symptoms to pass. If symptoms last longer than 10 minutes, go to the nearest emergency department.

- Chest pain
- · Shortness of breath
- Dizziness or lightheadedness
- Excessive fatique
- Excessive sweating





## Your Recovery Moving Forward

During the recovery period, your body sees any activity as work. It is normal to feel more tired than usual. The goal is progressive activity – doing a little more each day. You may feel like you are able to do more, but it is better to follow the recommended guidelines. Do everything in moderation and listen to your body.

This activities section of the booklet is designed to instruct you on an exercise program to do in the first 4 to 6 weeks at home after your surgery. Take control of your recovery by recording your activity and progress using the activity tracker on page 34.

## Cardiovascular Rehabilitation

There are a number of outpatient cardiovascular rehabilitation programs across the province for people who are recovering from vascular procedures or who are living with various heart and circulation conditions.

We may recommend you take part in an outpatient cardiovascular rehabilitation program close to home, as referred by your physiotherapist. These programs typically start six weeks after your leg bypass surgery and are designed to improve your strength and the health of your cardiovascular system. Until then, please follow the at-home exercise program below.

## Your At-Home Exercise Program

## **Deep Breathing and Coughing**

Your lungs may continue to produce more fluid than usual for one to two weeks after you are home from the hospital. To help clear mucus and prevent you from getting a lung infection, you should continue the same deep breathing and coughing exercises that the team has taught you while in the hospital.

#### Instructions

Take 5-10 deep breaths followed by 2 double coughs.
 Repeat 4 times a day for another two weeks after you leave the hospital.

Repetitions	Frequency
4	Daily





## **Walking**

Walking can improve your mobility and strength, as well as prevent blood clots and swelling. This walking program will gradually reintroduce your body to exercise, starting with very short walking periods. Give your legs and body time to adjust to increasing amounts of work.

#### Instructions

- Begin walking using the guidelines in the activity tracker on page 34. Within the first two weeks, aim to improve by approximately one level per day. Then, progress through the weeks as described.
- Walk at a comfortable pace on a level surface. Do not include any stairs in your walking program.
- When you can walk for 10 minutes continuously, you may walk outdoors. Some good indoor places to walk are a local shopping centre, apartment hallway, or recreation centre.
- · Plan your walks and communicate your route with your support person. Do not walk in secluded areas. Walk in areas that are emergency vehicle accessible and bring a cell phone with you.
- If the suggested progression is too tiring, or if you miss one day, stay on the same level for another one or two days. If you feel tired or unwell, or have not exercised for two or more days, drop a level when you begin again.

#### **General Exercises**

This general exercise program should be built into your daily schedule. The program is designed to help with muscle stiffness, fatique and pain and to improve strength and flexibility. This is different from the walking program, which is for general cardiovascular fitness. Therefore, one program cannot substitute for the other.

Your physiotherapist may make changes for you as needed before you leave the hospital.

#### Instructions

- Do the exercise program once a day. The exercises can be completed all at once or spread-out throughout the day.
- Do the exercises slowly with relaxed, deep breathing. Make sure you are not holding your breath during the difficult parts of any exercise. The exercises should be comfortable and painless. Do not push any exercises or activity to the point of discomfort or pain.

## Leg Straightening

Lie on your back with a rolled towel underneath your affected knee so that your knee is bent. Slowly raise your foot to straighten your leg. Hold for 5-10 seconds and lower your leg back to the starting position.

Repeat 10 times, 3 sets daily.



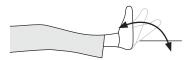
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A TOTAL	- ][
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Repetitions	Frequency
10	3 x Daily

#### **Ankle Pumps**

Lie on your back. Pull your toes toward you and then push down like on a gas pedal, stretching your ankles and calf muscle as far as you feel comfortable.

Repeat 10 times, 4 sets daily.

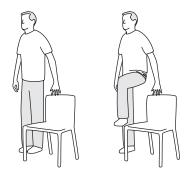


Repetitions	Frequency
10	4 x Daily

#### **Knee Raises**

Stand and rest your hands on a stable surface like a table, counter or windowsill. Starting with your leg straight, bend and lift your knee toward your chest. Lower your foot slowly to the floor.

Repeat 10 times, 3 sets daily.



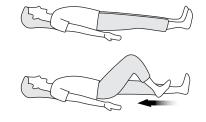
Repetitions	Frequency
10	3 x Daily

#### **Heel Slides**

Lie on your back with your legs straight. Slowly bend your knee, sliding your heel toward your buttock. Do not lift your heel. Slowly slide your heel back to the starting position.

If you feel pain, try wrapping a towel around your foot like a sling. Hold each end of the towel with your hands and pull the towel gently to support your leg as you bend your knee.

Repeat 10 times, 3 sets daily.

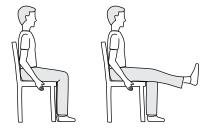


Repetitions	Frequency
10	3 x Daily

## **Seated Leg Straightening**

Sit on the side of your bed or chair with both feet firmly on the floor. Keep your thighs on the chair. Straighten one leg by lifting your foot from the ground. Hold for 5 seconds and lower your foot back to the floor. Then repeat with your other leg.

Repeat 10 times, 3 sets daily.



Repetitions	Frequency
10	3 x Daily

## **Activity Guidelines After Surgery**

Your body needs time to heal. You may need to move slower for a few weeks because of soreness, weakness, fatigue, and medication. Your leg may be swollen for a few days to weeks. This will get better as the blood flow to your leg improves. Avoid activities that require fast movements and quick reflexes. You will feel more tired than usual so take time to rest during the day.



#### **Bathing or Showering**

Shower using warm water and mild unscented soap. Do not have a bath or soak your incisions for the first 4-6 weeks after surgery until your incisions are healed. You may want to rent a shower chair or bath bench during your recovery. Avoid using a hot tub or sauna until all incisions are fully healed.



#### Climbing Stairs

Stairs are safe to use after surgery, but not as exercise. Limit stair use to twice a day for the first 2-3 days home. Take one step at a time and hold onto the handrail. Increase your trips up and down the stairs as you feel able.

If you have pain, follow the general rule: "up with the good leg, down with the bad leg" - step up with the leg that has no incision and step down with the leg that has the incision. If you have concerns about climbing the stairs at home, your physiotherapist can work with you before you leave the hospital.



## **Driving**

Do not drive for 4-6 weeks after your surgery if you are taking opioid-based pain medication or if you have not regained enough movement in your leg to drive safely. If travelling in a vehicle for a long time, take rests each hour and get out of the vehicle to do a short walk.



#### Lifting and Straining

For the next 4-6 weeks, do not lift items greater than 4.5 kilograms (10 pounds), for example: laundry baskets, groceries, luggage, pets or children. Do not push or pull heavy objects such as doors, furniture, garbage bins or appliances. Do not strain during activities such as having a bowel movement or bending over. Speak to your health-care team or pharmacist if you have constipation.



#### **Returning to Work**

When you return to work depends on the demands of your job. You may need to take time off work to heal and recover. Discuss your return to work with your vascular care team.



## Sports, Housework, and Yardwork

Do not play sports or do strenuous activities such as sweeping, shovelling, mopping, or scrubbing for the first 6 weeks after surgery.



## **Travelling**

Check with your family doctor and travel insurance provider when considering travel plans. If travelling in a car, airplane, or other vehicles for longer durations, take rests each hour to stretch and move your legs.



## **Sexual Activity**

It is safe to return to sexual activity when all your incisions are healed. Talk with your vascular care team if you have any questions.

## My Activity Tracker

The home exercise program, walking program, and other activities should be spread throughout the day and separated by periods of rest.

Use the table below to track your progress. Remember to listen to your body and know when it needs rest. Even as your strength and activity tolerance progress, **DO NOT** lift items that are more than 4.5 kilograms (10 pounds) for 4-6 weeks after surgery.

Week 1	
-	vel of activity you reached while you were in hospital. needed. Complete your exercises indoors.
Day 1	
Deep breathing and coughing	
Walk for 5 minutes	
Exercise program	
Day 2	
Deep breathing and coughing	
Walk for 6 minutes	
Exercise program	
Day 3	
Deep breathing and coughing	
Walk for <b>7 minutes</b>	
Exercise program	

Day 4	
Deep breathing and coughing	
Walk for 8 minutes	
Exercise program	
Day 5	
Deep breathing and coughing	
Walk for 9 minutes	
Exercise program	
Day 6	
Deep breathing and coughing	
Walk for 10 minutes	
Exercise program	
Day 7	
Deep breathing and coughing	
Walk for 11 minutes	
Exercise program	
Week 2	
•	more normal levels of activity such as light housework, ple meals. If you can walk comfortably for 10 minutes,
Day 8	
Deep breathing and coughing	
Walk for 12 minutes	
Exercise program	

Day 9	
Deep breathing and coughing	
Walk for 13 minutes	
Exercise program	
Day 10	
Deep breathing and coughing	
Walk for 14 minutes	
Exercise program	
Day 11	
Deep breathing and coughing	
Walk for 15 minutes	
Exercise program	
Day 12	
Deep breathing and coughing	
Walk for 16 minutes	
Exercise program	
Day 13	
Deep breathing and coughing	
Walk for 17 minutes	
Exercise program	
Day 14	
Deep breathing and coughing	
Walk for 18 minutes	
Exercise program	П

Week 3	
Activity Guidelines: Continue with the but remember you must not lift items green heavy objects (heavy doors, furniture, a	eater than 4.5 kilograms (10 pounds) or push or pull
Walk <b>25-30 minutes</b> , once daily	
Exercise program, once daily	
Week 4	
	or walking program and light activities. Remember to ds) and holding your breath with exertion. Discuss r or vascular surgeon.
Walk 30-35 minutes, once daily	
Exercise program, once daily	
Week 5	
Activity Guidelines: Continue with you	r activities you started in Week 4.
Walk <b>35-40 minutes</b> , once daily	
Week 6	
	should now be healed. All of your usual activities radually and sensibly. If you never exercised before ily doctor or physiotherapist.
Walk 40-45 minutes, once daily	

# **Healthy Living**

The same lifestyle factors that may have caused your blockages in the first place can also block your recent bypass. If you live a healthy lifestyle, you can help reduce and manage your risk factors for cardiovascular and peripheral vascular disease. You can find many healthy living tips on Sunnybrook's Your Health Matters blog at **health.sunnybrook.ca**.

## **Healthy Eating**

Many risk factors for vascular diseases, such as high blood pressure, cholesterol, obesity and diabetes, are affected by your food choices and eating habits. Read the nutrition label on food products to help you make healthy choices. Choose foods that are low in fat, such as lean meats and low-fat dairy products. Fruits, vegetables and whole grain products are high in fiber and help to lower cholesterol. You should also limit your salt and sugar intake. Use the table below to help make healthy eating choices.

Choose	Sometimes	Avoid
Fruits & Vegetables Enjoy a piece of fruit after each nalf of your plate.	neal. Choose colourful vegetal	bles, and make sure they fill
<ul><li>Fresh or frozen fruits and vegetables</li><li>Canned fruit, drained</li></ul>	<ul> <li>Avocado</li> <li>Canned vegetables, drained and rinsed</li> <li>Dried fruit (without hydrogenated oil)</li> </ul>	<ul><li>Juice</li><li>Pickled vegetables</li><li>Coconut</li></ul>
Grain Products  Look for products with more than	4 grams of fibre per serving.	
<ul> <li>Whole grain or multi-grain breads, cereals, pasta</li> <li>Oatmeal</li> <li>Popcorn (no butter, air popped)</li> <li>Rice (brown, wild or red)</li> <li>Barley, couscous, quinoa</li> </ul>	Low fat muffins     Noodles made with white or enriched flour	<ul> <li>Chips and salted snack foods</li> <li>Croissants, full fat muffins, pastries, donuts, pancakes and waffles</li> </ul>

Choose	Sometimes	Avoid
Dairy & Alternatives Enjoy skim or 1% dairy products	and cheeses with less than 16	6% M.F. (Milk Fat).
<ul> <li>Skim or 1% milk</li> <li>Cheese (less than 16% M.F.)</li> <li>0% or 1% yogurt</li> <li>Soy beverage (plain, unsweetened)</li> </ul>	<ul> <li>2% milk and yogurt</li> <li>Light cream cheese</li> <li>Soy beverage (flavoured)</li> <li>Cream sauces (made with 1% milk)</li> </ul>	<ul> <li>Homogenized milk</li> <li>Cream of any type; cream sauces made with 2% milk or greater</li> <li>Cheese (greater than 16% M.F.), processed or spreads</li> <li>Yogurt, greater than 2%</li> </ul>
Meats & Protein Alternatives Choose lean meats and poultry. I and nut butters to 3-4 tablespoor		st twice per week. Limit nuts
<ul> <li>Egg whites</li> <li>Fish (fresh, frozen, canned in water)</li> <li>Legumes (peas, beans, lentils)</li> <li>Lean beef, pork, veal</li> <li>Poultry (skinless)</li> <li>Shellfish (scallops, oysters, shrimp)</li> <li>Tofu and soy products</li> </ul>	<ul> <li>Egg yolks (limit to 3 per week)</li> <li>Nuts (walnuts, almonds, ground flaxseed)</li> <li>Natural peanut and nut butters</li> </ul>	<ul> <li>Meat or fish that is cured or smoked, pickled, breaded, fried</li> <li>Processed or deli meats (bacon, ham, sausages)</li> <li>Fish packed in oil</li> <li>Organ meats (kidneys, liver, heart)</li> <li>Peanut butter made with hydrogenated oil</li> </ul>
Fats & Oils Limit fats to 6-9 teaspoons per da	ay.	
	<ul> <li>Margarine (non-hydrogenated)</li> <li>Plant-based oils: olive, flax, canola</li> <li>Salad dressings (vinagrettes)</li> <li>Mayonnaise, low-fat</li> </ul>	<ul> <li>Butter, lard, fat, drippings from meat</li> <li>Hard margarine (hydrogenated)</li> <li>Fat, bacon</li> <li>Oils: palm, palm kernel, coconut</li> <li>Gravy</li> </ul>

## **Limit Alcohol**

Alcohol may increase triglycerides, which are a type of fat in the blood that makes the blood thicker and increases the risk for a clot. If you have high triglycerides, you should avoid having alcohol on a regular basis. Ask your family doctor if you are unsure about your triglyceride levels.

## Take Your Medications

Take your medications consistently as prescribed. Do not stop any medication without discussing with your physicians, especially your blood thinners and cholesterol medications. If you have concerns about managing your medications, speak with your community pharmacy about using a dosette (pill box) or pre-arranging your medications in weekly blister packs. If you experience side effects, talk to your family doctor or pharmacist.

## Check Your Blood Pressure

High blood pressure puts a strain on your heart and increases the speed that plaque forms in your arteries. Check your blood pressure regularly as directed by your family doctor and take medications as prescribed. Minimize your sodium (salt) intake and exercise regularly.

## **Manage Stress**

Difficulties coping with stress may increase your risk of having a heart attack. Stress is a necessary part of living. It helps us respond to emergencies, meet a deadline or achieve a goal. However, if we have too much stress, our minds and bodies cannot relax. Try to recognize stressful situations and learn effective ways of managing them. For example, avoid rush hour traffic or allow for more time to travel. You can also try relaxation techniques such as deep breathing, massage, or meditation. For some people, formal or informal counselling may be helpful.

## No Smoking

Smoking makes your heart work harder and can damage your blood vessels. It increases your heart rate, narrows blood vessels, raises blood pressure, and reduces the amount of blood, oxygen and nutrients that get to your organs and tissues. Second-hand smoke can cause the same effects. Quitting smoking will reduce your risks of peripheral vascular disease over time. Ask your family doctor or pharmacist for ways of helping you stop or reduce smoking. You may also visit smokershelpline.ca.

## **Exercise Regularly**

Physical activity can help you feel better, decrease symptoms and improve your heart's function. Be sure to talk to your family doctor before starting an exercise program or increasing your activity level. The key is to be active slowly and regularly. The goal is to do 30 minutes of activity a day for five days each week. This can be split into parts, such as three 10-minute blocks of activity.

	nt to Healthy Liv			
entify at least one	e healthy living hab	it you will try to adop	t first:	
hat other goals w	vill you work toward	ds?		
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# Who to Call if You **Have Questions**

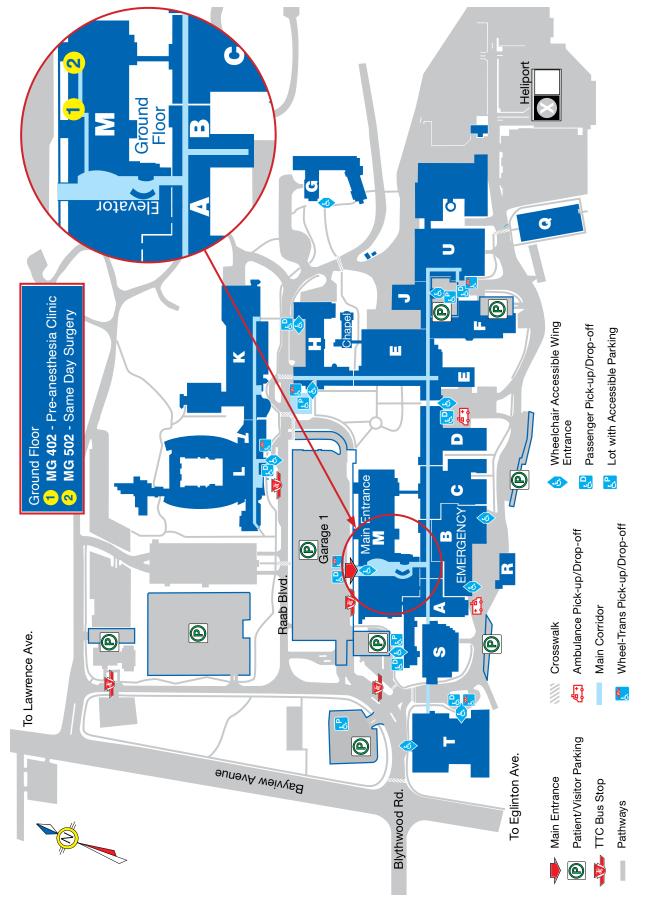
If you have questions about your surgery date, your pre-anesthesia assessment, or your post-surgery appointment, please call your surgeon's office:

or your poor our gory appearance, promote com your congre			
Dr. A. Dueck	416-480-6947		
• Dr. G. Papia	6100 ext. 683680		
Dr. D. Kucey	416-966-3886		
Dr. A. Kayssi	416-480-6948		
If you have questions about your <b>exercise and activities</b> , ple	ease call:		
Physiotherapists	416-480-4949		
If you have questions about managing activities of daily living	or delirium, please call:		
Occupational therapists	416-480-4949		
If you have questions about your <b>nutrition</b> , please call:			
Dietitians	416-480-4949		
If you have questions about <b>powers of attorney</b> or <b>managin</b>	ng after discharge, please call:		
Social Workers 416-480	-6100 ext. 63913		
If you need to contact us on Saturdays, Sundays or statutory holidays, call:			
D3 Cardiovascular Inpatient Unit	416-480-4949		

Notes		

# **Sunnybrook Health Sciences Centre**

The location of your appointments on the ground floor: (Take the M-Wing elevators to the ground floor)



#### **Schulich Heart Centre**

2075 Bayview Avenue Toronto, Ontario M4N 3M5

sunnybrook.ca/heart



